

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

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VERSION **v.1.5**

RELATED SUPPORT

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KEY PROJECT INFORMATION

GS ID of Project	GS7164
Title of Project	72 MW Wind power project in the South Sulawesi Province of Indonesia
Time of First Submission Date	27/03/2019
Date of Design Certification	23/09/2020
Version number of the PDD	4.1
Completion date of version	20/12/2023
Project Developer	PT Energi Bayu Jeneponto
Project Representative	Kosher Climate India Private Limited
Project Participants and any communities involved	PT Energi Bayu Jeneponto
Host Country (ies)	Indonesia
Activity Requirements applied	<input type="checkbox"/> Community Service Activity <input checked="" type="checkbox"/> Renewable Energy <input type="checkbox"/> Land-Use and Forests Activity Requirements/Risks & Capacities <input type="checkbox"/> N/A
Scale of the project activity	<input type="checkbox"/> Micro scale <input type="checkbox"/> Small Scale <input checked="" type="checkbox"/> Large Scale
Other Requirements applied	NA

Methodology (ies) applied and version number	ACM0002 "Grid-connected electricity generation from renewable sources" (Version 21)
Product Requirements applied	<input checked="" type="checkbox"/> GHG Emissions Reduction & Sequestration <input type="checkbox"/> Renewable Energy Label <input type="checkbox"/> N/A
Project Cycle:	<input type="checkbox"/> Regular <input checked="" type="checkbox"/> Retroactive

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 Climate Action (mandatory)	Amount of GHGs emissions avoided	198,676	tCO ₂ e
7 Affordable and Clean Energy	Total electricity produced: Renewable	236,520	MWh
8 Decent Work and Economic Growth	Total Number of Jobs	70	Number

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

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PT Energi Bayu Jeneponto is setting up wind power project at Jeneponto Regency in the province of South Sulawesi with capacity of 72 MW. The purpose of the project activity is to generate electrical power through operation of Wind power plant. The project activity installation comprises of setting up 20 Wind Turbine Generator (WTGs) of 3.6 MW each.

The purpose of the project activity is to generate electrical power using wind energy through operation of WTGs.

The project activity is commissioned on 9th December 2018. This is the 2nd crediting period under Gold Standard. The details of the crediting period is given below

1 st crediting period	10/12/2018 to 09/12/2023
2 nd crediting period (current)	10/12/2023 to 09/12/2028

How the proposed activity reduces GHG emissions

The electricity generated by the project is exported to the Indonesia Power Grid. The project activity will therefore displace an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. Since wind power is Greenhouse Gas (GHG) emissions free, the power generated will prevent the anthropogenic gas emissions generated by from fossil fuel based thermal power stations

comprising coal, diesel, furnace oil and gas. Hence, the generation by the proposed activity is non-GHG source and thus reduces the proportion of fossil fuel based generation in the grid leading to lesser carbon intensive grid.

Scenario existing prior to the implementation of project activity:

There was no activity at the site prior to implementation of the project activity. Hence the scenario existing prior to the project activity is same as baseline scenario which is continual use of highly carbon intensive electricity in the South Sulawesi.

Baseline Scenario:

As the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following as per applied methodology: Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system" version 7.0,. Hence, pre-project scenario and baseline scenario are the same.

Estimated emission reduction:

The project activity leads to an emission reduction of **993,380 tCO₂** for the chosen crediting period of 5 years with the annual average emission reduction of **198,676 tCO₂e**.

Sustainable Development

Project Contribution to Sustainable development:

Some of the sustainable development from the project are as following:

- a) Social well-being
- b) Economic well-being
- c) Environmental well-being
- d) Technological well-being

These project activity contributions towards the sustainable development are as follows;

Economic well-being:

- The project activity would help in alleviation of poverty in the area as it creates employment opportunities to the local people.
- The project activity would bring in additional investment to the region which would have not been possible in the absence of project activity. The development of project activity would contribute significantly towards infrastructure development of the region which ultimately leads to rural area development.
- The project activity evacuating power to the nearest regional grid would lead to improvement of electricity availability as the electricity is fed into a deficit grid.

Social well-being:

- The project activity would improve the local infrastructure development.
- Power generated from this project activity can be used for small scale industries, thus would generate employment opportunities.

Environmental well-being:

- Wind is one of the cleanest form of renewable energy and power generation does not involve any fossil fuels.
- The project activity by replacing electricity generated from fossil fuels would result in reduction of both GHG emissions and air borne pollutants, such as oxides of nitrogen, oxides of sulphur, carbon monoxide and particulates.
- Produces electricity without any GHG emissions.

Technological well-being:

- The project would use the environmental safe and sound technologies in Wind Power sector.
- It will improve the power quality and the improvement of transmission and distribution congestion.
- The successful implementation and operation of the project would serve as demonstration for harnessing wind potential and encourage setting up of similar projects in future.

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A.1.1. Eligibility of the project under Gold Standard

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The project activity is a wind power project and hence is automatically eligible for Gold Standard Certification as per the approved Gold Standard Activity Requirements.

The project activity meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements document as described below.

Eligibility Criteria	Eligible?	Justification of eligibility
a) Types of Project: Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	Yes	The project involves physical action/implementation on the ground. The project type is a grid-connected renewable energy located in Indonesia.
b) Location of Project: Projects may be located in any part of the world.	Yes	The project activity is located in Indonesia. The project is not located in HCV areas.
c) Project Area, Project Boundary and Scale: The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements. In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project	Yes	The project boundary is defined as per the applied methodology ACM0002, version 21.0. The project is not submitted in any other voluntary or compliance standards.

Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects).		
d) Host Country Requirements: Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	Yes	The project activity has obtained all the required approvals for the commissioning of the project from the Government of Indonesia.
e) As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required	Yes	Refer Appendix 2 for the contact details.

jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.		
<p>f) Legal Ownership: Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC).</p> <p>Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.</p>	Yes	Please refer to section A.1.2 for the legal ownership details.
g) Other Rights: As well as legal title and ownership, the Project Developer shall also	Yes	Wind power generation project doesn't require any continuous natural material to operate

demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example, access rights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.		except the wind energy which is renewable source. Therefore, no further consent to utilize the resources are required.
h) Official Development Assistance (ODA) Declaration: All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	Yes	The project had private funding and funding from bank. The PP hereby confirms that there is no public funding from Annex 1 countries and no diversion of Official Development Assistance (ODA) involved in the project activity. Please refer to section A.5 for the details related to funding of the project activity.

GS eligibility	Eligible?	Justification
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<p>3.1.1.1 A Project type is automatically eligible for Gold Standard Certification if there are Gold Standard published Activity Requirements and/or Gold Standard Approved Methodologies associated with it or as referenced in Gold Standard Product Requirements. These are published to the Gold Standard website and shall be followed where provided for a given Project type.</p>	<p>Yes</p>	<p>The project is a wind power generation activity which is automatically eligible under the project type category (b) of Renewable energy activity requirement¹:</p> <p><i>"(b) Project shall comprise of renewable energy generation units, such as photovoltaic, tidal/wave, wind, hydro, geothermal, waste to energy and renewable biomass:</i></p> <ul style="list-style-type: none"> • <i>Supplying energy to a national or a regional grid; or</i> • <i>Supplying energy to an identified consumer facility via national/regional grid through a contractual agreement such as wheeling"</i> <p>The CDM approved methodology ACM0002, Version 21, is applied to the project activity.</p>
<p>3.1.1.2 For Project types not currently published to the Gold Standard website, the Project Developer may submit to Gold Standard for approval. This shall be</p>	<p>NA</p>	<p>The project type is approved and published on the GS website.</p>

¹ <https://globalgoals.goldstandard.org/wp-content/uploads/2017/06/200-GS4GG-Renewable-Energy-Activity-Requirements-v1.1.pdf>

done at minimum as part of the Preliminary Review, though it is recommended to engage with Gold Standard earlier to establish the criteria and requirements for approval.		
3.1.1.3 Project types applying for Gold Standard approval are referred to the Gold Standard Vision and Mission. The Project Developer shall demonstrate how the Project would contribute to these and how the Gold Standard for the Global Goals Requirements would be met in their application for approval.	Yes	<p>The project activity is implementation wind power plant in Indonesia.</p> <p>The project avoids CO₂ emissions that would have occurred in the absence of the project at the grid connected fossil fuel power plants. Hence the project avoids the GHG emission that is responsible for climate change.</p> <p>The monitoring process required to achieve the Global Goals, are also explained in the project document. Therefore, the project activity is in line with the GS vision of "Climate security and sustainable development for all" and GS mission, "To catalyse more ambitious climate action to achieve the Global Goals through robust standards and verified impacts".</p>
3.1.1.4 In reviewing a new Project type for approval, Gold Standard may establish new Requirements to be met by the Project in order to achieve Gold Standard Design Certification and ongoing Project Certification. Where required, Gold	NA	<i>Non-Applicable</i>

Standard shall engage expert peer reviewers to establish these Requirements, at the Project Developer's expense.		
3.1.1.5 Gold Standard does not support Project types associated with geo-engineering or energy generated from fossil fuel or nuclear, fossil fuel switch, or any project that supports, enhances or prolongs such energy generation. In certain cases, concerning energy efficiency involving fossil fuels (for example, LPG stoves), an exception is made. This is captured in the relevant Activity Requirements, Gold Standard Approved Methodologies and/or Product Requirements.	NA	<i>Non-Applicable</i>

A.1.2. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

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The Project proponent has complete rights on the environmental attributes and other products detailed in the report. The project has not pledged any of the aforesaid products to any party and does not involve any double counting.

The legal ownership of the project with the respective project proponent which can be confirmed via the following documents:

1. Commissioning Certificate
2. Approvals

A.2 Location of project

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The project is located in Jeneponto Regency of South Sulawesi Province of Indonesia. The location & GPS coordinates of the WTGs are given in below:

Turbine	Latitude	Longitude	Village	Subdistrict
TO01	05°36'15.542"S	119°46'31.670"E	Bontomatene	Turatea
TO02	05°36'26.181"S	119°46'24.479"E	Bontomatene	Turatea
TO03	05°36'38.271"S	119°46'19.893"E	Bontomatene	Turatea
TO04	05°37'23.507"S	119°45'50.071"E	Parasangan Beru	Turatea
TO05	05°37'34.111"S	119°45'41.550"E	Kayuloe Barat	Turatea
TO06	05°37'43.468"S	119°45'30.230"E	Kayuloe Barat	Turatea
TO07	05°37'52.789"S	119°45'19.753"E	Kayuloe Barat	Turatea
TO08	05°38'20.780"S	119°45'23.360"E	Kayuloe Timur	Turatea
TO09	05°38'31.709"S	119°45'16.722"E	Empoang Utara	Binamu
TO10	05°38'42.961"S	119°45'9.8604"E	Empoang Utara	Binamu
TO11	05°38'56.268"S	119°45'13.397"E	Empoang Utara	Binamu
TO12	05°39'3.9134"S	119°45'3.1389"E	Empoang Utara	Binamu
TO13	05°37'37.076"S	119°46'35.270"E	Kayuloe Timur	Turatea
TO14	05°37'49.064"S	119°46'31.658"E	Kayuloe Timur	Turatea
TO15	05°38'1.7234"S	119°46'30.647"E	Kayuloe Timur	Turatea
TO16	05°38'16.473"S	119°46'27.600"E	Kayuloe Timur	Turatea
TO17	05°38'32.523"S	119°46'24.883"E	Kayuloe Timur	Turatea
TO18	05°38'46.094"S	119°46'23.714"E	Kayuloe Timur	Turatea
TO19	05°38'58.612"S	119°46'24.780"E	Empoang Utara	Binamu
TO20	05°39'11.627"S	119°46'24.193"E	Empoang Utara	Binamu

The location of the project site is shown in the map below:

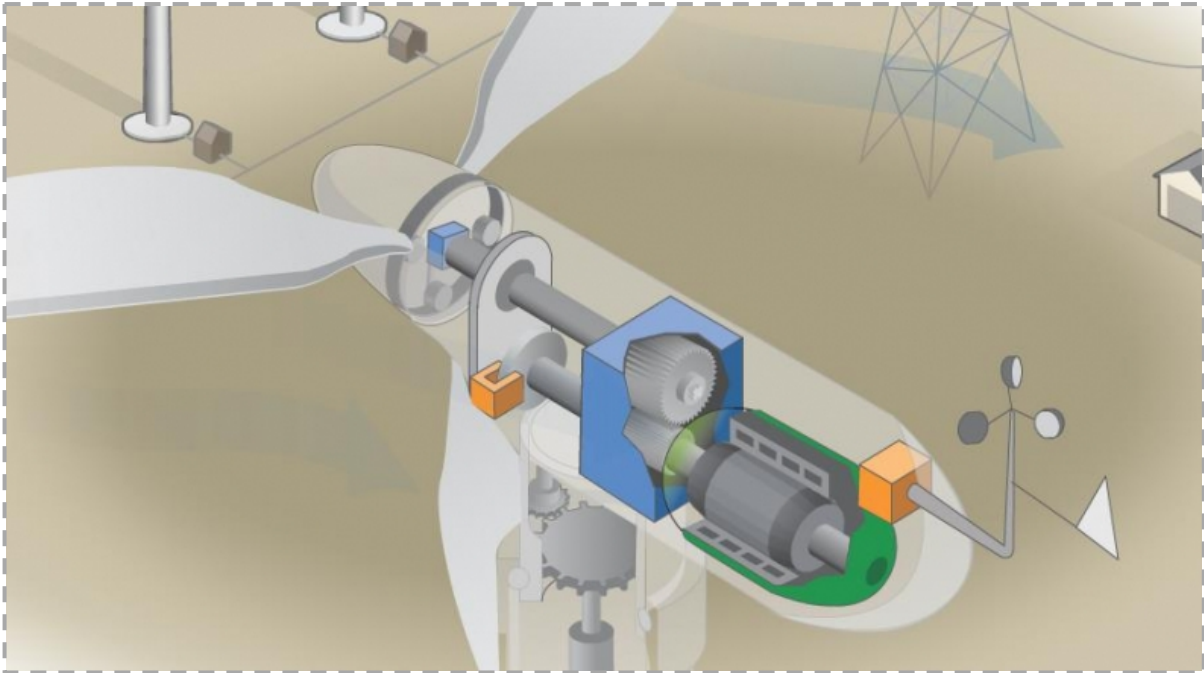




A.3 Technologies and/or measures

A wind turbine works on a simple principle: Energy in the wind turns two or three propeller-like blades around a rotor. The rotor is connected to the main shaft, which spins a generator to create electricity. Wind turbines are mounted on a tower to capture the most energy. At 30 meters or more above ground, wind turbines take advantage of faster and less turbulent wind. Electric power is collected at substation transformers and connected to an electricity grid for widespread electricity distribution.

