

المجلس العالمت للبصمة الكربونية GLOBAL CARBON COUNCIL

> Project Submission Form

> > V4.0-2022

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COVER PAGE- Project Submission Form (PSF)					
Complete this form in accordance with the instructions attached at the end of this form.					
	BASIC INFORMATION				
Title of the Project Activity as per LON/LOA	Ventos de São Fernando wind power projects in Brazil				
PSF version number	02				
Date of completion / Updating of this form	15/11/2022				
Project Owner(s) as per LON/LOA (Shall be consistent with De- registered CDM Type B Projects)	<ol> <li>VENTOS DE SÃO FERNANDO I ENERGIA S.A.</li> <li>VENTOS DE SÃO FERNANDO II ENERGIA S.A.</li> <li>VENTOS DE SÃO FERNANDO III ENERGIA S.A.</li> <li>Kosher Climate India Private Limited</li> </ol>				
Country where the Project Activity is located	Brazil				
GPS coordinates of the project site(s)	Refer Section A.2 of this PSF				
Eligible GCC Project Type as per the Project Standard (Tick applicable project type)	<ul> <li>☑ Type A:</li> <li>☑ Type A1</li> <li>☑ Type A2</li> <li>☑ Sub-Type 1</li> <li>☑ Sub-Type 2</li> <li>☑ Sub-Type 3</li> <li>☑ Sub-Type 4</li> <li>☑ Type A3</li> </ul>				

	Type B – De-registered CDM Projects: <sup>1</sup>
	Туре В1
	Туре В2
Minimum	Real and Measurable GHG Reductions
compliance requirements	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
	<ul> <li>Contributes to United Nations Sustainable Development Goal 13 (Climate Action)</li> </ul>
Choose optional and	Do-no-net-harm Safeguards to address Environmental Impacts
additional	Do-no-net-harm Safeguards to address Social Impacts
requirements	Contributes to United Nations Sustainable Development Goals (in
(Tick applicable label categories)	addition to Goal 13)
Applied methodologies including version No.	ACM0002 Grid-connected electricity generation from renewable sources, ver 20.0
(Shall be approved by the GCC or the CDM)	
GHG Sectoral scope(s) linked to the applied methodology(ies)	GHG Sectoral Scope SS1- Energy Industries (Renewable/Non- Renewable sources)

<sup>&</sup>lt;sup>1</sup> Owners of Type B projects shall fill in the form provided in Appendix 7.

Applicable Rules	Rules an	d Requirements	Version
and Requirements for Project Owners	⊠ ISO 14064-2		
(Tick applicable Rules and Requirements)		ountry legal requirements	
	GCC Rules and	Project Standard	3.1
	Requirements <sup>2</sup>	Approved GCC Methodology (XXXXX)	
		Program Definitions	3.1
		Environment and Social Safeguards Standard	3.0
	CDM Rules <sup>3</sup>	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	1.0
		Add rows if required	
		Approved CDM Methodology (ACM0002 Grid-connected electricity generation from renewable sources)	20.0
		TOOL 1- Tool for the demonstration and assessment of additionality	7.0.0
		TOOL 02- Combined tool to identify the baseline	

 <sup>&</sup>lt;sup>2</sup> GCC Program rules and requirements: <u>http://www.globalcarboncouncil.com/resource-centre/</u>
 <sup>3</sup> CDM Program rules: <u>https://cdm.unfccc.int/Reference/index.html</u>

		scenario and demonstrate additionality		
		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	11.0	
		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 <sup>4</sup>	<ul> <li>GHG emission reductions (i.e., Approved Carbon Credits (ACCs))</li> <li>Environmental No-net-harm Label (E<sup>+</sup>)</li> <li>Social No-net-harm Label (S<sup>+</sup>)</li> </ul>			
(Tick applicable verification categories)	<ul> <li>United Nations Sustainable Development Goals (SDG+)</li> <li>Bronze SDG Label</li> <li>Silver SDG Label</li> <li>Gold SDG Label</li> <li>Platinum SDG Label</li> <li>Diamond SDG Label</li> </ul>			

<sup>&</sup>lt;sup>4</sup> **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.

	<ul> <li>CORSIA requirements (C<sup>+</sup>)</li> <li>Host Country Attestation on Double counting</li> </ul>
Declaration by the 'Authorized Project Owner <sup>5</sup> and focal point' (Tick all applicable statements <sup>6</sup> )	<ul> <li>The Project Owner(s) declares that:</li> <li>Generic Requirements applicable to all Project Types:</li> <li> 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. </li> <li> 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. </li> <li> We confirm that the Project Activity is eligible to be registered under the GCC program. </li> <li> We shall ensure the following for the Project Activity (tick at least one of the two options): </li> <li> 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<sup>7</sup> 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<sup>8</sup> 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<sup>8</sup> by any other GHG/ non-GHG program. </li> <li> Specific requirements applicable to respective Project Types: </li> </ul>

<sup>&</sup>lt;sup>5</sup> The Project Owner means the legal entity or organization that has overall control and responsibility for the Project Activity

<sup>&</sup>lt;sup>6</sup> 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.

<sup>&</sup>lt;sup>7</sup> Non-GHG programs could be such as I-REC facilitating reliable energy claims with Renewable Energy Certificate (REC) schemes

<sup>8</sup> The environmental attributes of compensating nature are those which are used by captive users (e.g., corporates/industries) for offsetting their GHG emissions

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 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 <sup>9</sup> (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 <sup>10</sup> (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 <sup>11</sup> 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 <sup>12</sup> .

<sup>9</sup> In case of any change of Host Country Letter of Authorisation (HCLOA) the project owner shall inform the GCC operations team immediately

<sup>&</sup>lt;sup>10</sup> 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.

<sup>&</sup>lt;sup>11</sup> CORSIA Eligible Emissions Units containing approval and conditions for GCC Program: <u>https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx</u>

<sup>&</sup>lt;sup>12</sup> 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
Details about the Project Activity are provided in Appendixes 1 through 9 to this document.
Kosher Climate India Private Limited

#### 1. PROJECT SUBMISSION FORM

## Section A. Description of the Project Activity

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

The Purpose of this project activity is to generate electricity by harnessing the wind energy by using Wind Turbine Generators (WTGs) technology and there by feed the generated electricity to the Brazilian national grid.

This project activity involves installation of wind power generation project in São Bento do Norte, Rio Grande do Norte, Brazil with individual installed capacities of 76.2 MW, 72.7 MW and 24.2 MW each with a total project capacity of 173.1 MW. The Project activity has installed the Wind Turbine Generators (WTGs) to convert the available wind energy into the electric power.

All the project activities are connected to the Brazilian national grid through the distribution substations. The generated power from all the project activities will be supplied to the multiple distribution companies in the host country. Project Owners have already signed long term Power Purchase agreement with the DISCOMs to supply the generated power at contracted unit of price.

Sr.	Project Owner	Capacity	Off-taker	Commissioning
No				date (COD)
1	VENTOS DE SÃO FERNANDO I ENERGIA S.A.	76.2 MW	Cemig Geração e Transmissão S.A.	03/10/2020
2	VENTOS DE SÃO FERNANDO II ENERGIA S.A.	72.7 MW	Multiple DISCOMs - National Regulated Energy Auction	15/12/2020
3	VENTOS DE SÃO FERNANDO III ENERGIA S.A.	24.2 MW	Kroma Comercializadora de Energia, and others	25/12/2020

the project is promoted by Rio Norte I Energia LTDA and the above companies are the SPVs of Rio Norte I Energia LTDA.

The entire capacity of 173.1 MW is a single project implemented by Rio Norte I Energia LTDA through its SPVs with capacities of 76.2 MW, 72.7 MW and 24.2MW each. The investment decision making of all the projects is on same date and all projects are commissioned within the same year of 2020 and located in in São Bento do Norte, Rio Grande do Norte, Brazil. All the projects are of same technology (wind power) and applies same methodology (ACM0002, v 20.0) and has same baseline (which is national electricity grid), generate the same output (Electricity), apply the same additionality

approach (Investment analysis).

As per the paragraph 9 of the GCC "clarification No.1 v 1.2" and Guideline on "Non-binding examples of bundling", all the activities in the project by default 'homogeneous' and is not a bundled project. Hence, project proponent developed this project as a single project with multiple sites.

The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 251,225 tCO<sub>2</sub>e per year, thereon displacing estimated average of 696,231 MWh/year amount of electricity from the generation-mix of power plants connected to the Brazilian grid. Project activity will mitigate the total GHG emission reductions of 2,512,251 tCO<sub>2</sub>e over the entire crediting period.

#### **Baseline Scenario:**

The scenario existing prior to the implementation of the project activity, is electricity delivered to the grid by the project activity that 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"**. This is a green field project activity. There was no activity at the site of the project participant prior to the implementation of this project activity. Hence pre-project scenario and baseline scenario is the same.

#### Sustainable Development Indicators:

In addition to contribution to the sustainable environment by reducing the GHG emissions and reducing the dependency on fossil fuels, this project activity also contributing to the sustainable development though supporting the local community and local economy.

**Social well-being:** The project activity provided / provides job opportunity to local people during erection, commissioning, and maintenance of the Wind project. This will result in the improvement of living standards of the local community. The installation of the renewable energy project will also lead to the development of basic infrastructure like roads and communication with the nearby cities, which will also improve the living standards of the local population.

**Environmental well-being:** Wind power is one of the cleanest renewable energy powers and does not involve any fossil fuel. There are no GHG emissions. The impact on land, water, air and soil is negligible. Thus, the project activity contributes to environmental well-being without causing any negative impact on the surrounding environment.

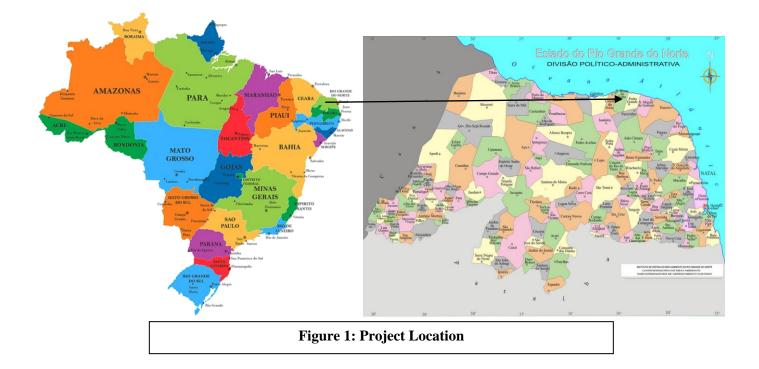
**Economic well-being:** The project activity generates permanent and temporary employment opportunity within the vicinity of the project. The electricity supply in the nearby area improves which directly and indirectly improves the economy and life style of the area.

**Technological well-being:** The project activity is step forward in harnessing the untapped wind potential and further diffusion of the wind technology in the region. The project activity leads to the promotion and demonstrates the success of wind projects in the region which further motivate more investors to invest in wind power projects. Hence, the project activity leads to technological well-being.

#### A.2. Location of the Project Activity

All the projects are located in São Bento do Norte, Rio Grande do Norte, Brazil.

Address and geographic coordinates of the physical site of the project activity					
Project Activity	et Activity Capacity Physical address Latitude				
Project Activity 1	76.2 MW	São Bento do Norte, Rio Grande do Norte, Brazil	5°10'36.91"S (-5.1802)	36° 0'40.61"W (-36.0290)	
Project Activity 2	72.7 MW	São Bento do Norte, Rio Grande do Norte, Brazil	5°10'48.29"S (-5.1801)	36° 1'43.16"W (-36.0286)	
Project Activity 3	24.2 MW	São Bento do Norte, Rio Grande do Norte, Brazil	5°9'10.59"S (-5.1529)	36°2'31.86"W (-36.0421)	



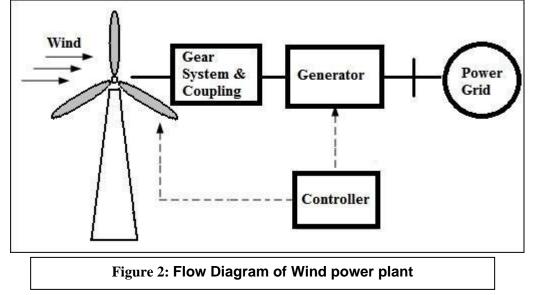
#### A.3. Technologies/measures

In wind energy generation, Kinetic energy of wind is converted into mechanical energy and subsequently into electrical energy. The project involves installation of 50 WTGs of capacity 3.465MW each.

Technical specifications of the proposed components used for this project are given below

NORDEX ACCIONA: AW-3465/132		
Design Data		
Rotor		
Туре	3-bladed, horizontal axis	
Position	Upwind	
Rotor tilt	6 degrees	
Diameter	132 m	
Swept area 13,685 m <sup>2</sup>		
Cut-in wind speed 3 m/s		
Cut-off wind speed 20 m/s		
Generator		
Туре	DFIG	
Frequency	50 Hz	
Nominal power	3,465 KW	
Nominal Voltage	12,000 V	

The generated power from the wind power projects at 34.5kV will be stepped up to 230kV voltage level through step-up transformers installed at the project pulling substation. The stepped-up power will be transmitted through 230kV transmission line and finally connected to the grid substation.



