

المجلس العالمي للبصمة الكربونية  
GLOBAL CARBON COUNCIL



# Project Submission Form

V3.2 - 2020

## Contents

<b><u>SECTION A. DESCRIPTION OF THE PROJECT ACTIVITY</u></b>	<b>9</b>
A.1. PURPOSE AND GENERAL DESCRIPTION OF THE PROJECT ACTIVITY	9
A.2. LOCATION OF THE PROJECT ACTIVITY	10
A.3. TECHNOLOGIES/MEASURES	11
A.4. PROJECT OWNER(S)	12
A.5. DECLARATION OF INTENDED USE OF APPROVED CARBON CREDITS (ACCs) GENERATED BY THE PROJECT ACTIVITY	12
A.6. ADDITIONAL REQUIREMENTS FOR CORSIA	12
<b><u>SECTION B. APPLICATION OF SELECTED METHODOLOGY(IES)</u></b>	<b>12</b>
B.1. REFERENCE TO METHODOLOGY(IES)	12
B.2. APPLICABILITY OF METHODOLOGY(IES)	13
B.3. PROJECT BOUNDARY, SOURCES AND GREENHOUSE GASES (GHGs)	15
B.4. ESTABLISHMENT AND DESCRIPTION OF THE BASELINE SCENARIO	16
B.5. DEMONSTRATION OF ADDITIONALITY	16
B.6. ESTIMATION OF EMISSION REDUCTIONS	27
B.6.1. EXPLANATION OF METHODOLOGICAL CHOICES	28
B.6.2. DATA AND PARAMETERS FIXED EX ANTE	28
B.6.3. EX-ANTE CALCULATION OF EMISSION REDUCTIONS	30
B.6.4. SUMMARY OF EX ANTE ESTIMATES OF EMISSION REDUCTIONS	31
B.7. MONITORING PLAN	31
B.7.1. DATA AND PARAMETERS TO BE MONITORED	31
B.7.2. MONITORING-PROGRAM OF RISK MANAGEMENT ACTIONS	37
B.7.3. SAMPLING PLAN	40
B.7.4. OTHER ELEMENTS OF THE MONITORING PLAN	40
<b><u>SECTION C. START DATE, CREDITING PERIOD TYPE AND DURATION</u></b>	<b>43</b>
C.1. START DATE OF THE PROJECT ACTIVITY	43
C.2. EXPECTED OPERATIONAL LIFETIME OF THE PROJECT ACTIVITY	43
C.3. CREDITING PERIOD OF THE PROJECT ACTIVITY	43
C.3.1. FIXED CREDITING PERIOD	43
C.3.2. START DATE OF THE CREDITING PERIOD	43
C.3.3. DURATION OF THE CREDITING PERIOD	44
<b><u>SECTION D. ENVIRONMENTAL IMPACTS</u></b>	<b>44</b>
D.1. ANALYSIS OF ENVIRONMENTAL IMPACTS	44

<b>D.2. ENVIRONMENTAL IMPACT ASSESSMENT</b>	<b>44</b>
<b><u>SECTION E. ENVIRONMENTAL AND SOCIAL SAFEGUARDS</u></b>	<b><u>44</u></b>
E.1. ENVIRONMENTAL SAFEGUARDS	45
E.2. SOCIAL SAFEGUARDS	56
<b><u>SECTION F. UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDG)</u></b>	<b><u>61</u></b>
<b><u>SECTION G. LOCAL STAKEHOLDER CONSULTATION</u></b>	<b><u>67</u></b>
G.1. MODALITIES FOR LOCAL STAKEHOLDER CONSULTATION	67
G.2. SUMMARY OF COMMENTS RECEIVED	68
G.3. CONSIDERATION OF COMMENTS RECEIVED	68
<b><u>SECTION H. APPROVAL AND AUTHORIZATION</u></b>	<b><u>68</u></b>
Appendix 1. Contact information of project owners	69
Appendix 2. Affirmation regarding public funding	69
Appendix 3. Applicability of methodology(ies)	69
Appendix 4. Further background information on ex ante calculation of emission reductions	69
Appendix 5. Further background information on monitoring plan	69
Appendix 6. Summary report of comments received from local stakeholders	69
Appendix 7. Summary of de-registered CDM project (Type B)	70
<b><u>INSTRUCTIONS FOR COMPLETING THIS FORM</u></b>	<b><u>74</u></b>

<b>COVER PAGE- Project Submission Form (PSF)</b>	
<i>Complete this form in accordance with the instructions attached at the end of this form.</i>	
<b>BASIC INFORMATION</b>	
<b>Title of the Project Activity</b>	<b>Hong Phong 1 Wind Power Plant</b>
<b>PSF version number</b>	01.2
<b>Date of completion of this form</b>	27/05/2022
<b>Project Owner(s)</b> <small>(Shall be consistent with De-registered CDM Type B Projects)</small>	Hong Phong 1 Wind Power Joint Stock Company
<b>Country where the Project Activity is located</b>	Vietnam
<b>GPS coordinates of the project site(s)</b>	Refer section A.2 for more information
<b>Eligible GCC Project Type as per the Project Standard</b> <small>(Tick applicable project type)</small>	<input checked="" type="checkbox"/> <b>Type A:</b> <input type="checkbox"/> Type A1 <input checked="" type="checkbox"/> Type A2  <input type="checkbox"/> <b>Type B – De-registered CDM Projects:<sup>1</sup></b> <input type="checkbox"/> Type B1 <input type="checkbox"/> Type B2

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

<b>Minimum compliance requirements</b>	<input checked="" type="checkbox"/> Real and Measurable GHG Reductions <input checked="" type="checkbox"/> National Sustainable Development Criteria (if any) <input checked="" type="checkbox"/> Apply credible baseline and monitoring methodologies <input checked="" type="checkbox"/> Additionality <input checked="" type="checkbox"/> Local Stakeholder Consultation Process <input checked="" type="checkbox"/> Global Stakeholder Consultation Process <input checked="" type="checkbox"/> No GHG Double Counting <input checked="" type="checkbox"/> Contributes to United Nations Sustainable Development Goal 13 (Climate Action)																										
<b>Choose optional and additional requirements</b> <small>(Tick applicable label categories)</small>	<input checked="" type="checkbox"/> Do-no-net-harm Safeguards to address Environmental Impacts <input checked="" type="checkbox"/> Do-no-net-harm Safeguards to address Social Impacts <input checked="" type="checkbox"/> Contributes to United Nations Sustainable Development Goals (in addition to Goal 13)																										
<b>Applied methodologies</b> <small>(Shall be approved by the GCC or the CDM)</small>	ACM0002: Grid-connected electricity generation from renewable sources --- Version 20.0																										
<b>GHG Sectoral scope(s) linked to the applied methodology(ies)</b>	Energy Industries (Renewable/ Non-Renewable Source)																										
<b>Applicable Rules and Requirements for Project Owners</b> <small>(Tick applicable Rules and Requirements)</small>	<table border="1"> <thead> <tr> <th data-bbox="521 1226 1159 1276">Rules and Requirements</th> <th data-bbox="1159 1226 1328 1276">Reference</th> <th data-bbox="1328 1226 1451 1276">Version</th> </tr> </thead> <tbody> <tr> <td data-bbox="521 1276 1159 1327"><input checked="" type="checkbox"/> ISO 14064-2</td> <td data-bbox="1159 1276 1328 1327"></td> <td data-bbox="1328 1276 1451 1327"></td> </tr> <tr> <td data-bbox="521 1327 1159 1411"><input checked="" type="checkbox"/> Applicable host country legal requirements /rules</td> <td data-bbox="1159 1327 1328 1411"></td> <td data-bbox="1328 1327 1451 1411"></td> </tr> <tr> <td data-bbox="521 1411 805 1495"><input checked="" type="checkbox"/> Project Standard</td> <td data-bbox="1159 1411 1328 1495"><a href="#">GCC Standards</a></td> <td data-bbox="1328 1411 1451 1495">03.1</td> </tr> <tr> <td data-bbox="521 1495 805 1579"><input type="checkbox"/> Approved GCC Methodology (XXXXX)</td> <td data-bbox="1159 1495 1328 1579"></td> <td data-bbox="1328 1495 1451 1579"></td> </tr> <tr> <td data-bbox="521 1579 805 1663"><input checked="" type="checkbox"/> Program Definitions</td> <td data-bbox="1159 1579 1328 1663"><a href="#">GCC Standards</a></td> <td data-bbox="1328 1579 1451 1663">03.1</td> </tr> <tr> <td data-bbox="521 1663 805 1747"><input checked="" type="checkbox"/> Environment and Social Safeguards Standard</td> <td data-bbox="1159 1663 1328 1747"><a href="#">GCC Standards</a></td> <td data-bbox="1328 1663 1451 1747">2.0</td> </tr> <tr> <td data-bbox="521 1747 805 1831"><input checked="" type="checkbox"/> Project Sustainability Standard</td> <td data-bbox="1159 1747 1328 1831"><a href="#">GCC Standards</a></td> <td data-bbox="1328 1747 1451 1831">2.1</td> </tr> </tbody> </table>			Rules and Requirements	Reference	Version	<input checked="" type="checkbox"/> ISO 14064-2			<input checked="" type="checkbox"/> Applicable host country legal requirements /rules			<input checked="" type="checkbox"/> Project Standard	<a href="#">GCC Standards</a>	03.1	<input type="checkbox"/> Approved GCC Methodology (XXXXX)			<input checked="" type="checkbox"/> Program Definitions	<a href="#">GCC Standards</a>	03.1	<input checked="" type="checkbox"/> Environment and Social Safeguards Standard	<a href="#">GCC Standards</a>	2.0	<input checked="" type="checkbox"/> Project Sustainability Standard	<a href="#">GCC Standards</a>	2.1
Rules and Requirements	Reference	Version																									
<input checked="" type="checkbox"/> ISO 14064-2																											
<input checked="" type="checkbox"/> Applicable host country legal requirements /rules																											
<input checked="" type="checkbox"/> Project Standard	<a href="#">GCC Standards</a>	03.1																									
<input type="checkbox"/> Approved GCC Methodology (XXXXX)																											
<input checked="" type="checkbox"/> Program Definitions	<a href="#">GCC Standards</a>	03.1																									
<input checked="" type="checkbox"/> Environment and Social Safeguards Standard	<a href="#">GCC Standards</a>	2.0																									
<input checked="" type="checkbox"/> Project Sustainability Standard	<a href="#">GCC Standards</a>	2.1																									

Project Submission Form

	<input checked="" type="checkbox"/> GCC Rules and Requirements <sup>2</sup>	<input checked="" type="checkbox"/> Instructions in Project Submission Form (PSF)-template	<a href="#">GCC Framework</a>	3.2
		<input type="checkbox"/> Add rows if required		
	<input checked="" type="checkbox"/> CDM Rules <sup>3</sup>	<input checked="" type="checkbox"/> Approved CDM Methodology (XXXXX)	<a href="#">ACM0002</a>	20.0
		<input checked="" type="checkbox"/> Tool for the demonstration and assessment of additionality	TOOL 01	7.0.0
		<input type="checkbox"/> Combined tool to identify the baseline scenario and demonstrate additionality	TOOL 02	
		<input checked="" type="checkbox"/> Tool to calculate the emission factor for an electricity system	TOOL 07	7.0
		<input type="checkbox"/> Demonstration of additionality of microscale project activities	TOOL 19	
		<input type="checkbox"/> Demonstration of additionality of small-scale project activities	TOOL 21	
		<input type="checkbox"/> Additionality of first-of-its-kind project activities	TOOL 23	
		<input checked="" type="checkbox"/> Common practice	TOOL 24	3.1
		<input checked="" type="checkbox"/> Investment analysis	TOOL 27	11.0
		<input type="checkbox"/> Positive lists of technologies	TOOL 32	
		<input type="checkbox"/> Guidelines for objective demonstration and assessment of barriers		
		<input type="checkbox"/> Add rows if required		
<b>Choose Third Party External Project Verification by</b>	<input checked="" type="checkbox"/> GHG emission reductions (i.e., Approved Carbon Credits <b>(ACCs)</b> ) <input checked="" type="checkbox"/> Environmental No-net-harm Label <b>(E<sup>+</sup>)</b> <input checked="" type="checkbox"/> Social No-net-harm Label <b>(S<sup>+</sup>)</b>			

<sup>2</sup> GCC Program rules and requirements: <https://www.globalcarboncouncil.com/resource-centre.html>



<sup>3</sup> CDM Program rules: <https://cdm.unfccc.int/Reference/index.html>

<p><b>approved GCC Verifiers<sup>4</sup></b> (Tick applicable verification categories)</p>	<p><input checked="" type="checkbox"/> United Nations Sustainable Development Goals (<b>SDG<sup>+</sup></b>)</p> <p><input type="checkbox"/> Bronze SDG Label</p> <p><input type="checkbox"/> Silver SDG Label</p> <p><input checked="" type="checkbox"/> Gold SDG Label</p> <p><input type="checkbox"/> Platinum SDG Label</p> <p><input type="checkbox"/> Diamond SDG Label</p> <p><input checked="" type="checkbox"/> CORSIA requirements (<b>C<sup>+</sup></b>)</p> <p><input checked="" type="checkbox"/> Host Country Attestation on Double counting</p>
<p><b>Declaration to be made by the Project Owner(s)<sup>5</sup></b> (Tick all applicable statements)</p>	<p>The Project Owner(s) declares that:</p> <p><input checked="" type="checkbox"/> The Project Activity complies with the eligibility of the applicable project type (A1, A2, B1 or B2) as stipulated by the Project Standard.</p> <p><input checked="" type="checkbox"/> The Project Activity shall start operations, and start generating emission reductions, on or after 1 January 2016.</p> <p><input checked="" type="checkbox"/> The Project Activity is eligible to be registered under the GCC program.</p> <p><input checked="" type="checkbox"/> No carbon credits generated by the proposed Project Activity will be claimed as carbon credits in any other GHG program anywhere in the world, either for compliance or voluntary purposes, for the entire 10-year GCC crediting period.</p> <p><input checked="" type="checkbox"/> The proposed Project Activity, if Type A, is NOT registered as a GHG Project Activity in any other GHG program or any other voluntary program anywhere in the world.</p> <p><input checked="" type="checkbox"/> The proposed Project Activity is NOT included as a component Project Activity (CPA) in a registered GHG Programme of Activities (PoA) under any GHG program (such as the CDM or any other voluntary program) anywhere in the world.</p> <p><input checked="" type="checkbox"/> The proposed Project Activity is NOT a CPA that has been excluded from a registered PoA under any GHG program (such as the CDM or any other voluntary program) anywhere in the world.</p> <p>Provide details (if any) below for the boxes ticked above.</p>

<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.

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

Project Submission Form

	<p><input checked="" type="checkbox"/> If a GCC project chooses to apply to use ACCs under CORSIA, the Project Owner(s) is required to declare that they are aware that they must obtain and provide to the GCC and its Registry (operated by IHS Markit) a written attestation from the host country's national focal point (e.g., Ministry of Environment or Civil Aviation Authority) or focal point's designee, as required by CORSIA Emissions Unit Eligibility Criteria, which:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Confirms the avoidance of double counting as required by CORSIA;</li> <li><input checked="" type="checkbox"/> Shall be made publicly available prior to the use of units from the host country under CORSIA; and</li> <li><input checked="" type="checkbox"/> Places all responsibility on the Project Owner(s) to replace any and all doubly claimed or counted ACCs by the host country, in the GCC registry operated by IHS Markit.</li> </ul> <p>Provide details below for the boxes ticked above</p> <hr/> <p>The Project Owner(s) declares that:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> All of 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;</li> <li><input checked="" type="checkbox"/> 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.</li> </ul> <p>Provide details below for the boxes ticked above</p>
<p><b>Appendixes 1-7</b></p>	<p>Details about the Project Activity are provided in Appendixes 1 through 7 to this document.</p>
<p><b>Name, designation, date and signature of the Project Owner(s)</b></p>	<p style="text-align: center;">  </p> <p style="text-align: center;"> <b>For and on behalf of Hong Phong 1 Wind Power Joint Stock Company</b>   </p> <hr style="width: 20%; margin-left: auto; margin-right: 0;"/> <p><b>Mr Nguyen Van Truong</b>  <b>General Director</b></p> <p><b>Date: 16/05/2022</b></p>



## 1. PROJECT SUBMISSION FORM

### Section A. Description of the Project Activity

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

The Hong Phong 1 Wind Power Plant Project (hereafter referred to as “the proposed project activity” or “the project activity”) is the greenfield grid-connected wind power project located in Hong Phong Commune, Bac Binh District, Phan Thiet city, Binh Thuan Province, Vietnam. The proposed project is owned by Hong Phong 1 Wind Power Joint Stock Company. The project activity has a total installed capacity of 42.4 MW, with a power generation capacity of 131,900 MWh per annum. The project activity involves the installation of 8 Wind Turbine Generators (WTGs), each has an installed capacity of 5.3 MW.

The power generated by the proposed project activity is supplied to the national grid of Vietnam through the connecting line structure of four (4) circuits remission line with 110kV, cross section of AC2x240mm<sup>2</sup>, length of 100m from the 110kV busbar of the 110kV substation of Hong Phong 1 wind power plant to the national grid, transit connection to 110kV double circuit Luong Son - Hoa Thang – Mui Ne.

The aim of the proposed project activity is to use the clean renewable wind resources of the Vietnam for power generation. It will provide power to a nation with high demand for power, reduce the dependence on exhaustible fossil fuels for power generation, and will make the power sector more sustainable. It is expected to reduce GHG emissions by 106,060 tCO<sub>2e</sub> annually.

Prior to the implementation of the project activity, electricity in Vietnam is generated mainly from fossil fuel sources and is solely distributed to consumers by Vietnam Electricity (EVN) via the unique national electricity grid. The baseline scenario of the project activity is the same as the scenario existing prior to the start of implementation of the project activity.

The project activity contributes towards the sustainable development of the host country and local community in the following aspects:

#### **Environmental well-being**

- Wind energy is one of the cleanest renewable sources and does not involve any fossil fuel. Thus, the wind project contributes to environmental well-being without causing any negative impact on health and surrounding environment.
- The wind project does not contribute to the carbon emissions, harmful pollutants and suspended airborne particulate matter associated with coal and fossil fuel fired power plants.

#### **Social well-being**

- The wind project has provided / will provide job opportunities to local people during implementation, commissioning and operation of the wind project. Frequent visits by engineers, professionals and industrialists to the villages and nearby areas regarding the project execution will create positive impacts on the economy of nearby areas and villages.