Figure: Power Gathering Scheme and Technical Specification



TECHNICAL SPECIFICATION	
Nominal power	3600 kW
Number of WTG	20
Installed Capacity	72 MW
Average total height	200 m
Wind class	IIA
Concept	3-bladed; horizontal axis direct drive; pitch regulation with variable speed upwind clockwise rotation
Control System	Built-in computer control system coupled with remote access system (Supervisory Control and Data Acquisition or SCADA in short).
TOWER	
Tubular	135 m
Material	Tubular Steel
Color	White (non-glossy) to light grey

Crane Hardstand	44m x 144 m
OPERATIONAL DATA	
Cut-in wind speed	3-5 m/s
Cut-out wind speed	25 m/s
Nominal power at approximate	11-12 m/s
ROTOR	
Diameter	130 m
Blade length	63.5 m
Swept area	13,300 M ²
Material	Glass reinforced epoxy fibre (GRE)
Speed	6.5 – 12.8 rpm
GENERATOR	
Type	Synchronous, Permanent Magnet Generator
INDICATIVE WEIGHT	
Blade	17 metric tons
Rotor	96 metric tons
Nacelle	103 metric tons
Tower	80 metric tons
FOUNDATION	
Shape	Octagonal
Horizontal dimension	About 20 m diameter
Thickness	Up to 4 m
Material	Up to 650 m ³ of reinforced concrete
Foundation type	Floating foundation
SUB STATION COMPLEX	
Area	approximately 2 ha
Comprises	<p>Distribution substation and switchgear with 33 kV ratings; 45 MVA</p> <p>Power transformers; Control/management facility and service;</p> <p>Parking,; Traffic acces; Landscape area; Internal infrastructure</p> <p>supply; Sewage</p>

	Low voltage power supply 33/0.4 kV internal transformer
TRANSMISSION LINE	
Voltage	150 kV
Length	3.5 km

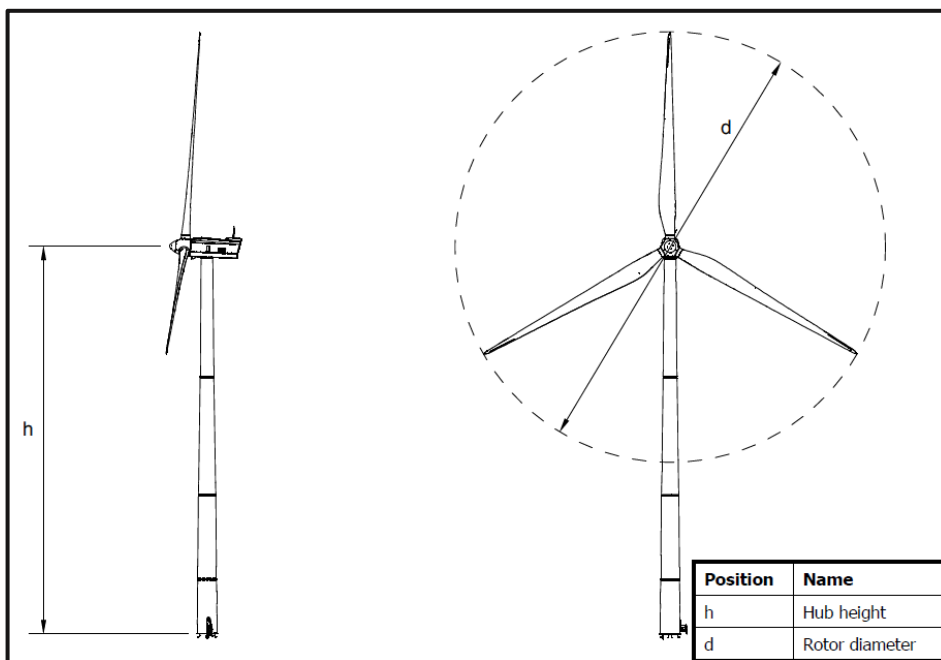
The components of the project explained:

- Wind Turbine Generators (WTGs)
- Pooling Substation
- Transmission Line
- Road Network till individual WTGs
- Temporary Storage Yards (2 at Amidayala and 1 at Nimbagallu)
- Permanent Storage Facility
- Batching Plant

The Wind Turbine Generator (WTG):

The project activity plans to commission 20 WTGs with a capacity 3.6MW, total hiegh of 200m and rotor diameter of 130m. A wind turbine consists of three major mechanical components: tower, nacelle, generator and rotor. These are described in the following subsections:

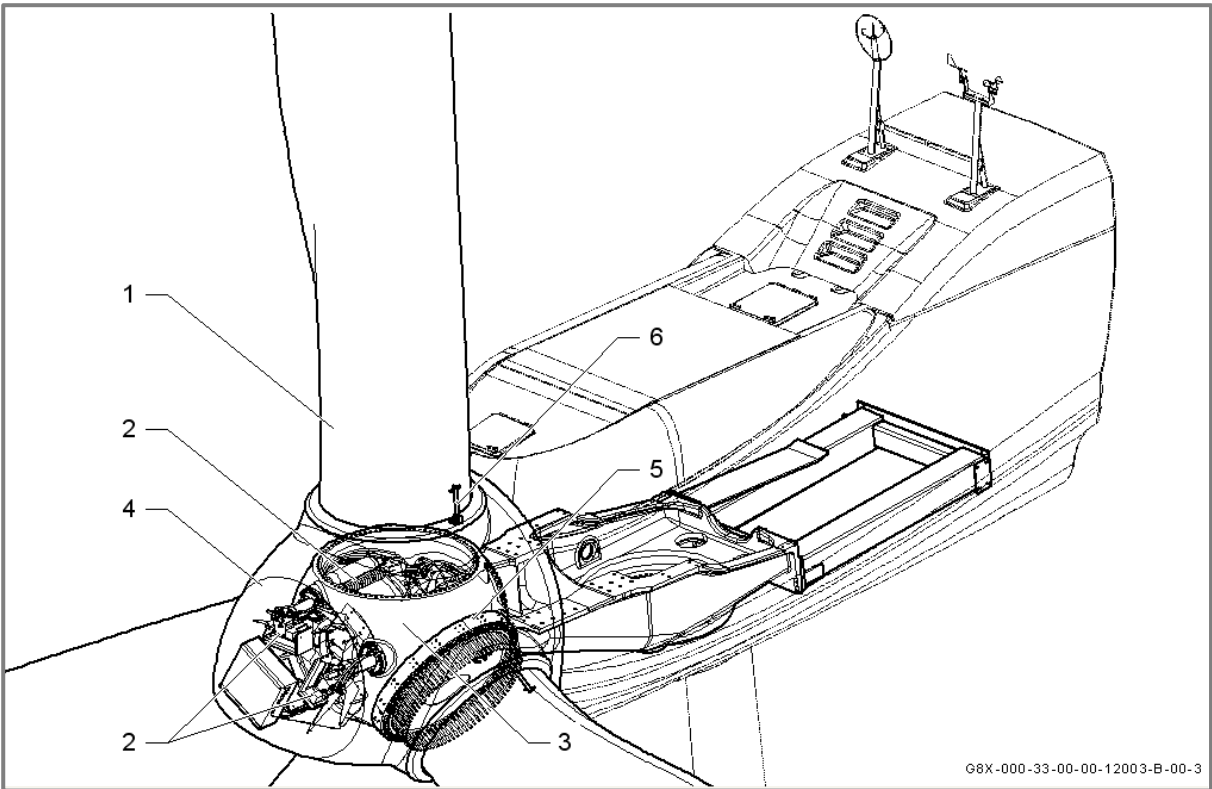
Figure: Digramatic presentation of WTG



Rotor

The rotor consists of three fiberglass blades that extend out of the hub. The rotor is mounted to a driveshaft within the nacelle (as defined below) to operate upwind of the tower. Hydraulic motors within the rotor hub feather each blade according to the wind conditions, which enables the turbine to operate efficiently at varying speeds.

Figure Error! No text of specified style in document.-1: Diagrammatic presentation of Rotor



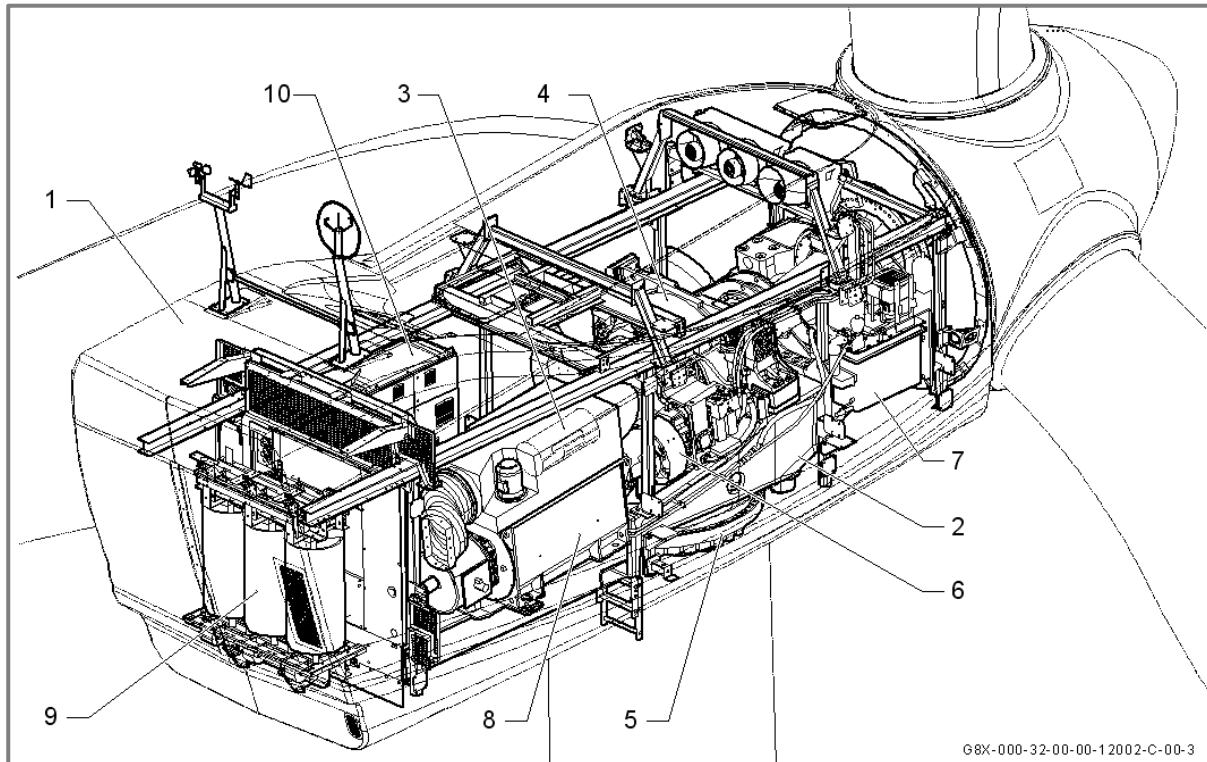
Position	1	2	3	4	5	6
Name	Blade	Pitch control	Hub	Cone	Blade bearing	Lightning

Nacelle

The nacelle is a large housing that sits on top of the tower behind the rotor. It houses the main mechanical components of the wind turbine: drive train, yaw system and its accessories, etc. The cover protects the wind turbine components within the nacelle from exposure to meteorological events and external environmental conditions. It is made of composite resin and reinforced with fiberglass. There are two skylights on the roof allowing sunlight to enter during the day and providing additional ventilation and

access to the exterior, where the wind measuring instruments and the lightning rod are located.