An intelligent automatic monitoring and alarm system (SCADA) has been already installed in the project control room which will monitor and record the real time data from the plant and alerts the

staff in case of any malfunctioning in the equipment operation. However Separate Energy meter has been installed at the substation to record the import export of electricity from the plant. Monitoring and metering system is explained in detail in the below section B.7.4

This is a green field project activity generating the electricity from the wind energy and supplying it to the national grid. In the baseline scenario the equivalent of electricity would have been generated from the grid connected power projects to which the project activity is connected. There is no technology transfer occurred in the proposed project activity.

#### A.4. Project Owner(s)

Location/ Country	Project Owner(s)	Where applicable <sup>13</sup> , indicate if the host country has provided approval (Yes/No)
	VENTOS DE SÃO FERNANDO I ENERGIA S.A.	No
Brazil	VENTOS DE SÃO FERNANDO II ENERGIA S.A.	No
	VENTOS DE SÃO FERNANDO III ENERGIA S.A.	No
India Kosher Climate India Private Limited		No

#### 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	
From	То		ACCs to be supplied	
03/10/2020	02/10/2030	<ol> <li>1.VENTOS DE SÃO FERNANDO I ENERGIA S.A.</li> <li>2.VENTOS DE SÃO FERNANDO II ENERGIA S.A.</li> <li>3.VENTOS DE SÃO FERNANDO III ENERGIA S.A.</li> <li>&amp;</li> <li>4.Kosher Climate India Private Limited</li> </ol>	For offsetting Greenhouse gases 2,512,251 tCO <sub>2</sub> for 10-year period	

#### A.6. Additional requirements for CORSIA

The proposed project activity is wind energy-based power project, by supplying the clean energy displacing the equivalent amount of electricity in the national grid which is being otherwise supplied by the grid-connected power projects. The project activity is the installation of an environmentally safe and sound technology since there are no GHG emissions associated with the electricity generation. The project activity complies with all relevant environmental and social safeguard standards and does not cause any net harm to the environment and society.

CORSIA pilot phase vintage eligibility criteria require that first crediting period of Project must start on or after 1 January 2016. The GCC Program also started on 1 Jan 2016. The proposed project activity starts operations after 1<sup>st</sup> January 2016 and thus complies with the requirement.

Additional CORSIA Criteria	Justification for the project
Comply with the Environment and Social	Please refer section E of this PSF.
Safeguards Standard to ensure that the Project	
Activity does not cause any net harm to the	
environment or society and provides an opportunity	
to demonstrate this achievement by obtaining the	
additional certification labels E+ and S+. Please	
refer to Section E of this document.	
Comply with the Project Sustainability Standard to	Please refer section F of this PSF.
ensure that the Project Activity demonstrates the	
level of contribution towards achieving the United	
Nations Sustainability Development Goals (SDGs)	
and provides an opportunity to demonstrate this	
achievement by obtaining the additional SDG+ label	
(Bronze, Silver, Gold, Platinum, or Diamond).	
Please refer to Section F of this document.	
Obtain and provide to the GCC and its Registry	Such attestation shall be provided during
(operated by IHS Markit), a written attestation from	ER verification when the host country
the host country's national focal point or the focal	provides such provision.
point's designee, as required by CORSIA Emissions	
Unit Eligibility Criteria <sup>14</sup> (paragraph 7 (c) of the	
Carbon Offset Credit Integrity Assessment Criteria)	
and Programme Application Form – Appendix A –	
Supplementary Information Form <sup>15</sup> (refer to section	
3.7.8. with respect to the Host Country Attestation	
on Double Counting), which shall be made publicly	

<sup>&</sup>lt;sup>14</sup> ICAO document 'CORSIA Emissions Unit Eligibility Criteria': <u>https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO%20document%2009.pdf</u>

<sup>&</sup>lt;sup>15</sup> <u>https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx</u>

available prior to the use of units from the host
country under CORSIA.

### Section B. Application of selected methodology(ies)

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

The United Nations approved consolidated baseline methodology applicable to this project is ACM0002 "Grid-connected electricity generation from renewable sources", Version –  $20.0^{16}$  Following tools have been referred during the estimation of emission reduction calculations as per the methodology ACM0002.

- Tool to calculate the emission factor for an electricity system, Version 7.0<sup>17</sup>.
- Tool for the demonstration and assessment of additionality, Version7.0.0<sup>18</sup>.
- Tool for the Investment analysis, Version 11.0<sup>19</sup>
- Methodological tool "Common Practice" Version 03.1<sup>20</sup>

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

The methodology ACM0002, Version 20.0 is applicable to the project activity under the following conditions:

Applicability Criteria	Applicability status
This methodology is applicable to grid-connected renewable power generation project activities that: (a) install Greenfield power plant; (b) involve a capacity addition to (an) existing plant(s); (c) involve a retrofit of (an) existing 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 proposed project activity is a green field, grid connected renewable power plant. Therefore, it confirms to the said criteria
The methodology is applicable under the following conditions: 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, Wind power plant/unit, wave power plant/unit or tidal power plant/unit	The project activity is the installation of a new grid connected renewable wind power project. Thus, it meets the first applicability condition

<sup>&</sup>lt;sup>16</sup> <u>https://cdm.unfccc.int/methodologies/DB/XP2LKUSA61DKUQC0PIWPGWDN8ED5PG</u>

<sup>&</sup>lt;sup>17</sup> <u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf</u>

<sup>&</sup>lt;sup>18</sup> <u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf</u>

<sup>&</sup>lt;sup>19</sup> https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v11.0.pdf

<sup>&</sup>lt;sup>20</sup> <u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf</u>

In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, Wind, 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 or 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	The proposed project activity is the installation of a new wind power plants/units. Therefore, the said criteria is not applicable
<ul> <li>In case of hydro power plants, one of the following conditions shall apply: <ul> <li>(a) The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of reservoirs; or</li> <li>(b) The project activity is implemented in an 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/m2; or</li> <li>(c) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density calculate equation (3), is greater than 4 W/m2.</li> <li>(d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density of any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m2, all of the following conditions shall apply.</li> <li>(i) The power density calculated using the total installed capacity of the integrated project, as per equation (4) is greater than 4W/m2;</li> <li>(ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity;</li> <li>(iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2shall be:     <ul> <li>(a) Lower than or equal to 15 MW; and</li> <li>(b) Less than 10% of the total installed capacity of wore project</li> </ul> </li> </ul></li></ul>	The proposed project activity is the installation of wind power plants/units. Therefore, the said criteria is not applicable
In the case of integrated hydro power projects, project proponent shall:	The proposed project activity is the installation of a new wind power plants/units. Therefore, the said criteria is not applicable

	[]	
<ul> <li>(a) 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</li> </ul>		
(b) 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 indifferent 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 years prior to implementation of CDM project activity.		
<ul> <li>The methodology is not applicable to:</li> <li>(a) Project activities that involve switching from I 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;</li> <li>(b) Biomass fired power plants;</li> </ul>	The proposed project activity is the installation of wind power plants/units. Therefore, the said criteria is not applicable	
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 proposed project activity is the installation of wind power plants/units. Therefore, the said criteria is not applicable	
In addition, the above applicability conditions, the applicability conditions of tool referred in the methodology ACM0002, version 20.0 has been referred here under:		
Tool07: Tool to calculate the emission factor for an		
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).	The project activity is a greenfield wind power generation plant and hence, according to the applied methodology, 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".
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 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.	Since the project activity is grid connected wind power project, this condition is applicable and the emission factor has been calculated accordingly.
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.	The project activity is located in Brazil, a non-Annex I country. Therefore, this criterion is not applicable for the project activity
Under this tool, the value applied to the CO <sub>2</sub> emission factor of bio fuels is zero	The project activity is a grid connected wind power project and therefore, this criterion is not applicable for the project activity
Tool 01: Tool for the demonstration and assessmen	t of additionality; Version 7.0.0,
The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	Since the applied technology is not a new methodology project proponent has applied this tool for the demonstration additionality in compliance with the tool. Refer to section B.5 of the PSF for the detailed applicability of this tool and additionality assessment. Hence this tool is applicable
Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	In line with the methodology requirement Project developer has applied this tool for the demonstration of additionality assessment.
Tool 24: Common Practice version 3.1	Hence this tool is applicable
This methodological tool is applicable to project	Project activity applies "Tool for the

activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.	demonstration and assessment of additionality". Hence this tool is applicable.
In case the applied approved baseline and monitoring methodology defines approaches for the conduction of the common practice test that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Applied methodology ACM0002 version 20.0 doesn't specify any approach for the demonstration of common practice analysis. As per the methodology the additionality including common practice analysis has been demonstrated as per the Tool 01: Tool for the demonstration and assessment of additionality" version 7.0.0 and Tool 24: Common Practice Analysis version 3.1. Hence Justified.
Tool27: Investment analysis version 11.0	
This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", the guidelines "Non-binding best practice examples to demonstrate additionality for SSC project activities", or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.	Project activity applies "Tool for the demonstration and assessment of additionality". Hence this tool is applicable.
In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Applied methodology ACM0002 version 20.0 doesn't specify any approach for the demonstration of Investment analysis. As per the methodology the additionality including investment analysis has been demonstrated as per the Tool 01: Tool for the demonstration and assessment of additionality" version 7.0.0 and Tool 27: Investment Analysis version 10.0 Hence Justified.

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

The project boundary includes the wind power plant, sub-stations, grid and all power plants connected to the national grid. The proposed project activity will evacuate power to the Brazilian

national grid. Therefore, the entire Brazilian national grid and all connected power plants have been considered in the project boundary for the proposed project activity.

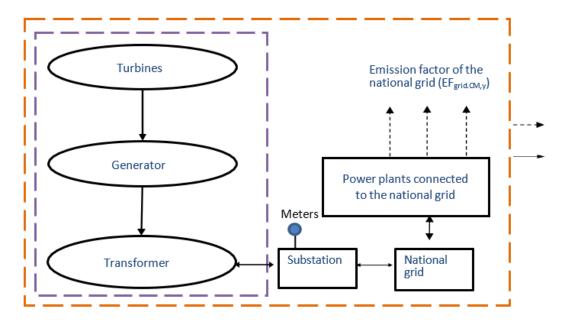


Figure: Project Boundary

The project does not involve any other emissions sources not foreseen by the methodologies. The greenhouse gases and emission sources included in or excluded from the project boundary are shown in table below.

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
	Grid Connected Electricity Generation	CO <sub>2</sub>	Yes	Main Emission Source
line		CH <sub>4</sub>	No	Minor Emission source
Baseline		N <sub>2</sub> O	No	Minor Emission source
<u>ت</u> ۲	Greenfield Wind Power Project activity	CO <sub>2</sub>	No	Project activity does not emit CO <sub>2</sub>
Project Activity		CH <sub>4</sub>	No	Project activity does not emit CH <sub>4</sub>
цА		N <sub>2</sub> O	No	Project activity does not emit N <sub>2</sub> O

**B.4. Establishment and description of the baseline scenario** 

An Approved large-scale baseline CDM methodology ACM0002 "Grid-connected electricity generation from renewable sources", Version 20.0.has been followed along with the "tool to calculate the emission factor for an electricity system, version 7" is used to establish the baseline scenario.

According to the methodology baseline scenario has been identified as "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 project activity involved setting up of wind Power generation Plant to harness the power of wind energy to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied to the electricity grid by the operation of gridconnected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations.

Hence, the baseline scenario for the project activity is the equivalent amount of electricity generated from the Brazilian national grid.

The baseline case is in compliance with all applicable legal and regulatory requirements references

As per the methodology, the combined margin ( $EF_{grid,CM,y}$ ) has to be determined as per the Tool to calculate the emission factor for an electricity system. However, in case of non-availability of the data required to calculate grid emission factor as per the CDM Tool 07: "Tool to calculate the emission factor for an electricity system". GCC has provided the clarification No.3<sup>21</sup> provided the options for the project owner to determine the baseline grid emission factor, where applicable:

- a) Using CDM Tool 07: "Tool to calculate the emission factor for an electricity system";
- b) Latest available emission factor of the Grid in a country as approved by CDM standardized baseline.
- c) Latest available emission factor of the Grid in a country as approved by its relevant National Authority or Designated National Authority (DNA) under CDM or UNFCCC focal point in case DNA doesn't exist.
- d) Latest IFI combined margin emission factors published on UNFCCC website<sup>22</sup>;
- e) Latest published Emission factor derived by International Energy Agency (IEA)<sup>23</sup>

Project Owner has chosen the option (c) "Latest available emission factor of the Brazilian national grid approved its Designated National Authority (DNA) "Ministry of Science and Technology "CO2

<sup>&</sup>lt;sup>21</sup> <u>https://www.globalcarboncouncil.com/wp-content/uploads/2022/04/Clarification-No.-03.pdf</u>

<sup>&</sup>lt;sup>22</sup> <u>https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting/ifi-twg-listof-methodologies</u>

<sup>&</sup>lt;sup>23</sup> <u>http://data.iea.org/payment/products/122-emissions-factors.aspx</u>

emission factors for electricity generation in the National Interconnected System of Brazil - Base Year 2020."<sup>24</sup>

As per the DNA the latest grid emission factor of Brazil 2020 is 0.3649 tCO<sub>2</sub>/MWh

#### EFgrid, CO2 = 0.3649 tCO<sub>2</sub>/MWh

#### **B.5.** Demonstration of additionality

The additionality of the proposed project activity is demonstrated by following the guidance provided in the GCC project Standard V 3.1.