## Project Submission Form

- The wind project supports the draft Power Development Plan 8 (PDP8)<sup>6</sup> in increasing the electricity generation by using renewable energy sources. Also, development of infrastructure like road network and street lightings etc.

### **Economic well-being**

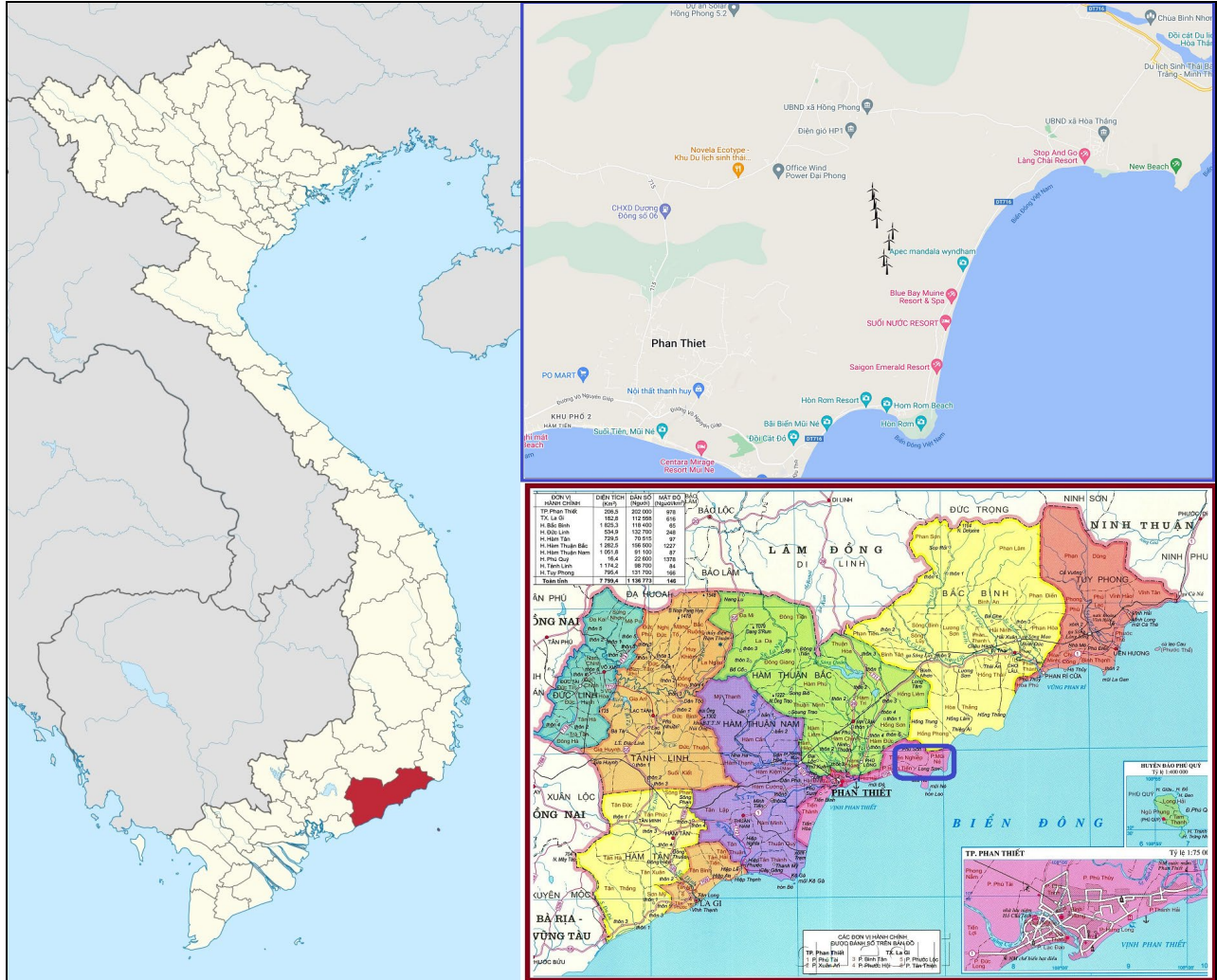
- The wind project will reduce the dependency of Vietnam on coal, fossil fuel and electricity importation as well as negative impact on the foreign exchange. It will contribute to strengthen the renewable energy sector, especially wind energy sector in Vietnam.
- The successful implementation and operation of large-scale wind projects would give a boost to the wind energy sector and push R&D in this field thus improving national economy through innovations.

In conclusion the project activity will contribute positively towards sustainable development of Viet Nam.

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

<b>Address and geodetic coordinates of the physical site of the Project Activity</b>		
<b>Physical address</b>	<b>Latitude</b>	<b>Longitude</b>
Hong Phong Commune, Bac Binh District, Phan Thiet city, Binh Thuan Province, Vietnam	11.02698	108.32042
	11.02410	108.32094
	11.02121	108.32137
	11.01817	108.32169
	11.01476	108.32650
	11.01137	108.32538
	11.00671	108.32380
	11.00401	108.32476

<sup>6</sup> <http://www.erea.gov.vn/d6/vi-VN/news/Quy-hoach-dien-VIII-Uu-tien-phat-trien-nang-luong-tai-tao-6-1322-110>



### A.3. Technologies/measures

The proposed project activity involves the implementation of 42.4 MW grid-connected wind power plant with 8 GE158-5.3MW WTGs to convert wind energy into rotating energy of the blades and converting that rotating energy into electrical energy by the generator, which will be supplied to the national grid through the transmission line.

The electricity supplied to the grid will be monitored through the energy meter installed at switching station. They are digital meters with an accuracy level of Class 0.2 to measure the export and import of electricity generated by Hong Phong 1 Wind Power Plant which has the technical lifetime of 25 years.

The technical parameters of the major equipment as follows:

Turbine's Parameters	Value	Units
Turbines model	GE158	—
Rotor Diameter	158	m

## Project Submission Form

Rated power output	5.3	MW
Total number of Turbines	8	–
Swept area	19,607	m <sup>2</sup>
Hub height	120.9	m

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

Location/ Country	Project Owner(s)	Where applicable <sup>7</sup> , indicate if the host country has provided approval (Yes/No)
Vietnam	Hong Phong 1 Wind Power Joint Stock Company	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 ACCs to be supplied
From	To		
06/11/2021	05/11/2031	CORSIA and all other entities who intend to offset their emissions	To offset Greenhouse Gas (GHG) emissions by supplying 1,060,600 ACCs in 10 years period

The project owner confirms that project activity is not registered with any other GHG schemes/programs. This could be verified by the GCC verifier during the project verification. Hence, there will be no double counting of ACCs generated from this project activity.

### A.6. Additional requirements for CORSIA

Please refer Section E & F

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

### B.1. Reference to methodology(ies)

#### Applied CDM Methodology

---

<sup>7</sup> For example, *Project Coordination Form* is to be filled-in by Project Owners for projects located in Qatar. A written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA (Refer section A.5 of the PSF guidelines).

ACM0002: Grid-connected electricity generation from renewable sources (Version 20.0)

**Related CDM Tools**

Tool 01 – Tool for the demonstration and assessment of additionality (version 07.0.0)

Tool 07 – Tool to calculate the emission factor for an electricity system (version 07.0)

Tool 24 – Common practice (version 3.1)

Tool 27 – Investment analysis (Version 10.0)

**B.2. Applicability of methodology(ies)**

Eligibility Criteria as per ACM0002	Compliance by Project Activity
<p>3. This methodology is applicable to grid-connected renewable energy power generation project activities that:</p> <ul style="list-style-type: none"> <li>(a) Install a Greenfield power plant;</li> <li>(b) Involve a capacity addition to (an) existing plant(s);</li> <li>(c) Involve a retrofit of (an) existing operating plants/units;</li> <li>(d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or</li> <li>(e) Involve a replacement of (an) existing plant(s)/unit(s).</li> </ul>	<p>The proposed project activity is a greenfield grid connected renewable (wind) energy power plant.</p>
<p>4. The methodology is applicable under the following conditions:</p> <ul style="list-style-type: none"> <li>(a) The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;</li> <li>(b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this</li> </ul>	<p>The proposed project activity is a new installation of wind power plant. It doesn't involve any capacity additions/ retrofits/ rehabilitations/ replacements the existing plant.</p>

Project Submission Form

minimum historical reference period and the implementation of the project activity.	
5. In case of hydro power plants, one of the following conditions shall apply:	Not applicable. Proposed project activity is a wind power plant.
6. In the case of integrated hydro power projects, project proponent shall:	Not applicable. Proposed project activity is a wind power plant.
7. The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (b) Biomass fired power plants/units.	Not applicable. The proposed project activity neither involve switching from fossil fuels to renewable energy sources nor biomass fired power plant.
8. In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”.	The proposed project activity is a new installation of wind power plant. It doesn't involve any capacity additions/ retrofits/ rehabilitations/ replacements the existing plant.
9. In addition, the applicability conditions included in the tools referred to below apply.	Refer below Table

<b>Eligibility Criteria as per Tool 01</b>	<b>Compliance by Project Activity</b>
Section 4 – Methodology procedure	Please refer Section B.5

<b>Eligibility Criteria as per Tool 07</b>	<b>Compliance by Project Activity</b>
3. This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	This tool is applied to estimate the grid emission factor since the project activity supplies electricity to grid.  The grid emission factor has been already estimated by using Tool 07 and published <sup>8</sup> by the Department of Climate Change, Vietnam
4. 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	As per the report issued by Department of Climate Change, the emission factor is computed for

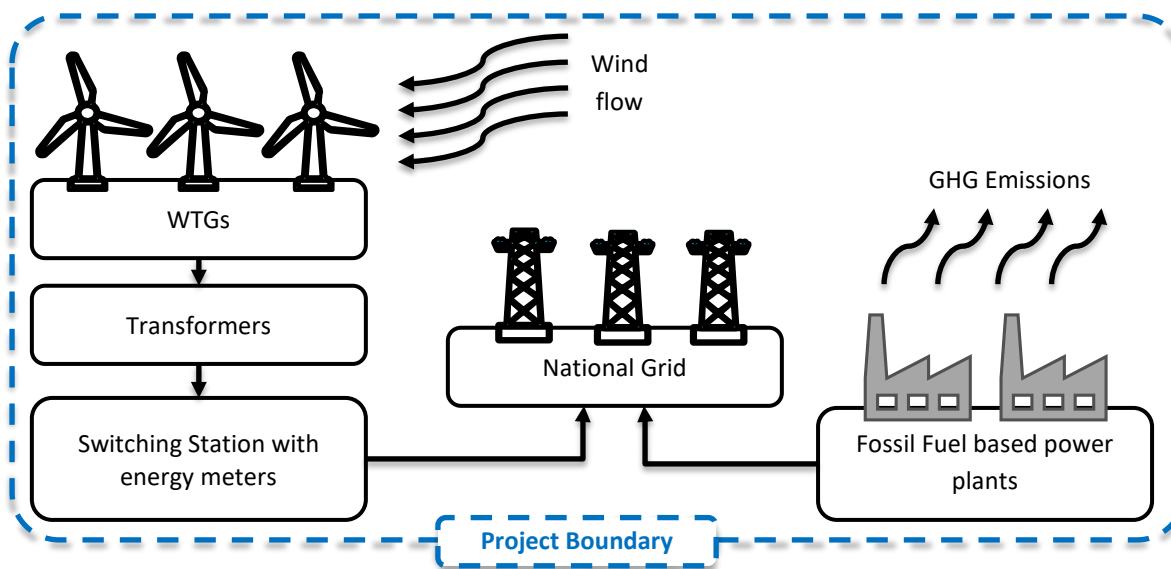
<sup>8</sup> [http://dcc.gov.vn/van-ban-phap-luat/1059/Nghien-cuu,-xay-dung-heso-phat-thai-\(EF\)-cua-luoi-dien-Viet-Nam-\(K%C3%A8m-CV-263/BDKH\).html](http://dcc.gov.vn/van-ban-phap-luat/1059/Nghien-cuu,-xay-dung-heso-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-(K%C3%A8m-CV-263/BDKH).html)

<p>power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in “Appendix 1: 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.</p>	<p>the grid power plants only.</p>
<p>5. 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.</p>	<p>The entire project electricity system is located in Vietnam which is not listed under Annex I</p>
<p>6. Under this tool, the value applied to the CO<sub>2</sub> emission factor of biofuels is zero.</p>	<p>Not Applicable</p>

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

As per the chosen methodology ACM0002, the spatial extent of the project boundary includes the Hong Phong 1 Wind Power Plant and all power plants connected physically to the national electricity grid to which the proposed project is also connected.

The flow diagram of the project boundary is shown in Figure below.



## Project Submission Form

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

Source		GHG	Included?	Justification/Explanation
Baseline	Electricity generation in fossil fuel fired power plants that is displaced due to the project activity	CO <sub>2</sub>	Yes	Main emission source
		CH <sub>4</sub>	No	Minor emission source
		N <sub>2</sub> O	No	Minor emission source
Project Activity	Proposed project activity	CO <sub>2</sub>	No	As per chosen methodology, the project emission is zero for renewable energy project
		CH <sub>4</sub>	No	
		N <sub>2</sub> O	No	

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

>>

As per chosen methodology ACM0002 (Version 20.0), section 5.2.1, clause 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 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".*

Since the proposed project activity involves the installation of greenfield grid connect wind power plant, the baseline scenario of the project is to provide an equal amount of electricity provided by the national grid where the proposed project is also connected. EVN<sup>9</sup> is the sole operator of the Viet Nam national electricity grid where all the power plants in Viet Nam are physically connected to and the proposed project activity is not outside of that system.

The combined margin emission factor of the national grid ( $EF_{grid,CM,y}$ ) is calculated as per "Tool to calculate the emission factor for an electricity system (Version 07.0)" and used to calculate the baseline emissions of the proposed project activity. The  $EF_{grid,CM,y}$  for wind power projects is published (1316/BDKH-TTBVTOD)<sup>10</sup> by Department of Climate Change - Ministry of Natural Resources and Environment on 03/01/2022.

### B.5. Demonstration of additionality

>>

The

As per chosen methodology ACM0002 (Version 20.0), "Tool for the demonstration and assessment of additionality (Version 07.0.0)" shall be used to demonstrate the additionality of the proposed project activity step-by-step as follows:

<sup>9</sup> <https://en.evn.com.vn/>

<sup>10</sup> <http://www.dcc.gov.vn/van-ban-phap-luat/1082/He-so-phat-thai-luoi-dien-Viet-Nam-2020.html>



**Step 0: Demonstration whether the proposed project activity is the first-of-its-kind**

The proposed project is an onshore wind power project located in Vietnam and it's not a first-of-its-kind.

**Step1. Identification of alternatives to the proposed project activity consistent with current laws and regulations**

In accordance with the chosen methodology ACM0002 version 20.0, paragraph 22 states:

*“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.”*

Since the baseline scenario is defined by the chosen methodology, no further analysis is required to carry out to identify the plausible alternatives. However, the identification of plausible alternatives has been considered in order to demonstrate the compliance towards the Tool 01:

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

In the absence of the proposed project activity, plausible and credible project activities to the proposed project activity are as below:

- Alternative 1: The proposed project activity not undertaken as a GCC project activity
- Alternative 2: Continuation of the current situation (no project activity or other alternatives undertaken)

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

The above plausible alternatives do not have any obstacles due to national or local laws and regulations since the proposed project is obtaining all the necessary authorities' approval throughout its implementation and operation, it doesn't face any difficulties due to mandatory laws and regulations. In terms of the second alternatives, it's currently under operation and thereby no effort is required. Hence these alternatives are consistent with mandatory laws and regulations.

Since wind projects are green power without polluting the environment, no concern to operate from pollution control board. Second alternative has been chosen as an appropriate baseline alternative for this project activity in line with the methodology. Hence, both alternatives are found to comply with the mandatory laws and regulations taking into account the enforcement of the legislations in the region or country and EB decisions on national and/or sectoral policies and regulations.

**Step 2: Investment Analysis**

Applicableity of TOOL27	Compliance by Project Activity
2. 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	Section B.5 is applied the “Tool for the demonstration and assessment of additionality”. In addition, ACM0002 methodology is used to defined the baseline and monitoring of the proeject activity. ACM0002's footnote 2 defined that the “Combined tool to identify the baseline

Project Submission Form

<p>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.</p>	<p>scenario and demonstrate additionality” does not apply to ACM0002.</p>
<p>3. 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.</p>	<p>The applied approved baseline and monitoring methodology (ACM0002) doesn’t contain any steps to define the investment analysis. The ACM0002 paragraph 27 (b) refers to use the “TOOL01: Tool for the demonstration and assessment of additionality” for benchmark analysis.</p>

Determine whether the proposed project activity is not:

- a) The most economically or financially attractive; or
- b) Economically or financially feasible, without the revenue from the sale of emission reductions.

The following steps are used to determine the proposed project activity is not financially attractive or feasible.

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

As per “Tool for the demonstration and assessment of additionality” (version 07.0.0), paragraph 32 states:

*“If the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income, then apply the simple cost analysis (Option I). Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III).”*

Since the project owner couldn’t obtain the financial data regarding the investment of at least one alternative available, Options I & II are not applicable for the proposed project activity. Hence, the most appropriate financial analysis would be Option III (benchmark analysis) where the returns on equity investment from the project activity is compared with default real benchmark.

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

The benchmark analysis approach has been chosen to assess the additionality of the proposed project activity.

**Identified Financial/Economic Indicator:**

The expected return on equity (Equity IRR) was selected as the financial indicator to assess the financial additionality of the proposed project activity as per Methodological tool for Investment analysis (Version 10.0).