Figure Error! No text of specified style in document.-2: Digramatic presentaion of Nacelle



Position	1	2	3	4	5
Name	Cover	Frame	Main shaft	Gearbox	Yaw system
Position	6	7	8	9	10
Name	Mechanical brake	Hydraulic unit	Generator	Transformer	Cabinets

Tower

The tower supports the nacelle and rotor. The tower is made up of 4 steel sections. The tower will have an access door and an internal safety ladder and/or elevator to access the nacelle.

The average lifetime of the project is around 25 years as per the equipment supplier specifications. The plant load factor assessed at project site is 37.5%.

In the absence of the project activity the equivalent amount of electricity sold to grid would have been generated by grid connected power plants, which is predominantly based on fossil fuels, hence baseline scenario of the project activity is the grid based electricity system, which is also the pre-project scenario.

The technology and the project do not pose any adverse threat to the environment and contribute positively in reducing GHG emissions by displacing energy generation from fossil fuel powered projects. The proposed project activity is environmentally safe to implement and operate.

A.4 Scale of the project

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The project activity is a 72 MW wind Power Project and hence falls under “non-microscale” category as per Renewable Energy Activity Requirements, v1.4

A.5 Funding sources of project

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The project activity is funded by debt and equity. Debt for this project is sourced from private Bank. No public funding is involved in this project

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

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Title: Grid-connected electricity generation from renewable sources

References: Approved Large Scale Consolidated Methodology: ACM0002 "Grid-connected electricity generation from renewable sources" (Version 21)²

ACM0002 draws upon the following tools which have been used in the PDD:

- Methodological Tool: Tool to calculate the emission factor for an electricity system - Version 7³.

B.2. Applicability of methodology (ies)

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The project connected to the regional grid in Indonesia. Prior to the implementation of the project activity, no renewable power project was operated at the project site. Hence the project activity is a green field project activity. The Project activity will displace fossil fuel based electricity generation that would have otherwise been provided by the operation and expansion of the fossil fuel based power plants in regional electricity grid in Indonesia:

Applicability Criteria	Applicability status
<p>This methodology is applicable to grid-connected renewable power generation project activities that:</p> <p>(a) install Greenfield power plant; (b) involve a capacity addition to (an) existing plant(s); (c) involve a retrofit of (an) existing</p>	<p>The project activity is a Green field, grid connected renewable power plant.</p> <p>Therefore, it confirms to the said criteria</p>

² <https://cdm.unfccc.int/UserManagement/FileStorage/ZPFJL01OU2RYC6N3HASIXV7K84QBG9>

³ http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf/history_view

plant(s)/unit(s); (d) involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) involve a replacement of (an) existing plant(s)/unit(s)	
<p>In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that:</p> <ul style="list-style-type: none"> (a) Integrate BESS with a Greenfield power plant; (b) Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic¹ or wind power plant(s)/unit(s); (c) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s); (d) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s) 	Not applicable as the project does not involve integration of BESS.
<p>The methodology is applicable under the following conditions:</p> <ul style="list-style-type: none"> (a) 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; (b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the 	The project activity is the installation of a new grid connected renewable wind power project. Thus, it meets the first applicability condition

<p>existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity;</p> <p>(c) In case of Greenfield project activities applicable under paragraph 5 (a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g. by referring to feasibility studies or investment decision documents);</p> <p>(d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies² may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period.</p>	
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<p>During the time periods (e.g. week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.</p>	
<p>In case of hydro power plants, one of the following conditions shall apply:</p> <ul style="list-style-type: none"> (a) The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of reservoirs; or (b) The project activity is implemented in an existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3) is greater than 4 W/m²; or (c) The project activity results in new single or multiple reservoirs and the power density calculate equation (3), is greater than 4 W/m². (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density of any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m², all of the following conditions shall apply. (i) The power density calculated using the total installed capacity of the integrated 	<p>The proposed project activity is the installation of wind power plant. Therefore, the said criteria is not applicable</p>

<p>project, as per equation (4) is greater than $4W/m^2$;</p> <p>(ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity;</p> <p>(iii) Installed capacity of the power plant(s) with power density lower than or equal to $4 W/m^2$ shall be:</p> <p>(a) Lower than or equal to 15 MW; and</p> <p>(b) Less than 10% of the total installed capacity of integrated hydro power project</p>	
<p>In the case of integrated hydro power projects, project proponent shall:</p> <p>(a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or</p> <p>(b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of</p>	<p>The proposed project activity is the installation of wind power plants/units. Therefore, the said criteria is not applicable</p>

water availability indifferent seasons to optimize the water flow at the inlet of power units. Therefore this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.	
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;	The proposed project activity is the installation of wind power plant. Therefore, the said criteria is not applicable
In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".	The proposed project activity is the installation of wind power plants. Therefore, the said criteria is not applicable
In addition, the above applicability conditions the applicability conditions of tool referred in the methodology ACM0002, version 21.0 has been referred here under:	
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	This condition is applicable. OM, BM and CM are estimated using the tool for calculating baseline emissions.

that would have been provided by the grid(e.g. demand-side energy efficiency projects).	
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, the conditions specified in "Appendix 2: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.	Since the project activity is grid connected, this condition is applicable and the emission factor has been calculated accordingly.
In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	The project activity is located in Indonesia, a non-Annex I country. Therefore, this criterion is not applicable for the project activity
Under this tool, the value applied to the CO ₂ emission factor of bio fuels is zero	The project activity is a grid connected wind power project and therefore, this criterion is not applicable for the project activity

Since the project generates and exports renewable electricity to the grid system, hence the choice of project Type and category is justified

B.3. Project boundary

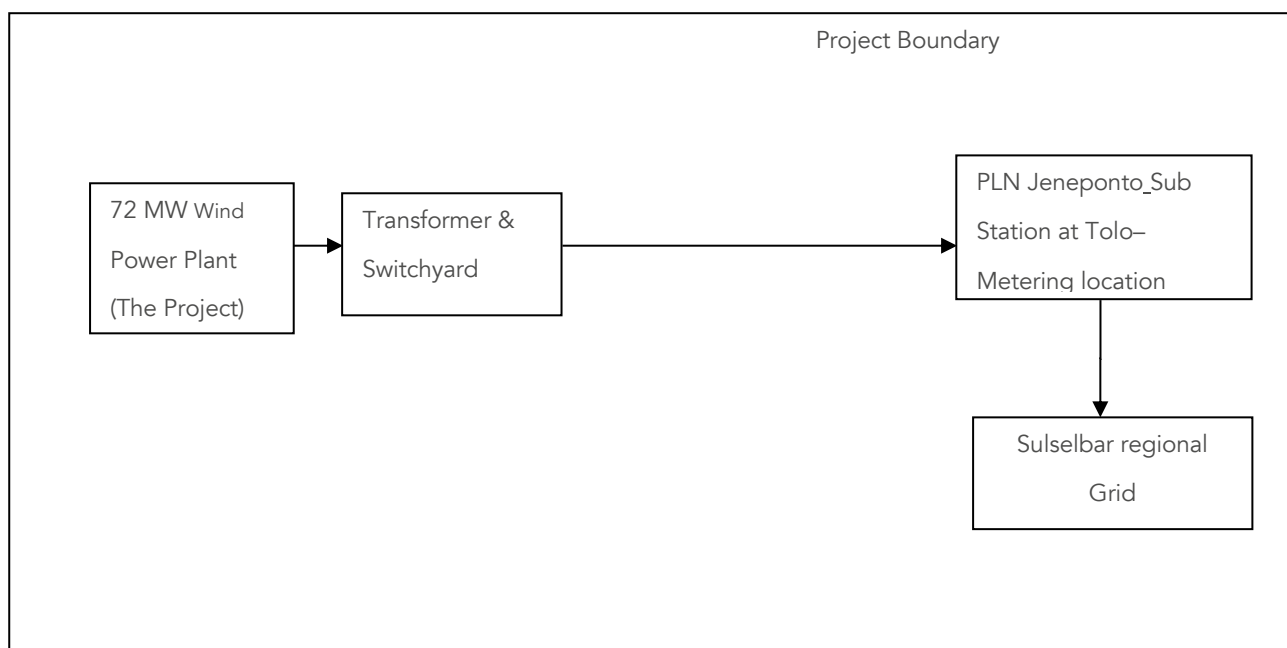
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As per the approved methodology ACM0002, Version 21, following gases and emission sources have been included in the project boundary.

Source		GHGs	Included ?	Justification/Explanation
Baseline scenario	CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity	CO ₂	Yes	Main emission source.
		CH ₄	No	Minor emission source.
		N ₂ O	No	Minor emission source.
Project scenario	For dry or flash steam geothermal power plants, emissions of CH4 and CO2 from non-condensable gases contained in geothermal steam	CO ₂	No	The project is a not a geothermal project. Hence not applicable.
		CH ₄	No	
		N ₂ O	No	
	For binary geothermal power plants, fugitive emissions of CH4 and CO2 from non-condensable gases contained in geothermal steam	CO ₂	No	The project is a not a geothermal project. Hence not applicable.
		CH ₄	No	
		N ₂ O	No	
	For binary geothermal power plants, fugitive emissions of hydrocarbons such as n-butane and isopentane (working fluid) contained in the heat exchangers	Low GWP hydrocarbon/ refrigerant	No	The project is a not a geothermal project. Hence not applicable.
	CO2 emissions from combustion of fossil fuels for electricity generation in solar thermal power plants and geothermal power plants	CO ₂	No	The project is neither solar thermal power plant nor geothermal power plant. Hence not applicable
		CH ₄	No	
		N ₂ O	No	
	For hydro power plants, emissions of CH4 from the reservoir	CO ₂	No	The project is not a hydro power plant. Hence, not applicable
		CH ₄	No	
N ₂ O		No		

As per applied baseline and monitoring methodology ACM0002, Version-21 the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the project power plant is connected to. This includes the wind plant installation, pooling and sub-stations.

The proposed project activity evacuates the power to the Indonesia Power Grid. Therefore, all the power plants contributing electricity to the Sulselbar regional Grid have been considered in the project boundary for the purpose of baseline estimation. The project activity targets reduction of CO₂e as main GHG greenhouse gas in baseline, there are no GHG emission associated with project activity.



Power Evacuation:

Power will be injected to the grid via 3.5 km long 150kV transmission line from the wind farm's pooling substation to PLN Jeneponto substation at Tolo. The transmission line will consist of ten (10) towers with 20 m x 20 m or 15 m x 15 m footprint. The grid connection is subject of separate environmental permitting process (UKL/UPL); the grid connection count as associated facility

B.4. Establishment and description of baseline scenario

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Updated baseline for the second crediting period in line with the CDM tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period." Version 03.0.1. This tool provides a stepwise procedure to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period. The tool stipulates the following steps to be carried out.

Step 1: Assess the validity of the current baseline for the next crediting period

Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies

The baseline scenario remains unchanged and is in compliance with all the relevant mandatory national and/or sectoral policies. Current baseline of the project met all relevant mandatory national and sectoral policies. Directorate General Electrical under the Ministry of Energy and Mineral Resources, who has the authority over the energy related activities in Indonesia has released the new operating margin, build margin and combined margin emission factor for Selselbar Interconnected Grid for the year of 2019, The average combine margin used is 0.84 tCO₂/MWh. The Government of Indonesia has a strong commitment to accelerate the electric power development project using renewable energy. This commitment was formalized by releasing regulation. Here are list of regulation that have been released:

- Presidential Regulation No.4/2010 concerning the assignment to PT PLN to conduct electric power development acceleration using renewable, coal and gas.
- Minister Energy and Mineral Resources Regulation No 15 / 2010 on the List of Electric Power Development Acceleration Projects Using Renewable, Coal and Gas which has been amended by Minister Energy and Mineral Resources Regulation No 1/2012 and Minister Energy and Mineral Resources Regulation No 21 / 2013.
- Presidential Regulation No.61/2011 on National Action Plan in Reducing GHG Emission (RAN-GRK).
- Presidential Regulation No 62/2014 on the Ratification of the Statute of the International Renewable Energy Agency. □ Minister Energy and Mineral Resources Regulation No. 17/2014 on Purchase of Electricity and Steam From Geothermal by PLN.
- Minister Energy and Mineral Resources Regulation No. 50/2017 on the use of Renewable Energy for Electricity Supply

The regulations above do not mandate the use of wind power hence those regulations do not impact upon the baseline scenario. The project has consistently met & align those laws and regulations current electricity generation mix complies with the policies and

regulations to achieve the Indonesian government's energy target as well as to promote development of clean energy and enhance protection of environmental functions.