As per the GCC Project Standard additionality can be demonstrated using the following two components

- a) A legal requirement test
- b) An Additionality Test either based on a Positive List test or a projects-specific additionality test.

#### a) Legal requirement test

As per the paragraph no 46 of the project standard V3.1 the project is not implemented by the force of law. This is a voluntary activity undertaken by the project owner without enforcing by any legal requirement in the host country. Hence project complies with the legal requirement test.

#### b) Additionality Test

As per the GCC Project standard V3.1 this project needs to be demonstrating the additionality test based on the Project specific additionality test.

Additionality has been demonstrated as per the applied methodology ACM0002 (Version 20.0). Methodology requires the project participant to determine the additionality based on "Tool for the demonstration and assessment of additionality", Version 7.0.0.

The step-wise approach to establish additionality of the project activity has been followed, details of which are provided in the following paragraphs:

As per the applied methodology requirement, Additionality of the project activity is demonstrated using the Methodological tool "Tool for the demonstration and assessment of additionality" Version 07.0.0. The tool defines the following steps:

#### Sub Step 0: Demonstration whether the proposed project activity is the first-of-its-kind.

The proposed project activity is not the first of its kind as implementation of wind power project in the country is not first of its kind.

<sup>&</sup>lt;sup>24</sup>https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao\_despacho.html

# Step 1: Identification of alternatives to the project activity consistent with current laws and regulations

#### Sub-step 1a: Define alternatives to the project activity

As per the applied ACM0002 version 20.0; Para 22, 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 plant and by the addition of new generation sources.

However, for the assessment of additionality the following alternatives are identified:

Alternative 1: The proposed project activity undertaken without being registered as a GCC project activity.

Alternative 2: No project activity is undertaken.

#### Sub-step 1b: Consistency with mandatory laws and regulations:

Alternative	Compliance with laws & regulation
	Government of Brazil does not restrict
undertaken without being registered as a GCC	implementation of wind power project.
project activity	
Alternative 2: No project activity is undertaken.	No law or regulation mandate PP to invest in
	this project.

Hence, all the alternatives identified above comply with mandatory laws and regulations in Brazil. The financial attractiveness of Alternative 1 is demonstrated though investment analysis explained below:

#### Step 2: Investment Analysis

As per para 29 of "Tool for the demonstration and assessment of additionality" it is determined that the proposed project activity is not an economically attractive or financially feasible option.

To conduct the investment analysis, Methodological tool 27: Investment analysis, version 11.0, EB 112 Annex 02 has been referred.

#### Sub-step 2a: Determine appropriate analysis method

As per "Tool for the demonstration and assessment of additionality" (version 07.0.0), for financial analysis of the project, the following three options are available:

Option I: Simple Cost Analysis Option II: Investment Comparison Analysis Option III: Benchmark Analysis

The proposed project activity generates financial and economic benefits from sale of the generated electricity other than ACC revenues, so the simple cost analysis (Option I) is not applicable. Out of the two remaining options, Option II is also not applicable as there are no other credible and realistic baseline scenario alternatives other than electricity supply from the grid. Thus, the benchmark analysis (Option III) is chosen to prove additionality.

Since, identified baseline for the proposed project activity is continuation of current practice (i.e. equivalent amount of energy would have been generated by grid electricity system through its currently operating power plants and by new capacity addition) and which is outside the direct control of the project participant, hence benchmark analysis (option III), where the returns on investment in the project activity are compared to benchmark returns that are available to any investors in the country is selected as the most appropriate method.

#### Sub-step 2b: Option III. Apply benchmark analysis

The investment analysis using Benchmark analysis approach (Option III) has been chosen. In the following, Equity IRR is used to demonstrate the additionality of the project.

As per para 15 of Tool 27: Investment analysis, version 11.0 states that Required/expected returns on equity are appropriate benchmarks for equity IRR. The project is promoted by private limited company and hence the return on equity and the risks associated with the investments for their shareholder is of primary concern. Hence, in order to analyze the financial viability of the project activity, the prime financial indicator that has been used is the post-tax equity IRR of the project activity.

#### Selection of Appropriate Benchmark

The benchmark has been considered in accordance with Guidance 19 of EB 112 Annex 2, "The values in the table in the Appendix may also be used, as a simple default option".

- As the proposed project activity generates power utilizing wind energy, Group 1 as per para 5a 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 table under the Appendix, EB 112 Annex 2 has been adjusted by adding suitable forecasted inflation rate taken from Banco Central Do Brazil.

As per para 19 of investment analysis, the cost of equity is determined by selecting the values provided in the Appendix, i.e. Default values for cost of equity (expected return on equity) is presented below:

#### Default Value Benchmark:

The cost of equity is determined by selecting the values provided in the table of the Appendix, i.e., Default values for cost of equity (expected return on equity) in the 'Methodological tool: Investment analysis version 11.0

#### Benchmark estimation:

The Cost of Equity has been considered using the "Methodological tool: Investment analysis version 11.0" available at the time of decision making as well as the latest available value.

Table under the tool "Investment analysis" version 11.0 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in Brazil =  $11.22\%^{25}$ 

#### The Required return on equity (benchmark) was computed in the following manner:

Nominal Benchmark<sup>26</sup> = {(1+Real Benchmark) \*(1+Inflation rate)}-1 Where: Default value for Real Benchmark = 11.22% (as per Appendix of EB 112, Annex 2)

Thus, minimum cost of equity considered for calculation of Benchmark = 11.22%

#### Inflation rate:

In line with investment analysis tool, Project owner has considered the targeted inflation rate published by the Banco Central Do Brazil (BCB)<sup>27</sup> at the time of project start date i.e 05/07/2018.

Since the start date of all the projects are same and considered in the FY 2018-2019 Inflation rate for Brazil as per website<sup>28</sup> and corresponding benchmark values applicable at the time of investment decision time are provided below.

Project Activity	Inflation Forecast	Benchmark
Project Activity	4.50%	16.22%

As a conservative approach, benchmark of 16.22% has been selected for the project.

#### **Comparison of Financial Indicators:**

The period considered for Post Tax Equity IRR calculations is 25 years, which corresponds to the operational lifetime of the project activity.

Depreciation, and other non-cash items related to the project activity, which have been deducted in estimating gross profits on which tax is calculated, is added back to net profits for the purpose of calculating the financial indicator.

Input values considered for the IRR calculation are provided below.

#### **Project Activity:**

Particulars Value Unit Source/Remarks
---------------------------------------

<sup>25</sup> <u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v11.0.pdf</u>

<sup>26</sup> As per Pg. 320 of Corporate Finance, Second Edition of Aswath Damodaran

<sup>&</sup>lt;sup>27</sup> https://www.bcb.gov.br/en/monetarypolicy/historicalpath

<sup>&</sup>lt;sup>28</sup> <u>https://www.bcb.gov.br/en/monetarypolicy/historicalpath</u>

Capacity of the			
project	173.26	MW	DPR
Plant Load Factor	45.87%	%	DPR
Annual Net			
generation	696231	MWh	Calculated
Project cost	847.59	<b>BRL</b> Million	DPR
Debt	70%	%	DPR
Equity	30%	%	DFR
Debt	593.31	<b>BRL</b> Million	Calculated
Equity	254.28	<b>BRL</b> Million	Calculated
Interest rate	12.00%	%	DPR
Debt Repayment			
tenure	15	years	DPR
Moratorium	1	year	
Operation and			
Maintenance	15.40	<b>BRL Million</b>	DPR
Escalation in O & M	5%	%	DPR
Transmission Cost		BRL/kW/m	
(TUSD)	4.00	onth	
VAT on O&M	17.00%	%	As per prevailing tax rates
Insurance &	1.27	<b>BRL</b> Million	
overhead		/ Yr	standard practice
	198.7013		
Tariff	737	BRL/MWh	DPR
Depreciation Rate	4.00%	%	DPR
Income tax rate			
(IRPJ)	25.00%	%	Calculated

Applicable Taxes (% of Revenue)			
PIS	0.65%	%	https://www.taxathand.com/article/10477/Brazil /2018/Tax-authorities-clarify-PISCOFINS- taxation-of-financial-income-from-waivers-of- debt-
COFINS	4.00%	%	https://www.pwcimpuestosenlinea.co/TLSTime s/boletines/Tax-Incentives-for-Renewable- Energy-LATAM-30-10.pdf
ONS/CCEE	1%	%	
Social Contribution CSLL (% Of Taxable			
Cashflow)	9%	%	

Post Tax Equity IRR for the project activities against the benchmark values are shown in table below. Thus, it is evident that the project is not financially attractive as the equity IRR is less below the benchmark value.

Project	Post Tax Equity IRR	Benchmark
Project Activity	8.08%	16.22%

#### Sensitivity Analysis

The robustness of the conclusion drawn above, namely that the project is not financially attractive, has been tested by subjecting critical assumptions to reasonable variation. As required by Annex 2 of EB 112, only variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation. PP has identified the total revenue from the project activity is dependent on the Tariff, Plant Load Factor, Project Cost and O&M Costs constitute more than 20% of the project costs. These factors have been subjected to a 10% variation on either side and the results of the sensitivity analysis indicate that even after applying such variation the EIRR does not cross the benchmark.

Variation %	-10%	Normal	10%	Variation required to reach benchmark	Value required to reach benchmark
Tariff	5.84%	8.08%	10.28%	34.40%	267.050
PLF	5.84%	8.08%	10.28%	32.20%	61.65%
Project Cost	9.85%	8.08%	6.61%	-31.50%	580.60
O&M Cost	8.55%	8.08%	7.60%	NA	NA

#### Project Activity:

An analysis has been done to identify the percentage variation at which the financial indicators will equal/breach the benchmark and the probability of its occurrence. Based on sensitivity analysis it can be concluded that the proposed project activity is additional with reasonable variation in values and is not likely to reach the benchmark value. The occurrence of these events is unlikely for the following reasons:

- a) **Tariff:** The Tariff rate of electricity used for investment analysis i.e. 198.7013737 BRL/MWh is sourced from the DPR estimate applicable at the time of investment decision. Furthermore, the project will breach the benchmark value at a tariff variation of 34.40%. However, the actual tariff based on the PPAs signed is close to the estimated tariff and much below the tariff value required benchmarking value.
- b) **PLF:** The PLF value considered is based on DPR which is 45.87% and the IRR breach the benchmark value at a PLF variation of more than 34.40%. The increase in PLF value to breach the benchmark is highly unlikely as the PLF is estimated with the estimated annual radiation

assessment and equity IRR at normative PLF values are less than the benchmark value and given the analysis above it's highly unlikely that PLF will increase above breaching value.

- c) Project Cost: The project cost considered for investment analysis i.e. 847.59 million BRL. The cost is sourced from DPR which is based on the negotiations with supplier. A variation of -31.50% is required for IRR to breach benchmark which is impractical. The actual incurred for commissioning of the project is higher than the value required to breach the benchmark which is within the sensitivity applied.
- d) O&M Costs: The sensitivity analysis reveals that O&M will breach the benchmark at negative values and is hypothetical case. Since the O&M cost is subject to escalation (as evidence by the O&M agreement) and subject to inflationary pressure, any reduction in the O&M costs is highly unlikely. The O&M contract has been executed at 15.40 BRL Million at which the equity IRR is much below the benchmark value.

#### 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.

- (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.

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

The capacity of the project activity is 173.1 MW and hence the output range as per the guideline is selected to be 86.55 MW to 259.65 MW.

**Step (2):** 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 in Brazil, therefore, the applicable geographical area is Brazil and projects in the host country Brazil have been chosen for analysis.
- b) The projects applying same measure (i.e, only renewable energy through wind) are selected as the proposed project activity is wind power project.
   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 for the chosen projects (86.55 MW to 259.65 MW)
- f) The start date of the project is 05/07/2018 (EPC contract signed date), As Kyoto Protocol was ratified by Brazil on 23/08/2002<sup>29</sup>, and therefore projects which had started commercial operation between 25/09/2002 to 20/09/2020 have been identified.

The list of projects considered for the analysis has been sourced from the official website of ANEEL.