**Selection of Appropriate Benchmark:**

The default benchmark for Group 1 for Vietnam under Appendix of TOOL27 (Version 10.0) is 12.6%

**Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III)**

As per the Methodological Tool: Investment Analysis, Version 10.0, the general issued in calculation and presentation are discussed as follows:

General issues as per investment analysis tool	Justification
<p>6. The period of assessment should not be limited to the proposed crediting period of the CDM project activity. Both project internal rate of return (IRR) and equity IRR calculations should reflect the period of expected operation of the underlying project activity (technical lifetime) and if a shorter period than the technical lifetime is chosen, the investment analysis shall be conducted for at least 10 years and include the fair value of the project activity assets at the end of the assessment period. The IRR calculation may include the cost of major maintenance and/or rehabilitation if these are expected to be incurred during the period of assessment.</p>	<p>The project activity has chosen 25 years (project lifetime) for the IRR calculation. Fair value is considered as zero in accordance with the following explanation: As per Annex 2 of “GUIDING REGULATION ON MANAGEMENT, USE AND DEPRECIATION OF FIXED ASSETS” issued by Ministry of Finance, Straight-line depreciation method defines:</p> $\text{Annual average rate of depreciation for the fixed assets} = \frac{\text{Primary price of fixed assets}}{\text{Time of depreciation}}$ <p>Where, the default value for maximum time of depreciation for wind power assets is 20 years which is mentioned under Annex 1 in the same guideline. Since Hong Phong 1 Wind Power Plant has been chosen 25 years for computation, no fair value is considered.</p>
<p>7. The fair value of any project activity assets at the end of the assessment period shall be included as a cash inflow in the final year. The fair value should be calculated in accordance with local accounting regulations where available, or international best practice. It is expected that such fair value calculations will include</p>	<p>Since the IRR calculation has been used the entire project lifetime of 25 years, zero fair value has been considered.</p>

Project Submission Form

<p>both the book value of the asset and the reasonable expectation of the potential profit or loss on the realization of the assets.</p>	
<p>8. The discount rate used in the investment comparison analysis shall be determined following the requirements as set out in this tool for the calculation of IRR benchmarks in section 6 below.</p>	<p>No discount is considered in the IRR computation.</p>
<p>9. The weighted average costs of capital (WACC) and the cost of equity provided in the Appendix or calculated using Capital Asset Pricing Model (CAPM) are post-tax IRR benchmarks, and investment analysis shall be conducted with post-tax cash flows. Depreciation, and other non-cash items related to the project activity, which have been deducted in estimating gross profits on which tax is calculated, shall be added back to net profits for the purpose of calculating the financial indicator (e.g. IRR, NPV). The cash flow effects of taxation should be included in the IRR/NPV calculation.</p>	<p>The investment analysis has been conducted with the post-tax cash flows. There are no depreciation and other non-cash items are not considered in the calculation.</p>
<p>10. Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant. The DOE is therefore expected to validate the timing of the investment decision and the</p>	<p>The input values used in all investment analysis has been valid and applicable at the time of the investment decision taken by the project participant. The date of the Wind Turbine Supply Agreement (“TSA”) and Wind Turbine Supply and Installation Services Agreement (“TISA”) were signed on 17<sup>th</sup> March 2020 is considered as the investment decision date Therefore, the default</p>

<p>consistency and appropriateness of the input values with this timing. The DOE should also validate that the listed input values have been consistently applied in all calculations.</p>	<p>benchmark for IRR has been used from Methodological Tool: Investment Analysis, Version 10.0.</p>
<p>11. In the case of project activities for which implementation ceases after the commencement and where implementation is recommenced due to consideration of the CDM the investment analysis should reflect the economic decision-making context at point of the decision to recommence the project. Therefore, capital costs incurred prior to the revised project activity start date can be reflected as the recoverable value of the assets, which are limited to the potential reuse/resale of tangible assets</p>	<p>This is not applicable as the implementation of project activity is not ceased but delayed due to pandemic outbreak.</p>
<p>12. Project participants shall supply spreadsheet versions of all investment analysis. All formulas used in this analysis shall be readable and all relevant cells shall be viewable and unprotected. The spreadsheet will be made available to the Board, UNFCCC secretariat and others contracted to assess the request for registration on behalf of the Board including assigned members of the Registration and Issuance Team. In cases where the project participant does not wish to make such a spreadsheet available to</p>	<p>The spreadsheet is available during the validation of the proposed project activity.</p>

Project Submission Form

<p>the public an exact read-only or PDF copy shall be provided for general publication. In case the project participant wishes to black-out certain elements of the publicly available version, a clear justification for this shall be provided to the secretariat by the DOE when requesting registration.</p>	
--	--

The values used in investment analysis were valid and applicable at the time of the investment decision taken by the management. The key values used to calculate the return on equity as follows:

Exchange Rate: 1USD = 22,957 VND (Source: State Bank of Vietnam)

Description of Parameters	Values	Unit	Reference
Total installed capacity	42.4	MW	Investment Policy
Project lifetime	25	years	Methodological Tool 10: Tool to determine the remaining lifetime of equipment
<b>Electricity Generation</b>			
Annual generation (kWh)	132	mil kWh	Energy Yield Assessment Report
Electricity Tariff	0.0850	USD/kWh	PPA
<b>O&amp;M Cost</b>			
Asset Management	0.17	mil USD	1.4% of total sales invoiced to grid - Section 4.1.1 of the contract
Substation Management	0.18	mil USD	0.5% of total sales invoiced to grid - Section 6.1 of the contract Plus, fixed fee of VND244 mil per month or USD10,628 per month - article 6.1 of the sub-contract
Transmission Line	0.0002	mil USD	Cost summary in the Contract
O&M Fee (Y1 - Y5)	0.67	mil USD	O&M Contract (Section 6.1 - Fixed Annual Payment)
O&M Fee (Y6 - Y10)	0.72	mil USD	
O&M Fee (Y11 – Y15)	0.77	mil USD	
Annual Insurance Premium	0.18	mil USD	Insurance Policy
<b>Project Costing</b>			
Total Project cost	70.34	mil USD	Investment Registration Certificate
Equity Share	21.27%	%	
Debt Share	78.73%	%	

Equity Amount	14.96	mil USD	
<b>Debt (Shareholder Loans)</b>			
Debt Amount	55.38	mil USD	Clause 2 of the Shareholder Loan Agreements
Fixed lending interest rate	9%	per year	As per clause 5 in the Shareholder Loan Agreements
<b>Income Tax</b>			
VAT	10%	%	<a href="https://moj.gov.vn">https://moj.gov.vn</a>
CIT	20%	%	<a href="https://moj.gov.vn">https://moj.gov.vn</a>

### Outcome of Investment Analysis:

By considering all the above values, the equity IRR for the proposed project activity as follows:

Benchmark (Investment Analysis Tool)	Equity IRR without carbon revenue
12.6%	7.7%

The equity IRR is estimated based on the project activity's lifetime of 25 years, cash outflows and cash inflows into the project activity. From the above table, the estimated equity IRR is below than the benchmark and thereby justifying that the investments are not financially attractive. Therefore, the project activity is an additional and not a Business-As-Usual (BAU).

### Sub-step 2d: Sensitivity Analysis

As per the Methodological Tool: Investment Analysis, Version 10.0, paragraph 27 states:

*“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 (all parameters varied need not necessarily be subjected to both negative and positive variations of the same magnitude), and the results of this variation should be presented in the PDD and be reproducible in the associated spreadsheets.”*

The project investment is already fixed, and the electricity tariff has been already committed with national grid for 20 years. Therefore, both values are not subjected to variation. Hence, only power generation and O&M expenses are subjected to reasonable variation. However, following factors have been considered into sensitivity analysis:

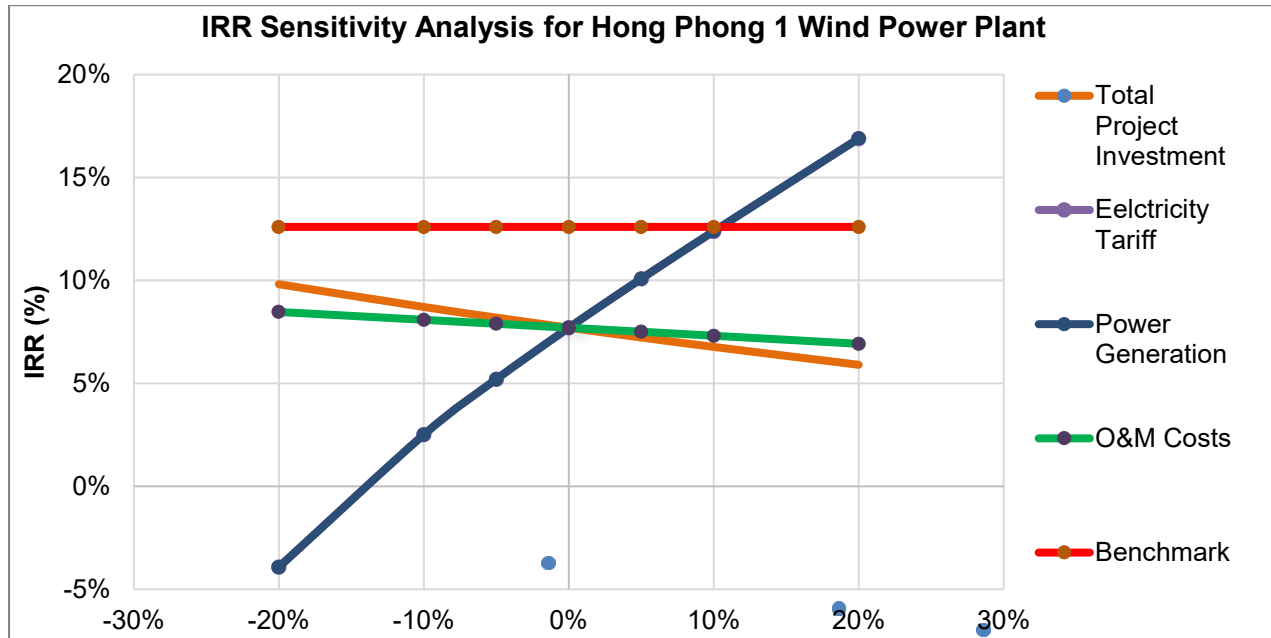
- Total project investment
- Electricity tariff
- Power generation
- Operation & Maintenance (O&M) costs

The results of sensitivity analysis are as follows:

Variations	-20%	-10%	-5%	0%	5%	10%	20%
Total Investment	9.82%	8.71%	8.20%	7.70%	7.23%	6.77%	5.90%
Electricity Tariff	-3.92%	2.51%	5.20%	7.70%	10.08%	12.39%	<b>16.90%</b>
Power Generation	-3.92%	2.51%	5.20%	7.70%	10.08%	12.39%	<b>16.90%</b>

Project Submission Form

O&M Costs	8.47%	8.09%	7.90%	7.70%	7.51%	7.32%	6.92%
-----------	-------	-------	-------	-------	-------	-------	-------



Variations	Calculated IRR	Benchmark IRR	Required variation to exceed benchmark
Total Investment	7.7%	12.6%	↓ 42%
Electricity Tariff			↑ 11%
Power Generation			↑ 11%
O&M Costs			↓ 100% (not feasible)

**Total Project Investment**

The equity investment by project owner is 14.96 million USD which is 21% of the total project investment cost (excluding land cost). To assess the additionality of this project, if equity decreased by 42% (6.28 mil USD), then equity IRR would exceed the benchmark. As per the contracts/agreements in place, relevant purchase orders are already made, thus the equity investment is impossible to vary in the future.

**Electricity Tariff**

As per the Power Purchase Agreement (PPA) signed with EVN (Vietnam Electricity) on 05<sup>th</sup> February 2021, the fixed tariff for the electricity is 8.5 US cents per kWh. The equity IRR is exceeding the benchmark when the electricity tariff increased up to 11% which is not possible for next 20 years as per clause 2.2 of the PPA.

**Power Generation**

Increase in power generation would lead to increase in electricity supply to grid and thereby



revenue. The equity IRR is exceeding the benchmark, if the power generation increase up to 11% which is 14,509 MWh of total estimated power generation 131,900 MWh per annum. The EYA was conducted based on the on-site wind measurement (covered minimum 12 calendar months period), equipment specification, potential losses and whether condition as per geographical location. Hence, the possibility of increase in power generation is unlikely in the future. Since the project is under operation, the actual power generated for recent 5 months (Nov 2021 – Mar 2022), was 46,711 MWh with a monthly average of 9,342 MWh which leads to 112,107 MWh per annum. This is 15% lesser than the estimated power generation.

**Operation & Maintenance Costs**

The analysis shows that the equity IRR would exceed the benchmark, if the O&M costs decrease more than 100% which is not reasonable. Hence, the O&M costs associated with the project has no impact on the financial returns of the equity.

**Step 3: Barrier Analysis**

Barrier analysis is not considered.

**Step 4: Common practice analysis**

Common practice analysis has been carried out as per TOOL24: Common Practice, (Version 03.1). As per the methodological tool, the following definitions are explained in order to evaluate the project as per the stepwise approach for common practice:

Applicableity of TOOL24	Compliance by Project Activity
<p>3. 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”, or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.</p>	<p>Section B.5 is applied the “Tool for the demonstration and assessment of additionality”. In addition, ACM0002 methodology is used to defined the baseline and monitoring of the proeject activity. ACM0002’s footnote 2 defined that the “Combined tool to identify the baseline scenario and demonstrate additionality” does not apply to ACM0002.</p>
<p>4. 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.</p>	<p>The applied approved baseline and monitoring methodology doesn’t contain any steps to define the common practice analysis. Hence, TOOL24 steps are discussed in the below table.</p>

Definitions as per methodological tool	Justification				
<p>Step 1: calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.</p>	<table> <tr> <td>+50% installed capacity</td> <td>: 63.6 MW</td> </tr> <tr> <td>Installed capacity</td> <td>: 42.4 MW</td> </tr> </table>	+50% installed capacity	: 63.6 MW	Installed capacity	: 42.4 MW
+50% installed capacity	: 63.6 MW				
Installed capacity	: 42.4 MW				

Project Submission Form

	-50% installed capacity : 21.2 MW
<p>Step 2: identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:</p> <ul style="list-style-type: none"> <li>(a) The projects are located in the applicable geographical area;</li> <li>(b) The projects apply the same measure as the proposed project activity;</li> <li>(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;</li> <li>(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;</li> <li>(e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1;</li> <li>(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.</li> </ul>	<p>Identification of similar projects (CDM &amp; Non-CDM) is carried out as follows:</p> <ul style="list-style-type: none"> <li>(a) The applicable geographical area is Vietnam (host country) and thereby all projects located in Vietnam are considered</li> <li>(b) The proposed project activity uses renewable energy to generate power. Therefore, all renewable energy projects located in Vietnam are considered.</li> <li>(c) The energy source used by the project activity is wind. Hence, only wind energy projects have been considered.</li> <li>(d) The project activity produces electricity; therefore, all wind power plants are considered.</li> <li>(e) The capacity range of the projects is within the applicable capacity range from 21.2 to 63.6 MW</li> <li>(f) The project start date was 17/03/2020 which is the date of WTG agreement signed.</li> </ul> <p>Numbers of Similar projects (CDM and non-CDM) identified, which fulfil above-mentioned conditioned are:</p> <p>In accordance with table shown below, there was 5 wind power plants identified before the investment decision made on 20<sup>th</sup> June 2020 for the proposed project activity.</p>
<p>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 <math>N_{all}</math>.</p>	<p>2 projects identified under Step 2 and therefore,</p> <p><math>N_{all} = 2</math></p>
<p>Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology</p>	<p>No projects identified under Step 3 and therefore,</p> <p><math>N_{diff} = 0</math></p>

applied in the proposed project activity. Note their number $N_{diff}$ .	
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.	$F=1-N_{diff}/N_{all}$ $F = 1 - 0/2 = 1$
As per paragraph 18, The proposed project activity is a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and $N_{all}-N_{diff}$ is greater than 3.	Since F is 1 which is $>0.2$ as well as $N_{all}-N_{diff}$ is 2 which is not greater than 3. Hence, the project activity is not a “common practice” in the applicable geographical area.

Following list of wind power plants<sup>11</sup> have been identified as per the step 2 above:

S/N	Name	CDM/VCS /GS-VER Project?	Year of Commencement		Capacity (MW)
			Construction	COD	
0	Proposed Project	Yes	2020-2021	06/11/2021	42.4
1	Binh Thau Wind Power	Yes	Unknown	Unknown	30
2	Thuan Nhen Phong	Yes	Unknown	Unknown	32
3	Phu Lac Wind Farm	Yes	2016	19-09-2016	24
4	Mui Dinh	No	2016-2018	10-04-2019	37.6
5	Dam Nai Phase 2	No	2018	Unknown	30

The above explanation/justification clearly shows that the proposed project activity is unlikely to be financially attractive as well as not a common practice in host country; hence the proposed project activity is additional.

## B.6. Estimation of emission reductions

>>

As per the para 57 of ACM0002, version 20.0, the formula to calculate the emission reduction is

$$ER_y = BE_y - PE_y$$

Where:

$ER_y$  = Emission reductions in year y (tCO<sub>2</sub>e/yr)

$BE_y$  = Baseline emissions in year y (tCO<sub>2</sub>e/yr)

<sup>11</sup> <https://devi-renewable.com/>

$PE_y$  = Project emissions in year y (tCO<sub>2</sub>e/yr)

### B.6.1. Explanation of methodological choices

>>

#### Baseline Emission:

As per Equation (11) of ACM0002 (Version 20.0), 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 (tCO<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 "TOOL07: Tool to calculate the emission factor for an electricity system" (tCO<sub>2</sub>/MWh)

As per Equation (12) of ACM0002 (Version 20.0), the  $EG_{PJ,y}$  for the greenfield power plant is calculated as follows:

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

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

#### Project Emission:

The proposed project activity involves the generation of electricity by development of wind power project. The generation of electricity does not result in greenhouse gas emissions and therefore the project emission ( $PE_y$ ) is zero.