Also these regulations does not restrict operation of any type of the power plant in the Sulsebar grid and hence, this will not affect the baseline scenario of the project activity.

Hence the current baseline is in compliance with the relevant mandatory national and/or sectoral policies.

Step 1.2: Assess the impact of circumstances

The baseline scenario identified at the validation of the project activity was the 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 into the grid. Thus, this project activity was a voluntary investment which intends to replace equivalent amount of electricity at grid from renewable source. PP was not bound to incur this investment; hence absence of project activity (i.e. the investment) does not lead to any continued baseline practice for PP within their scope whereas the continued operation of the project activity would continue to replace equivalent amount of electricity at grid. Hence, the same baseline as identified in the previous crediting period is still valid for the project. Therefore, the assessment of the changes in market characteristics is not required for the renewal of the project's crediting period under Gold Standard.

The Government of Indonesia released some regulations to accelerate the electric power development projects using renewable energy, coal and gas since 2010. In year 2014, Minister Energy and Mineral Resources has released regulation No.12/2017 on Purchase Renewable Resources for the Provision of Electricity by PLN including wind power, it means that government is very concerned about the geothermal project development to achieve the Indonesian government's target as well as to promote development of clean energy.

Directorate General Electrical under the Ministry of Energy and Mineral Resources, who has the authority over the energy related activities in Indonesia has released the new operating margin, build margin and combined margin emission factor for Sulsebar Interconnected Grid for the year of 2017, 2018 and 2019. The average combine margin

used is 0.84 tCO₂/MWh is bigger compare to previous release in 2014 which is 0.80 tCO₂/MWh due to the increase of fossil based generation (predominantly coal) to satisfy electrical at Sulselbar grid. The Project baseline scenario is the existing facility would continue to supply electricity to the grid at historical levels, until the time at which the generation facility would likely be replaced or retrofitted (DATEBaselineRetrofit). Even though the price of VER is very low in the market, but the project is continued into 2nd crediting period as a company commitment's to supply clean energy.

The conditions used to determine the baseline emissions in the previous crediting period are still valid.

The conditions used to determine the baseline emissions in the previous crediting period are still valid.

Step 1.3: Assess whether the continuation of the use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested

As explained in step 1.2, the baseline scenario was the electricity import/generation from the power plants connected to the electricity grid. The project activity in green field project and there is no any baseline equipment or investment involved in project activity. Therefore, this condition is not applicable to the project activity.

Step 1.4: Assessment of the validity of the data and parameters

This step stipulates that "Where emission factors, values or emission benchmarks are used and determined only once for the crediting period, they should be updated, except if the emission factors, values or emission benchmarks are based on the historical situation at the site of the project activity prior to the implementation of the project and cannot be updated because the historical situation does not exist anymore as a result of the CDM project activity."

In the context of the present project activity the emission factor has been updated along with the approach used to calculate the emission factor.

Step 2: Update the current baseline and the data and parameters

As evident from the explanation provided above the baseline scenario remains unchanged. Only the approach used to calculate the baseline emission factor is updated as per the latest version of emission factor database available at the time of PDD submission for renewal.

In line with the CDM Project Standard for Project Activities, version 03.0, the impact of new relevant national and/or sectoral policies and circumstances on the baseline taking into account relevant EB guidance with regard to renewal of the crediting period at the time of requesting renewal of crediting period; and the correctness of the application of an approved baseline methodology for the determination of the continued validity of the baseline or its update, and the estimation of emission reductions for the applicable crediting period.

The approved baseline methodology, ACM0002 (Version 21), has been used to determine the baseline and the estimation of emission reductions for the applicable crediting period. As referred in the methodology "Tool to calculate the emission factor for an electricity system" (version 07.0) has been used to determine continued validity of the baseline based on combined margin (CM) calculations.

As per latest database, the fossil fuel dominated electricity is more than renewable sector and is continuing with same pattern. In light of the above discussion, it is to be concluded that in accordance with relevant guidelines stipulated in the CDM Project Standard version 03.0, national and/or sectoral policies and circumstances had been considered towards formulating the OM & BM baseline scenario. Hence the baseline scenario as applied for the present project activity remains justified.

As per the approved Methodology ACM002 (Version 21): *"The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system⁶ that the CDM project power plant is connected to."*

The project activity involves setting up of wind project to harness the power of wind energy to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the regional grid in Indonesia, which is fed mainly by fossil fuel fired plants.

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

Though original PDD not fix any baseline parameter ex-ante for the 1st crediting period, now we would like to fix combined margin emission factor ex-ante for the 2nd crediting period.

The combined margin ($EF_{grid,CM,y}$) is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM). Calculations for this combined margin must be based on data from an official source (where available) and made publicly available. The Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 published by Director General of Electricity is the latest available data at the time of PD submission to VVB for validation, hence same is considered for emission factor calculations.

Combined Margin Emission factor Calculation:

PP choose to fix the emission factor Ex-ante for this 2nd crediting peirod as per the version 7 of "tool to calculate the emission factor of an electricity system". For the ex-ante calculation, following approaches for emission factor calculations has been used:

(a) Combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the approved methodology "Tool to calculate the emission factor for an electricity system". OR

(b) The weighted average emissions (in t CO₂/MWh) of the current generation mix. The data of the year in which project generation occurs must be used.

Option (a) has been considered to calculate the grid emission factor as per the 'Tool to calculate the emission factor for an electricity system' since data is available from an official source.

CO₂ Baseline Database for the Indonesian Power Sector, published by Directorate General of Electricity (Ministry of Energy and Mineral Resources or DNA Indonesia) has been used for the calculation of emission reduction.

As per the "Tool to calculate the emission factor for an electricity system" Version 07.0 the following steps have been followed.

STEP 1: Identify the relevant electricity systems;

STEP 2: Choose whether to include off-grid power plants in the project electricity system (optional);

STEP 3: Select a method to determine the operating margin (OM);

STEP 4: Calculate the operating margin emission factor according to the selected method;

STEP 5: Calculate the build margin (BM) emission factor;

STEP 6: Calculate the combined margin (CM) emission factor.

STEP 1: Identify the relevant electricity power systems

The tool defines that “for determining the electricity emission factors, identify the relevant electricity system. Similarly, identify any connected electricity systems”. It also states that, “If the DNA of the host country has published a delineation of the project electricity system and connected electricity systems, these delineations should be used”. The project chooses “Sulselbar regional grid” as the project is located within the South Sulawesi region and supply electricity to Sulselbar regional grid.

STEP 2: Choose whether to include off-grid power plants in the project electricity system (optional)

Project participants have the option of choosing between the following two options to calculate the operating margin and build margin emission factor:

Option I: Only grid power plants are included in the calculation.

Option II: Both grid power plants and off-grid power plants are included in the calculation.

Option I corresponds to the procedure contained in earlier versions of this tool. Option II allows the inclusion of off-grid power generation in the grid emission factor. Option II aims to reflect that in some countries off-grid power generation is significant and can partially be displaced by CDM project activities, e.g. if off-grid power plants are operated due to an unreliable and unstable electricity grid. Option II requires collecting data on off-grid power generation and can only be used if the conditions outlined therein are met. Option II may be chosen only for the operating margin emission factor or for both the build margin and the operating margin emission factor but not only for the build

margin emission factor. If Option II is chosen, off-grid power plants should be classified in different classes of off-grid power plants. Each off-grid power plant class should be considered as one power plant j , k , m or n , as applicable. In case of the project Option I is chosen with only grid power plants included in the calculation.

STEP 3: Select a method to determine the operating margin (OM) method

The calculation of the operating margin emission factor ($EF_{grid,OM,y}$) is based on one of the following methods, which are described under Step 4:

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

PP has chosen Option (a) i.e. simple OM, to determine the operating margin. Other available options in the tool were ruled out considering the fact that data required to calculate simple adjusted OM or dispatch data analysis is not available publicly. As per the tool, low cost/must run resources typically include hydro, geothermal, wind, low-cost biomass, nuclear and solar generation. Data for the same, as published by Central Electricity Authority, has been presented below which illustrates that low cost/must run resources constitute less than 50% of total Indonesia Power Grid generation, hence, the average OM method could not have been used.

The above data clearly shows that the percentage of total grid generation by low cost/must run plants (on the basis of average of three most recent years) for the Indonesia Power Grid is less than 50 % of the total generation. Thus the average emission rate method cannot be applied, as low cost/must run resources constitute less than 50% of total grid generation.

The "Simple operating margin" has been calculated as per the weighted average emissions (in tCO₂/MWh) of all generating sources serving the system, excluding hydro, geo-thermal, wind, low- cost biomass, nuclear and solar generation;

As per tool to calculate emission factor for an electricity system (Version 07), The simple OM method (option a) can only be used if low-cost/must-run resources constitute less than 50% of total grid generation in: 1) average of the five most recent years, or 2)

based on long-term averages for hydroelectricity production. Since the low cost/must run resources constitute less than 50% of total grid generation as seen from the average of five most recent years, the Simple OM method can be used to calculate the Operating Margin Emission factor.

PP has chosen ex post option, thus, monitoring and recalculation of the emissions factor during the crediting period is required.

STEP 4: Calculate the operating margin emission factor according to the selected method

The simple OM emission factor is calculated as the generation-weighted average CO₂ emissions per unit net electricity generation (tCO₂/MWh) of all generating power plants serving the system, not including low-cost / must-run power plants / units.

The simple OM may be calculated:

Option A: Based on the net electricity generation and a CO₂ emission factor of each power unit; or

Option B: Based on the total net electricity generation of all power plants serving the system and the fuel types and total fuel consumption of the project electricity system.

This database data published By Directorate General of Electricity (Ministry of Energy and Mineral Resources or DNA Indonesia provides information about the Combined Margin Emission Factors of all the regional electricity grids in Indonesia. The Combined Margin in the database is calculated ex post using the guidelines provided by the UNFCCC in the "Tool to calculate the emission factor for an electricity system, Version 07". We have, therefore, used the Combined Margin data published for calculating the Baseline Emission Factor.

As per „Tool to calculate the emission factor for an electricity system“, Option A ("Based on the net electricity generation and a CO₂ emission factor of each power unit") is used to calculate simple OM emission factor. Where Option A is used, the simple OM emission factor is calculated based on the electricity generation of each power unit and an emission factor for each power unit, as follows:

$$EF_{grid,OMsimple,y} = \sum (EG_{m,y} \times EF_{EL,m,y}) / \sum EG_{m,y}$$

Where:

$EF_{grid,OMsimple,y}$ Simple operating margin CO₂ emission factor in year y (tCO₂/MWh)

$EG_{m,y}$ Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)

$EF_{EL,m,y}$ CO₂ emission factor of power unit m in year y (tCO₂/MWh)

m All power units serving the grid in year y except low-cost / must-run power units

y the relevant year as per the data vintage chosen in STEP 3

PP chooses Ex-ante option (Option B) in estimation of OM. As per the data published Directorate General of Electricity (Ministry of Energy and Mineral Resources or DNA Indonesia), the weighted average OM for the year 2019 is estimated to be:

Parameter	Value	Units
Operating Margin : $EF_{grid,OM}$	0.73	tCO ₂ /MWh

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

The project participants have chosen Option I, i.e. fixing build margin emission factor ex ante based on the most recent information available on units already built for sample group m at the time of GS PDD submission to the VVB for validation.