Numbers of Similar projects identified which fulfill above-mentioned conditions are  $N_{wind} = 0$ 

**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<sub>all</sub>.

CDM/VCS/GS/GCC and EU-ETS project activities, which have got registered, submitted for registration or are under validation, have been excluded in this step. The list of the power plants identified is provided to the DOE. After excluding the registered, submitted for registration and under validation projects the total number of projects. List of projects have been submitted to DOE for verification.

No similar projects are identified in Step (2), therefore,  $N_{all} = 0$ 

**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  $N_{diff}$ .

From the projects identified above, those projects which employ "**different technologies**" have been excluded and the number of such projects has been identified as N<sub>diff</sub>.

<sup>&</sup>lt;sup>29</sup>https://unfccc.int/node/180413

Since  $N_{all} = 0$  hence,  $N_{diff} = 0$ 

**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  $F = 1-N_{diff}/N_{all}$  F = 1-(0/0) = 1  $N_{all} - N_{diff} = 0 - 0 = 0$ Outcome of Step 5:

#### As,

- i. F = 1 which is greater than 0.2
- ii.  $N_{all}-N_{diff} = 0$ ; is not more than 3

# Since N<sub>all</sub>-N<sub>diff</sub> is less than 3, the project activity\_is "not a common practice" within a sector in the applicable geographical area.

#### Conclusion:

As described above, the project fulfils all necessary requirements of additionality specified in the 'Tool for the demonstration and assessment of additionality' v7.0.0. Hence, the project is additional.

#### **B.6. Estimation of emission reductions**

#### **B.6.1. Explanation of methodological choices**

As per the paragraph 54 of the methodology ACM0002 Version 20.0 emission reductions are calculated as follows

#### **Emission Reductions**

ERy = BEy - PEy

Where,

ERy = Emission reductions in year y (t CO2e/yr)

BEy =Baseline emissions in year y (t CO2/yr)

PEy =Project emissions in year y (t CO2/yr)

#### **Baseline Emissions**

As per the approved consolidated Methodology ACM0002 version 20.0 that Baseline emissions include only  $CO_2$  emissions from electricity generation in grid-connected 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:

 $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ 

Where,	
$BE_y =$	Baseline emissions in year y (t CO <sub>2/</sub> yr)
$EG_{PJ,y} =$	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/yr)
$EF_{grid,CM,y} =$	Combined margin CO <sub>2</sub> 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 <sub>2</sub> /MWh)

AS per para 41 of ACM0002, version 20.0, when the project activity is installation of Greenfield power plant, then:

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

Where,

EG<sub>PJ,y</sub> = 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/yr)

EG<sub>facility, y</sub> = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

Project	EG <sub>facility, y</sub> (MWh)
Project Activity 1	322,535
Project Activity 2	271,114
Project Activity 3	102,582
Total	696,231

As per the methodology, The combined margin ( $EF_{grid,CM,y}$ ) has to be determined as per the Tool to calculate the emission factor for an electricity system. However, in case of non-availability of the data required to calculate grid emission factor as per the CDM Tool 07: "Tool to calculate the emission factor for an electricity system". GCC has provided the clarification No.3<sup>30</sup> provided the options for the project owner to determine the baseline grid emission factor, where applicable:

- a) Using CDM Tool 07: "Tool to calculate the emission factor for an electricity system";
- b) Latest available emission factor of the Grid in a country as approved by CDM standardized baseline.

<sup>&</sup>lt;sup>30</sup> <u>https://www.globalcarboncouncil.com/wp-content/uploads/2022/04/Clarification-No.-03.pdf</u>

- c) Latest available emission factor of the Grid in a country as approved by its relevant National Authority or Designated National Authority (DNA) under CDM or UNFCCC focal point in case DNA doesn't exist.
- d) Latest IFI combined margin emission factors published on UNFCCC website<sup>31</sup>;
- e) Latest published Emission factor derived by International Energy Agency (IEA)<sup>32</sup>

Project Owner has chosen the option (c) "Latest available emission factor of the Brazilian national grid approved its Designated National Authority (DNA) "Ministry of Science and Technology "CO2 emission factors for electricity generation in the National Interconnected System of Brazil - Base Year 2020."<sup>33</sup>

As per the DNA the latest grid emission factor of Brazil 2020 is 0.3649 tCO2/MWh

#### EFgrid, CO2 = 0.3649 tCO2/MWh

#### Leakage Emissions:

No other leakage emissions are considered. The emissions potentially arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport etc.) are neglected.

Hence Emission reductions will be calculated as per the below equation  $ERy = BEy = EG_{Pl_y} \times EF_{grid,CM,y}$ 

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

Data / Parameter:	EF <sub>grid,CM,y</sub>
Methodology	ACM0002: Grid-connected electricity generation from renewable sources,
reference	Version 20.0
Data unit	tCO2/MWh
Description	Combined Margin CO <sub>2</sub> emission factor in year y of Brazilian Grid
Measured/calculated	Calculated
/default	

#### Data / Parameter Table 1.

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https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao\_despacho.html

<sup>&</sup>lt;sup>31</sup> <u>https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting/ifi-twg-listof-methodologies</u>

<sup>&</sup>lt;sup>32</sup> <u>http://data.iea.org/payment/products/122-emissions-factors.aspx</u>

Data source	Designated National Authority (DNA) "Ministry of Science and Technology "CO2 emission factors for electricity generation in the National Interconnected System of Brazil - Base Year 2020." <sup>34</sup>
Value(s) of monitored parameter	0.3649
Measurement/	
Monitoring	Not Applicable
equipment (if	Type of meter NA
applicable)	Location of meter NA
	Accuracy of meter NA
	Serial number of meter NA
Calculation method (if applicable)	NA
QA/QC	NA
procedures	
Purpose of data	Baseline Emission calculation
Additional	The combined Margin is calculated ex ante and fixed during the crediting
comments	period.

#### B.6.3. Ex-ante calculation of emission reductions

>> The ex-ante emission reductions (*ERy*) for the project activity are calculated as follows ERy = BEy - PEy - LEy

Where,

*ERy* = Emission Reduction in tCO2/year

*BEy* = Baseline emission in tCO2/year

PEy = Project emissions in tCO2/year

*LEy* = Leakage Emissions in tCO2/year

#### Baseline Emissions (*BEy*):

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

 $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ 

AS per para 41 of ACM0002, version 20.0, when the project activity is installation of Greenfield power plant, then:

<sup>&</sup>lt;sup>34</sup><u>https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao\_despacho.ht</u> <u>ml</u>

As the project activity is installation of Greenfield power plant, hence,

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

Where,

 $EG_{facility,y}$  = Total quantity of net electricity delivered to the Brazilian grid in year y (MWh/yr)

EF<sub>grid,CM,y</sub>

= Baseline grid emission factor (t  $CO_2/MWh$ ) = 0.3649 t  $CO_2/MWh$ 

Project	EG <sub>facility, y</sub> (MWh)
Project Activity 1	322,535
Project Activity 2	271,114
Project Activity 3	102,582
Total	696,231

As per section B.6.1 above, the combined margin grid emission factor  $(EF_{grid,CM,y})$  is 0.3649 tCO<sub>2</sub>/MWh.

Hence the annual baseline emission is calculated as below:

Project	EG <sub>facility, y</sub> (MWh)	Emission factor (tCO2/MWh	Baseline emission (tCO2)
Project Activity 1	322,535	0.3649	117,693
Project Activity 2	271,114	0.3649	98,929
Project Activity 3	102,582	0.3649	37,432
Total	696,231	0.3649	254,055

*BEy* = *EG*<sub>PJ,y</sub> \* *EF*<sub>grid,CM,y</sub> = 696,231 MWh x 0.3649 tCO<sub>2</sub>/MWh = 254,055 tCO<sub>2</sub>

## **Project Emissions (PEy):**

As explained in the above section B.6.2 Project emissions from the project activity is considered Zero.

## Leakage Emissions (LEy):

As explained in the above section B.6.2 Project emissions from the project activity is considered Zero.

**LEy**=0

**Emission Reductions (ERy):** 

$$ERy = BEy - PEy - Ley$$

Since the project and leakage emissions are estimated as zero

## *ERy* = *BEy* = 254,055 tCO<sub>2</sub>

Project	Emission Reductions (tCO2)
Project Activity 1	117,693
Project Activity 2	98,929
Project Activity 3	37,432
Total	254,055

Considering the different commissioning date of each project and annual degradation, the emission reduction estimation for the entire crediting period is provided in the below section.

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

Year	Baseline emissions	Project emissions	Leakage	Emission reductions
	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)
03/10/2020 to 02/10/2021	225,757	0	0	225,757
03/10/2021 to 02/10/2022	254,055	0	0	254,055
03/10/2022 to 02/10/2023	254,055	0	0	254,055
03/10/2023 to 02/10/2024	254,055	0	0	254,055
03/10/2024 to 02/10/2025	254,055	0	0	254,055
03/10/2025 to 02/10/2026	254,055	0	0	254,055
03/10/2026 to 02/10/2027	254,055	0	0	254,055
03/10/2027 to 02/10/2028	254,055	0	0	254,055
03/10/2028 to 02/10/2029	254,055	0	0	254,055
03/10/2029 to 02/10/2030	254,055	0	0	254,055
Total	2,512,251			2,512,251
Total number of Crediting years	10			
Annual Average over the crediting period	251,225			251,225

## **B.7.** Monitoring plan

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

#### Data / Parameter Table 2.

Data / Parameter:	EG <sub>facility,y</sub>
Methodology	ACM0002: Grid-connected electricity generation from renewable sources,
reference	Version 20.0
Data unit	MWh/Year

>>

Description	Quantity of net electricity generation supplied by the project (Wind) plant/unit				
Measured/calculated /default	to the grid in year y Measured & calculated				
Data source	Monthly generation report				
Value(s) of					
monitored	Project		Value	Monitored (MWh)	
parameter applied	Project Activity 1		322,535		
with basis	Project Activity 2		271,114		
	Project Activity 3			102,582	
	Total			696,231	
Measurement/		Main Ma	4	Obeels Meter	
Monitoring	Type of meter	Main Ma	ter	Check Meter	
equipment	Location of meter				
	Accuracy of meter				
	Serial number of				
	meters				
	Calibration frequency				
	Date of Calibration/				
	validity Reference No. of				
	Calibration Certificate				
	Calibration Status				
	Energy meter details v	vill be pro	vided du	ring the final version o	f PSF.
Frequency of Measuring/reading	Continuous measurement				
Recording frequency	Monthly				
Calculation method (if applicable)				rides the	
	Monthly meter reading installed at metering p DISCOM Officials and The export and import checked with the expo sales invoice.	oint and c the repre values of rt and imp	ertified t sentative the Join port value	by the representatives es of the project partici at Meter Reports is cross es mentioned at the ele	of pant. ss ectricity
QA/QC	The meter(s) shall be o			2	· ·
procedures	their own schedule, ar		• •	of meter calibration is	not within
	the control of the Proje				ation
	Calibration of electricit				
	standard which recom	menus at	least on	ce in p-year calibration	

	whenever abnormal difference/inconsistency is observed between main meter and check meter.
Purpose of data	Baseline Emission Calculations.
Additional	-
comments	

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

# Environmental safeguards:

Data / Parameter:	CO <sub>2</sub> emissions		
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.	CO <sub>2</sub> emissions reductions	per year	
Describe the			
parameters to be			
monitored to demonstrate	Parameter to be monitored	GHG emission reductions (tCO2/year)	
compliance with requirements to	Frequency of monitoring	Continuously measured and monthly recorded	
demonstrate "harmless" condition	Legal /regulatory / corporate limits (if any)	-	
or demonstrate Impact on SDG	QA/QC	Monitored data will be stored and archived till the end of the crediting period	
Remarks			

Data / Parameter:	Noise due to operation of WTG
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 may result in some noise during the construction period and operation period.

Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	Parameter to be monitored Frequency of	Nearby settlements' distance from the WTGs Annual
	monitoring Legal /regulatory / corporate limits (if any) QA/QC	Brazilian Standard <u>NBR 10151</u> /2019 -
Remarks		

Data / Parameter:	Solid waste Pollution from Hazardous wastes		
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.	Hazardous waste generati is treated and disposed of	ion during the operation of the project activity which as per the law.	
Describe the			
parameters to be			
monitored to demonstrate	Parameter to be monitored	Hazardous waste generation (tonnes/year)	
compliance with requirements to demonstrate	Frequency of monitoring	Annual	
"harmless" condition	Legal /regulatory / corporate limits (if any)	Law 12.305/2010 (which amends Law 9.605/1998)	
or demonstrate Impact on SDG	QA/QC	Records will be maintained and archived till the end of the crediting period	
Remarks			

Data / Parameter:	Solid waste pollution from E-wastes
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.	E-waste generation during the operation of the project activity, is treated and disposed of as per the law.

Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG		
	Parameter to be monitored	E-waste generation (tonnes/year)
	Frequency of monitoring	Annual
	Legal /regulatory / corporate limits (if any)	Law 12.305/2010 (which amends Law 9.605/1998)
	QA/QC	Records will be maintained and archived till the end of the crediting period
Remarks		

Data / Parameter:	Solid waste pollution from end-of-life products / equipment	
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.	Project Activity may result in E-waste from electronic equipment at the end of its lifetime.	
Describe the parameters to be		
monitored to demonstrate	Parameter to be monitored	E-waste generation (tonnes)
compliance with requirements to demonstrate "harmless" condition	Frequency of monitoring	Annual
	Legal /regulatory / corporate limits (if any)	Law 12.305/2010 (which amends Law 9.605/1998)
or demonstrate Impact on SDG	QA/QC	Records will be maintained and archived till the end of the crediting period
Remarks		<u> </u>

Data / Parameter:	Replacing fossil fuels with renewable sources of energy
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.	Net quantity of renewable energy generated from the power plant, which otherwise would have been generated from the combustion of fossil fuels.	
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition	Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any)	Electricity generation by the project activity (MWh) Monthly
or demonstrate Impact on SDG	QA/QC	Energy meters will be calibrated as per schedule. Records will be maintained and archived till the end of the crediting period.
Remarks		

Data / Parameter:	Bird hits/bird mortality	
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.	Bird hits/bird mortality might happen during the operation of the project.	
Describe the		
parameters to be		
monitored to demonstrate compliance with requirements to demonstrate "harmless" condition	Parameter to be monitored	Bird/Bat hits
	Frequency of monitoring	Continuous monitoring
	Legal /regulatory / corporate limits (if any)	-
or demonstrate Impact on SDG	QA/QC	Records will be maintained and archived till the end of the crediting period
Remarks		

Data / Parameter:	Shadow Flicker	
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.	Shadow flicker may impact in case of receptors within the 500m radius of the WTG.	
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG Remarks	Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any) QA/QC	Nearby settlements' distance from the WTGs         Annual         -         Records will be maintained and archived till the end of the crediting period

# Social safeguards

Data / Parameter:	Long-term jobs (> 1 year	) created
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.	Long term job opportunities created during the operation of the project activity.	
Describe the		
parameters to be		
monitored to demonstrate	Parameter to be monitored	Employment records
compliance with requirements to	Frequency of monitoring	Annual
demonstrate "harmless" condition or demonstrate Impact	Legal /regulatory / corporate limits (if any)	1. Employment is in compliance with the Labor Lawa Consolidation - 24 Law Decree No.
on SDG	QA/QC	5452/1943. Labor Laws Consolidation. Records will be maintained and archived till the end of the crediting period

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 an	d O&M services in the project region
Describe the parameters to be		
monitored to demonstrate	Parameter to be monitored	Employee records, O&M contracts
compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	Frequency of monitoring	Annual
	Legal /regulatory / corporate limits (if any)	<ol> <li>Employment is in compliance with the Labor Lawa Consolidation - 24 Law Decree No. <u>5452/1943. Labor Laws Consolidation</u>.</li> </ol>
	QA/QC	Records will be maintained and archived till the end of the crediting period
Remarks		

Data / Parameter:	Non-Discrimination Practices
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.	Policy to ensure that there is no discrimination based on gender, racism, religion etc. during the recruitment process

Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	Parameter to be	Company policy
	monitored	Continuous
	Frequency of monitoring	
	Legal /regulatory / corporate limits (if any)	In compliance with the company policy
	QA/QC	Records will be maintained and archived till the end of the crediting period
Remarks		

Data / Parameter:	Occupational health hazards	
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.	Cause of Physical hazards in project sites due to human intervention or technical failure or emergency	
Describe the parameters to be		
monitored to demonstrate	Parameter to be monitored	Number of trainings
compliance with requirements to demonstrate "harmless" condition	Frequency of monitoring	Annual
	Legal /regulatory / corporate limits (if any)	In compliance with the EHS policy
or demonstrate Impact on SDG	QA/QC	Records will be maintained and archived till the end of the crediting period
Remarks		· · · · · · · · ·

Data / Parameter:	Reducing / increasing accidents/incidents/fatality	
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.	Cause of Physical hazards in project sites due to human intervention or technical failure or emergency	
Describe the parameters to be monitored to demonstrate compliance with requirements to	Parameter to be monitored Frequency of monitoring	Number of trainings & physical hazards/incidents Annual
demonstrate "harmless" condition or demonstrate Impact	Legal /regulatory / corporate limits (if any) QA/QC	In compliance with the EHS policy Records will be maintained and archived till the
on SDG		end of the crediting period
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	Annual monitoring		
compliance with requirements to			
demonstrate "harmless" condition	Legal /regulatory / corporate limits (if any)	-	
or demonstrate Impact on SDG	QA/QC	Records will be maintained and archived till the end of the crediting period	
Remarks		· · · · · · ·	

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.	O&M Trainings provided to employees	
Describe the		
parameters to be		
monitored to demonstrate	Parameter to be monitored	Training Records and O&M manual
compliance with requirements to	Frequency of monitoring	Annual
demonstrate "harmless" condition	Legal /regulatory / corporate limits (if any)	-
or demonstrate Impact on SDG	QA/QC	Records will be maintained and archived till the end of the crediting period
Remarks		

Data / Parameter:	Community and rural welfare		
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.	Contribution of Project activity to the Economic, Environmental, Economical, and social well-being for the community.		
Describe the			
parameters to be			
monitored to demonstrate	Parameter to be monitored         Community Development Activities           Frequency of monitoring         Annual		
compliance with requirements to			
demonstrate "harmless" condition	Legal /regulatory / corporate limits (if any)	-	
or demonstrate Impact on SDG	QA/QC	Records will be maintained and archived till the end of the crediting period	
Remarks			

# SDG parameters monitoring:

Data / Parameter:	Amount of renewable energy supplied to grid for consumption		
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.	Net quantity of renewable energy supplied by the project activity during the year y		
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG Remarks	Parameter to be monitored       Quantity of net electricity generation supplied by the plant to the grid in year y         Frequency of monitoring       Continuously measured and monthly recorded         Legal /regulatory / corporate limits (if any)       -         QA/QC       -		

Data / Parameter:	Average earnings of females and male employees engaged in the project and segregated by age and persons with disabilities
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.	Average hourly earnings of employees, by sex, age, occupation, and persons with disabilities.

Describe the parameters to be		
monitored to demonstrate compliance with requirements to	Parameter to be monitored	1. No of employment (with bifurcation on number by sex, age group and where applicable, persons with disabilities)
demonstrate "harmless" condition or demonstrate Impact		<ol> <li>Average earnings</li> <li>Policy for Nondiscrimination and equal pay for the work of equal value.</li> </ol>
on SDG	Frequency of monitoring	Annual
	Legal /regulatory / corporate limits (if any)	<ol> <li>Employment is in compliance with the Labor Lawa Consolidation - 24 Law Decree No. <u>5452/1943. Labor Laws Consolidation</u>.</li> </ol>
	QA/QC	
Remarks		

Data / Parameter:	Reductions in Emissions (TCO2e) per unit of product due to project	
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.	CO₂ emissions reductions per year	
Describe the		
parameters to be	Parameter to be monitored     GHG emission reductions (tCO2/year)       Frequency of monitoring     Continuously measured and monthly recorded	
monitored to demonstrate		
compliance with requirements to demonstrate		
"harmless" condition	Legal /regulatory / corporate limits (if any)	-
or demonstrate Impact on SDG	QA/QC	Monitored data will be stored and archived till the end of the crediting period
Remarks		

Data / Parameter:	Amount of emissions reductions achieved by project under UNFCCCs/	
	GCC market mechanism	

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.	Quantity of CO2 emissions reduced	
Describe the		
parameters to be		
monitored to demonstrate	Parameter to be monitored	GHG emission reductions (tCO2/year)
compliance with requirements to	Frequency of monitoring	Continuously measured and monthly recorded
demonstrate "harmless" condition	Legal /regulatory / corporate limits (if any)	-
or demonstrate Impact on SDG	QA/QC	Monitored data will be stored and archived till the end of the crediting period
Remarks		

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

>> There are no parameters identified as harmful and scored as negative indicator. Hence, monitoring is not required under this section

Data / Parameter:	XX									
Purpose:	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.									
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.										
Describe the parameters to be										
monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	Parameter to be monitored       Frequency of monitoring       Legal /regulatory / corporate limits (if any)       QA/QC									

Program of Risk Management Actions to mitigate risk related to aspect (if any for aspects assessed to	S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by (insert date)	Key Performance Indicators (KPI)	Targets achieved on (insert date)
be harmful)	1						
	2						
	3						
	4						
	5						
	6						
	Date of	Closing the	Program:				·

## B.7.3. Sampling plan

No Sampling plan is required.

#### B.7.4. Other elements of the monitoring plan

Monitoring has the objective of measuring the emission reductions achieved by the project. The monitoring plan follows the Monitoring Methodology of consolidated baseline methodology for grid connected electricity generation from renewable sources ACM0002, version 20.0. All data collected as part of monitoring should be archived electronically and be kept at least for two years after the end of the last crediting period. All measurements will be conducted with calibrated measurement equipment according to Brazilian industry standards. The main parameters that will be monitored are:

EG<sub>facility,y</sub> - Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr);

Combined margin emission factor for the grid in year y (EF<sub>Grid,CM,y</sub>)

New project instances should present their monitoring reports when requesting inclusion in this Grouped Project. Monitoring Report should follow Monitoring Methodology of consolidated baseline methodology for grid-connected electricity generation from renewable sources ACM0002, version 19.0, and Brazilian Electricity Standards.

## Monitoring of EG<sub>facility,y</sub>

Operation and Maintenance (O&M) team is responsible for the operation and maintenance activities of the plants. Operation and maintenance team is responsible for measurement activities. It collects and storages all measurement data. Data is collected in real time and is available at the project site.

Commercial team is responsible for monitoring and analyzing EG<sub>facility,y</sub> information. It monitors data provided and cross-checks it with information provided by Chamber of Electricity Commercialization (CCEE).

Each plant has two measurement instruments (meters) located in the plant. One is the principal meter and the second is a rear. These meters register gross electricity generated by each plant. The WTGs included in this project activity has individual measuring equipment for each facility connected. The substation can also include energy generated by facilities outside the boundary project.

At substation there are two meters (one principal and one rear) that register net electricity supplied to the grid ( $EG_{facility,y}$ ) by all plants that compose the initial project instance. These meters can also include energy generated by facilities outside the project boundary. The total amount dispatched to the SIN monitored by these meters will be prorated between each project facility according to the proportional amount of electricity generation measured in the electrical substation for each facility.

ONS Grid Procedures (Sub-module 12.3) defines the calibration frequency and other maintenance procedures. All meters of the plants are calibrated according to Brazilian Standards.

# Monitoring roles and responsibilities:

The data for the project is compiled by the O&M Contractor and subsequently stored by the PP, the reporting and data flows as per the below mentioned flow chart starting from Site O&M team which monitors day to day operational data and monthly recording. The reporting responsibilities for the project are described as below;

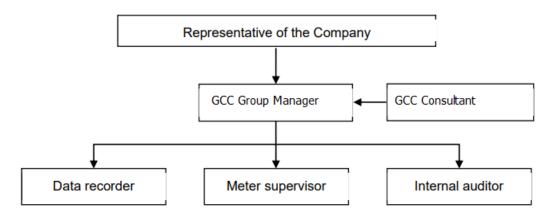


Figure: Structure of the monitoring group

The responsibilities of each person involved are elaborated as follows:

Person	Responsibility									
Representative of the Company	Legal representative of the Project Company									
	Review the monitoring report annually									
GCC group manager	Managing the whole GCC business of the									

	project, guiding and supervising data recorder after trained by GCC consultant.
GCC consultant	Providing trainings and technical support about GCC monitoring plan
Data recorder	Collecting and recording data every month.
Meter supervisor	Checking power meter periodically according to relevant regulation.
Internal auditor	Checking the monitoring procedures, double checking the collected data.

#### Personal Training:

The project employs qualified and experienced persons for plant operation. The training period shall be for three months, as this would be adequate and necessary to ensure proper imparting of the objective. The training course will be thoroughly and meticulously designed, highlighting the objectives, salient features, operational aspects and trouble shooting.

#### Emergency preparedness:

In case of any unforeseen event that is not covered under this monitoring plan, staff of the operation division will immediately inform the chief of the operation division. The chief of the operation division is then responsible to ensure that the cause for the unforeseen event is detected, the event is remedied and for the period in which the unforeseen event has occurred uncertainty in data gathered is limited as much as possible.

- In normal condition, the data of main power meter will be used as the basis of payment by the DISCOM to the PO and to calculate the emission reductions by the project activity.
- In case the main power meter is in failure and the backup power meter is still in good operation, the result of the backup meter will be used to calculate the emission reduction by the project activity.
- In case of both main and backup power meters are in failure, the Project Owner and the DISCOM will jointly calculate a conservative estimate of power supplied to the grid. The assumptions used to estimate net electricity supply to the grid will be signed by both a representative of the project owner as well as a representative of the DISCOM
- In case any power meters are in failure, the Project Owner will inform DISCOM immediately and contract with the authorized party to verify/ calibrate and/or replace the failed power meter.