#### Emission Reduction:

As per the para 57 of ACM0002, version 20.0, the formula to calculate the emission reduction is

$$ER_y = BE_y - PE_y$$

Where:

$ER_y$  = Emission reductions in year y (tCO<sub>2</sub>e/yr)

$BE_y$  = Baseline emissions in year y (tCO<sub>2</sub>e/yr)

$PE_y$  = Project emissions in year y (tCO<sub>2</sub>e/yr)

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

>>

**Data / Parameter Table 1.**

<b>Data / Parameter:</b>	<b>EF<sub>grid,CM,y</sub></b>																
Methodology reference	ACM0002 (version 20.0)																
Data unit	tCO <sub>2</sub> /MWh																
Description	Operating Margin CO <sub>2</sub> emission factor for the electricity system in year y																
Measured/calculated /default	Calculated																
Data source	The latest EF <sub>grid,CM,y</sub> was calculated and issued (1316/BDKH-TTBVTOD) by Department of Climate Change - Ministry of Natural Resources and Environment on 03/01/2022 as per “Tool to calculate the emission factor for an electricity system (Version 07.0)” <a href="http://www.dcc.gov.vn/van-ban-phap-luat/1082/He-so-phat-thai-luoi-dien-Viet-Nam-2020.html">http://www.dcc.gov.vn/van-ban-phap-luat/1082/He-so-phat-thai-luoi-dien-Viet-Nam-2020.html</a>																
Value(s) of monitored parameter	0.8041																
Measurement/ Monitoring equipment (if applicable)	<table border="1"> <tr> <td>Type of meter</td> <td></td> </tr> <tr> <td>Location of meter</td> <td></td> </tr> <tr> <td>Accuracy of meter</td> <td></td> </tr> <tr> <td>Serial number of meter</td> <td></td> </tr> <tr> <td>Calibration frequency</td> <td></td> </tr> <tr> <td>Date of Calibration/ validity</td> <td></td> </tr> <tr> <td>Reference No. of Calibration Certificate</td> <td></td> </tr> <tr> <td>Calibration Status</td> <td></td> </tr> </table> <p>Not Applicable</p>	Type of meter		Location of meter		Accuracy of meter		Serial number of meter		Calibration frequency		Date of Calibration/ validity		Reference No. of Calibration Certificate		Calibration Status	
Type of meter																	
Location of meter																	
Accuracy of meter																	
Serial number of meter																	
Calibration frequency																	
Date of Calibration/ validity																	
Reference No. of Calibration Certificate																	
Calibration Status																	
Measuring/reading/ recording frequency (if applicable)	Not Applicable																
Calculation method (if applicable)	<p>The EF<sub>grid,CM,y</sub> is calculated by using Operating Margin (EF<sub>grid,OM,y</sub>) and Build Margin (EF<sub>grid,BM,y</sub>) CO<sub>2</sub> emission factors published (1316/BDKH-TTBVTOD) by Department of Climate Change - Ministry of Natural Resources and Environment on 03/01/2022 as per “Tool to calculate the emission factor for an electricity system (Version 07.0)”. the computation as follows:</p> $EF_{grid,CM,y} = (EF_{grid,OM,y} \times W_{OM}) + (EF_{grid,BM,y} \times W_{BM})$ <p>Where:  W<sub>OM</sub> = Weighting of OM emissions factor (%) = 75%  W<sub>BM</sub> = Weighting of BM emissions factor (%) = 25%</p>																

Project Submission Form

QA/QC procedures	Not Applicable
Purpose of data	To compute the baseline emission
Additional comments	This parameter is fixed ex-ante for the entire crediting period.

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

>>

Baseline Emission:

As per Equation (11) of ACM0002 (Version 20.0), 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  $y$  (tCO<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 "TOOL07: Tool to calculate the emission factor for an electricity system" (tCO<sub>2</sub>/MWh)

As per Equation (12) of ACM0002 (Version 20.0), the  $EG_{PJ,y}$  for the greenfield power plant is calculated as follows:

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

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

The est. electricity generation<sup>12</sup> by the proposed project ( $EG_{PJ,y}$ ) = 131,900 MWh/yr

The CM emission factor for the Vietnam's electricity system ( $EF_{grid,CM,y}$ ) = 0.8041 tCO<sub>2</sub>/MWh.

Hence the baseline is:

$$\begin{array}{rclcl}
 EG_{PJ,y} & \times & EF_{grid,CM,y} & = & BE_y \\
 131,900 \text{ MWh/yr} & \times & 0.8041 \text{ tCO}_2/\text{MWh} & = & 106,060 \text{ tCO}_2/\text{yr}
 \end{array}$$

Project Emission:

The proposed project activity involves the generation of electricity by development of wind power project. The generation of electricity does not result in greenhouse gas emissions and therefore the project emission (PE<sub>y</sub>) is zero.

Emission Reduction:

As per Equation (17) of ACM0002 (Version 20.0), the emission reduction (ER<sub>y</sub>) of the proposed

<sup>12</sup> Estimated (for 1st year) by using power simulations variant – Done by ERS Energy Sdn Bhd (Malaysia)

project as follows:

$$\begin{array}{rclcl}
 BE_y & - & PE_y & = & ER_y \\
 106,060 \text{ tCO}_2/\text{yr} & - & 0 \text{ tCO}_2/\text{yr} & = & 106,060 \text{ tCO}_2/\text{yr}
 \end{array}$$

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

>>

Year	Baseline emissions (t CO <sub>2</sub> e)	Project emissions (t CO <sub>2</sub> e)	Leakage (t CO <sub>2</sub> e)	Emission reductions (t CO <sub>2</sub> e)
2022	106,060	0	0	106,060
2023	106,060	0	0	106,060
2024	106,060	0	0	106,060
2025	106,060	0	0	106,060
2026	106,060	0	0	106,060
2027	106,060	0	0	106,060
2028	106,060	0	0	106,060
2029	106,060	0	0	106,060
2030	106,060	0	0	106,060
2031	106,060	0	0	106,060
<b>Total</b>	<b>1,060,600</b>	<b>0</b>	<b>0</b>	<b>1,060,600</b>
<b>Total number of crediting years</b>	10			
<b>Annual average over the crediting period</b>	1,060,600	0	0	1,060,600

#### B.7. Monitoring plan

>>

The monitoring plan consists of the organization in-charge for monitoring, parameters to be monitored, measurement procedure, QA/QC, data archiving and the personal in charge. The monitoring plan has been established in line with the modalities and procedures for GCC project activities.

##### B.7.1. Data and parameters to be monitored

&gt;&gt;

**Data / Parameter Table 01.**

<b>Data / Parameter:</b>	Access to basic services including energy (SDG 1)																
Methodology reference	GCC Project Sustainability Standard (Version 2.1)																
Data unit	Number																
Description	Number of households have access to basic services – Electricity																
Measured/calculated/default	Measured																
Data source	Randomly collect electricity consumption information from households (minimum 5) located nearby site																
Value(s) of monitored parameter	To be monitored																
Measurement/ Monitoring equipment	<table border="1"> <tr> <td>Type of meter</td> <td></td> </tr> <tr> <td>Location of meter</td> <td></td> </tr> <tr> <td>Accuracy of meter</td> <td></td> </tr> <tr> <td>Serial number of meter</td> <td></td> </tr> <tr> <td>Calibration frequency</td> <td></td> </tr> <tr> <td>Date of Calibration/ validity</td> <td></td> </tr> <tr> <td>Reference No. of Calibration Certificate</td> <td></td> </tr> <tr> <td>Calibration Status</td> <td></td> </tr> </table> <p>Not Applicable</p>	Type of meter		Location of meter		Accuracy of meter		Serial number of meter		Calibration frequency		Date of Calibration/ validity		Reference No. of Calibration Certificate		Calibration Status	
Type of meter																	
Location of meter																	
Accuracy of meter																	
Serial number of meter																	
Calibration frequency																	
Date of Calibration/ validity																	
Reference No. of Calibration Certificate																	
Calibration Status																	
Measuring/reading/ recording frequency	Yearly																
Calculation method (if applicable)	<p>The computation as follows:</p> $HH = EG_{J,grid,y} \div \left[ \frac{ECHH_1 + ECHH_2 + ECHH_3 + \dots + ECHH_n}{n} \times 12 \right]$ <p>Whereas:  HH – Net electricity supplied to the grid (MWh)  ECHH – Electricity consumption by household (MWh/month)</p>																
QA/QC procedures	<p>Electricity bills will be collected from households to verify the consumption. In case households refuse to give the electricity bills, the following information will be collected verbally:</p> <ul style="list-style-type: none"> <li>▪ House Address</li> <li>▪ House owner name</li> <li>▪ Monthly consumption (kWh)</li> </ul>																
Purpose of data	To demonstrate the contribution to SDG1 – Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of																



	property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
Additional comments	Data will be archived electronically for 2 years after the end of crediting period.

### Data / Parameter Table 02.

<b>Data / Parameter:</b>	EGP <sub>J,grid,y</sub> (SDG 7)	
Methodology reference	ACM0002 (Version 20.0)	
Data unit	MWh	
Description	Net electricity supplied to national grid by the project activity in year y	
Measured/calculated/default	Measured	
Data source	Direct measurement by electricity meters at the point of electricity supplied to the national grid	
Value(s) of monitored parameter	131,900	
Measurement/ Monitoring equipment		
	Type of meter	Elster (PB3KAGGHT-5)
	Location of meter	Hong Phong Substation
	Accuracy of meter	0.2S
	Serial number of meter	131 (SN: 19061742)
	Calibration frequency	Once in 3 years as per EVN requirement.
	Date of Calibration/validity	To be confirmed during project verification
	Reference No. of Calibration Certificate	To be confirmed during project verification
	Calibration Status	Calibrated
Measuring/reading/recording frequency	Continuous measurement with daily recording (The meters can capture half hourly generation data and the data would be logged through the SCADA system in a daily basis. However, readings will be downloaded on a monthly basis for record keeping and billing to the EVN.)	
Calculation method (if applicable)	Net electricity supplied to grid = Export (MWh) – Import (MWh)	
QA/QC procedures	Electricity meters will be calibrated once in three years as per EVN requirement. The electricity generation can also be cross-checked using the invoices billed to EVN EPTC for payment	
Purpose of data	To demonstrate the contribution to SDG7 – Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix”	
Additional comments	Data will be archived electronically for 2 years after the end of crediting period.	

**Data / Parameter Table 03.**

<b>Data / Parameter:</b>	Average hourly earnings of employees (SDG 8)	
Methodology reference	GCC Project Sustainability Standard (Version 2.1)	
Data unit	Vietnam Dong/hour/employee or Vietnam Dong/month/employee	
Description	Average hourly earnings of employees, by sex, age, occupation and persons with disabilities	
Measured/calculated/default	Measured	
Data source	Payroll records or Payslips	
Value(s) of monitored parameter	To be monitored	
Measurement/ Monitoring equipment		
	Type of meter	
	Location of meter	
	Accuracy of meter	
	Serial number of meter	
	Calibration frequency	
	Date of Calibration/ validity	
	Reference No. of Calibration Certificate	
	Calibration Status	
	Not Applicable	
Measuring/reading/ recording frequency	Once for each monitoring period	
Calculation method (if applicable)	Not Applicable	
QA/QC procedures	Payroll records, job contracts and staff register will be provided annually. After first verification, only changes in employees will be reported.	
Purpose of data	To demonstrate the contribution to SDG8 – Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	
Additional comments	Data will be archived electronically for 2 years after the end of crediting period.	

**Data / Parameter Table 04.**

<b>Data / Parameter:</b>	Climate Action (SDG 13)
Methodology reference	GCC Project Sustainability Standard (Version 2.1)
Data unit	tCO <sub>2</sub> /year
Description	Emission reduced per year

Measured/calculated /default	Calculated																
Data source	Emission reduction spreadsheet sheet.																
Value(s) of monitored parameter	106,060																
Measurement/ Monitoring equipment	<table border="1"> <tr> <td>Type of meter</td> <td></td> </tr> <tr> <td>Location of meter</td> <td></td> </tr> <tr> <td>Accuracy of meter</td> <td></td> </tr> <tr> <td>Serial number of meter</td> <td></td> </tr> <tr> <td>Calibration frequency</td> <td></td> </tr> <tr> <td>Date of Calibration/ validity</td> <td></td> </tr> <tr> <td>Reference No. of Calibration Certificate</td> <td></td> </tr> <tr> <td>Calibration Status</td> <td></td> </tr> </table> <p>Not Applicable</p>	Type of meter		Location of meter		Accuracy of meter		Serial number of meter		Calibration frequency		Date of Calibration/ validity		Reference No. of Calibration Certificate		Calibration Status	
Type of meter																	
Location of meter																	
Accuracy of meter																	
Serial number of meter																	
Calibration frequency																	
Date of Calibration/ validity																	
Reference No. of Calibration Certificate																	
Calibration Status																	
Measuring/reading/ recording frequency	Yearly																
Calculation method (if applicable)	Computed as recommended by ACM0002 (Version 20.0) Refer Section B.6.3																
QA/QC procedures	This parameter is cross checked with the electricity supplied to grid																
Purpose of data	To demonstrate the contribution to SDG13 – Target 13.3: Integrate climate change measures into national policies, strategies grid planning																
Additional comments	Data will be archived electronically for 2 years after the end of crediting period.																

### Safeguarding Principle Parameters:

<b>Data / Parameter:</b>	<b>Job opportunities</b>
Methodology reference	Environment and Social Safeguards Standard (Version 2.0)
Data unit	Number
Description	Number of jobs created by the project activity
Measured/calculated /default	Measured
Data source	Payroll records / Job contracts /Staff register
Value(s) of monitored parameter	Constriction Phase – 337 (Male – 275 & Female – 62) Operational Phase – 19 (Male – 13 & Female – 6)

Project Submission Form

Measurement/ Monitoring equipment	
	Type of meter
	Location of meter
	Accuracy of meter
	Serial number of meter
	Calibration frequency
	Date of Calibration/ validity
	Reference No. of Calibration Certificate
	Calibration Status
	Not Applicable
Measuring/reading/ recording frequency	Once for each monitoring period
Calculation method (if applicable)	Not Applicable
QA/QC procedures	Payroll records, job contracts and staff register will be provided annually. After first verification, only changes in employees will be reported.
Purpose of data	Justification of social safeguard
Additional comments	Data will be archived electronically for 2 years after the end of crediting period.

<b>Data / Parameter:</b>	<b>Employee safety</b>
Methodology reference	Environment and Social Safeguards Standard (Version 2.0)
Data unit	Number
Description	Number of safety related trainings provided to employees
Measured/calculated /default	Measured
Data source	Training records (either attendance register or event photos of the training)
Value(s) of monitored parameter	To be monitored

Measurement/ Monitoring equipment	
	Type of meter
	Location of meter
	Accuracy of meter
	Serial number of meter
	Calibration frequency
	Date of Calibration/ validity
	Reference No. of Calibration Certificate
	Calibration Status
	Not Applicable
Measuring/reading/ recording frequency	Once for each monitoring period
Calculation method (if applicable)	Not Applicable
QA/QC procedures	Interview employees during verification.
Purpose of data	Justification of social safeguard
Additional comments	Data will be archived electronically for 2 years after the end of crediting period.

## B.7.2 Monitoring-program of risk management actions

>>

<b>Data / Parameter:</b>	<b>Noise generated due to WTG operation</b>
Objective of the Program of Risk Management Actions	<b>Program of Risk Management Actions for Noise from WTG Operation (PRMA 01)</b>
Purpose:	To monitor environmental impact identified as not harmful (The noise pollution related to the operation of wind power plant complies with the Noise exposure level at works according to the Circular No. 24/2016/TT-BYT <sup>13</sup> ) in the risk assessment and to develop a program of risk management actions plan to address the risk of PRMA 01.
Describe the environment /social impact risk that needs to be mitigated.	Wind turbines produce noise when operating primarily from mechanical and aerodynamic sources. Mechanical noise may be generated by machinery in the nacelle. Aerodynamic noise emanates from the movements of air around the turbine blades and tower. The types of aerodynamic noise may include low frequency, impulsive low frequency, tonal and continuous broadband. In addition, the amount of noise may rise with increasing rotation speed of the turbine blade.

<sup>13</sup> [https://moh.gov.vn/web/phong-chong-benh-nghe-nghiep/thong-tin-hoat-dong/-/asset\\_publisher/xjpQsFUZRw4g/content/tieng-on-muc-tiep-xuc-cho-phep-tieng-on-tai-noi-lam-viec?inheritRedirect=false](https://moh.gov.vn/web/phong-chong-benh-nghe-nghiep/thong-tin-hoat-dong/-/asset_publisher/xjpQsFUZRw4g/content/tieng-on-muc-tiep-xuc-cho-phep-tieng-on-tai-noi-lam-viec?inheritRedirect=false)

Project Submission Form

Describe the actions and targets that will be implemented to ensure that the Project Activity will avoid negative impacts that cause harm.	Turbines are located in remote area which is neither densely populated nor an urban or industrial area. Although monitoring is not required as per regulation Project owner has decided to undertake annual monitoring of noise level.																					
Program of Risk Management Actions to achieve the target(s):	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Action and targets</th> <th>Responsibility</th> <th>Resource Requirement</th> <th>Target to be Achieved by (insert date)</th> <th>Key Performance Indicators (KPI)</th> <th>Targets achieved on (insert date)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Monitoring of noise level</td> <td>Project owner</td> <td>Manpower – 1 Equipment – Noise meter</td> <td>On-going process since the COD</td> <td>Noise level</td> <td>On-going process since the COD</td> </tr> <tr> <td colspan="7">Date of Closing the Program:</td> </tr> </tbody> </table> <p>It will be monitored once in every 6 months and the same will be verified during verification</p>	S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by (insert date)	Key Performance Indicators (KPI)	Targets achieved on (insert date)	1	Monitoring of noise level	Project owner	Manpower – 1 Equipment – Noise meter	On-going process since the COD	Noise level	On-going process since the COD	Date of Closing the Program:						
S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by (insert date)	Key Performance Indicators (KPI)	Targets achieved on (insert date)																
1	Monitoring of noise level	Project owner	Manpower – 1 Equipment – Noise meter	On-going process since the COD	Noise level	On-going process since the COD																
Date of Closing the Program:																						
QA/QC procedures:	Record will be maintained and submitted during verification																					
Describe whether the Project Activity has achieved the targets set out in this Program of Risk Management Actions. If yes, describe the outcome(s).	To be monitored																					

<b>Data / Parameter:</b>	<b>Shadow flickering</b>
Objective of the Program of Risk Management Actions	<b>Program of Risk Management Actions for Shadow flickering due to WTG blades (PRMA 02)</b>
Purpose:	To monitor environmental impact identified as not harmful in the risk assessment and to develop a Program of Risk Management Actions plan to address the risk of PRMA 02.
Describe the environment /social impact risk that needs to be mitigated.	Shadow flicker occurs under a limited range of conditions when the sun passes behind the hub of a wind turbine and casts an intermittent shadow over neighboring properties. Shadow flicker may become a problem when potentially sensitive receptors (e.g., residential properties, workplaces, learning and/or health care spaces/facilities) are located nearby, or have a specific orientation to the wind energy facility.