The build margin emissions factor is the generation-weighted average emission factor of all power units m during the most recent year y for which power generation data is available, calculated as follows:

$$EF_{grid,BM,y} = \sum (EG_{m,y} \times EF_{EL,m,y}) / \sum EG_{m,y}$$

Where:

$EF_{grid,BM,y}$ = Build margin CO₂ emission factor in year y (t CO₂ e/MWh)

$EG_{m,y}$ = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)

$EF_{EL,m,y}$ = CO₂ emission factor of power unit m in year y (t CO₂ e/MWh)
 m = Power units included in the build margin
 y = Most recent historical year for which power generation data is available

The CO₂ emission factor of each power unit m ($EF_{EL,m,y}$) is determined as per the procedures given in step 4 (a) for the simple OM, using options A1B1 using for y the most recent historical year for which power generation data is available, and using for m the power units included in the build margin. As per the data published Directorate General of Electricity (Ministry of Energy and Mineral Resources or DNA Indonesia), the OM for the year 2019 is estimated to be:

Parameter	Value	Units
Build Margin : $EF_{grid,BM}$	1.17	tCO ₂ /MWh

Step 6: Calculate the combined margin (CM) emissions factor

The combined margin is the weighted average of the simple operating Margin and the build margin. In particular, for intermittent and non-dispatchable generation types such as wind and solar photovoltaic, the 'Tool to calculate the emission factor for an electricity system', allows to weigh the operating margin and Build margin at 75% and 25%, respectively

$$\begin{aligned}
 EF_{grid,y} &= (EF_{OM,y} \times W_{OM}) + (EF_{BM,y} \times W_{BM}) \\
 &= (EF_{OM,y} \times 75\%) + (EF_{BM,y} \times 25\%)
 \end{aligned}$$

The Ex-post emission factor was estimated by the Directorate General of Electricity (Ministry of Energy and Mineral Resources or DNA Indonesia) for the Sulselbar and the final values are presented below:

Parameter	Value	Units
Combined Margin : $EF_{grid,y}$	0.84	tCO ₂ /MWh

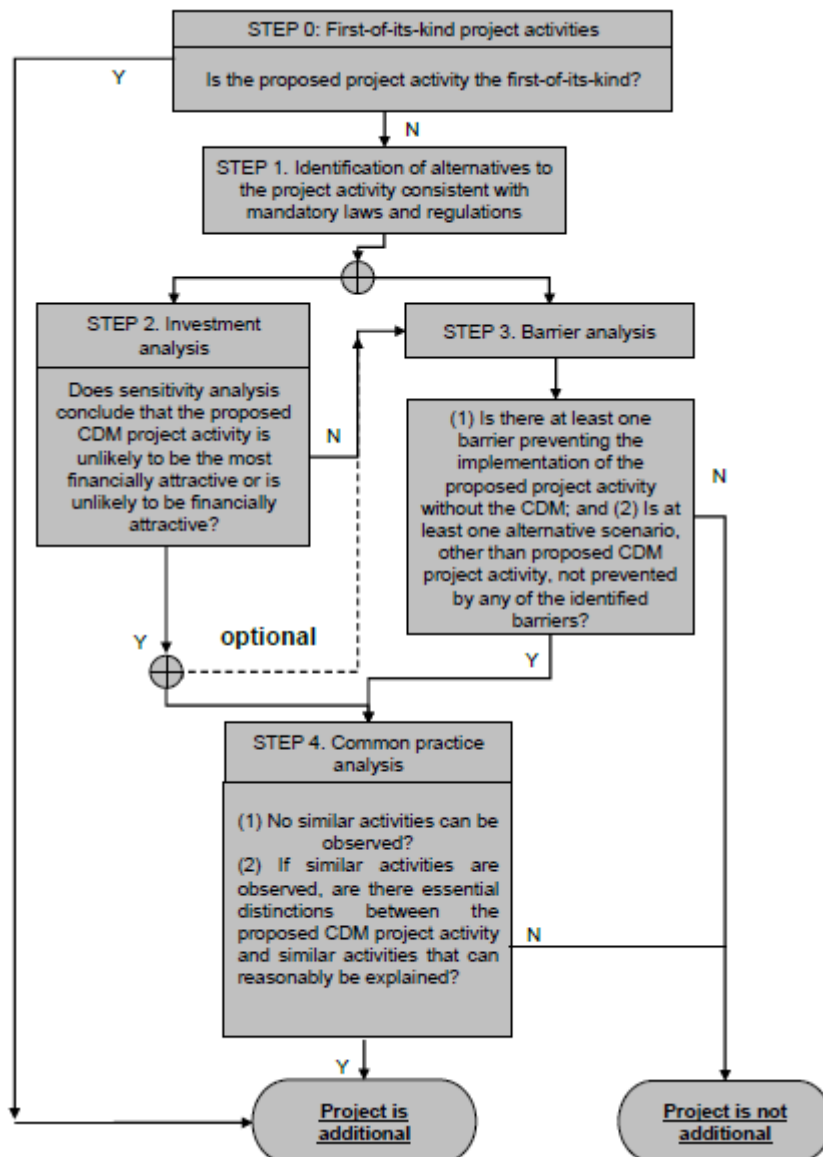
The combined margin of the Sulselbar regional grid used for the project activity is as follows:

Parameter	Value	Nomenclature	Source
$EF_{grid,CM,y}$	0.840 tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.75) & build margin (0.25) period as applicable for the 2 nd crediting period, sourced from Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 published by Director General of Electricity, Government of Indonesia
$EF_{grid,OM,y}$	0.73 tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system in year y	Calculated as the last 3 year generation-weighted average, sourced from Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019, published by Director General of Electricity, Government of Indonesia
$EF_{grid,BM,y}$	1.17 tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system in year y	Sourced from Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019, published by Director General of Electricity, Government of Indonesia for the year 2019

B.5. Demonstration of additionality

The applicable methodology under section 5.3.1 details a Simplified procedure to demonstrate additionality. The defined auto additionality is not applicable to the project activity as wind projects are not listed in the eligible electricity generation technologies.

As per the applied methodology requirement, Additionality of the project activity is demonstrated using the Methodological tool “Tool for the Demonstration and assessment of additionality” Version 07.0.0. The step-wise approach is presented in the flow-chart:



The tool defines the following steps:

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

The proposed project activity is first of its kind as implementation of Wind power project in the country of Indonesia is not first of its kind. However PP would like to prove the financial constraint for the project to make the case stronger.

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

As per the applied ACM 0002 version 20.0; Para 22, *if the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid connected power plant and by the addition of new generation sources.*

As the baseline scenario is prescribed by applied methodology, hence no further analysis is carried out to identify alternatives.

Step 2: Investment Analysis

As per para 29 of "Tool for the demonstration and assessment of additionality" v7.0.0, it is determined that the proposed project activity is not an economically attractive or financially feasible option.

To conduct the investment analysis, Methodological tool: Investment analysis, EB 92 Annex 5 has been referred.

Sub-step 2a: Determine appropriate analysis method

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

Option I: Simple Cost Analysis

Option II: Investment Comparison Analysis

Option III: Benchmark Analysis

The project will generate revenues from sale of electricity, therefore Option I is not applicable as per para 32 of the "Tool for the demonstration and assessment of additionality" (version 07.0.0).

Since, identified baseline for the proposed project activity is continuation of current practice (i.e. equivalent amount of energy would be generated by grid electricity system through its currently operating power plants and by new capacity addition) and which

is outside the direct control of the project participant, hence benchmark analysis (option III), where the returns on investment in the project activity are compared to benchmark returns that are available to any investors in the country is selected as the most appropriate method.

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

As per Para 16 of EB92, Annex 5 states that Required/expected returns on equity are appropriate benchmarks for equity IRR. The project participant has chosen benchmark analysis to demonstrate the additionality of the project. The project is promoted by limited company and hence the return on equity and the risks associated with the investments for their shareholder is of primary concern. Hence, in order to analyse the financial viability of the project activity, the prime financial indicator that has been used is the post-tax equity IRR of the project activity.

Selection of Appropriate Benchmark

The benchmark has been considered in accordance with Guidance 17 and 18 of Investment analysis (Tool 27), version 10, "The values in the table in Appendix may also be used, as a simple default option".

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

- As the proposed project activity generates power utilizing wind energy, Group 1 as per para 5a of Investment Analysis, v10 has been identified as a suitable category. Though the current applicable version of investment analysis is version 10, this was not available at the time of investment decision. The available version at the time of investment decision was version 7. The conservative default value of Cost of equity as provided in the Table 1 of the respective version has been considered.
- The investment analysis has been carried out in Nominal terms. Accordingly, Default value as given in Para 6, Appendix, Annex 05, EB 92 has been adjusted by adding suitable forecasted inflation rate.
- Since "Bank of Indonesia" (Central Bank of Indonesia), publish only one year inflation forecast and one year inflation target, the 5 year inflation forecast

published by the IMF (International Monetary Fund World Economic Outlook) for Indonesia has been used to calculate the benchmark in nominal terms as per para 17 of EB 92, Annex 5.

The benchmark has been computed in the following manner:

Default Value Benchmark:

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

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

$$\text{Nominal Benchmark}^4 = \{(1 + \text{Real Benchmark}) * (1 + \text{Inflation rate})\} - 1$$

Where,

Default value for Real Benchmark applicable as per the latest investment Analysis Tool (ie, Investment Analysis, v10)	11.06%
Default value for Real Benchmark applicable at the time of investment decision (ie, Investment Analysis, v7)	10.73%
Real Benchmark selected (conservative of above)	10.73%

5 year average Inflation Rate forecast for Indonesia published by IMF.

Benchmark estimation:

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

⁴ As per Pg. 320 of Corporate Finance, Second Edition of Aswath Damodaran

As a conservative approach, the minimum value of benchmark has been considered as calculated using these 2 approaches.

As per the above table default value of expected return on equity in real terms for Energy Industries (Group 1) in Indonesia = **10.73%**⁵

Thus, minimum cost of equity considered for calculation of Benchmark = 10.73%%

Inflation Rate:

The IMF (World Economic Outlook Database) provides 'for the inflation. Bank Indonesia forecasted values for the next ten years has been used to adjust the default value of ROE, which is given in real terms.

The 5 year Inflation forecast of Indonesia published by IMF (World Economic Outlook Database, April 2017)⁶ is considered in project activity as the same was available to PP at that time of investment decision date i.e. 04/06/2017. The 5 year average (2018-2022) inflation is calculated as below:

Year	2018	2019	2020	2021	2022	5 year average
Inflation	4.52%	4.28%	4.06%	3.96%	3.98%	4.16%

Therefore the benchmark is calculated as below,

Return on equity_{Nominal} = $(1 + 10.73\%) * (1 + 4.16\%) - 1 = \mathbf{15.34\%}$

⁵<https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v7.0.pdf>

⁶

<https://www.imf.org/external/pubs/ft/weo/2017/01/weodata/weorept.aspx?pr.x=79&pr.y=9&sy=2015&ey=2022&scsm=1&ssd=1&sort=country&ds=.&br=1&c=536&s=PCPI%2CPCPIPCH%2CPCPIE%2CPCPIEPCH&grp=0&a=>

Sub-step 2c: Calculation and comparison of financial indicators

The period considered for Post Tax Equity IRR calculations is 25 years, which corresponds to the operational lifetime of the project activity. The parameters considered for the financial assessment are given below:

Particulars	Value	Unit	Source/Remarks
No. of wind turbines	20	nos	As per DPR
Capacity of each wind turbine	3.6	MW	As per DPR
Capacity of the project	72	MW	As per DPR
Plant Load Factor	37.50%	%	As per DPR
Net generation	236.5200	GWh	Calculated
Project cost	161.00	USD Million	As per DPR
Debt	70%	%	As per DPR
Equity	30%	%	
Debt	112.70	USD Million	Calculated
Equity	48.30	USD Million	Calculated
Interest rate	8.00%	%	As per DPR
Debt Repayment tenure	15	years	As per DPR
Moratorium	1	year	
Operation and Maintenance (3rd year)	4.3	USD Million	As per DPR
Escalation in O & M	7%	%	As per DPR
Insurance premium	1.11	USD Million / Yr	As per DPR
Tariff	0.117	USD/kWh	As per DPR
Tariff (16th Year Onwards)	0.0744	USD/kWh	As per DPR
Depreciation Rate (Book)	4.00%	%	As per DPR
Income tax rate	25.00%	%	As per DPR
Salvage Value	5%	%	As per DPR

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

The following table illustrates the assumptions used for the calculation of the financial indicator i.e. Post Tax Equity IRR for the given project activity. The use of these parameters indicating if they are assumed or based on actual figures is explained in the table. All the relevant costs and revenues for the project activity have been considered for calculation of Post Tax Equity IRR.

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

Post tax Equity IRR	8.41%
Benchmark Value	15.34%

The carbon revenue from the project activity would provide significant amount of returns from the sale of the Emission Reductions accrued from the project activity and in turn increase the financial attractiveness of the project activity and hence make the project activity more financially viable.

Sub-step 2d: Sensitivity Analysis

The robustness of the conclusion drawn above, namely that the project is not financially attractive, has been tested by subjecting critical assumptions to reasonable variation. As required by Annex 08 of EB97, only variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation. PP has identified the total revenue from the project activity is dependent on the Tariff, Plant Load Factor, Project Cost and O&M Costs which constitute more than 20% of the project costs. These factors have been subjected to a 10% variation on either side and the results of the sensitivity analysis so conducted are given in the following tables.

Variation %	-10%	Normal	10%	Variation required to reach benchmark
Tariff	1.17%	8.41%	14.08%	12.37%
PLF	1.71%	8.41%	14.08%	12.37%
Project Cost	13.56%	8.41%	4.12%	-13.05%
O&M Cost	10.19%	8.41%	6.23%	-47.80%

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

- a) Tariff: The Tariff rate of electricity used for investment analysis is sourced from the offered tariff applicable at the time of investment decision. Furthermore, the project will breach the benchmark value at a tariff variation of 12.37%. Moreover, the actual tariff of the project less than the tariff mentioned in the DPR. Hence, the increase in the tariff is not possible.
- b) PLF: The PLF value considered is based on Third Party PLF report & DPR and the IRR will breach the benchmark value at a PLF variation of 12.37%. The increase in PLF value to breach the benchmark is unlikely as the PLF considered is based on a detailed study. The actual PLF achieved during the year 2019 (37.7%) is also in line with the estimated PLF. Equity IRR at normative PLF values are less than the benchmark value and given the analysis above its highly unlikely that PLF will increase above breaching value.
- c) Project Cost: A variation of -13.05% is required for IRR to breach benchmark which is highly unlikely as the project is already spent over 100% of the project cost; which is lesser than the estimated project cost however is within the sensitivity. The key reason behind the price revision is the contract values form the estimates offered by the in DPR.