**Data recording & archiving:** The project proponent shall maintain data both in electronic form and hard copies. The monitored data shall be archived till 2 years after the completion of crediting period.

# Section C. Start date, crediting period type and duration

## C.1. Start date of the Project Activity

As per the paragraph 38 of the project standard V3.1, start of commercial operations has been considered as the start date. Hence project commissioning date (COD), on which project is connected to grid and started generating power and exporting to the grid there by started generating GHG emission reductions is considered as start date.

Start date for all the projects is given in the below table:

Project	Start Date
Project Activity 1	03/10/2020
Project Activity 2	15/12/2020
Project Activity 3	25/12/2020

Earliest date of the commercial operation of the first project shall be on 03/10/2020. Hence, the start date of the project activity is 03/10/2020.

#### C.2. Expected operational lifetime of the Project Activity

25 Years 00 Months.

C.3. Crediting period of the Project Activity

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

Start date of the crediting period is 03/10/2020 and end date is 02/10/2030

C.3.2. Duration of crediting period

10 years i.e from 03/10/2020 to 02/10/2030

# **Section D. Environmental impacts**

#### **D.1.** Analysis of environmental impacts

The project activity does not involve any major construction activity. It primarily requires the installation of the wind WTGs, interfacing the generators with the grid by setting up HT transmission lines and installation of other accessories. Wind project activity operations do not result in direct air pollution, noise pollution. 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.

#### D.2. Environmental impact assessment and management action plans

Project activity has obtained relevant and required environmental approvals and operational licenses in prior to start the construction of the project activity. Applicable impact assessment studies have been carried out before the construction of the project activity.

# Section E. Environmental and social safeguards

>>

# E.1. Environmental safeguards

Impact of P Activity on	roject	li	nformation o	on Impacts,	, Do-No-Harm Ris	k Assessn	ent and Establishi	ng Safegua	rds		Project Owner's Conclusion		
		Description of Impact (both positive and	Legal requireme nt / Limit				Risk Mitigation Act		n Residual Ris essment	k Self-Dec	Self-Declaration		
		negative)	nt / Limit	Not Applicabl e (No actions required)	Harmless (No actions required)	Harmful (Actions required)	Operational Controls	Program of Risk Managem ent Actions	Re- Monitor evaluate Risks		Explanation of Conclusion	The Project Activity will not cause any harm	
Environment al impacts on the identified categories <sup>35</sup> indicated below.	Indicators for environmental impacts	Describe anticipated environmental impacts, both positive and negative from all sources (stationary and mobile), that may result from the Project Activity, within and outside the project boundary, over which the Project Owner(s) has control, and beyond what would reasonably be expected to occur in the absence of the Project Activity.	Describe the applicable national regulatory requirement s /legal limits related to the identified risks of environment al impacts.	If no environme ntal impacts are anticipated , then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicabl e (No actions required)	If environmental impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirements/ below the legal limits, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Harmless</b> (No actions required)	If environme ntal impacts are anticipated that will not be in complianc e with the applicable national regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause harm (may be un- safe) and shall be indicated as <b>Harmful</b> (Actions required).	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 <b>Harmful</b> .	Describe the Program of Risk Manageme nt Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce the risk of risk of rinkacts that have been identified as <b>Harmful</b> .	Re- evaluate risks after Risk Mitigation Action Plans have been developed (refer to previous two columns) for impacts that have been identified as Harmful. Indicate whether the risks have been eliminated or reduced and, where appropriate, indicate them as <b>Harmfess</b> (No actions required)	Describe the monitoring approach and the paramete to be monitored for each impact that has beer identified as Harmful and described in the PSF (refe to Table 3).	rs concluded that the Project Activity is likely to achieve the identified Risk	Confirm that the Project Activity risks of negative environn ntal impacts are expected to be managee to levels that are unlikely i cause an harm (Mark +1 for Yes c and -1 fc No)	

<sup>&</sup>lt;sup>35</sup>sourced from the CDM SD Tool and the sample reports are available (<u>https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx</u>)

# Project Submission Form

Environm ent - Air	SO <sub>x</sub> emissions	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e
	NO <sub>x</sub> emissions	Not Applicable	There is a limit of 650 mg/Nm3, according to CONAMA Resolution n <sup>o</sup> 382 (Resoluçã o CONAMA n <sup>o</sup> 382)	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e
	CO <sub>2</sub> emissions	The Project activity reduces greenhouse gases by producing and dispatching electricity generated by Wind energy technology displace the number of emissions would have been occurred through the conventional fossil fuel power plants in the country. Hence implementation of Wind project has the positive impact on the environment for this indicator.	Not Applicable	Not Applicabl e	-	-	Not Applicable	Not Applicable	Not Applicable	The CO2 emission reductions are going to be monitored through Monitoring Reports under GCC Standard (parameter <i>ER</i> )	Not Applicable	+1
	CO emissions	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e
	Suspended particulate matter (SPM) emissions	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e
	Fly ash emissions	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e

	Non- Methane Volatile Organic Compounds (NMVOCs)	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e
	Odor emissions	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e
	Noise Pollution	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e
	Others											
	Add more rows if required											
Environm ent - Land	Solid waste Pollution from Plastics	There were chances of Solid waste generation during the construction of the project activity from construction solid waste and domestic solid waste.	Brazilian National Policy on Solid waste <sup>36</sup>	-	The waste generation during the construction activity were managed as per the local regulation. Hence it is Harmless, and no further actions required.	No Action Required	The Waste management activities has been undertaken in the construction and operation phase of the project. The Waste management plan will be implemented in during the operation of the project activity	No Action required	By implement ing the measures and monitorin g the waste generatio n the residual risk associate d with the project can be eliminated and the project become Harmless throughou t its life cycle.	Monitoring of waste generation and disposal process.	The project activity is unlikely to cause any harm related to this indicator.	0

<sup>&</sup>lt;sup>36</sup> <u>https://www.braziliannr.com/brazilian-environmental-legislation/law-no-12305-brazilian-national-policy-solid-waste/</u>

Solid waste Pollution from Hazardous wastes	There is less chance for the occurrence of Hazardous waste in the Wind Power Plant since none of the components are described as Hazardous as per the standards. However, the parameter will be monitored to demonstrate the impact is harmless over the crediting period.	As above	-	Project anticipate generating hazardous waste (transformer oil) and it would be disposed by the PO as per the host country regulation through a licensed hazardous waste handler. Hence this will be harmless	No Action Required	Quantity of hazardous waste (transformer oil) discarded through registered vendor will be monitored and recorded	No Action Required	No Action Required	Quantity of hazardous waste (transformer oil) discarded through registered vendor will be monitored and recorded	The project activity is unlikely to cause any harm related to this indicator. Hence this parameter is scored as +1	+1
Solid waste Pollution from Bio- medical wastes	Not Applicable	Not Applicable	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
Solid waste Pollution from E- wastes	There is a minimal chance of E- waste generation from the Wind Power Project in terms of electronic equipment and, wires and computer auxiliary etc	-	-	The E-Waste generated from the project activity shall be disposed in a manner in compliance to the applicable law/regulation Hence it is Harmless.	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	The project activity is unlikely to cause any harm related to this indicator.	0
Solid waste Pollution from Batteries	Not applicable	Not applicable	Not applicabl e	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
Solid waste Pollution from end- of-life products/ equipment	The project is unlikely to cause pollution from chemicals and pesticides.	Not Applicable	Not applicabl e	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
Soil Pollution from Chemicals (including	The project is unlikely to cause pollution from chemicals and pesticides.	Not Applicable	Not applicabl e	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA

	Pesticides, heavy metals, lead, mercury)											
	Soil erosion	There is no chance of soil erosion during operation phase of the project activity	Not applicable	Not applicabl e	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
	Others											
	Add more rows if required											
Environm ent - <i>Water</i>	Reliability/ accessibility of water supply	Not applicable	Not applicable	Not applicabl e	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	0
	Water Consumptio n from ground and other sources	Not applicable	Not applicable	Not applicabl e	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	0
	Generation of wastewater	The project activity is predicted to generate wastewater from the construction activities, domestic activities during operation and runoff rainwater.	"Standards for effluent discharge Article 19 of: https://ww w.al .sp.gov.br/ rep ositorio/leg isla cao/decret o/1 976/decret o8468- 08.09.197 6.ht ml Operation License: https://aute nti	-	Project activity generates wastewater during operation of the project through sanitary usage. This wastewater shall be treated through by means of septic tank constructed at project site. Hence the impact is mitigated and harmless.	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	0

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	Wastewater discharge without/with insufficient treatment	Not Applicable	Not Applicable	No Action Required	No Required	Action	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
	Pollution of Surface, Ground and/or Bodies of water	Not Applicable	Not Applicable	No Action Required	No Required	Action	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
	Others	Not Applicable	Not Applicable	No Action Required	No Required	Action	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
	Add more rows if required												
Environm ent – Natural	Conserving mineral resources	Not Applicable	Not Applicable	No Action Required	No Required	Action	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
Resource s	Protecting/ enhancing plant life	Not Applicable	Not Applicable	No Action Required	No Required	Action	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
	Protecting/ enhancing species diversity	Not Applicable	Not Applicable	No Action Required	No Required	Action	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA

Protecting/ enhancing forests	Not Applicable	Not Applicable	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
Protecting/ enhancing other depletable natural resources	Not Applicable	Not Applicable	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	NA
Conserving energy	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Nil
The wind power project replaces fossil fuel with the renewable wind energy for the power generation by installing the wind power plant which would have been otherwise generated from the fossil fuel dominant grid connected power plants in the absence of the project activity.	Not Applicable	Since the impact is positive and cause no harm to the environme nt further Risk assessme nt is Not Applicable	No Action Required	No Action Required	No Action Required	No Action Required	No Action Required	Though the Project activity is not responsibl e for displacing any power station it is reducing the amount of fossil fuel used in the existing conventio nal power projects in the country there by reducing the release of greenhou se gasses into atmosphe re. Consideri ng the occurrenc e of emission reducions through	The project activity is unlikely to cause any harm related to this indicator. Hence this parameter is scored as +1	The wind power project replaces fossil fuel with the renewable wind energy for the power generation by installing the wind power plant which would have been otherwise generated from the fossil fuel dominant grid connected power plants in the absence of the project activity.	+1

			Na			Mension			electricity generatio n form the wind power project. This parameter will be monitored through the monthly Power generatio n from the proposed wind Project. Monthly electricity generatio n will be monitored through the energy meters installed at the substation . Energy Generatio n reports will be provided for the verificatio n.			
Replacing ODS with non-ODS refrigerants	Not Applicable	Not Applicable	Not Applicabl e	No required	action	No action required	Not Applicable	Not Applicabl e	No action required	Not Applicable	No action required	Not Applicabl e
Others												
Add more rows if required												

	all impact is neutral or positive and there is no net harm; and (b) less than zero, the overall impact is negative and there is net harm to Environment. Score ach of the rows in the last column of the above table.
Net Score:	+3
Project Owner's Conclusion in PSF:	The Project Owner confirms that the Project Activity will not cause any net harm to the environment.