Describe the actions and targets that will be implemented to ensure that the Project Activity will avoid negative impacts that cause harm.	<p>Proposed wind turbines are coated with nonreflective paint, which will avoid reflection of light from towers. Similar to shadow flicker, blade or tower glint occurs when the sun strikes a rotor blade or the tower at a particular orientation. This can impact the community, as the reflection of sunlight off the rotor blade may be angled toward nearby residences.</p> <p>Blade glint is a temporary phenomenon for new turbines only, and typically disappears when blades get soiled after a few months of operation. Since the settlements are more than distance away from the project site this problem is not anticipated in the operational stage of the project. Also, WTGs considered in this project are painted with non-reflective coatings; reflection from tower is not anticipated. Also, the likelihood of direct line of sight to the location of proposed turbine locations will be assessed visually and the potential for using screening such as higher fencing and planting trees will be explored at problematic houses. The use of curtains or blinds will also be explored.</p>																					
Program of Risk Management Actions to achieve the target(s):	<table border="1" data-bbox="500 787 1421 1138"> <thead> <tr> <th>S.No.</th> <th>Action and targets</th> <th>Responsibility</th> <th>Resource Requirement</th> <th>Target to be Achieved by (insert date)</th> <th>Key Performance Indicators (KPI)</th> <th>Targets achieved on (insert date)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Number of complains/grievances received</td> <td>Project owner</td> <td>Manpower – 1</td> <td>On-going process since the COD</td> <td>Number of complains/grievances received</td> <td>On-going process since the COD</td> </tr> <tr> <td colspan="7">Date of Closing the Program:</td> </tr> </tbody> </table> <p>Monitoring and reporting of any complains/grievances on shadow flicker effect during operational phase so as appropriate mitigation measures can be assessed and provided to the sensitive receptors.</p>	S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by (insert date)	Key Performance Indicators (KPI)	Targets achieved on (insert date)	1	Number of complains/grievances received	Project owner	Manpower – 1	On-going process since the COD	Number of complains/grievances received	On-going process since the COD	Date of Closing the Program:						
S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by (insert date)	Key Performance Indicators (KPI)	Targets achieved on (insert date)																
1	Number of complains/grievances received	Project owner	Manpower – 1	On-going process since the COD	Number of complains/grievances received	On-going process since the COD																
Date of Closing the Program:																						
QA/QC procedures:	Record will be maintained and summited during verification																					
Describe whether the Project Activity has achieved the targets set out in this Program of Risk Management Actions. If yes, describe the outcome(s).	To be monitored																					

<b>Data / Parameter:</b>	<b>Bird &amp; Bat Mortality</b>
Objective of the Program of Risk Management Actions	<b>Program of Risk Management Actions for Bird &amp; Bat mortality from WTG operation (PRMA 03)</b>
Purpose:	To monitor environmental impact identified as not harmful in the risk assessment and to develop a Program of Risk Management Actions plan to address the risk of PRMA 03.

Project Submission Form

Describe the environment /social impact risk that needs to be mitigated.	There are some possibilities of bird or bat mortalities due to WTG operation.																					
Describe the actions and targets that will be implemented to ensure that the Project Activity will avoid negative impacts that cause harm.	The migratory bird pathway does not coincide with the WTG Locations in the of the project area. Moreover, there is a remote chance that bird reaching the blade height considering 120 m of hub height. However, the project owner has implemented bird diverter in key areas. In addition, the blades have orange color painted strip which helps the bird change their flight path.																					
Program of Risk Management Actions to achieve the target(s):	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Action and targets</th> <th>Responsibility</th> <th>Resource Requirement</th> <th>Target to be Achieved by (insert date)</th> <th>Key Performance Indicators (KPI)</th> <th>Targets achieved on (insert date)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Conduct birds monitoring using carcass search on line transects</td> <td>Project owner</td> <td>Manpower – 1</td> <td>On-going process since the COD</td> <td>Conduct birds monitoring using carcass search on line transects</td> <td>On-going process since the COD</td> </tr> <tr> <td colspan="7">Date of Closing the Program:</td> </tr> </tbody> </table> <p>Monitoring and reporting of birds on a monthly basis</p>	S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by (insert date)	Key Performance Indicators (KPI)	Targets achieved on (insert date)	1	Conduct birds monitoring using carcass search on line transects	Project owner	Manpower – 1	On-going process since the COD	Conduct birds monitoring using carcass search on line transects	On-going process since the COD	Date of Closing the Program:						
S.No.	Action and targets	Responsibility	Resource Requirement	Target to be Achieved by (insert date)	Key Performance Indicators (KPI)	Targets achieved on (insert date)																
1	Conduct birds monitoring using carcass search on line transects	Project owner	Manpower – 1	On-going process since the COD	Conduct birds monitoring using carcass search on line transects	On-going process since the COD																
Date of Closing the Program:																						
QA/QC procedures:	Record will be maintained and summited during verification																					
Describe whether the Project Activity has achieved the targets set out in this Program of Risk Management Actions. If yes, describe the outcome(s).	To be monitored																					

**B.7.3. Sampling plan**

>>

Not Applicable

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

>>

Monitoring data is collected in accordance with the agreement done between the project owner and Vietnam Electricity Corporation (EVN) which provides the infrastructure for the connection to the



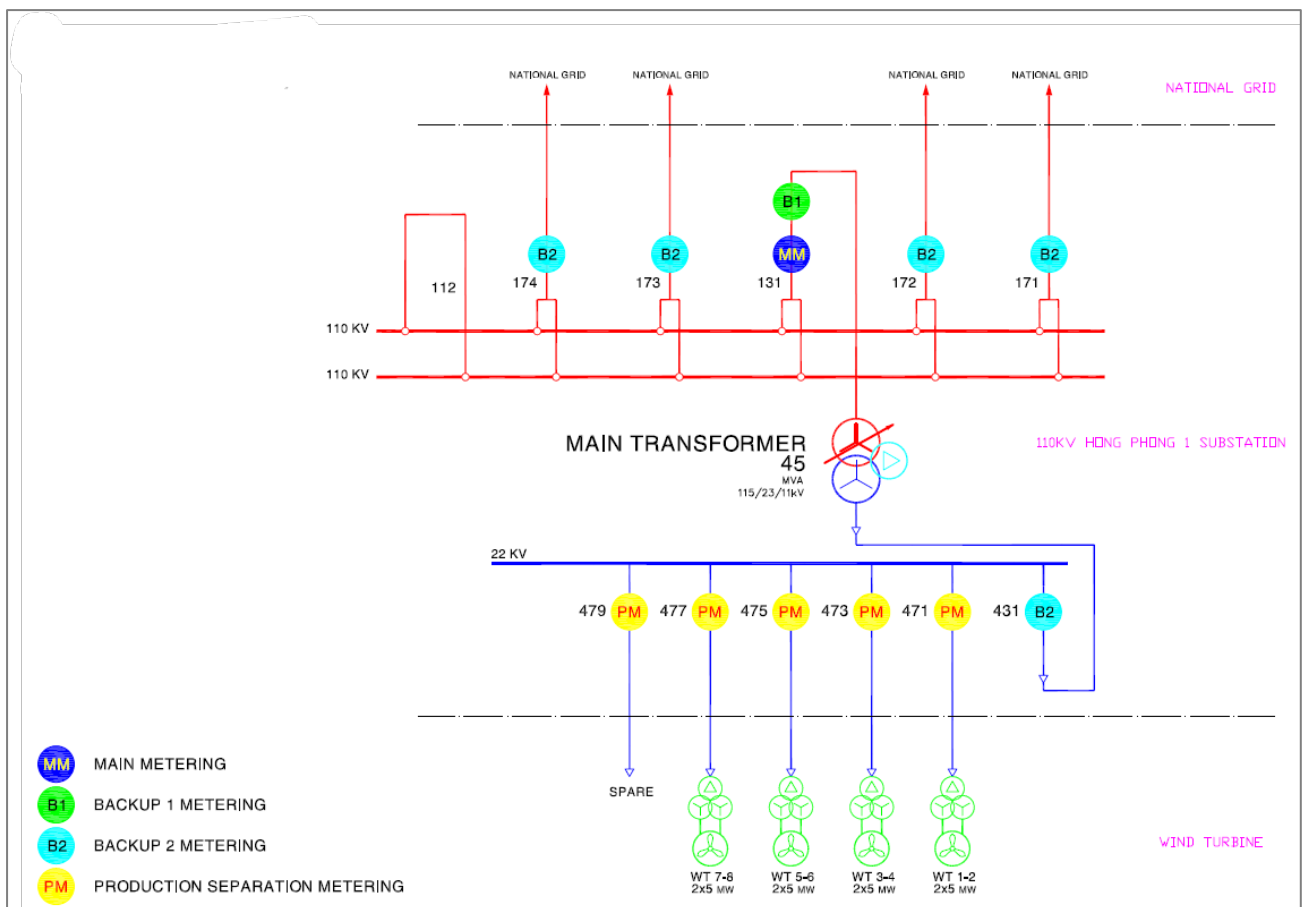
national grid. Data will be stored electronically, during the crediting period and at least two years after the last issuance of credits for the wind power project activity in the concerning crediting period. The Project Participant will be responsible for storage of data received from the measuring devices.

Monitoring procedures

A total of 12 meters installed to monitor the electricity generation. Their locations are as follows:

Location: Hong Phong 1 substation		
1. 131 (Main)	1. 171, 172, 173 & 173 (Backup 2)	Production separation:
2. 131 (Backup 1)	2. 431 (Backup 2)	471, 473, 475, 477 & 479

The metering layout as follows:



All the installed electricity meters have an integrated with SCADA system and store the data electronically. The electricity meters will obtain every 5 mins data and send to the server located at control room in switch station on a daily basis. The data can be downloaded from the system whenever required.

Period of archiving

## Project Submission Form

The data will be archived electronically every half hour in meters and the meters will send the data to server on a daily basis. Monthly data can be downloaded for billing purposes.

### Calibration of equipment

A total of 12 electricity meters installed (refer above picture) various location of the plant. The calibration of electricity meters will be done as per supplier recommendation by an independent accredited third party. However, the tariff meters are validated by EVN as per their requirement in three years interval. The relevant calibration certificates will be made available at the time of verification. The specification of electricity meter is as follows:

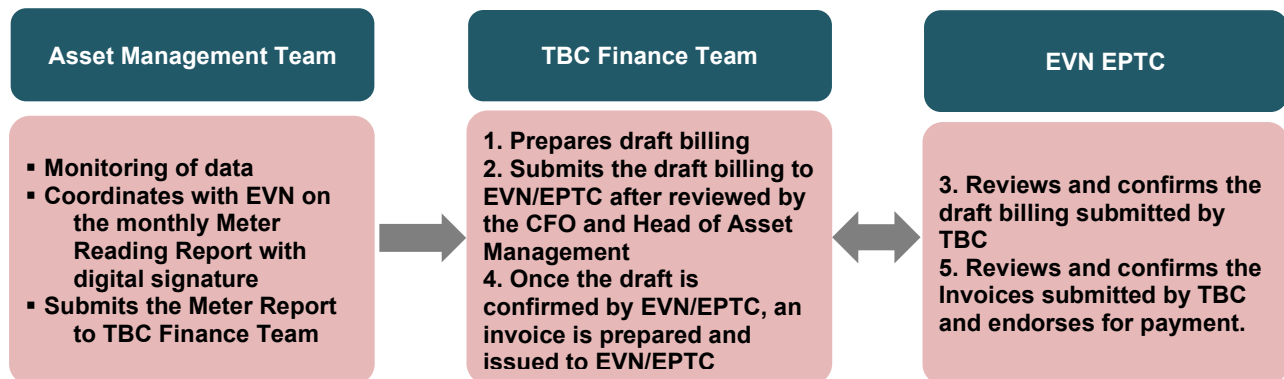
Type of Meters	Brand	Model	Rated Current (Measuring range)	Rated Voltage (Measuring range)	Accuracy
Main	Elster <sup>14</sup>	A1700	3 x 1 (1.2) A	3 x 63.5/110 V	0.2S
Backup & Others			3 x 1 (1.2) A	3 x 63.5/110 V	0.5S

### Training requirements

The suppliers of the equipment will train the staff in-charge during erection, to operate and maintain the equipment efficiently. Apart from this, the equipment supplier will provide complete manuals and documentation providing details for the maintenance schedule and the required activities associated with it.

### Roles & Responsibilities

The following roles and responsibilities will be used to monitor the project activity as per procedures:



The monitored data will be reported on a yearly basis for the calculation and estimation of emission reductions. This data will be checked against the billing to EVN. If the project is not performing as expected or if there are any negative impacts on the volume of emission reductions obtained, identify the where the project is deviating in its generation of emission reductions and the immediate measures which need to be undertaken to maintain the expected generation of emission reductions from the operation of this project. Should there be any significant changes in plant operation, these will be notified and amendments to the PDD will be requested during the following

<sup>14</sup> Supplier's Data/specification sheet

verification by GCC Verifier.

For each verification period, project owner will prepare a monitoring report that will be submitted to a GCC Verifier for verification. Project owner ensures that the procedures and monitoring plan are being followed. All data will be kept for a minimum of 2 years following issuance of certified emission reductions or the end of the crediting period, whichever is later, and the storage of this data will be the responsibility of the project owners.

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

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

>>

The start date of the project activity is 06/11/2021 which is the date of Commercial Operation Date of the proposed project activity.

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

>>

25 Years

### **C.3. Crediting period of the Project Activity**

>>

10 years:

Start date – 06/11/2021

End date – 05/11/2031

#### **C.3.1. Fixed crediting period**

>>

Yes

#### **C.3.2. Start date of the crediting period**

>>

Project Submission Form

06/11/2021<sup>15</sup>

### C.3.3. Duration of the crediting period

>>  
10 years

## Section D. Environmental impacts

### D.1. Analysis of environmental impacts

>>

Mott MacDonald conducted a report on Environmental and Social Impact Assessment (ESIA) report and Management Plans (MP) for the Hong Phong 1 wind power plant. The ESIA was conducted in line applicable national and international standards including Equator Principle IV (2020), Equator Principles (EP) III, International Finance Corporation (IFC) Performance Standards (PS) and the World Bank Group (WBG) Environmental, Health and Safety (EHS) Guidelines for wind energy, International Labor Organization standard and Vietnamese environmental and social regulations.

### D.2. Environmental impact assessment

>>

The environmental impact assessment covers the surface and groundwater quality, soil environment, air quality, biodiversity, climate change, electromagnetic interference (EMI), shadow flickering and visual amenity

The report clearly states that Hong Phong 1 wind power plant doesn't create any air, noise and water pollution. The ESIA report will be submitted to GCC Verifier during project verification.

## Section E. Environmental and social safeguards

>>

---

<sup>15</sup> Commercial Operation Date (COD). The COD certificate is available during the project verification.

## E.1. Environmental safeguards

>>

Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards										Project Owner's Conclusion	
		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	
<b>Environmental impacts on the identified categories<sup>16</sup> indicated below.</b>	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 requirements /legal limits related to the risks of environmental impacts.	If no environmental impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Not Applicable</b> (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 environmental impacts are anticipated that will not be in compliance 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 Management 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 impacts 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>Harmless</b> (No actions required)	Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as Harmful and 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 environmental impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for Yes or and -1 for No)	
<b>Environmental Safeguards</b>													
Environment - Air	SO <sub>x</sub> emissions	The wind power project does not result in emission of SO <sub>x</sub> in the Project scenario. However, in the absence	The National Technical Regulation on Industrial Emission of Inorganic Substances and Dusts	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	The project activity doesn't involve any fossil fuel combustion and thereby no SO <sub>x</sub> emission involved.	Not applicable	

<sup>16</sup> sourced from the CDM SD Tool and the sample reports are available ( <https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx> )

Project Submission Form

		of the project activity, the other fossil fuel power plants which are connected to grid might result in SO <sub>x</sub> emission.	(QCVN 19: 2009/BTNMT) stipulates thresholds for all industrial operations									
<i>NO<sub>x</sub> emissions</i>		The wind power project does not result in emission of NO <sub>x</sub> in the Project scenario. However, in the absence of the project activity, the other fossil fuel power plants which are connected to grid might result in NO <sub>x</sub> emission.	The National Technical Regulation on Industrial Emission of Inorganic Substances and Dusts (QCVN 19: 2009/BTNMT) stipulates thresholds for all industrial operations	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	The project activity doesn't involve any fossil fuel combustion and thereby no NO <sub>x</sub> emission involved.	Not applicable
<i>CO<sub>2</sub> emissions</i>		The wind power project does not result in emission of CO <sub>2</sub> in the Project scenario. However, in the absence of the project activity, the other fossil fuel power plants which are connected to grid might result in CO <sub>2</sub> emission.  The CO <sub>2</sub> emissions by the grid – connected power plants	The National Technical Regulation on Industrial Emission of Inorganic Substances and Dusts (QCVN 19: 2009/BTNMT) stipulates thresholds for all industrial operations	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	The project activity utilizes renewable energy and thereby reduce CO <sub>2</sub> emission instead of emitting them. Hence, no impact by the project activity	Not applicable and thereby no action required	Not applicable	The mission reduction achieved by the project activity is continuously monitored through power generation.	The project activity doesn't involve any fossil fuel combustion and thereby no CO <sub>2</sub> emission involved. However, in the baseline Scenario (grid) the fossil fuel power plants result in CO <sub>2</sub> emissions. Therefore, emission reductions are expected to be reduced which will be regularly	+1

		are expressed as grid emission factor, i.e. tCO <sub>2</sub> /MWh generated by the grid connected power plants.									monitored and verified ex-post and therefore, is eligible to be scored. Detailed monitoring plan and approach is presented in the PSF.	
	<i>CO emissions</i>	The wind power project does not result in emission of CO in the Project scenario. However, in the absence of the project activity, the other fossil fuel power plants which are connected to grid might result in CO emission.	The National Technical Regulation on Industrial Emission of Inorganic Substances and Dusts (QCVN 19: 2009/BTNM T) stipulates thresholds for all industrial operations	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	The project activity doesn't involve any fossil fuel combustion and thereby no CO emission involved.	Not applicable
	<i>Suspended particulate matter (SPM) emissions</i>	The wind power project does not result in emission of SPM in the Project scenario. However, in the absence of the project activity, the other fossil fuel power plants which are connected to grid might result in SPM emission.	The National Technical Regulation on Industrial Emission of Inorganic Substances and Dusts (QCVN 19: 2009/BTNM T) stipulates thresholds for all industrial operations	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	The project activity doesn't involve any fossil fuel combustion and thereby no SPM emission involved.	Not applicable
	<i>Fly ash emissions</i>	The wind power project does not	The National Technical	Not applicable and thereby	Not applicable and thereby	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby	The project activity doesn't	Not applicable

Project Submission Form

		result in emission of fly ash in the Project scenario. However, in the absence of the project activity, the other fossil fuel power plants which are connected to grid might result in fly ash emission.	Regulation on Industrial Emission of Inorganic Substances and Dusts (QCVN 19: 2009/BTNM T) stipulates thresholds for all industrial operations	no action required	no action required					no action required	involve any fossil fuel combustion and thereby no fly ash emission involved.	
	<i>Non-Methane Volatile Organic Compounds (NMVOCs)</i>	The wind power project does not result in emission of Organic in the Project scenario. However, in the absence of the project activity, the other fossil fuel power plants which are connected to grid might result in organic emission.	The National Technical Regulation on Industrial Emission of Inorganic Substances (QCVN 20: 2009/BTNM T) stipulates thresholds for all industrial operations	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	The project activity utilizes the natural resources to generate electricity and therefore no organic related emission involved.	Not applicable
	<i>Odor emissions</i>	The wind power project does not result in emission of Odor in the Project scenario.	The National Technical Regulation on Industrial Emission of Inorganic Substances and Dusts (QCVN 19: 2009/BTNM T) stipulates thresholds for all industrial operations	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	The project activity utilizes the natural resources to generate electricity and therefore no odor issue involved.	Not applicable