- d) O&M Costs: The sensitivity analysis reveals that O&M will breach the benchmark at -47.80%. Since the O&M cost is subject to escalation/inflation, any reduction in the O&M costs is highly unlikely. Hence, the reduction in the O&M cost is highly unlikely.

The above analysis proves that varying the parameters does not lead to a Post Tax Equity IRR without carbon credit revenue, which will cross the benchmark value.

The carbon revenue from the project activity would provide returns from the sale of the Emission Reductions accrued from the project activity and in turn increase the financial attractiveness of the project activity and hence make the project activity more financially viable.

Step 3: Barrier analysis

Barrier analysis has not been used.

Step 4: Common practice analysis

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

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

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

The capacity of the project activity is 72MW and hence the output range as per the guideline is selected to be 36MW to 108MW.

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

- a) As the project is located in Indonesia, therefore, the applicable geographical area is Indonesia and projects in the host country Indonesia have been chosen for analysis.
- b) The projects applying same measure (i.e, only renewable energy through wind) are selected as the proposed project activity is wind power project. Therefore, all projects applying same measure (b) as the proposed project activity are candidates for similar projects.
- c) The energy source used by the project activity is wind. Hence, only wind energy projects have been considered for analysis.
- d) The project activity produces electricity; therefore, all power plants that produce electricity are candidates for similar projects.
- e) The capacity range of the projects is within the applicable capacity range from 36MW to 108MW.
- f) The start date of the project activity is 12/12/2017. As Kyoto Protocol was ratified by Indonesia on 03rd December 2004⁷, therefore projects which had started commercial operation from 03rd December 2004 to project's start date, have been identified.

⁷ http://unfccc.int/tools_xml/country_ID.html

However, the first wind project in Indonesia itself was commissioned on July 2018⁸. No wind project was operational at the time of start date of the project activity⁹. Hence,

$$N_{\text{wind}} = 0$$

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

Since no wind project was operational in Indonesia at the time of start date of the project,

$$N_{\text{all}} = 0$$

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

The different technologies are defined based on the scale of the project activity. Since the project is a large scale wind project, the wind project other than large scale wind project (ie, small scale) is defined as “different technology” projects. However, as mentioned above, there is no wind project was commissioned before the start date of the project. Hence,

$$N_{\text{diff}} = 0$$

Step (5): *calculate factor $F=1-N_{\text{diff}}/N_{\text{all}}$ representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to*

⁸ <http://iesr.or.id/wp-content/uploads/2018/12/Indonesia-Clean-Energy-Outlook-2019-new.pdf>

⁹ Since no wind project was commissioned in Indonesia at the time of starting of the project, the project also qualifies under 'First of its kind'. However, PP proved additionalty for better representation of additional financial requirements.

the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.

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

$$F = 1 - (0/0) = 1$$

$$N_{all} - N_{diff} = 0 - 0 = 0$$

Outcome of Step 5:

As,

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

Since, $N_{all} - N_{diff}$ is not more than 3, the proposed project activity is not a "common practice" within a sector in the applicable geographical area.

The analysis clearly demonstrates that project activity is not a common practice within the sector in the applicable geographical area. Therefore, it can be concluded that the project activity is additional and requires carbon credits revenues to alleviate the investment barrier to the project activity.

Chronology:

The below table represents the chronology of the project activity:

Events related to project implementation	GS relevant events	Dates
Completion of DPR	-	May 2017
Board decision for investing in Project and securing carbon credits	Investment decision	04/06/2017
Placement of the Purchase Orders	Start date of the project activity	12/12/2017
GS Readiness	Appointment of the Gold Standard consultant	04/07/2017
GS Compliance	First submission of project	04/12/2018

Commissioning of project	COD	09/12/2018
GS Compliance	Appointment of DOE	01/06/2019
GS Compliance	Notices and Publication about consultation meeting	12/09/2019
GS Compliance	Stakeholder' consultation meeting	19/09/2019-
GS Compliance	Stakeholder Feedback Round	06/02/2020 – 05/04/2020 & 17/04/2020 to 16/06/2020

From the above chronology of the project it is evident that the PP has taken real action to secure GS registration status in parallel with implementation of the project activity.

B.5.1 Prior Consideration

The project is already registered under Gold Standard. Hence not applicable.

B.5.2 Ongoing Financial Need

Previously issued VERs have given support to the ongoing financial sustainability of the project. Both low demand for VERs and a sharp decrease in prices caused Project Owner not to benefit from carbon revenue as expected. Even, the sales prices were so lower than the expected ones at the investment time, sold VERs provided contribution of the ongoing financial sustainability of the project. VER revenue from the project is mostly used for the operation costs of the project activity to be covered.

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

SUSTAINABLE
DEVELOPMENT
GOALS TARGETED

MOST RELEVANT
SDG TARGET

SDG IMPACT

INDICATOR
(PROPOSED OR SDG
INDICATOR)

13 Climate Action (mandatory)	13.2: Integrate climate change measures into national policies, strategies and planning	Amount of GHGs emissions avoided
7 Affordable and Clean Energy	7.2: By 2030, increase substantially the share of renewable energy in the global energy mix	Total electricity produced: Renewable
8 Decent Work and Economic growth	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	Total number of Jobs

B.6.1 Explanation of methodological choices/approaches for estimating the SDG Impact

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SDG 7– Ensure access to affordable, reliable, sustainable and modern energy for all

The project produces electricity from wind which is clean electricity that is supplied to grid that improve renewable energy share in the grid. The clean energy supplied by the project is measured using the energy meter.

Monitoring parameter	Total electricity produced: Renewable
Baseline estimation approach	In the baseline scenario no wind power plant has been installed in the project area. Hence no clean electricity is generated and supplied to grid
Project Estimation approach	The clean electricity generated from the project and supplied to grid is monitored though calibrated energy meter. The meter reading will be recorded every month in the joint meter reading
Net estimation approach	Net benefit = Project estimate – Baseline estimate

SDG 8 – Promote inclusive and sustainable economic growth, employment and decent work for all

This project created new job opportunities to local people in construction and operation and maintenance of the power plant. Also the employees will be trained in various aspects of wind energy power plant operation and maintenance that will help to explore new upcoming job opportunities

Monitoring parameter	Total Number of Jobs
Baseline estimation approach	In the baseline scenario there won't be any wind project. Hence, in the baseline scenario no new jobs would have been created
Project Estimation approach	The number jobs created will be recorded in the employment records.
Net estimation approach	Net benefit = Project estimate – Baseline estimate

For the SDG 13, the emission reduction calculations were carried out as per the applied CDM methodology ACM0002, v21.

The baseline emission is calculated in line with para 47 of ACM0002, Version 21.0, using equation below

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

Where,

BE_y	Baseline emissions in year y (t CO ₂ /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 project activity in year y (MWh/yr)
$EF_{grid,CM,y}$	Combined margin CO ₂ emission factor for grid connected power generation in year y calculated using TOOL07 (t CO ₂ /MWh)

AS per para 49 of ACM0002, version 21.0, when the project activity is installation of Greenfield power plant, then:

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

Where,

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

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

Hence the baseline emission equation is as below:

$$BE_y = EG_{facility,y} * EF_{grid,CM,y}$$

PROJECT EMISSION:

The project activity involves in harnessing wind power. As per the approved consolidated Methodology ACM0002 (Version 21.0) para 31:

"For most renewable energy power generation project activities, $PE_y = 0$. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted for as project emissions by using the following equation:

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

Where,

PE_y Project emissions in year y (t CO₂e/yr)

$PE_{FF,y}$ Project emissions from fossil fuel consumption in year y (t CO₂/yr)

$PE_{GP,y}$ Project emissions from the operation of dry, flash steam or binary geothermal power plants in year y (t CO₂e/yr)

$PE_{HP,y}$ Project emissions from water reservoirs of hydro power plants in year y (t CO₂e/yr)

$PE_{BESS,y}$ Project emissions from charging of a BESS using electricity from the grid or from fossil fuel electricity generators (t CO₂e/yr)

As the project activity is the installation of a new grid-connected wind power plant/ unit and does not involve any project emissions from fossil fuel, operation of dry, flash steam or binary geothermal power plants, and from water reservoirs of hydro power plants. Therefore $PE_{FF,y}$, $PE_{GP,y}$, $PE_{HP,y}$ are equal to zero and thus, $PE_y = 0$.

So the emissions from the project are zero.

LEAKAGE

As per the approved consolidated Methodology ACM0002 (Version 21.0) para 61, no leakage emissions are considered. The emissions potentially arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport etc.) are neglected

EMISSION REDUCTION (ER_y):

The project activity mainly reduces carbon dioxide through substitution of grid electricity generation with fossil fuel fired power plant by renewable electricity. The emission

reduction ER_y by the project activity during a given year y is the difference between Baseline emission and Project emission & Leakage emission. As per the applied methodology, leakage emissions are excluded for wind projects and hence the same is not used. The emission reduction is calculated in line with para 62 of ACM0002, Version 21, using equation below:

$$ER_y = BE_y - PE_y$$

Where,

ER_y = Emission Reduction in tCO₂/year

BE_y = Baseline emission in tCO₂/year

PE_y = Project emissions in tCO₂/year

B.6.2 Data and parameters fixed ex ante

SDG13

Data/parameter	EF _{OM}
Unit	tCO ₂ eq/MWh
Description	Operating Margin emission factor
Source of data	Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 ¹⁰ .
Value(s) applied	0.73
Choice of data or Measurement methods and procedures	Derived from Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 published by the Director General of Electricity, Government of Indonesia
Purpose of data	Baseline Emission calculation
Additional comment	The above value is fixed and it is same for the entire crediting period

Data/parameter	EF _{BM}
Unit	tCO ₂ eq/MWh

¹⁰ https://gatrik.esdm.go.id/frontend/download_index/?kode_category=emisi_pl

Description	Build Margin emission factor
Source of data	Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 values have been used for the calculation.
Value(s) applied	1.17
Choice of data or Measurement methods and procedures	Derived from Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 published by the Director General of Electricity, Government of Indonesia
Purpose of data	Baseline Emission calculation
Additional comment	The above value is fixed and it is same for the entire crediting period

Data/parameter	EF _{CM}
Unit	tCO ₂ eq/MWh
Description	Combined Margin emission factor
Source of data	Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 values have been used for the calculation.
Value(s) applied	0.84
Choice of data or Measurement methods and procedures	Derived from Greenhouse Gas (GHG) Emission Factors for Electricity Interconnection Systems, 2019 published by the Director General of Electricity, Government of Indonesia It is calculated based on Operating Margin (OM) and Build Margin (BM) using the weights of w _{OM} = 0.75 and w _{BM} = 0.25
Purpose of data	Baseline Emission calculation
Additional comment	The above value is fixed and it is same for the entire crediting period

B.6.3 Ex ante estimation of SDG Impact

SDG	Parameter	Baseline impact	Project impact	Net impact

				(baseline – project)
SDG 13	Amount of GHGs emissions avoided (refer the detail calculation below)	0	198,676	198,676
SDG 7	Total electricity produced: Renewable (MWh)	0	236,520	236,520
SDG 8	Total Number of Jobs	0	70	70

13. GHG Emission Reduction

Baseline Emission:

As mentioned above, the baseline emission shall be estimated using the below formula:

$$BE_y = EG_{\text{facility}, y} * EF_{\text{grid}, \text{CM}, y}$$

The $EG_{\text{facility}, y}$ is estimated from the PLF provided as per the third party engineering company report which is estimated to be 236,520 MWh/Annum

As per section B.6.1 above, the combined margin grid emission factor ($EF_{\text{grid}, \text{CM}, y}$) is 0.9419 tCO₂/MWh

Hence the annual baseline emission is calculated as below:

$$BE_y = EG_{\text{facility}, y} * EF_{\text{grid}, \text{CM}, y} = 236,520 \text{ MWh} \times 0.9310 \text{ tCO}_2/\text{MWh} = 198,676 \text{ tCO}_2$$

Project Emission:

As per section B.6.1, the project emission is zero.

$$PE_y = 0 \text{ tCO}_2$$

Leakage:

As per section B.6.1, the no leakage emission is considered.

$$LE_y = 0 \text{ tCO}_2$$

Emission Reduction:

$$ER_y = BE_y - PE_y = 198,676 - 0 = 198,676 \text{ tCO}_2$$

B.6.4 Summary of ex ante estimates of each SDG Impact

SDG 13: Amount of GHGs emissions avoided

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
28/07/2023 to 31/12/2023	11,975	0	11,975
01/01/2024 to 31/12/2024	198,676	0	198,676
01/01/2025 to 31/12/2025	198,676	0	198,676
01/01/2026 to 31/12/2026	198,676	0	198,676
01/01/2027 to 31/12/2027	198,676	0	198,676
01/01/2028 to 27/07/2028	186,701	0	186,701
Total	993,380	0	993,380
Total number of crediting years	5		
Annual average over the crediting period	198,676	0	198,676