# E.2. Social Safeguards

Impact Project	of Activity		Infor	mation on Im	pacts, Do-No	-Harm Risk A	ssessment and	Establishing S	Safeguards		Project Owner's Conclusion	
on		Description of Impact (both positive and negative)	Legal requirement /Limit	Do-No-Harm Risk Assessment			Risk Mitigation Action Plans		Do-No-Harm Residual Risk Assessment		Self-Declaration	
				Not Applicable (No actions required)	Harmless (No actions required)	Harmful (Actions required)	Operational Controls	Program of Risk Management Actions	Re-evaluate Risks	Monitoring	Explanation of Conclusion	The Project Activity will not cause any harm
Social impacts on the identifi ed categor ies <sup>37</sup> indicate d below.	Indicator s for social impacts	Describe the impacts on society and stakeholders, both positive and negative, that may result from constructing and operating of the Project Activity.	Describe the applicable national regulatory requirements / legal limits 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 (No actions required)	If social impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirements/ legal limits, then it the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Harmless</b> (No actions	If social impacts are anticipated that will not be in compliance with the applicable national regulatory requirements/ legal limits, then the Project Activity is likely to cause harm (may be unsafe) and shall be indicated as <b>Harmful</b> (Actions required).	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 <b>Harmful</b> .	Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., construction of crèche for workers) that will be adopted to reduce the risk of impacts that have been identified as <b>Harmful</b> .	Re-evaluate risks after Risk Mitigation Actions plans have been developed (refer to previous two columns) for impacts that have been identified as Harmful. Indicate whether the risks have been eliminated or reduced and, where appropriate, indicate them as Harmless (No actions required)	Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as Harmful and to be described in the PSF (refer to Table 3).	Describe how the Project Owner has concluded that the Project Activity is likely to achieve the identified Risk Mitigation Action Plan targets for managing risks to levels that are unlikely to cause any harm.	Confirm that the Project Activity risks of negative social impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for <b>Yes</b> or and -1 for <b>No</b> )
Social	Safeguard	ls										
Socia I – Jobs	Long- term jobs (> 1 year) created / lost	The project activity generates long term job opportunitie s during the operation the project activity. Project	Host country minimal wage requirement s	This is a positive impact on the society Hence No actions required.	No action required.	No action required	No action required	No action required	No action required	To demonstrate the positive impact due to the project activity over the lifetime Project Owner monitors the impact through	The project is unlikely to cause any harm. Hence this parameter is scored as +1	+1

<sup>37</sup>sourced from the CDM SD Tool and the sample reports are available (<u>https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx</u>)

		Owner has a policy on nondiscrimin ation for any openings.									either of the following measures. 1. Employ ment Records 2. Host country minimal wage requirem ents and project complian ce to that. Project Owner monitors the parameter and keep the records for the verification purpose.		
	New short- term jobs (< 1 year) created / lost	The Project will generate short term employment during the construction of the project.	Host country minimal wage requirement s	This is a positive impact on the society Hence No actions required for further No- Harm Risk assessment	No action required.	No action required	No action required	No action required	No required	action	The project will achieve the generation of short-term employment during the construction, operation and commissionin g of the wind power plant	The project is unlikely to cause any harm. Hence this parameter is scored as +1	+1
	Source s of income generat ion increas ed / reduce d	Not Applicable	No regulation	Not applicable	-	-	Not applicable	Not applicable	No required	action	Not applicable	Not applicable	NA
Socia  - <i>Healt</i>	Diseas e prevent ion	Not Applicable	No regulation	Not applicable	-	-	Not applicable	Not applicable	No required	action	Not applicable	Not applicable	NA
h & Safety	Reduci ng / increasi ng acciden ts	Not Applicable	NA	Not applicable	-	-	Not applicable	Not applicable	No required	action	Not applicable	Not applicable	NA

Reduci	Not	NA	Not			Not applicable	Not applicable	No action	Not applicable	Not applicable	NA
ng / increasi ng crime	Applicable		applicable	-	-			required			
Reduci ng / increasi ng food wastag e	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	NA
Reduci ng / increasi ng indoor air pollutio n	Not Applicable	-	Not applicable	No Action required	No Action required	Not applicable	Not applicable	No Action required	Not applicable	Not applicable	NA
Efficien cy of health service s	Not Applicable	No local regulation available	Not applicable	No action required	No action required	Not applicable	Not applicable	No action required	Not applicable	Not applicable	NA
Sanitati on and waste manag ement	The project activity is predicted to generate solid waste and wastewater from the construction activities, domestic activities during operation.	-	-	The solid waste generated during the operation of the project activity shall be collected, stored, segregated and dispose to regulated areas and Hazardous waste (transformer oil) shall be disposed to the licensed vendor in compliance to the local Laws and regulation.	-	No Action Required	quantity of hazardous waste (transformer oil) discarded through registered vendor will be monitored and recorded. Portable toilets with sanitation and septic tanks will be constructed at the site.	No Action Required	No Action Required	quantity of hazardous waste (transformer oil) discarded through registered vendor will be monitored and recorded	+1
Other health and safety issues	Not Applicable	Not applicable	No action require	No action required	Not applicable	Not applicable	Not applicable	No action required	Not applicable	Not applicable	NA

	Add more rows if require d	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	NA
Socia I - Educa tion	Job related training imparte d or not	Employees gets benefited from training 	-	This is a positive impact on the society Hence No actions required for further No- Harm Risk assessment	No action required	To demonstrate the positive impact due to the project activity over the lifetime Project Owner monitors the impact through either of the following measures. 1) List of Trainings conducted 2) Attendance Records Project Owner monitors the parameter and keep the records for the verification purpose.	The project is unlikely to cause any harm. Hence this parameter is scored as +1	+1				
	Educati onal service s improv ed or not	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not Applicable
	Project- related knowle dge dissemi nation effectiv e or not	Project activity generates knowledge disseminatio n during the operation of the project.	Not applicable	This is a positive impact Hence no actions require	No action required	Since No risk has been associated with this parameter no risk mitigation action plan is required to implement.	0					
	Other educati onal issues	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	

# Project Submission Form

	Add more rows if require											
Socia   – Welfa re	Improvi ng/ deterior ating working conditio ns	Not Applicable	EHS policy of project company	Not applicable	No action required	No action required	Not applicable	Not applicable	No action required	Not applicable	Not applicable	NA
	Commu nity and rural welfare	Not Applicable	Not applicable	Not applicable	No action required	No action required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	0
	Poverty alleviati on (more people above poverty level)	Not Applicable	No local regulation	Not applicable	No action required	No action required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	NA
	Improvi ng / deterior ating wealth distribut ion/ generat ion of income and assets	Not Applicable	No local regulation	Not applicable	No action required	No action required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	NA
	Increas ed or / deterior ating municip al revenu es	Not Applicable	No local regulation	Not applicable	No action required	No action required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	NA
	Women 's empow erment	The project owner has the nondiscrimin ation policy on recruitment and	Organizatio n Policy	This is a positive impact Hence no actions required	No action required	No action required	Project Owner has enforced the policy on "Remunerati and Welfare for Executives and Employees"	No action required	No action required	1.listofwomenemployeesifemployed any2.Organizationpolicyon	The project activity creates positive impact on the society	+1

		remuneratio n. (i.e right of equal pay). This ensures women's empo werment.					ensuring the employees in various positions without discrimination and providing equal opportunities, both women, disabled, underprivilege d.			gender equality and equal remuneration.		
	Reduce d / increas ed traffic congest ion	Not Applicable	No local regulation	Not applicable	No action required	No action required	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	NA
	Other social welfare issues	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	NA
	Add more rows if require											
		(a) zero or great scores in each o				ere is no net ha	rm; and (b) less tha	an zero, the overal	l impact is negative a	nd there is net har	m to society.Score is	obtained after
Net S	core:		+5									
	Project         Owner's           Conclusion in PSF:         The Project Owner confirms that the Project Activity will not cause any 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								
			Project-level SDGs	Project-level Targets/ Actions	Project-level Indicators	Contribution of Project- level Actions to SDG Targets	Monitoring	Explanation of Conclusion	Are Goal/ Targets Likely to be Achieved?			
Describe UN SDG targets and indicators See: <u>https://unstat</u> <u>s.un.org/sdgs</u> <u>/indicators/in</u> <u>dicators-list/</u>	Describe the UN- level target(s) and correspond ing 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. <b>For guidance see:</b> Integrating the SDGs into Corporate Reporting- A Practical Guide: <u>https://www.unglobalcompact.or</u> <i>g/docs/publications/Practical_Gu</i> <i>ide_SDG_Reporting.pdf</i> Case-study from Coca-Cola and other organizations to develop organization-wide SDGs (page 114): <u>https://pub.iges.or.jp/pub/re</u> alising-transformative-potential- sdgs	Define project- level targets/actions, by suitably modifying and customizing UN/Country- level targets to the project scope. Define the target date by which the Project Activity is expected to achieve the project-level SDG target(s). Refer to the previous column for guidance	Define project- level indicators by suitably modifying and customizing UN/Country- level indicators to the project scope or creating a new indicator(s). Refer to the previous column for guidance	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 and is additional to what would have occurred in the absence of the Project Activity	Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG target and Indicator	Describe how the Project Owner has concluded 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	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Goal 2: End hunger, achieve food security and improved nutrition and promote	NA	NA	NA	NA	NA	NA	NA	NA	NA			

sustainable agriculture									
Goal 3. Ensure healthy lives and promote well-being for all at all ages	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunitie s for all	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 5. Achieve gender equality and empower all women and girls	5.C Adopt and strengthen sound policies and enforceabl e legislation for the promotion of gender equality and the empowerm ent of all women and girls at all levels	YES	Organization Policy for maintaining Non-discrimination and Gender equality during employment and remuneration policy for equal pay for equal work.	Project will be commissioned on 01/01/2016 and thus all policies related to the gender equality and remuneration are in place for implementation	Project Owner through the implementation of organization policies for gender equality and equal remuneration targeted to eliminate any non- discrimination while employing the people and paying the equal remuneration for equal work.	In the absence of the project activity the additional employment opportunities created for both men and women would have not been occurred as there was no power plant is being operational in the project area. Project Owner has enforced the policy on "Remuneration and Gender	<ol> <li>list of women employees if employed any</li> <li>Organization policy on gender equality and equal remuneration</li> <li>.</li> </ol>	Project is yet to be commissione d to national grid and feeding the renewable power to the grid. Hence complied to the SDG. No 5.C	YES

#### Project Submission Form

						Equality" ensuring the employees in various positions without discrimination and providing equal opportunities, both women, disabled, underprivileged			
Goal 6. Ensure availability and sustainable managemen t of water and sanitation for all	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 By 2030, increase substantiall y the share of renewable energy in the global energy mix.	YES	7.2.1 Renewable energy share in the total final energy consumption	Project will be commissioned on 01/01/2016 and thus will increase the share of renewable energy in the grid mix of national grid.	Project target to generate and feed 426,459 MWh/year to the national grid and thus expected to increase the share of renewable energy by 10,661,475 MWh to the national grid for its lifetime	In the absence of the project activity 426,459 MWh/year of electricity would have been generated in the fossil fuel dominated grid mix of Brazil and thus the project increase the share of renewable energy in national grid.	The value of net electricity supplied to the national grid shall be monitored and recorded. Refer section B.7.2 of this PSF.	Project is yet to be commissione d and connected to national grid and feeding the renewable power to the grid. Hence complied to the SDG. No 7.2	YES
Goal 8. Promote sustained, inclusive and sustainable economic growth, full	8.5 By 2030, achieve full and productive employmen t and decent	Yes	8.5.1Average hourly earnings of employees, by sex, age, occupation, and persons with disabilities.	Project will be commissioned on 01/01/2016 Thus during the construction and operation of the project, increases full	Project creates new employments and generates income for people during the project lifetime.	In the absence of the project activity the targeted employment would not have been occurred and thus by	1. No of employment (with bifurcation on number by sex, age group and also where	Project is yet to be commissione d. Hence complied to SDG No 8.5	YES

and productive employment and decent work for all	work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.					and productive employment and decent work. Project Owner is an equal employment provider without any discrimination such as sex, age and personal disability and also the policy ensures equal pay for work of equal value.		through implementation and operation of the it increases full and productive employment and decent work	applicable, persons with disabilities) 2. Average earnings 3. Policy for Non discriminatio n and equal pay for the work of equal value.		
Goal 9. Build resilient infrastructur e, promote inclusive and sustainable industrializa tion and foster innovation	9.4 By 2030, upgrade infrastructu re and retrofit industries to make them sustainable , with increased resource- use efficiency and greater adoption of clean and environme ntally sound technologie s and industrial processes, with all countries taking action in	No	Bild and resilient facility.	operate energy	clean and generation	Project activity involves installation of 100.8 MW wind project in Brazil.	Project activity target to generate 426,459 MWh of electricity per annum from the renewable energy source of wind and feed into the national grid. Project activity reduces an average of 155,615 tCO <sub>2</sub> per annum with the installation of cleaner energy generation source.	Project owner ensures and undertake following actions to demonstrate the contribution to the SDGs. 1. Long term Power Purchase agreement has been signed with power distribution utility to purchase and supply the generated power from the wind power project to the final consumers through the national grid. 2.Ensures best O&M practices at the site to optimise plant	Monitoring Parameter: Net quantity of electricity supplied to the National Grid (MWh/Annum)) Monitoring procedures: Main and Check meters are installed at the substation by the electricity the electricity from the plant. The value of net electricity generation supplied to the grid as	Project activity is yet to be commissione d. Project activity involves installation of advanced wind technology which is clean and resilient infrastructure from the conventional fossil fuel- based power plant technology. Supports advanced industrializati on by providing zero greenhouse gas and non-	YES

	accordance with their respective capabilities					efficiency to generate maximum possible renewable energy and supply to the grid. These two actions ensure increase of renewable share in the national gird thereby increase in the total final energy consumption.	per Monthly Meter Reading Report forms which can be cross- checked from the invoice raised to Consumer.	polluting clean electricity. Support industrializati on through local hiring, procurement, and training and skills development. Project is yet to be commissione d and will achieve the Goal targets.	
Goal 10. Reduce inequality within and among countries	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 12. Ensure sustainable consumptio n and production patterns	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 13. Take urgent action to combat climate	13.2 Integrate climate change measures	No	13.2.2 Total greenhouse gas emissions per year	Project will be commissioned on 01/01/2016 and thus will result in 155,615 tCO2	Project target to reduce 155,615 tCO2 emissions per year in the host country and	In the absence of the project activity 155,615 tCO2/year emission reductions	The quantity of CO2 emission reduction/yea r reduced due to the	Project is yet to be commissione d and will result in emission	YES Targeted SDG is likely to be achieved during the

change and its impacts	into national policies, strategies, and planning			emissions per year in the host country.	expected to reduce 3,890,375 tCO2 emission reductions to in the host country for its lifetime	would have been generated from the fossil fuel dominated power plants in the host country.	operation of the project activity. Refer section B.7.2 of this PSF.	reductions during its lifetime. Hence complied to the SDG No.13	entire crediting period.
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable developmen t	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertificati on, and halt and reverse land degradation and halt biodiversity loss	NA	NA	NA	NA	NA	NA	NA	NA	NA

	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goal 16. Promote peaceful and inclusive societies for sustainable developmen t, provide access to justice for all and build effective, accountable and inclusive institutions at all levels									
Goal 17. Strengthen the means of implementat ion and revitalize the global partnership for sustainable developmen t	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SUMMARY Targeted Likely to be Achieve							hieved	
Total Number	of SDGs					+5		Likely to be Achieved +5	
Certification la	Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF						Platinum Platinum		um

## Section G. Local stakeholder consultation

#### G.1. MODALITIES FOR LOCAL STAKEHOLDER CONSULTATION

The consultation was carried out through a specific public hearing in 27/04/2022 including all stakeholders, where the Environmental and Social Impact Assessment and the mitigation and compensatory proposals were presented. In addition, physical consultation was carried out by Individual interviews with local stakeholders, not gender specific, living in the vicinity of the wind farms.