<p><i>Noise Pollution</i></p>	<p>Wind turbines produce noise when operating primarily from mechanical and aerodynamic sources. Mechanical noise may be generated by machinery in the nacelle. Aerodynamic noise emanates from the movements of air around the turbine blades and tower. The types of aerodynamic noise may include low frequency, impulsive low frequency, tonal and continuous broadband. In addition, the amount of noise may rise with increasing rotation speed of the turbine blade.</p>	<p>The National Technical Regulation on Noise - Permissible Exposure Levels of Noise in the Workplace (QCVN 24 :2016/BYT) stipulates thresholds for all industrial operations</p>	<p>Not applicable and thereby no action required</p>	<p>Not applicable and thereby no action required</p>	<p>Not applicable</p>	<p>Turbines are located in remote area which is neither densely populated nor an urban or industrial area. Hence, no impact by the project activity.</p>	<p>Not applicable and thereby no action required</p>	<p>Not applicable</p>	<p>Noise level is continuously monitored as defined under section B.7.2</p>	<p>Turbines are located in remote area which is neither densely populated nor an urban or industrial area. Although monitoring is not required as per regulation Project owner has decided to undertake annual monitoring of noise level.</p>	<p>+1</p>
<p><i>Shadow Flickering</i></p>	<p>Shadow flicker occurs under a limited range of conditions when the sun passes behind the hub of a wind turbine and casts an intermittent shadow over neighboring properties.</p>	<p>There are no laws and regulations which define shadow flickering by wind power plant in Viet Nam.</p>	<p>Not applicable and thereby no action required</p>	<p>Not applicable and thereby no action required</p>	<p>Not applicable</p>	<p>Proposed wind turbines are coated with nonreflective paint, which will avoid reflection of light from towers. Hence, the impact is very negligible.</p>	<p>Not applicable and thereby no action required</p>	<p>Not applicable</p>	<p>Shadow flickering is continuously monitored as defined under section B.7.2</p>	<p>Proposed wind turbines are coated with nonreflective paint, which will avoid reflection of light from towers. Similar to shadow flicker, blade or tower glint</p>	<p>+1</p>

Project Submission Form

		Shadow flicker may become a problem when potentially sensitive receptors (e.g., residential properties, workplaces, learning and/or health care spaces/ facilities) are located nearby, or have a specific orientation to the wind energy facility.									occurs when the sun strikes a rotor blade or the tower at a particular orientation. This can impact the community, as the reflection of sunlight off the rotor blade may be angled toward nearby residences.	
<b>Environment - Land</b>	<i>Solid waste Pollution from Plastics</i>	Wind power plant doesn't generate plastic wastes	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	No plastic wastes are disposed during the operational phase.	Not applicable
	<i>Solid waste Pollution from Hazardous wastes</i>	Wind power plant doesn't generate hazardous wastes	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	No hazardous wastes are generated at the project site. However, project owner has proper waste management plant at site. This parameters in not monitored and thereby not scored	Not applicable
	<i>Solid waste Pollution from Bio-medical wastes</i>	Wind power plant doesn't generate bio-medical wastes	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	No biomedical wastes are generated by wind	Not applicable

											power plants	
	<i>Solid waste Pollution from E-wastes</i>	No e-waste pollution anticipated at the project site	E-waste disposal regulations	Not applicable	Not applicable	Not applicable and thereby no action required	An inventory of all electrical and electronics equipment used and returned at the site	Project owner is responsible to maintain records and filling of records as per applicable law	Not applicable and thereby no action required	Even though e-waste is not anticipated, the records of e-waste will be maintained as per applicable laws and regulations.	Project Owner will be responsible to maintain records and filling of returns as per applicable law and have no significant impact. Hence, this parameter will not be scored.	Not applicable
	<i>Solid waste Pollution from Batteries</i>	Wind power plant doesn't generate solid waste pollution from batteries.	E-waste disposal regulations	Not applicable	Not applicable	Not applicable and thereby no action required	An inventory of all electrical and electronics equipment used and returned at the site	Project owner is responsible to maintain records and filling of records as per applicable law	Not applicable and thereby no action required	Even though e-waste is not anticipated, the records of e-waste will be maintained as per applicable laws and regulations.	Project Owner will be responsible to maintain records and filling of returns as per applicable law and have no significant impact. Hence, this parameter will not be scored.	Not applicable
	<i>Solid waste Pollution from end of life products/ equipment</i>	Wind power plant doesn't generate solid waste pollution from end life of product/equipment	Solid waste disposal regulations	Not applicable	Not applicable	Not applicable and thereby no action required	Solid waste from project activity will be disposed as per local regulations.	Project owner is responsible to maintain records and filling of records as per applicable law	Not applicable and thereby no action required	The details of damaged and spoiled goods from plant will be maintained.	Project Owner will be responsible to maintain records and filling of returns as per applicable law and have no significant impact. Hence, this parameter will not be scored.	Not applicable

Project Submission Form

	<i>Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury)</i>	Wind power plant doesn't generate solid waste pollution from chemicals.	Not available	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable
	<i>Soil erosion</i>	Wind power plant doesn't result in soil erosion.	Not available	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable
<b>Environment - Water</b>	<i>Reliability/ accessibility of water supply</i>	Not available	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Supply water from water body will be utilized and necessary approval obtained.	Not applicable
	<i>Water Consumption from ground and other sources</i>	Not available	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	No ground water will be consumed by the project activity.	Not applicable
	<i>Generation of wastewater</i>	Not available	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Only domestic wastewater generated at the site, and it has been discharged as per local regulations.	Not applicable
	<i>Wastewater discharge without/with insufficient treatment</i>	Not available	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Only domestic wastewater generated at the site, and it has been discharged as per local regulations.	Not applicable
	<i>Pollution of Surface, Ground</i>	Not available	Not applicable and thereby	Not applicable	Not applicable	Not applicable and thereby	Not applicable	Not applicable and thereby no action required	Not applicable and thereby	Not applicable and thereby	The domestic wastewater generated	Not applicable

	<i>and/or Bodies of water</i>		no action required			no action required			no action required	no action required	at the site, and it has been discharged as per local regulations.	
<b>Environment – Natural Resources</b>	<i>Conserving mineral resources</i>	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Wind power plant doesn't use minerals.	Not applicable
	<i>Protecting/enhancing plant life</i>	Not applicable	Forest conservation act	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	The project activity has been implemented in the seashore where no trees have been removed.	Not applicable
	<i>Protecting/enhancing species diversity</i>	Potential birds/bat mortality in the project area	Wildlife act	Not applicable	Even though is limited chance of birds/bat mortality, project owner has been taken necessary actions to divert the birds/bat. The migratory bird pathway does not crossing with the WTG locations.	Not applicable and thereby no action required	No actions required since there are no sensitive ecological and wildlife zones presented within the project area. Hence, no actions required.	Not applicable and thereby no action required	Not applicable and thereby no action required	Even though limited birds/bat mortality, project owner keeps monitoring the mortality rate.	The migratory bird pathway does not coincide with the WTG Locations in the of the project area. Moreover, there is a remote chance that bird reaching the blade height considering 120 m of hub height. However, the project owner has implemented bird diverter in key areas. In addition, the blades have orange color	+1

Project Submission Form

											Painted strip which helps the bird change their flight path.	
<i>Protecting/enhancing forests</i>	Not applicable	Forest conservation act	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	No forest land has been used and thereby not applicable.	Not applicable
<i>Protecting/enhancing other depletable natural resources</i>	Not applicable	Forest conservation act	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable
<i>Conserving energy</i>	Not applicable	Energy Conservation Act	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Electricity generation by the project activity will be monitored. Detail of monitoring plan is provided in this PSF	The project activity supply electricity to the grid generated by the renewable source. Hence, this parameter will be monitored continuously.		+1
<i>Replacing fossil fuels with renewable sources of energy</i>		Energy Conservation Act	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable
<i>Replacing ODS with non-ODS refrigerants</i>		Not available	Not applicable	Not applicable	Not applicable and thereby no action required	Not applicable	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable and thereby no action required	Not applicable	Not applicable

**Note:** If the score is: (a) zero or greater, the overall 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 is obtained after adding the individual scores in each of the rows in the last column of the above table.

<b>Net Score:</b>	<b>+5</b>
-------------------	-----------

**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 of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards										Project Owner's Conclusion	
		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	
<b>Social impacts on the identified categories<sup>17</sup> indicated below.</b>	Indicators 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 <b>Not Applicable</b> (No actions required)	If social impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirements/ 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 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 <b>Harmful</b> . Indicate whether the risks have been eliminated or reduced and, where appropriate, indicate them as <b>Harmless</b> (No actions required)	Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as <b>Harmful</b> 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> )	
<b>Social Safeguards</b>													
<b>Social - Jobs</b>	Long-term jobs (> 1 year) created/ lost	The project activity creates job opportunities	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Number of people employed by the project will be monitored. However, the monitoring parameters	No local regulation mandate to create job opportunity. Since the project is already under operation, it has been	Not applicable	

<sup>17</sup> sourced from the CDM SD Tool and the sample reports are available ( <https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx> )



										is total number of staffs employed regardless of either short or long term. Hence, this will not be monitored.	provided job opportunities.	
	<i>New short-term jobs (&lt; 1 year) created/ lost</i>	<i>The project activity creates job opportunities</i>	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Number of people employed by the project will be monitored. However, the monitoring parameters is total number of staffs employed regardless of either short or long term. Hence, this will not be monitored.	No local regulation mandate to create job opportunity. Since the project is already under operation, it has been provided job opportunities.	Not applicable
	<i>Sources of income generation increased / reduced</i>	<i>The project activity creates job opportunities</i>	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Number of people employed by the project will be monitored. This will be monitored. Detailed monitoring plan provided in section B.7.1	No local regulation mandate to create job opportunity. Since the project is already under operation, it has been provided job opportunities.	+1
<b>Social - Health &amp; Safety</b>	<i>Disease prevention</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable

Project Submission Form

	<i>Reducing / increasing accidents</i>	Safety training provided to employees to prevent accidents at the site.	Industrial safety regulations.	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Number of safety training provided will be monitored. Detailed monitoring plan provided in section B.7.1	Regular safety trainings have been conducted at the site to avoid any accidents at the site. The training records will be maintained.	+1
	<i>Reducing / increasing crime</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Reducing / increasing food wastage</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Reducing / increasing indoor air pollution</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Efficiency of health services</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Sanitation and waste management</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Other health and safety issues</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
<b>Social - Education</b>	<i>Job related training imparted or not</i>	<i>The project activity provides skilled trainings for employees</i>	Permanent employees will receive regular training to	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Number of skilled trainings provided will be monitored.	Regular skilled trainings have been conducted at the site to	+1

			enhance their skills.							Detailed monitoring plan provided in section B.7.1	enhance the employees performance during operation. The training records will be maintained.	
	<i>Educational services improved or not</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Project-related knowledge dissemination effective or not</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
<b>Social - Welfare</b>	<i>Improving/deteriorating working conditions</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Community and rural welfare</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Poverty alleviation (more people above poverty level)</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Improving / deteriorating wealth distribution/ generation of income and assets</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Increased or / deteriorating municipal revenues</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable

Project Submission Form

	<i>Women's empowerment</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable
	<i>Reduced / increased traffic congestion</i>	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not applicable and thereby no actions required.	Not available	Not available	Not applicable

**Note:** If the score is: (a) zero or greater, the overall 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 society. Score is obtained after adding the individual scores in each of the rows in the last column of the above table.

<b>Net Score:</b>	+3
<b>Project Owner's Conclusion in PSF:</b>	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 Owner(s)'s Conclusion	
			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?
<p><b>Describe UN SDG targets and indicators</b></p> <p>See: <a href="https://unstats.un.org/sdgs/indicators/indicators-list/">https://unstats.un.org/sdgs/indicators/indicators-list/</a></p>	Describe the UN-level target(s) and corresponding indicator no(s)	Has the host country declared the SDG to be a national priority? Indicate Yes or No	<p>Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope.</p> <p><b>For guidance see:</b> Integrating the SDGs into Corporate Reporting- A Practical Guide: <a href="https://www.unglobalcompact.org/docs/publications/Practical_Guide_SDG_Reporting.pdf">https://www.unglobalcompact.org/docs/publications/Practical_Guide_SDG_Reporting.pdf</a></p> <p>Case-study from Coca-Cola and other organizations to develop organization-wide SDGs (page 114): <a href="https://pub.iges.or.jp/pub/realising-transformative-potential-sdgs">https://pub.iges.or.jp/pub/realising-transformative-potential-sdgs</a></p>	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)
<p><b>Goal 1: End poverty in all its forms everywhere</b></p>	Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to	Yes	The project activity contributes to access the basic service such as electricity for the households in the region.	Project activity result in providing basic service such as electricity to the households in the region.	Number of households consuming the electricity	Provision of electricity have direct linkage with the access of basic services to the households.	Project owner will do the local survey and collect sampling information from households in order to monitor the number of households	Currently the project activity is under operation and supplying electricity to the households.	Yes. It's on-going for the entire crediting period

Project Submission Form

	<p>basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <p><b>Indicator</b>  <b>1.4.1:</b> Proportion of population living in households with access to basic services</p>						<p>consuming electricity.</p>		
<p><b>Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b></p>									
<p><b>Goal 3. Ensure healthy lives and promote well-being for all at all ages</b></p>									
<p><b>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning</b></p>									

opportunities for all									
<b>Goal 5. Achieve gender equality and empower all women and girls</b>									
<b>Goal 6. Ensure availability and sustainable management of water and sanitation for all</b>									
<b>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</b>	<p>Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix</p> <p><b>Indicator 7.2.1:</b> Renewable energy share in the total final energy consumption</p>	No	<p>The project activity installed 42.4 MW of renewable energy capacity that will deliver green electricity annually. Quantity of net electricity supplied to the grid by project activity in year will replace equivalent amount of electricity feed to the grid by fossil fuel-based power plant.</p>	<p>The gross generation of 1.32 million MWh in 10 years crediting period and continue to provide electricity until end of project lifetime.</p>	<p>The net amount of electricity supplied in an annual basis.</p>	<p>Contribute to the renewable energy share in the power mix of national grid.</p>	<p>The net electricity supplied to grid is continuously monitored by the electricity meters installed at the power station which is owned by the national grid.</p>	<p>Contributes green and clean energy in the power mix of the national grid.</p>	<p>Yes. It's ongoing for the entire crediting period</p>
<b>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b>	<p>Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work</p>	No	<p>The project activity created permanent job opportunities during the operation and temporary jobs during construction. Project protects labour rights and promotes safe and secure working environments. Supports a transition to a low-carbon society through employment training for former fossil fuel industry employees</p>	<p>The project created more than 330 job opportunities during construction and 19 permanent jobs during operational phase. The hourly earnings of permanent employees will be disclosed during the project verification.</p>	<p>Project created temporary and permanent job opportunities during the project lifetime.</p>	<p>Employment opportunities as per labour code</p> <p>Wages as per the minimum wages act of the country</p>	<p>The project owner monitors the number of job opportunities through payroll and job contracts and hourly earnings through payroll records. This monitoring follows the</p>	<p>Currently the project activity under operation and created the job opportunities</p>	<p>Yes. It's ongoing for the entire crediting period</p>

Project Submission Form

	of equal value  <b>Indicator 8.5.1:</b> Average hourly earnings of employees, by sex, age, occupation and persons with disabilities						procedure defined under B7.1, Table 3.		
<b>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b>									
<b>Goal 10. Reduce inequality within and among countries</b>									
<b>Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable</b>									
<b>Goal 12. Ensure sustainable consumption and production patterns</b>									
<b>Goal 13. Take urgent action to combat climate change and its impacts</b>	Target 13.2: Integrate climate change measures into national policies, strategies and planning	Yes	Project activity is generating clean and green electricity through wind energy and thereby reduced emission from the fossil-fuel based power generation plant supplying electricity to the national grid.	The gross generation of 1.32 million MWh in 10 years crediting period will reduce 1,060,600 tCO <sub>2</sub> e	The emission reduction achieved in annual basis will be considered as project	Emission reductions achieved per year.	The net electricity supplied to grid is continuously monitored by the electricity meters	Reduction of Greenhouse Gas (GHG) emissions.	Yes. It's ongoing for the entire crediting period



	<b>Indicator 13.2.2:</b> Total greenhouse gas emissions per year				level indicator.		installed at the power station which is owned by the national grid. The monitored electricity will be utilized to compute the emission reduction.		
<b>Goal 14.</b> Conserve and sustainably use the oceans, seas and marine resources for sustainable development									
<b>Goal 15.</b> Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss									
<b>Goal 16.</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive									

Project Submission Form

institutions at all levels									
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development									
<b>SUMMARY</b>							<b>Targeted</b>	<b>Likely to be Achieved</b>	
Total Number of SDGs							4	4	
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF							Gold	Gold	

## Section G. Local stakeholder consultation

### G.1. Modalities for local stakeholder consultation

>>

The local stakeholder consultations for the project activity have been carried out in line with Gold Standard requirement. The documents and records pertaining to the local stakeholder consultations will be submitted to GCC verifier during the project verification.

A total of 2 meetings were carried out on 06/05/2022 as follows:

S/N	Targeted Audiences	Venue	Time (hours)	No of Attendees
1	Local community	People's Committee Office	1000 - 1200	29
2	Authorities	People's Committee Office	1400 - 1600	9

The meetings began with the welcome address and purpose of the consultation meeting and subsequently followed by the presentation about the basic project information and its contribution towards sustainable development goals. The presentations were carried out by Mr. Bui Minh Hoang, Project Coordinator. There were no negative comments received from the stakeholders. The local community people very much supportive to this kind of project implementation in the region.

#### Local Community



#### Authorities



## Project Submission Form

The project owner shared the contact details (mobile phone number and email) of the project representative for the grievance mechanism.

### G.2. Summary of comments received

>>

The following comments were received from the stakeholders during the consultation meetings:

Questions	Answers
1. Some power projects (wind, solar) have problems with the legal procedures during the application of connection into national grid, does HP1 have such those problems?	1. HP1 completes the procedure to connect the project into national grid, put into operation on 06/11/2021, HP1 has no problems in term of legal.
2. Does HP1 have local workers during the period of construction and operation?	2. On construction: HP1 have local contractor, local workers which is about 40% of total workers. On operation: local workers for suitable jobs. Overall assessment: the project HP1 contributes to the job creation for local workforce, contributes to the Provincial Budget, create the landscape and environment, help promote local images.