SDG 7: Total electricity produced: Renewable (MWh)

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
28/07/2023 to 31/12/2023	0	14,256	14,256
01/01/2024 to 31/12/2024	0	236,520	236,520
01/01/2025 to 31/12/2025	0	236,520	236,520
01/01/2026 to 31/12/2026	0	236,520	236,520
01/01/2027 to 31/12/2027	0	236,520	236,520
01/01/2028 to 27/07/2028	0	222,264	222,264
Total	0	1,182,600	1,182,600
Total number of crediting years	5		
Annual average over the crediting period	0	236,520	236,520

SDG 8: Total Number of Jobs

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
28/07/2023 to 31/12/2023	0	70	70
01/01/2024 to 31/12/2024	0	70	70
01/01/2025 to 31/12/2025	0	70	70
01/01/2026 to 31/12/2026	0	70	70
01/01/2027 to 31/12/2027	0	70	70
01/01/2028 to 27/07/2028	0	70	70
Total	0	NA	NA
Total number of crediting years	5		
Annual average over the crediting period	0	70	70

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 7 & SDG 13

Data / Parameter	EGy
Unit	MWh
Description	Quantity of net electricity supplied to the grid during the year y.
Source of data	Monthly energy generation statement issued by PLN. These are called BA-I
Value(s) applied	236,520
Measurement methods and procedures	<p>Net electricity supplied will be calculated based on the difference between values of "export" and "import" on the energy meter at the sub-station (evacuation point). (Net Electricity = Export – Import)</p> <p>The net electricity will be calculated by PLN and provided in the monthly generation statement. Hence, the net electricity reading will be directly sourced from the monthly generation statement.</p>
Monitoring frequency	Monitoring equipment: Energy meters (installed at

	<p>TRAFO 1 and TRAFO 2 lines)</p> <p>Metering Location: 150 kV side of Tolo Substation</p> <p>Accuracy of Energy meters: 0.2</p> <p>Measurement frequency: Continuous</p> <p>Recording: Monthly</p> <p>Monitoring Method: Net export is calculated based on the export & import reading and recorded in the "generation statement"</p>
QA/QC procedures	<p>Net electricity supplied to the grid by the project activity will be cross checked with invoices. The meter(s) shall be calibrated and maintained by the authorities as per their schedule, and this frequency of meter calibration is not within the control of the Project Proponent. However, the project proponent shall ensure that calibration of electricity meters is carried at least once in 5 year calibration or whenever abnormal difference/inconsistency is observed between main meter and check meter.</p>
Purpose of data	<i>Calculation of baseline emissions</i>
Additional comment	<i>The Monitored Data to be kept for a minimum of two years after the end of the crediting period or the last issuance whichever is later.</i>

SDG 8:

Data / Parameter	Total number of Jobs
Unit	-
Description	Total employment generated due to the implementation of project activity
Source of data	Plant employment records
Value(s) applied	70
Measurement methods and procedures	Maintaining Employment records
Monitoring frequency	Yearly Once
QA/QC procedures	-
Purpose of data	To monitor the contribution to SDG 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all)
Additional comment	-

B.7.2 Sampling plan

Not applicable

B.7.3 Other elements of monitoring plan

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SDG 7 & 13:

PP has dedicated O&M team in site for the operation and maintenance of WTGs. The O&M team is technically well-equipped and it will take care of day-to-day Operation and maintenance of each WTG. O&M team will provide a monthly report, which includes generation data, major breakdown events and machine availability.

The project activity has entered a power purchase agreement with PLN for a period of 30 years. The electricity is fed to the Sulsebar regional Grid of Indonesia. Monitoring consists of metering the net electricity supplied to the grid ($EG_{\text{facility},y}$). This parameter is based on the Monthly energy generation statement issued by PLN (BA-I or JMR).

Metering

The project activity includes metering at the Tolo substation managed by PLN & PP. The electricity generated is supplied at 150 kV to grid through two electricity lines (Line 1 & Line 2 or TRAFO 1 or TRAFO 2). The electricity exported & imported from each line are measured by Energy meters (main meter) installed at each line in substation. The reading is recorded and the difference from last month reading gives the number of units imported/exported.

In each line, a check meter is installed which reading will be considered for billing when the main meter is found to be malfunctioning. All the meters used in the project activity will be calibrated on an at least once in 5 years.

Recording

The energy meter reading (both export & import) will be recorded by PLN & PP. The difference between current reading and previous month reading will be determined. Based on the energy meter reading, a Monthly energy generation statement will be issued by PLN (BA-I or JMR). The PP will then raise monthly electricity sales invoices to PLN based on the BA-I reading.

Quality Check:

The monitored data will be reported by the PP to the GS consultant on a monthly basis for the calculation and estimation of emission reductions. This data will be checked against invoices raised.

Data storage and Archiving

In accordance with the methodology all the data collected during the crediting period will be archived electronically and kept for at least two years after the end of crediting period.

SDG 8

Number of staff employed in the project is maintained by HR department which will be updated as and when required.

The money spent on the operation and maintenance activities are recorded on daily basis by accounts department which will be reported annually in the company balance sheet.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

12/12/2017 (Placement of Purchase order for wind turbine generator)

C.1.2 Expected operational lifetime of project

25 Year

C.2. Crediting period of project

C.2.1 Start date of crediting period

10/12/2023 (Second crediting period)

C.2.2 Total length of crediting period

5 years

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in [Appendix 1](#), ongoing monitoring is summarised below.

PRINCIPLES	MITIGATION MEASURES ADDED TO THE MONITORING PLAN
Principle 3	<ul style="list-style-type: none"> • Provision of proper temporary storage for hazardous waste • Waste segregation • Waste disposal by an appointed/accredited waste disposer company
Principle 4	<ul style="list-style-type: none"> • Maintain a uniform size and design of turbines (e.g., type of turbine and tower, as well as height). • Locals will be consulted wherever a WTG location or access road was in vicinity to a settlement. • The WTGs are painted with non-reflect paints and are not glary. • Re-vegetation taken up as necessary after construction, in order to reduce the risk of soil erosion.

	<ul style="list-style-type: none"> • Implement silt control measures such as silt fences and silt traps. • Stockpiles of excavated materials should be stored appropriately in designated areas and at a minimum distance of 10m from any nearby watercourses or drains.
Principle 9	<ul style="list-style-type: none"> • Control of the generation of silt laden surface water runoff will be by use of mitigation measures such as bunds, settlement ponds, silt fences, silt traps, or by covering the stockpiles with plastic sheeting. Long term stockpiles will be placed at a suitable gradient and grass planted.
Principle 9	<ul style="list-style-type: none"> • During the siting activity, it was ensured that there are no water bodies beside WTGs. • Water pits are not allowed around the WTGs. • Maintains a Bird strike register

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	Yes, from the pre-feasibility study stage to the operation time, from the stakeholder investigation to the employment, fair chance and gender equality to access the source, information and to reflect their opinions as a main consideration is taken by the project owner. Further, even if the customers both including suppliers and power buyer are also investigated by the project owner for gender equality issues.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	<p>In Indonesia, the policy on gender equality and empowerment of women has been adopted at the international and national levels¹¹:</p> <p>(a) at the international and national levels, through the ratification of the UN Convention on the Elimination of All</p>

¹¹ <https://www.un.org/womenwatch/daw/Review/responses/INDONESIA-English.pdf>

Forms of Discrimination against Women with Law Number 7/1984;

- (b) at the national level, through the People's Consultative Assembly (the highest political body in Indonesia) Decree Number IV/MPR/1999 on the Broad Guidelines of State Policy 1999-2004;
- (c) the establishment of National Machinery for the Advancement of Women with the Presidential Decree of 1978;
- (d) Law Number 25/2000 on the National Development Programme;
- (e) Presidential Instruction Number 9/2000 on Gender Mainstreaming in National Development;
- (f) National Action Plan for the Elimination of Violence Against Women;
- (g) the inclusion of gender-mainstreaming policy in 38 programmes of the National Development Programme (2000-2004);
- (h) Law Number 23/2002 on Child Protection;
- (i) Presidential Decree Number 87/2002 on National Plan of Action on Eradication of Child Commercial Sexual Exploitation;
- (j) Presidential Decree Number 88/2002 on National Plan of Action on Elimination of Trafficking in Women and Children;
- (k) Law no. 12/2003 on General Election in which each political party participating in a general election should consider at least 30% of women representation in the nomination of its members of national, provincial and local representative council.

Indonesia is ranked 103 out of 1629 countries in 2018 on its Gender Inequality Index (GII)¹². Moreover, the Human Development Index (HDI) for females (0.681) which is on par with the HDI for males (0.727), which shows the gender policies are effectively implemented in Indonesia. Hence, the project implemented in Indonesia complies with all the laws and policies of the gender equality as follows.

- *The project activity promotes and encourages active participation of women and men during the stakeholder meetings, giving an equal opportunity to both genders.*
- *The project provides equal employment opportunities for men and women.*
- *Equal pay for equal work is followed. No discrimination is made in the salaries of men and women.*

Hence, the project aligned with existing country policies, strategies and best practices.

Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?

The relevant questions raised in the Gold Standard Safeguarding Principles & Requirements assessment are provided in Principle 2 of Appendix 1. As per the GS preliminary review report, Gold Standard did not mention any requirement for an expert stakeholder opinion (with a specific emphasis on gender and environment expertise) to support the gender safeguards assessment process.

Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?

The project applies Gold Standard Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines. Please refer section E and stakeholder consultation report. As per the GS preliminary review report, Gold Standard did not mention any requirement for an expert stakeholder opinion (with a specific

¹² http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/IDN.pdf

emphasis on gender and environment expertise) to support the gender safeguards assessment process.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

E.1 Summary of stakeholder mitigation measures

>>

The stakeholder consultation meeting was conducted through physical meeting on 19/09/2019 at O Café Meeting Area - Jalan Masjid H Syamsudin, Kalumpang Lompoa, Desa Kalumpang Loe, Kecamatan Arungkeke, Kabupaten Jeneponto. Sulawesi Selatan – Indonesia. The planning for carrying out this consultation has been initiated in advance by factoring the convenience of local stakeholders.

The proponents have given advance notice to the local stakeholders for the meeting. Similarly all NGO's were invited by giving them the same notice period so as to facilitate them in attending the meeting. The non-technical summary of the project was prepared and the same has been translated into local language for distribution among stakeholders.

The attendees of the meeting were from Local Village residents and government officials from the region.

The minutes of the meeting is given below:

The Gold Standard Stakeholder's consultation meeting was held along with the FGD (focus group discussion) with the affected communities in relation to the Community development plan (CDP) on 19th September 2019 at the O Café Meeting Area - Jalan Masjid H Syamsudin, Kalumpang Lompoa, Desa Kalumpang Loe, Kecamatan Arungkeke, Kabupaten Jeneponto, Sulawesi Selatan – Indonesia. Meeting was opened with a formal welcome speech followed by the introduction of the attendees. In the welcome address, PP's representative explained the objective of the meeting and requested them to actively participate in the meeting.

Then Focus Group Discussion (FGD) was held, in which stakeholders suggestion on various requirements of communities under Community development plan (CDP) are discussed.

After the completion of FGD, PP's representative explained about the key project information including the technical details of the wind energy plant, relevant dates of the project and the environmental and social impacts of the project. PP's representative also explained about the importance of clean energy for healthy lifestyle and its significance in combating climate change and limiting its devastating effects. Stakeholders were informed that the project is applied for Gold Standard registration and importance of the meeting for obtaining the GS registration and were requested to share their opinion about the project.

In the next session, stakeholders were requested to ask the questions/clarifications requests they have in this project. Several participants came forward to talk about their experiences and passed on their opinions, suggestions, comments and clarification requests, which were addressed satisfactorily. All the comments are in support of the project activity. Most of the stakeholder praised the project and the summary is given below:

- The project gives job opportunities to local people*
- Local people income increased.*
- The project becomes pride of Jeneponito as it is one of the first of its kind in the country*
- The place become tourist spot due to wind turbine*
- New community development activities by the developer under CSR*
- No emission from the power generation compared to other fossil fuel power plants*

The stakeholders also requested some clarifications which are as below:

- How safe the wind turbines are? Any risk associated with this?*
- Will this kind of meeting be conducted regularly?*
- Will the revenue from gold standard credits be used for village development activities?*
- Will all the villages development activities suggested in FDG be undertaken?*

All the above doubts/clarification requests about the project are clarified by the PP's representative. He also explained about how the wind energy technology is environmentally safe and sound. He also promised that their suggestions would be considered for further evaluation and inclusion in their CSR plans.

This was followed by the blind sustainable development exercise. The stakeholders were made aware of the safeguarding principles and all actions pertaining to safeguarding were made clear to help guide them with their assessment as yes, no or potentially relevant. Further, information was provided about the 4 SDG's and their relevant targets that were addressed by the project.