Since all the projects are commissioned at one location in São Bento do Norte - RN, Brazil., the specific local stakeholder consultation was conducted on the same day.

#### Scope of Consultation:

The scope of this Local Stakeholder Consultation meeting is to provide an opportunity to engage stakeholders in a meaningful manner at an early stage of the project activity which helps them to understand the project, participate in decision-making and exchange views and/or concerns regarding the project impacts and opportunities. This also enables or helps the project owner to identify, avoid and minimize adverse impacts and establish ongoing communications with relevant stakeholders during the lifetime of the project activity.

#### Means of Inviting Stakeholders:

Since the local communities are the predominant stakeholders for the meeting sending individual invitations is not a possible option. So, the local people were invited through the public notice which is more appropriate. For village authorities and officials' invitations were handed over as they were available locally in the project area.

#### Group of Stakeholders to be Involved

The stakeholders identified and invited for the meeting were relevant and are directly /indirectly affected by the project. The invitees include individuals from the local communities irrespective of caste, creed, gender or community, representatives of local authority and official representatives. Group of stakeholders identified for this project includes following

- 1. Local villagers in the study area, and villagers outside the study area where an existing project is operational (Both men and woman gender were invited to the meeting at the plant site).
- 2. Land sellers
- 3. Village officials such as village/panchayat president and Village development officer
- 4. Electricity Board officials

#### **Meeting Details**

LSC meeting details are presented in below table.

Project Developer Capacity Date of LSC Location
---

1. VENTOS DE SÃO FERNANDO I ENERGIA S.A 2. VENTOS DE SÃO FERNANDO II ENERGIA S.A 3. VENTOS DE SÃO FERNANDO III ENERGIA S.A	173.1 MW	27/04/2022	São Bento do Norte, Rio Grande do Norte, Brazil
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Plant In charge welcomed all the panel members and participants and provided the technical description of the wind power plant including environmental, social and economic impacts on the local community. Further explained the role of this wind Project over the years in addressing community development and livelihood issues and its contribution towards promoting sustainable development by linking local priorities to global challenges.

He further explained how thermal power plants were contributing to the global warming and provided a comparison between non-renewable and renewable power plants to the stakeholders where it was shown how a wind power plant is beneficial for the environment. Further, he briefed the stakeholders about the precautionary and safety measures to be kept in mind while working or visiting the power plant. Further explained the benefits of wind Power Plant and its contribution to climate mitigation. further, briefed the stakeholders about the UN Sustainable Development Goals and how this project was contributing towards the UN SDGs.

Feedback questionnaire was distributed to the stakeholders to collect the comments and concerns about the project activity. The following questions were asked in the questionnaire.

Are you aware of the project?

What are the pros and cons of the project?

What's your concern over the project?

Do you face any negative impact due to the project construction and operation?

Do you support the implementation of the project activity?

This was followed by questions and experience sharing from the participating stakeholders. After listening to all the stakeholder comments, suggestions and answering their queries successfully, the meeting reached a closure and thanked everyone for being part of the stakeholder consultation meeting and requested everyone to keep up the momentum towards tackling climate change.

Project owner has requested the stakeholders to contact the site in-charge any time through the email or phone or to the site address mentioned in the invitation to express their grievances in future. Also assured that a grievance register is always made available at the project site to register their complaints if any in the register and same will be addressed and resolved in the earliest possible time.

Total 44 stakeholders including local villagers were attended the meeting, list of stakeholders are provided below.

	COMUNIDADE: ALTO DO ORIENTE						
	NOME	TELEFONE	TEMPO DE HABITAÇÃO (anos)				
1	Wastenilson Costa	(84) 99958-1710	11				
2	Marinete Bezerra	(84) 98606-5441	12				
3	Gilvan Costa da Cruz	(84) 99499-2175	11				
4	Ana Lucia Pontes	(84) 98777-3349	10				
5	Ana Clara Freitas da Cruz	(84) 98838-1363	10				
6	Miguel Xavier de Souza	-	10				
7	Maria Nazaré Ferreira	-	12				
8	Francisca Pereira da Silva	-	9				
9	Maria Ivanete Freitas da Rocha	(84) 98838-1363	9				
10	Ana Paula Rocha	(84) 98842-3197	10				
11	Neila Maria da Silva	(84) 98624-4007	5				

	COMUNIDADE:	NOVA OLINDA I	
	NOME	TELEFONE	TEMPO DE HABITAÇÃO (anos)
1	Maria de Fátima Barboza da Silva	-	9
2	Maria Aparecida Oliveira dos Santos	(84) 98795-9853	15
3	Luisa Figueiredo dos Santos	(84) 99110-3677	15
4	Maria dos Santos Figueredo	(84) 99471-9473	15
5	Antônio Ribeiro	-	17
6	Luiz Gonçalo dos Santos	-	17
7	Milton Tenorio	-	15
8	Daniele Barbosa Lucas	(84) 99170-1587	15
9	Francisca da Silva Oliveira	-	15
10	Maria Rita Gonçalo dos Santos	(84) 99204-3551	15
11	Luís Ribeiro da Silva	(84) 99476-7793	15
12	José Jackson Teixeira Rodrigues	(84) 99910-2690	15
13	José Gomes Ferreira	-	15
14	Roberta Raimunda da Silva	(84) 99227-5554	15
15	Léa Silva do Nascimento	(84) 99453-2340	3
16	Miranilson Franco Costa	-	15
17	Maria de Lourdes	-	15
18	Marluce Barbosa	-	3
19	Daniele Martins da Silva	-	15
20	Maria Santos	(84) 98795-9853	15
21	Severino Juvino dos Santos	(84) 98795-9853	15
22	Idelfonso Domingos de Moura	-	15

	COMUNIDADE: NOVA OLINDA II						
	NOME	TELEFONE	TEMPO DE HABITAÇÃO (anos)				
1	Luiz Gonzaga do Nascimento	(84) 98704-8136	9				
2	Jerry Adriano Silva do Nascimento	(84) 99152-1026	8				
3	José Joaquim da Silva	-	7				
4	José de Oliveira	-	10				
5	Lucilei de Barbosa da Silva	-	6				
6	Maria Eliane dos Santos	(84) 98717-2942	8				
7	Terezinha Vicente Ferreira	-	8				
8	Luciana Barbosa Ribeiro	(84) 98783-2309	9				
9	Rosane Ferreira Gomes Alves	(84) 99204-0731	12				
10	Marco	-	15				
11	Geovana Navarro Silva dos Santos	(84) 98843-4214	9				

#### G.2. SUMMARY OF COMMENTS RECEIVED

All the respondents, communities in and around study area were aware about the proposed wind power project and expressed their support and cooperation for project activity. They didn't seem to have any objections or problem related to the development of wind power project in their area.

Local people were concerned about the employment opportunity from the proposed wind power project. The Project Owner has assured, that they will prefer local people for unskilled labors during project construction period, while based on the skills and education they will provide employment opportunities to eligible youths of the locality.

## G.3. CONSIDERATION OF COMMENTS RECEIVED

There were no concerns raised by the local stakeholders. The potential benefits of the project activity for the local stakeholders were acknowledged.

No negative comments have been received on project activity from any of the local stakeholders consulted. As all comments were very positive about the project, no further action is required.

There were no further comments raised by the stakeholders and they were totally in support for setting up of these kinds of projects in the region.

The summary of comments received during the meeting and responses provided by PP representative are provided below:

Stakeholder comment	Explanation provided by PP representative
How do you manage the dust and air and noise pollution during the construction	Adequate measures will be followed to eliminate the risk of air, noise and dust pollution during the construction of the project activity.
Is there any impact on the local people due to the waste generation at the plant?	There is no significant solid waste generation or wastewater discharge due to the wind power plants. However, if any waste generates during the project operation will be well managed at the plant storage

yard and dispatched to the regulated dumping areas without affecting the local people on regular intervals. You can anytime complain your grievances if any due
to the project operation at the site grievance register.

# Section H. Approval and authorization

State and municipal environmental authorization were required and obtained.

Host country approval will be submitted in later stages as and when required to meet the CORSIA requirements.

#### **APPENDIX 1. CONTACT INFORMATION OF PROJECT OWNERS**

Project Owner name	VENTOS DE SÃO FERNANDO I ENERGIA S.A.	
(as per LON/LOA)	VENTOS DE SÃO FERNANDO II ENERGIA S.A.	
	VENTOS DE SÃO FERNANDO III ENERGIA S.A.	
Country	Brazil	
Address	at São Fernando Farm RN 129, kM 9,5, Rural area, zip code number	
	59.590-00, São Bento do Norte, Rio Grande do Norte, Brazil;	
Telephone	-	
Fax	-	
E-mail	fostermayer.enerfin@elecnor.com	
Website	http://enerfin.com.br/br/	
Contact person	Felipe Ostermayer,	

Project Owner name (as per LON/LOA)	Kosher Climate India Private Limited
Country	India
Address	Zee Plaza, No.1678, Ground and 1st Floor, 27th Main Rd, near Andhra Bank, Sector 2, HSR Layout, Bengaluru, Karnataka 560102
Telephone	9632803444
Fax	-
E-mail	narendra@kosherclimate.com
Website	-
Contact person	Narendra Kumar Ramraj

## **APPENDIX 2. AFFIRMATION REGARDING PUBLIC FUNDING**

>> Not Applicable

## APPENDIX 3. APPLICABILITY OF METHODOLOGY(IES)

>>Refer section B.2

## APPENDIX 4. FURTHER BACKGROUND INFORMATION ON EXANTE CALCULATION OF EMISSION REDUCTIONS

>> Not Applicable

# APPENDIX 5. FURTHER BACKGROUND INFORMATION ON MONITORING PLAN

>> Not Applicable

# APPENDIX 6. SUMMARY REPORT OF COMMENTS RECEIVED FROM LOCAL STAKEHOLDERS

>>Refer section G.2

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

>> Not Applicable

Complete this form in accordance with the instructions attached at the end of this form.		
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	Pre-registration Changes	Reference number	Approved	Provide a summary of pre- registration changes
(Tick as applicable)	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	Fixed 10 year				
	Period (Shall start	Renewable	1 <sup>st</sup>			
	on or after 1 Jan 2016)	(7 years, with 2 approved	2 <sup>nd</sup>			
	,	renewals)	3 <sup>rd</sup>			
	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				-	

Details of Previous			-		-
Issuance Requests	Issuance Request	Period (start & end dates)	ERs as per registered PDD	Quantity of Credits requested to be issued	Quantity of Credits issued
	1 <sup>st</sup>				
	2 <sup>nd</sup>				
	3 <sup>rd</sup>				
	4 <sup>th</sup>				
	5 <sup>th</sup>				
	Add rows				
	Total				
List any open issues in the Validation and last Verification Report (e.g., FARs, if any) and how they have been addressed					
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					
Provide the list of all the registered documents related to this project, as available on the program's website and the					

corresponding	
URLs.	

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

>> 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.

>> Not Applicable

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

V 2.0	25/06/2019	<ul> <li>approval under CORSIA<sup>38</sup>;</li> <li>Revised version released for approval by the GCC Steering Committee.</li> <li>Revised version includes additional details and instructions on the information to be provided, consequent to the latest developments world-wide (e.g., CORSIA EUC).</li> </ul>
V 1.0	01/11/2016	Initial version released under the GCC Program Version 1

<sup>&</sup>lt;sup>38</sup>See ICAO recommendation for conditional approval of GCC at <u>https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt TAB Report Jan 2020 final.pdf</u>





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