Few positive feedbacks received from the stakeholders too. The feedbacks are how they understood the project and its benefits. There were no commend raised by the stakeholders.

### G.3. Consideration of comments received

>>

Since only positive comments received from the stakeholders, no consideration is required.

## Section H. Approval and authorization

>>

Not Applicable.

## Appendix 1. Contact information of project owners

<b>Organization name</b>	Hong Phong 1 Wind Power Joint Stock Company
<b>Country</b>	Vietnam
<b>Address</b>	3/F F42 Hoang Bich Son Street, Phu Thuy Ward, Phan Thiet City, Binh Thuan Province, Vietnam
<b>Telephone</b>	+84978722950
<b>Fax</b>	
<b>E-mail</b>	Primary: <a href="mailto:louis.aniban@thebluecircle.sg">louis.aniban@thebluecircle.sg</a> ; Secondary: <a href="mailto:duyen.duong@thebluecircle.sg">duyen.duong@thebluecircle.sg</a>
<b>Website</b>	
<b>Contact person</b>	Primary: Aniban Louis Tiden; Secondary: Duong Ngoc Thuong Duyen

## Appendix 2. Affirmation regarding public funding

>>

No public funding received by the project activity.

## Appendix 3. Applicability of methodology(ies)

>>

Refer section B.6.1

## Appendix 4. Further background information on ex ante calculation of emission reductions

>>

Refer section B.6.2

## Appendix 5. Further background information on monitoring plan

>>

Refer section B.7

## Appendix 6. Summary report of comments received from local stakeholders

>>

Refer section G.2

**Appendix 7. Summary of de-registered CDM project (Type B)**

>>

Not applicable as the project activity falls under Type A2

<i>Complete this form in accordance with the instructions attached at the end of this form.</i>	
<b>CDM Project registration number</b>	
<b>Date of registration of CDM Project</b>	
<b>Title of the Project Activity</b>	
<b>CDM Project de-registration reference number</b>	
<b>Date of de-registration of the CDM Project</b>	
<b>Project Participants</b> <small>(authorized by the host / annex 1 country letter of approval)</small>	
<b>Country where the project is located</b>	

<p><b>Applied CDM methodology(ies)</b> (provide reference and version number(s))</p>				
<p><b>Pre-registration changes to the CDM Project Activity</b> (Tick as applicable)</p>	<p><b>CDM Pre-registration Changes</b></p>	<p><b>Reference number</b></p>	<p><b>Approved</b></p>	<p><b>Provide a summary of pre-registration changes</b></p>
	<p>Deviations from the CDM methodology</p>		<p><input type="checkbox"/></p>	
	<p>Deviations from the CDM Tool</p>		<p><input type="checkbox"/></p>	
	<p>Deviations from the CDM rules</p>		<p><input type="checkbox"/></p>	
	<p>Other.....</p>		<p><input type="checkbox"/></p>	
<p><b>Post-registration changes to the CDM Project Activity</b> (Tick as applicable)</p>	<p><b>CDM Post registration Changes</b></p>	<p><b>Reference number</b></p>	<p><b>Approved</b></p>	<p><b>Provide a summary of post-registration changes</b></p>
	<p>Change in project design</p>		<p><input type="checkbox"/></p>	
	<p>Request for revision of monitoring plan</p>		<p><input type="checkbox"/></p>	
	<p>Request for change in start date of crediting period</p>		<p><input type="checkbox"/></p>	
	<p>Renewal of crediting period</p>		<p><input type="checkbox"/></p>	
	<p>Temporary deviations</p>		<p><input type="checkbox"/></p>	
	<p>Other.....</p>		<p><input type="checkbox"/></p>	

Project Submission Form

Crediting Period(s)	Crediting period(s)		Period (start & end dates)	ERs as per registered PDD/MR	CERs issued	
	Crediting Period (shall start on or after 1 Jan 2016)	Fixed 10 year				
		Renewable (7 years, with 2 approved renewals)	1 <sup>st</sup>			
			2 <sup>nd</sup>			
		3 <sup>rd</sup>				
	Period for which CERs have been issued					
	Period for which CERs have been requested but not issued				-	
	Period for which CERs have never been requested for issuance (no monitoring reports submitted)				-	
	Period for which CERs have never been requested for issuance prior to CDM de-registration				-	
	Remaining Crediting period, after CDM de-registration, for which CERs have not been issued by the UNFCCC CDM Executive Board, subject to a ceiling of 10 years as allowed under the GCC Program				-	
Details of Previous CDM Issuance Requests	Issuance Request	Period (start & end dates)	ERs as per registered PDD	Quantity of CERs requested to be issued	Quantity of CERs issued	
	1 <sup>st</sup>					
	2 <sup>nd</sup>					
	3 <sup>rd</sup>					
	4 <sup>th</sup>					
	5 <sup>th</sup>					
	Add rows .....					
	<b>Total</b>					



<p><b>List any open issues in the Validation and last Verification Report (e.g., FARs, if any) and how they have been addressed</b></p>	
<p><b>Any other relevant information that has not been reported in the registered CDM documents and that may have adverse impacts on the environmental integrity of the Project Activity</b></p>	
<p><b>Provide the list of all the registered documents related to this project, as available on the UNFCCC/CDM website and the corresponding URLs.</b></p>	

## 2. INSTRUCTIONS

### Instructions for completing this form

#### General instructions

1. For designing and developing a project for the GCC Program, the requirements stipulated in the 'Project Standard' and the applicable GCC or CDM Methodologies and tools, are applicable to Project Owners to ensure conformance with applicable GCC Rules and requirements while completing the Project Submission Form (PSF, this document).
2. The Project Standard stipulates that the Project Owners wishing to register a proposed GCC Project Activity with the GCC Program shall prepare a Project Submission Form, using the valid version of the applicable PSF form, available on the GCC website.<sup>18</sup>
3. When completing the PSF form, the Project Owners shall follow the instructions therein and provide all necessary information and documentation to demonstrate compliance of the proposed GCC Project Activity with all applicable requirements in this document and other applicable GCC Rules and requirements.
4. The terms<sup>19</sup> used in this document have been defined in the Program Definitions document and shall be referred to while completing the PSF.
5. The Project Owners shall assess the project to identify the appropriate project type (A1, A2, B1 or B2), which complies with the eligibility criteria of the Project Standard. Once the eligible project type is identified, the PSF shall be completed, clearly identifying the requirements including the voluntary certification labels and/or market eligibility (e.g., CORSIA) they wish to target. The choices made by the Project Owners in the PSF (including on the cover page) shall become a package of requirements against which the GHG Verifier as well as the GCC Operations Team and Steering Committee shall assess and evaluate the Project Activity throughout the project cycle.
6. For Type A (A1, A2) projects, all of the sections of the PSF are required to be completed, including the cover page. If the voluntary certification labels and/or market eligibility (e.g., CORSIA) have been chosen to be targeted, sections A.5 (requirements related to CORSIA including Host Country Attestation on Double Counting), B.7.2 (SDG monitoring), E.1 (Do-No-Net-Harm requirements for Environment), E.2 (Do-No-Net-Harm requirements for Society), and F (contribution to UN SDGs) are required to be filled with new information.
7. For Type B (de-registered from CDM) projects being submitted to the GCC Program, the PSF shall be completed as per the guidance provided below:
  - (a) **For Type B1 projects:**

---

<sup>18</sup> GCC website : <https://www.globalcarboncouncil.com/resource-centre.html>

<sup>19</sup> While using any GCC document, the terms/definitions/Acronyms and the names of the regulatory documents referred have their first letter in capitals (e.g., 'Project Standard').

- (i) All of the sections of the PSF are required to be completed, including the cover page. New sections are required to be filled with new information not contained in the registered CDM PDD.
- (ii) Sections A.4, A.5 (requirements related to CORSIA including Host Country Attestation on Double Counting), A.6, C.1, C.2, C.3, H (if applicable) and Appendix 1 are required to be completed with new and/or updated information.
- (iii) If the voluntary certification labels and/or market eligibility (e.g., CORSIA) have been chosen to be targeted, sections A.5 (requirements related to CORSIA including Host Country Attestation on Double Counting), B.7.2 (SDG monitoring), E.1 (Do-No-Net-Harm requirements for Environment), E.2 (Do-No-Net-Harm requirements for Society) and F (contribution to UN SDGs) are required to be completed with new information.

**(b) For Type B2 projects:**

- (i) All of the sections of the PSF are required to be completed, including the cover page. New sections are required to be filled with new information not contained in the registered CDM PDD.
- (ii) Sections A.4, A.5 (requirements related to CORSIA including Host Country Attestation on Double Counting), A.6, C.1, C.2, C.3, H (if applicable) and Appendix 1 are required to be filled with new and/or updated information.
- (iii) For project type B2, since the voluntary certification labels and market eligibility (e.g., CORSIA) are not chosen, mark the sections: B.7.2 (SDG monitoring), E.1 (Do-No-Net-Harm requirements for Environment), E.2 (Do-No-Net-Harm requirements for Society) and F (contribution to UN SDGs) as “Not applicable” and explicitly state that they have been left blank intentionally.

**(c) For both B1 and B2 projects:**

- (i) The remaining sections of the PSF, except those mentioned in paragraphs 7 (a) and (b) above and particularly related to GHG reduction, shall:
  - i. refer to the corresponding sections of the registered CDM PDD, where the same information as contained in the registered CDM PDD, is required; and
  - ii. provide, in the appropriate sections, additional information if required.
- (ii) The PSF shall also provide the required information in Appendix 7.
- (iii) The GCC Program shall not allow any post-registration changes or deviations from the contents of the registered CDM project documents (including registered CDM PDD and supporting documents such as spreadsheets, Modalities of Communication (CDM-MoC), letters of approval, etc.), unless approved by UNFCCC/ CDM as per its rules and CDM project cycle procedures. Therefore, any post-registration changes or deviations from the contents of the registered CDM project documents shall be approved under the CDM, following the CDM Project cycle procedures, prior to de-registering the CDM Project and completing the PSF for Type B projects.

## Project Submission Form

8. Use this PSF form for all types of GCC Project Activities, except for afforestation and reforestation (A/R) Project Activities and carbon dioxide capture and storage (CCS) Project Activities, for which a separate template may be designed in future.
9. Currently, the GCC Program has not developed requirements for post-registration changes. These will be developed in the future if required.
10. Where a PSF and/or spreadsheet contains information that the Project Owner(s) wish to be treated as confidential/proprietary, submit documentation in two versions:
  - (d) One electronic version where all parts containing confidential/proprietary information are redacted (e.g., made illegible by covering them with black ink) so that the version can be made publicly available without displaying confidential/proprietary information; and
  - (e) One electronic version containing all information that is to be treated as strictly confidential/proprietary by all parties handling this documentation (GCC approved verifiers, Steering committee members, external experts requested to consider such documents in support of work for the Steering committee, and the GCC team).
11. Information used to demonstrate additionality, to describe the application of the selected methodologies, and to support the environmental impact assessment, is not considered proprietary or confidential. The Project Owner(s) shall make any data, values and formulae included in spreadsheets provided accessible and verifiable. In case of strictly confidential financial information regarding a project, the Project Owner(s) can prepare two versions of spreadsheets in a similar way as mentioned in paragraph 10 above and mark one spreadsheet accordingly as “confidential”.
12. Complete this form in English. All sections of this form are mandatory, unless otherwise indicated, and shall be completed with all required information. Prepare all attached supporting documents in English, or, if their originals were prepared in another language, provide a full translation of the relevant sections of these documents in English.
13. Complete this form using the same format without modifying its font, headings or logo, and without any other alterations to the form.
14. Do not modify or delete tables and their columns in this form. Add rows to the tables as needed. Add additional appendices as needed.
15. If a section of this form is not applicable, explicitly state that the section has been left blank intentionally.
16. Use an internationally- recognized format for presentation of values. For example, use digits grouping in thousands and mark a decimal point with a dot (.), not with a comma (,).
17. Complete this form deleting the ‘Instructions for completing this form’.
18. Provide the information requested on the cover page.
19. The Project Owner(s) shall note that non-compliance with the instructions provided in this document shall lead to non-compliance of the Project Owner(s) with the Project Standard and the applicable GCC documents containing the rules and requirements governing the GCC Program.

## Section A. Description of the Project Activity

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

1. Provide the purpose and a general description of the Project Activity, including a summary of:
  - (a) The location of the Project Activity;
  - (b) The technologies/measures employed by the Project Activity;
  - (c) The project boundary;
  - (d) The baseline scenario;
  - (e) The estimates of annual average and total GHG emission reductions for the chosen crediting period.
2. Describe how the Project Activity contributes to sustainable development (not more than one page).
3. Provide a full description of 1(a)–(e) above in sections A.2, A.3, B.3, B.4 and B.6 below, respectively.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### A.2. Location of Project Activity

4. Provide details of the physical/geographical location of the Project Activity, including the physical address (host country, region/state/province, city/town/community, street name and number) and a map, and if necessary, other information allowing for the unique identification of the Project Activity (e.g., geodetic coordinates).
5. Do not exceed one page for the description of the location.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### A.3. Technologies/measures

6. Describe the technologies/measures to be employed and/or implemented by the Project Activity, including:
  - (a) A list of the facilities, systems and equipment that will be installed and/or modified under the Project Activity;
  - (b) The arrangement of the facilities, systems and equipment;
  - (c) The monitoring equipment and their location in the systems.

## Project Submission Form

7. Describe the types and levels of services (normally in terms of mass or energy flows) provided by the facilities, systems and equipment that are being modified and/or installed under the Project Activity and their relation, if any, to other facilities, systems and equipment outside the project boundary.
8. For the facilities, systems and equipment that are being modified and/or installed under the Project Activity, provide information on:
  - (a) The age and average lifetime of the equipment based on the manufacturer's specifications and industry standards;
  - (b) The existing and forecast installed capacities, load factors and efficiencies;
  - (c) The energy and mass flows and balances of the facilities, systems and equipment, if necessary.
9. Provide a short summary of facilities, systems and equipment in the baseline scenario as established in section B.4 below.
10. Do not provide information that is not essential to understanding the purpose of the Project Activity and how it reduces GHG emissions. Do not include information related to facilities, systems and equipment that are auxiliary to the main scope of the Project Activity and that do not affect directly or indirectly GHG emissions and/or mass and energy balances of the processes related to the Project Activity.
11. Describe how the technologies/measures and know-how for their use are transferred to the host country, where applicable.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

12. Using the table provided, list the Project Owner(s) involved in the Project Activity, and provide contact information for each Project Owner in Appendix 1 below.
13. When this form is completed in support of a proposed new GCC methodology, identify at least the host country and any known Project Owner(s) (e.g., those proposing the new methodology).

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **A.5. Declaration of intended use of carbon credits (ACCs) from the Project Activity**

14. Indicate the intended use of carbon credits (ACCs) from the Project Activity.
15. Confirm that the carbon credits (ACCs) from the Project Activity shall not be double counted.

**Note:** For all project (Types A1, A2, B1 and B2), this section requires new information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

#### **A.6. Additional Requirements for CORSIA**

16. If the Project Owner(s) intend to use/sell/transfer/retire the carbon credits (ACCs) generated by the Project Activity for offsetting purposes to Airlines under ICAO's CORSIA requirements, the Project Owner(s) shall:

- (a) Comply with the Environment and Social 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.
- (b) Comply with the Project Sustainability Standard to 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.
- (c) Obtain and provide to the GCC and its Registry (operated by IHS Markit), a written attestation from the host country's national focal point or the focal point's designee, as required by *CORSIA Emissions Unit Eligibility Criteria*<sup>20</sup> (paragraph 7 (c) of the *Carbon Offset Credit Integrity Assessment Criteria*) and *Programme Application Form – Appendix A – Supplementary Information Form*<sup>21</sup> (refer to section 3.7.8. with respect to the Host Country Attestation on Double Counting), which shall be made publicly available prior to the use of units from the host country under CORSIA.

**Note:** For all projects (Types A1, A2, B1 and B2) that wish to apply for the *E+* or *S+* and/or *SDG+* label and for use under CORSIA, this section requires new information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

## **Section B. Application of selected methodologies**

### **B.1. Reference to methodologies**

17. Indicate the exact reference (number, title, version) of:

- (a) The selected methodology(ies) (approved by any GHG program including by the GCC or the CDM);
- (b) Any tools and other methodologies to which the selected methodology(ies) refers;
- (c) The selected CDM standardized baseline, where applicable.

---

<sup>20</sup> ICAO document 'CORSIA Emissions Unit Eligibility Criteria':

<https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO%20document%2009.pdf>

<sup>21</sup> <https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx>

18. Refer to the GCC<sup>22</sup> or UNFCCC CDM website for the exact references for approved methodologies, tools and standardized baselines.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **B.2. Applicability of methodologies**

19. Justify the choice of the selected methodologies and, where applicable, the selected standardized baseline by showing that the Project Activity meets all applicability conditions of the methodology(ies) and, where applicable, the standardized baseline. Explain/describe any documentation that has been used in the justification and provide references to it or include the documentation in Appendix 3 below.

20. Ensure that the Project Activity complies with all the relevant requirements of the selected methodology(ies) and, where applicable, the selected standardized baseline, including the application of any tools, standards or guidelines required by the methodology(ies) and, where applicable, the standardized baseline.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDMPDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

21. Define the project boundary of the Project Activity, including the physical delineation of the Project Activity, and which sources and GHGs are included in the project boundary, in accordance with the applied methodology(ies) and, where applicable, the applied standardized baseline.

22. In the table provided, describe emission sources and GHGs included in the project boundary for the purpose of calculating project emissions, baseline emissions and, if applicable, leakage emissions.

23. In addition to the table, where possible, present a flow diagram of the project boundary based on the description provided in section A.3 above. Include in the flow diagram all of the facilities, systems and equipment, and flows of mass and energy described in that section. In particular, indicate in the diagram the emission sources and GHGs included in the project boundary and the data and parameters to be monitored.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided by the General Instructions section in paragraph 7, above.

---

<sup>22</sup> GCC Methodologies: <https://www.globalcarboncouncil.com/baseline-and-monitoring-methodologies.html>  
CDM Methodologies: <https://cdm.unfccc.int/methodologies/index.html>



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

24. Describe the baseline scenario for the Project Activity and explain how it is established in accordance with applicable provisions for the establishment and description of baseline scenarios in the Project Standard, the applied methodology(ies) and, where applicable, the applied standardized baseline.
25. Where the procedure in the applied methodology(ies) and, where applicable, the applied standardized baseline involves several steps, describe how each step is applied and transparently document the outcome of each step. Explain and justify key assumptions and rationales. Provide and explain all data used to establish the baseline scenario (variables, parameters, data sources, etc.). Provide all relevant documentation and/or references.
26. Where “future anthropogenic emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party,” use the CDM document: “Guidelines on the consideration of suppressed demand in CDM methodologies” to propose a revision to an approved methodology to cover such scenario if it is not covered in the methodology.
27. Describe how the relevant national and/or sectoral policies, regulations and circumstances are taken into account.
28. Provide a list of facilities, systems and equipment in the baseline scenario, and clearly explain how the same types and levels of services provided by the Project Activity would have been provided in the baseline scenario.
29. Provide a transparent description of the baseline scenario as established above.
30. Note that this section and section B.5 below are complementary. Some of the steps undertaken in one section may overlap with the steps undertaken in the other, depending on the procedures used to establish the baseline scenario and demonstrate additionality. If the “CDM Methodological tool: Combined tool to identify the baseline scenario and demonstrate additionality” is used, replicate the same information in both sections. In this case, make a reference to the other section where the description is contained.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

#### **B.5. Demonstrating additionality**

31. If the Project Activity is a type of Project Activity which is deemed automatically additional, in accordance with the GCC Project Standard or CDM rules:
  - (a) Specify the relevant methodologies, tools, standardized baselines or specific technologies/measures conferring automatic additionality; and
  - (b) Explain how the Project Activity meets the criteria established in these for determining automatic additionality.

32. If the Project Activity is not a type of Project Activity that is deemed automatically additional, then follow the instructions in paragraphs 33 through 35 below.
33. Demonstrate that the Project Activity is additional in accordance with the applied methodology(ies), and where applicable the applied standardized baseline, and applicable provisions for demonstrating additionality in the GCC Project Standard. Where the procedure in the applied methodology(ies) and/or tools involves several steps, describe how each step is applied and transparently document the outcome of each step. Indicate clearly the method selected to demonstrate additionality (e.g., investment analysis or barrier analysis). Present in a transparent manner, in the form or in a separate appendix, all data used (variables, parameters, data sources, etc.) and how the additionality of the Project Activity is demonstrated.
34. Where investment analysis is used, list all relevant assumptions and parameters used in the analysis. Where benchmark analysis is used, clearly indicate the benchmark. Where cost comparison is used, describe the scenarios compared.
35. Where barrier analysis is involved in demonstrating additionality, only select the most relevant barriers. Justify the credibility of the barriers, presenting key facts, assumptions and rationale. Provide relevant documentation or references.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

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

36. Explain how the methods or methodological steps in the applied methodology(ies) and, where applicable, the applied standardized baseline, for calculating baseline emissions, project emissions, leakage emissions and emission reductions are applied to the Project Activity. Clearly state which equations will be used in calculating emission reductions.
37. Explain and justify all relevant methodological choices, including:
- (a) Where the applied methodologies and, where applicable, the applied standardized baselines include different scenarios or cases, indicate and justify which scenario or case applies to the Project Activity;
  - (b) Where the applied methodologies and, where applicable, the applied standardized baselines allow different default values, indicate and justify which default value has been chosen for the Project Activity.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

38. Include a compilation of information on the data and parameters that are not monitored during the crediting period of the Project Activity but are determined prior to registration of the Project Activity and that remain fixed throughout the crediting period. Do not include data that will only become available upon implementation of the Project Activity (e.g., measurements taken after Project Activity implementation begins). Such data shall be included in section B.7.1 below.
39. The compilation of information may include data that are measured or sampled, and data that are collected from other sources (e.g., official statistics, expert judgment, proprietary data, the IPCC, commercial and scientific literature, etc.). Do not include data that are calculated applying equations provided in the applied methodology(ies) or default values specified in the methodology(ies) in the compilation.
40. For each piece of data or parameter, complete the table following the instructions below:
  - (a) Value(s) applied: provide the value applied. Where a time series of data is used, where several measurements are undertaken or where surveys have been conducted, provide detailed information in Appendix 4 below. To report multiple values referring to the same data or parameter, use one table. If necessary, use references to spreadsheets;
  - (b) Source of data: indicate and justify the choice of data source. Provide clear and valid references and, where applicable, additional documentation in Appendix 4 below;
  - (c) Measurement methods and procedures: where values are based on measurement, include a description of the measurement methods and procedures applied (e.g., which standards have been used), indicate the responsible person/entity that undertook the measurement, the measurement date and the measurement results. More detailed information can be provided in Appendix 4 below;
  - (d) Purpose of data: choose one of the following:
    - (i) Calculation of baseline emissions;
    - (ii) Calculation of project emissions;
    - (iii) Calculation of leakage.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

41. Provide a transparent ex-ante calculation of baseline emissions, project emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period of the Project Activity, applying all relevant equations provided in the applied methodology(ies) and, where applicable, the applied standardized baseline. For data or

parameters available before the registration of the Project Activity, use values contained in the table in section B.6.2 above.

42. For data or parameters not available before the registration of the Project Activity and monitored during the crediting period of the Project Activity, use estimates contained in the table in section B.7.1 below. If any of these estimates has been determined using a sampling approach, provide a description of the sampling efforts undertaken in accordance with the “CDM Standard: Sampling and surveys for CDM project activities and programme of activities.”
43. Document how each equation is applied, in a manner that enables the reader to reproduce the calculation. Where relevant, provide additional background information and/or data in Appendix 4 below, including relevant spreadsheets.
44. Provide a sample calculation for each equation used.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 type projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

45. Summarize the results of the ex-ante calculation of emission reductions for all years of the crediting period of the Project Activity, using the table in the form.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

46. In sections B.7.1 through B.7.3 below, provide a detailed description of the monitoring plan for the Project Activity developed in accordance with the applicable provisions in the Project Standard, the applied methodology(ies) and, where applicable, the applied standardized baseline.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

##### **B.7.1. Data and parameters to be monitored**

47. Include specific information on how the data and parameters that need to be monitored in accordance with the applied methodology(ies) and, where applicable, the applied standardized baseline will be collected during monitoring. Include here data and parameters that are determined only once for the crediting period of the Project Activity but that will become available only after the implementation of the Project Activity begins.

48. For each piece of data or parameter, complete the table following the instructions below:

- (a) Source of data: indicate the source(s) of data that will be used for the Project Activity (e.g., which specific national statistics). Where several sources are used, justify which data sources should be preferred;
- (b) Value(s) applied: the value applied is an estimate of the data or parameter that will be monitored during the crediting period of the Project Activity, and is used for the purpose of calculating estimated emission reductions in sections B.6.3 and B.6.4 above. To report multiple values referring to the same data or parameter, use one table. If necessary, use references to spreadsheets;
- (c) Measurement methods and procedures: where data or parameters are to be monitored, specify the measurement methods and procedures, standards to be applied, accuracy of the measurements, person/entity responsible for the measurements, and, in case of periodic measurements, the measurement intervals;
- (d) QA/QC procedures: describe the Quality Assurance (QA)/Quality Control (QC) procedures to be applied, including calibration procedures where applicable;
- (e) Purpose of data: choose one of the following:
  - (i) Calculation of baseline emissions;
  - (ii) Calculation of project emissions;
  - (iii) Calculation of leakage emissions.

49. Provide any relevant further background documentation in Appendix 5 below.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **B.7.2. Monitoring- program of risk management actions**

50. The aim of Do-No-Harm Residual Risk Assessments is to re-evaluate risks to determine the severity of environmental and social impacts after risk mitigation actions are planned/implemented for project impacts that have been identified as harmful.

51. Describe the monitoring approach and the monitoring parameters corresponding to each impact that has been identified as harmful, as per Table 3 of the Environment and Social Safeguards Standard.

**Note:** For all project Types (A1, A2, B1), that wish to apply for the *E+* and/or *S+* label, this section requires new information. Information shall be provided as per the guidance provided in the General Instructions section in paragraph 7, above.

### **B.7.3. Sampling plan**

52. If data and parameters to be monitored in section B.7.1 above are to be determined by a sampling approach, provide a description of the sampling plan in accordance with the recommended outline for a sampling plan in the “CDM Standard: Sampling and surveys for CDM project activities and programme of activities.”

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

#### **B.7.4. Other monitoring plan elements**

53. Describe the other elements of the monitoring plan as outlined in the Project Standard and the applied methodology(ies) and, where applicable, the applied standardized baseline, including the operational and management structure for monitoring, provisions for data archiving, and responsibilities and institutional arrangements for data collection and archiving.

54. Provide any relevant further background information in Appendix 5 below.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

#### **C.1. Project Activity start date**

55. State the start date of the Project Activity in the format of dd/mm/yyyy.

56. Describe how the start date has been determined in accordance with the start date definition provided in the Project Standard and provide evidence to support this date.

**Note:** For all projects (Types A1, A2, B1 and B2), this section requires new information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

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

57. State the expected operational lifetime of the Project Activity in years and months.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

#### **C.3. Crediting period of the GCC Project Activity**

##### **C.3.1. Fixed crediting period**

58. Confirm that the crediting period chosen for the Project Activity is fixed for not more than 10 years.

**Note:** For all project Types (A1, A2, B1, B2), this section requires new information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **C.3.2. Start date of crediting period**

59. State the start date of the crediting period of the Project Activity in the format of dd/mm/yyyy. Do not attach any qualifications to the start date, such as “expected.”

**Note:** For all project Types (A1, A2, B1, B2), this section requires new information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **C.3.3. Duration of crediting period**

**Note:** For all project Types (A1, A2, B1, B1), this section requires new information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

## **Section D. Environmental impacts**

60. If the Project Owner(s) opt to implement Environmental and Social Safeguards, then this information will be provided in section E of this document. A summary may be provided here.

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

61. Provide a summary of the analysis of the environmental impacts of the Project Activity, including transboundary impacts, and provide references to all related documentation.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **D.2. Environmental impact assessment**

62. Where relevant, provide a copy of the Environmental Impact Assessment (EIA) or provide evidence that an EIA is not required.

63. If an environmental impact assessment is carried out in accordance with the applicable provisions of host country requirements, provide conclusions and references to all related documentation. If an environmental impact assessment is not carried out, indicate “Not applicable” and provide a justification.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, the same information is required as provided in the registered CDM PDD. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

## **Section E. Environmental and Social Safeguards**

## Project Submission Form

64. This section is optional and voluntary and provides an opportunity to submit information for those GCC Projects which, in addition to reducing greenhouse gases (GHG), voluntarily intend to ensure that their Project Activity does not cause any net harm to the environment and society. This option provides an opportunity to demonstrate this achievement by obtaining additional certification labels: the Environmental No-net-harm (*E+*) label and the Social No-net-harm (*S+*) label.
65. If the Project Owner(s) select this option, they shall indicate their choice in this form and apply the requirements provided in the Environment and Social Safeguards Standard.

**Note:** For all project Types (A1, A2, B1) that wish to apply for the *E+* and/or *S+* label, this section requires new information. Information shall be provided as per the guidance provided in the General Instructions section in paragraph 7, above.

### E.1. Environmental Safeguards

66. The Project Owner(s) shall design and define its plan for identifying and mitigating or eliminating the environmental impacts that may be caused due to the Project Activity in this form, as per Table 1(a) of the Environment and Social Safeguards Standard.

**Note:** For all project Types (A1, A2, B1) that wish to apply for the *E+* label, this section requires new information. Information shall be provided as per the guidance provided in the General Instructions section in paragraph 7, above.

### E.2. Social Safeguards

67. The Project Owner shall design and define its plan for identifying and mitigating or eliminating the social impacts that may be caused as a result of the construction and operation of the Project Activity in this form, as per Table 1(a) of the Environment and Social Safeguards Standard.

**Note:** For all project Types (A1, A2, B1) that wish to apply for the *S+* label, this section requires new information. Information shall be provided as per the guidance provided in the General Instructions section in paragraph 7, above.

## Section F. United Nations Sustainable Development Goals (SDG)

68. This section is optional and voluntary and provides an opportunity to submit information for those GCC Projects which, in addition to reducing greenhouse gases (GHG), voluntarily intend to ensure that their Project Activity demonstrates a given level of contribution towards achieving the United Nations Sustainability Development Goals (SDGs), and provides an opportunity to demonstrate this achievement by obtaining an additional certification label: the *SDG+* label (Bronze, Silver, Gold, Platinum, or Diamond).
69. If the Project Owner(s) select this option, they shall indicate their choice in this form and apply the requirements mentioned in the Project Sustainability Standard.
70. The project owner shall design and define its Project Level SDGs, Targets and Indicators in this form, as per the Table 1 of the Project Sustainability Standard.



**Note:** For all project Types (A1, A2, B1) that wish to apply for the *SDG+* label, this section requires new information. Information shall be provided as per the guidance provided in the General Instructions section in paragraph 7, above.

## **Section G. Local stakeholder consultation**

### **G.1. Modalities for conducting local stakeholder consultations**

71. If there are host country rules regarding local stakeholder consultations that are applicable to the Project Activity, provide a summary of the consultations carried out in compliance with the host country rules, including the direct positive and negative impacts identified and how the negative impacts identified will be addressed. If such host country rules do not exist, follow the instructions in paragraphs 72 through 74, below.
72. Describe the local stakeholder consultation process undertaken for the Project Activity and demonstrate how the process complies with the relevant requirements in the GCC rules regarding:
  - (a) The scope of local stakeholder consultation;
  - (b) The minimum group of stakeholders to be involved;
  - (c) The means for inviting stakeholders' participation;
  - (d) The information to be made available to stakeholders;
  - (e) The consultation(s) conducted.
73. For 72 (b) above, provide evidence that invitations were sent to the relevant stakeholders and that their comments were invited. If any of the relevant stakeholders were not invited, provide an appropriate justification.
74. For 72 (c) above, describe the steps/actions taken to invite comments, taking into account local and national circumstances.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 type projects, additional information than that required in the registered CDM PDD may be required. For project Types (A1, A2, B1) that wish to apply for the *E+*, *S+*, and/or *SDG+* label, this section requires new and additional information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **G.2. Summary of comments received**

75. Prepare a summary report of the comments received during the local stakeholder consultation and attach the report as Appendix 6 below.
76. Provide an executive summary of the comments in this section.
77. Describe complaints from local stakeholders, if any, submitted to the competent authority of the host country and forwarded through the GCC Verifier on the handling of the outcome of the local stakeholder consultation.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, additional information than that required in the registered CDM PDD may be required. For project Types (A1, A2, B1) that wish to apply for the *E+*, *S+* and/or *SDG+* label, this section requires new and additional information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **G.3. Consideration of comments received**

78. Describe how the comments and, where applicable, complaints provided by local stakeholders have been taken into account in this form or in a revised PSF, including a justification if any comments were not incorporated.

**Note:** For both Type A1 and A2 projects, this section requires new information. For both Type B1 and B2 projects, additional information than that required in the registered CDM PDD may be required. For project Types (A1, A2, B1) that wish to apply for the *E+*, *S+* and/or *SDG+* label, this section requires new and additional information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

## **Section H. Approval and authorization**

79. Where applicable, indicate whether any host-country clearance is required and has been received from the host country of the project, at the time of submitting the PSF to the GCC. If so, provide the relevant document that demonstrates that the host country has provided the clearance to the Project Owner(s).

**Note:** For all project Types (A1, A2, B1, B2), this section requires new information. This section shall provide information as per the guidance provided in the General Instructions section in paragraph 7, above.

### **Appendix 1. Contact information of the Project Owner(s)**

80. Complete the table for each Project Owner listed in section A.4 above. Copy and paste the table as needed.

### **Appendix 2. Affirmation regarding public funding**

81. If applicable, attach the affirmation obtained from the entity providing public funding for the Project Activity.

### **Appendix 3. Applicability of methodology(ies)**

82. Provide any further background information on the applicability of the selected methodology(ies) and, where applicable, the selected standardized baseline.

### **Appendix 4. Further background information on ex-ante calculation of emission reductions**

83. Provide any further background information on the ex-ante calculation of emission reductions. This may include data, measurement results, data sources, etc.

## **Appendix 5. Further background information on the monitoring plan**

84. Provide any further background information used when developing the monitoring plan. This may include tables with time series data, additional documentation of measurement equipment, procedures, etc.

## **Appendix 6. Summary report of comments received from local stakeholders**

85. Provide a summary report of the comments received from local stakeholders on the Project Activity during and, if any, after the local stakeholder consultation. In the report, also identify stakeholders who have made comments, including comments forwarded by the host country (if applicable) where project is located.

## **Appendix 7. Summary of CDM de-registered project (Type B)**

86. For Type B projects, provide a summary of information regarding the de-registered CDM project as detailed below:

- (a) CDM Project registration number;
- (b) Date of registration of the CDM Project;
- (c) Title of the Project Activity;
- (d) CDM Project de-registration reference number;
- (e) Date of de-registration of the CDM Project;
- (f) Project Participants (authorized by the host / annex 1 country letter of approval);
- (g) Country where project is located;
- (h) Applied CDM methodology(ies) (provide reference and version number(s));
- (i) Pre-registration changes to the CDM Project Activity;
- (j) Post-registration changes to the CDM Project Activity;
- (k) Crediting Periods;
- (l) Details of previous CDM requests for issuance;
- (m) List of any open issues in the Validation and last Verification Report (e.g., FARs, if any) and how they have been addressed;
- (n) Any other information that you wish to provide that would be necessary or has not been reported in the registered CDM documents and that may have an adverse impact on the environmental integrity of the Project Activity; and
- (o) A list of all of the registered documents related to this project as available on CDM/UNFCCC website and the corresponding URLs.

## DOCUMENT HISTORY

Version	Date	Comment
V 3.2	31/12/2020	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>▪ Editorial revisions made               <ul style="list-style-type: none"> <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 on United Nations Sustainable Development Goals (SDG)</li> </ul> </li> </ul>
V 3.0	05/07/2020	<ul style="list-style-type: none"> <li>▪ Revised version released on approval by Steering Committee as per GCC Program Process;</li> <li>▪ Revised version contains following changes:               <ul style="list-style-type: none"> <li>○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC);</li> <li>○ Considered and addressed comments raised by Steering Committee:                   <ul style="list-style-type: none"> <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> </ul> </li> <li>○ Feedback from Technical Advisory Board (TAB) of ICAO on GCC submission for approval under CORSIA<sup>23</sup>;</li> </ul> </li> </ul>
V 2.0	25/06/2019	<ul style="list-style-type: none"> <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>23</sup>See ICAO recommendation for conditional approval of GCC at [https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt\\_TAB\\_Report\\_Jan\\_2020\\_final.pdf](https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf)



المجلس العالمي للبصمة الكربونية  
GLOBAL CARBON COUNCIL

A member of