Additionally, a discussion session on the sustainability monitoring plan of the project activity was carried out and based on the stakeholder suggestions appropriate indicators to monitor each of the SDG goals addressed by the project were finalized. Approaches to continuous inputs and grievance mechanisms were discussed. It was agreed that grievance forms would be made available at the site office and the stakeholders could meet the project coordinator's in person or in case of their absence they could be contacted via telephone or email addresses that would be made available.

Feedback forms were distributed and the stakeholders were encouraged to state their feedback about the project and the meeting. Once the feedbacks were collected, PP's representative thanked the participants for their presence and their valuable inputs.

Summary of comments received during LSC:

Stakeholder comment	Was comment taken into account (Yes/No)?	Explanation (Why? How?)
<i>How safe the wind turbines are? Any risk associated with this?</i>	Yes and clarification given	Provided the below clarification: The wind energy technology is proven technology in the entire world. The technology supplier has installed the same technology in many parts of world. Also regular O&M is undertaken in the wind turbines. Hence, the wind turbines are very much safe and no risk associated with the turbine.
<i>Will this kind of meeting be conducted regularly?</i>		Provided the below clarification: Focus Group Discussion (FGD) will be conducted regularly. But the

	Yes and clarification given	Gold standard part is conducted only this time. However, any concerns in the projects shall be reported by filling grievances form available in the site office. Appropriate actions will be taken on all the grievances on time.
<i>Will the revenue from gold standard credits be used for village development activities?</i>	Yes and clarification given	Provided the below clarification: Yes, depends on the requirement, part of this revenue will be added to the CSR budget. This will be decided on time to time basis.
<i>Will all the villages development activities suggested in FDG be undertaken?</i>	Yes and clarification given	Provided the below clarification: Based on the CSR budget, the priority development activities will be undertaken. If any activities are not considered due to budget constrain, the same will be undertaken in the next year from the next year budget.

The comments and clarifications requested during the meeting were taken into account and accordingly explained by the PP. There were no comments that led to a requirement to modify the project activity

Stakeholder Feedback Round

The stakeholder feedback round was open from 6th February 2020 to 5th April 2020 at site. PP had kept the hard copy of the project documents (PDD, Non-technical summary & Stakeholder consultation report) at site office for comments from local stakeholders. However, no comments received from any local stakeholder during the period.

Online stakeholder feedback round was open from 17th April 2020 to 16th June 2020. An email with online link of all project documents (PDD, Non-technical summary & Stakeholder consultation report) were sent to all stakeholders who were invited for

the stakeholder consultation meeting and requested comments on the documents. The email was sent to the following stakeholders:

No	Organisation (if relevant)	Name of the person
1	Gold Standard	Ms. Arshi Vimal
2	Carbon Watch	Mr. Deepak
3	Development Alternatives	Tara
4	EnerGHG India	Mr. Parchuri Narendra
5	NERDs Society	Mr. Kamaraj
6	Rural Education for Development Society-REDS	Mr. Jothiraj
7	Winrock international India	Mr. Debajit
8	Indonesian Forum for Environment (WALHI)	-
9	Institute for Essential Services Reform (IESR)	Mr. Fabby Tumiwa
10	Pelangi Indonesia	-

The link for the project documents that were shared with stakeholders are as below:

GS Registry link : <https://registry.goldstandard.org/projects/details/1789>

Non-Technical

Summary: https://drive.google.com/open?id=1H9txYVXh5PfRBkE0HO1x0yr_JcEH92pk

GS4GG PDD : <https://drive.google.com/open?id=1reycvRaU78YZdDNto1u-JiG0dJYYqjG6>

LSC Report:

https://drive.google.com/file/d/17wUamOQgxWYvP_roz4AV_Y1EDqG_6k-T/view?usp=sharing

However, no comments received from any stakeholder during the period

E.2 Final continuous input / grievance mechanism

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
Continuous Input / Grievance Expression Process Book (mandatory)	Grievance is placed in the site office to convey grievances regarding the project activity
GS Contact (mandatory)	help@goldstandard.org
Telephone access	Site: +62 21 5084 7830 The Gold Standard Foundation: +41 (0) 22 788 7080
Internet/email access	Mr. Adi Nataamadja (HSE Head): adi.nataatmadja@venaenergy.com

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into [SECTION D](#) above. Please refer to the instructions in the [Guide to Completing](#) this Form.

SOCIAL SAFEGUARDING PRINCIPLES		
Reference requirement	Question	Response
ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does this project undermine national or regional measures for the realisation of the right to development?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<p>If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.</p> <p>Please add text here...</p>		
<p>Would the project potentially involve or lead to:</p>		
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

ERROR! REFERENCE SOURCE NOT FOUND.	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

Briefly describe below how the project incorporates a human rights-based approach.

For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher)
- enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle)
- provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities.

Please add text here....

During construction and operation of the project the project proponent respected all the human rights. The project is not in any kind of conflict with the livelihood of local people. Project proponent had conducted stakeholder's consultation and sought their opinion. ESIA Report also confirms that the PP will comply with local regulations related to labor and working conditions and maintain a human rights policy that is consistent with global standards. The project will not employ any personnel based on gender, race, religion, sexual orientation or any other basis. As the Constitution of the host country prohibits discrimination on the basis of a person's race, sex, religion, place of birth, or social status. Section 2.3 of the ESIA Report also confirms the same. Indonesia, as the host country of the project, is a party to

Universal Declaration of Human Rights¹³ and also ratified ILO Convention 111 on Discrimination (Employment and Occupation)¹⁴.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

¹³ <http://www.komnasham.go.id/profil>

¹⁴

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11200:0::NO::P11200_COUNTRY_ID:102938

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	adverse impacts on gender equality and/or the situation of women and girls?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.

NA

ERROR! **REFERENCE** **SOURCE** **NOT** **FOUND.** **ERROR!** **REFERENCE** **SOURCE** **NOT** **FOUND.**

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Does the project involve any potential risks to the workers' safety and health?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	construction and/or infrastructure development (e.g., roads, buildings, dams)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> POTENTIALLY <input type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
Briefly describe below how the project is addressing any identified risk related to community health and safety.		
<p><i>The following management measures shall be followed to reduce the risk related to transport, storage, and use and/or disposal of hazardous or dangerous materials:</i></p> <ul style="list-style-type: none"> • <i>Provision of proper temporary storage for hazardous waste</i> • <i>Waste segregation</i> • <i>Waste disposal by an appointed/accredited waste disposer company</i> 		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

NOT FOUND.		
<p>If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.</p> <p>Please add text here....</p>		
<p>Would the project potentially involve or lead to:</p>		
ERROR! REFERENCE SOURCE NOT FOUND.	activities adjacent to or within a cultural heritage site?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	alterations to landscapes and natural features with cultural significance?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> POTENTIALLY <input type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY" - are the communities made aware of their right under the law, scope and nature of proposed development and its potential consequences?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialisation of such knowledge, innovation, or practice, consistent with their customs and traditions?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

As per ESIA report, the following management measures shall be followed to avoid impact due to landscape modification:

- Maintain a uniform size and design of turbines (e.g., type of turbine and tower, as well as height).
- Locals will be consulted wherever a WTG location or access road was in vicinity to a settlement.
- The WTGs are painted with non-reflect paints and are not glary.
- Re-vegetation taken up as necessary after construction, in order to reduce the risk of soil erosion.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to involuntary relocation of people?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
-------------------------------------------	---------------------------------------------------------------------------------	------------------------------------------------------------------------

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	risk of forced evictions or involuntary relocation of people?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	economic displacement (e.g., loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY

NOT FOUND.		<input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	<p>If answer to question above is "YES" or "POTENTIALLY",</p> <ul style="list-style-type: none"> - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design? 	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
-------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	<p>uncertainties with regards to land tenure, access rights, usage rights or land ownership?</p> <p>Examples include, but are not limited to water access rights, community-based property rights and customary rights.</p>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
-------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect areas where indigenous peoples are present (including project area of influence)	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE	affect areas, land and territory claimed by indigenous peoples?	<input type="checkbox"/> YES

<u>SOURCE NOT FOUND.</u>		<input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	<p>If answer to above questions is "YES" or "POTENTIALLY",</p> <ul style="list-style-type: none"> - Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people? - Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation? - Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines? 	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	risk of forcibly removing indigenous people from their lands and territories?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	<p>utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?</p> <p>Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above</p>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u> <u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	<p>If answer to question above is "YES" or "POTENTIALLY"</p> <ul style="list-style-type: none"> - Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? - Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ? - Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? - Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including 	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

	health services, clean water, energy, education, safe and decent working conditions, and housing?	
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

ECONOMIC SAFEGUARDING PRINCIPLES

ERROR! REFERENCE SOURCE NOT FOUND.**ERROR! REFERENCE SOURCE NOT FOUND.**

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate national laws, if available regarding non-discrimination in employment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.	Does the project allow child labor?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse,	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

	bullying, or exploitation, including gender-based violence (GBV)?	
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project potentially involve or lead to:

(NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)

ERROR! REFERENCE SOURCE NOT FOUND.	use of forced labour?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	working conditions that do not meet national labour laws and international commitments?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	working conditions that may deny freedom of association and collective bargaining?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	absence of documented working agreements with all individual workers <i>if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.</i>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	use of migrant workers? <i>if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.</i>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE	having no arrangements for basic services ¹⁵ for workers?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY

¹⁵ Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

<u>NOT FOUND.</u>	<i>the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association</i>	<input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	harassment, intimidation, and/or exploitation, especially in regard to women?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	use of child labour? (including third-party engaged workers)	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	inadequate and verifiable mechanisms for age verification?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	no processes and measures in place for the safety and health of project workers?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE</u>	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	No grievance mechanism available for workers to voice workplace concerns.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have potential negative impacts or pose a risk to the local economy?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	economic impacts (negative/detrimental) to the local economy?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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ERROR! REFERENCE SOURCE NOT FOUND.	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	increase greenhouse gas emissions over the Baseline Scenario?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk to the availability and reliability of energy supply to other users?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	negative impact on the availability and reliability of energy supply to other users?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	negatively impact on the catchment area?	
- ERROR! REFERENCE SOURCE	<i>If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length</i>	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

NOT FOUND.	<i>assessment. Regular reassessment of these measures is necessary.</i>	
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	<p>Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project?</p> <p><i>If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.</i></p>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

General soil erosion and sediment control measures to be followed to avoid the soil erosion:

- Implement silt control measures such as silt fences and silt traps.
- Stockpiles of excavated materials should be stored appropriately in designated areas and at a minimum distance of 10m from any nearby watercourses or drains.
- Control of the generation of silt laden surface water runoff will be by use of mitigation measures such as bunds, settlement ponds, silt fences, silt traps, or by covering the stockpiles with plastic sheeting. Long term stockpiles will be placed at a suitable gradient and grass planted.

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
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If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here....

Would the project involve or lead to:

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	any potential risks that require emergency preparedness and response planning?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has any risks identified in the risk assessment?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	Forestry (for example Afforestation/Reforestation) involving GMO planting? <i>Note - Forestry projects (for example Afforestation/Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here....

Would the project involve or lead to:

ERROR! REFERENCE SOURCE	any potential risk of pollutant release that cannot be avoided?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE	the generation and management of waste materials?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY
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NOT FOUND.		<input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	treatment, destruction, or disposal of waste material?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes", does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", does project has measures in place to address health risks?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of chemical pesticides?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	chemical pesticides use for pest management?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of unsustainable forest management, including timber harvesting?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
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If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks to animal welfare?	
	Animal welfare shall be ensured by providing access to water and food, appropriate environment, humane treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the risk of administering synthetic growth promoters, including hormones?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	animal husbandry or harvesting of fish populations or other aquatic species? ¹⁶	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inappropriate spacing per animal and stocking rates per land unit?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<u>ERROR!</u> <u>REFERENCE</u> <u>SOURCE</u> <u>NOT</u> <u>FOUND.</u>	inadequate measures to address the specific needs of aquatic animals?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

¹⁶ 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

ERROR! REFERENCE SOURCE NOT FOUND.	<p>primary production of living natural resources such as animal husbandry, aquaculture, and fisheries?</p> <p>If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.</p>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
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If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

<p>The following management measure shall be followed:</p> <ul style="list-style-type: none"> During the siting activity, it was ensured that there are no water bodies beside WTGs. Water pits are not allowed around the WTGs. Maintains a Bird strike register 	
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Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	identified habitats as HCV areas and or Critical habitats?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

<u>NOT FOUND.</u>	designated, and on the ecological processes supporting that biodiversity?	
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	<input type="checkbox"/> YES <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	<input type="checkbox"/> YES <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native ecosystems following HCV approach as per the given requirements?	<input type="checkbox"/> YES <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

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<u>ERROR! REFERENCE SOURCE NOT FOUND.</u>	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	distortion of habitats of endangered species?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to the above question is "yes", does the project plan to protect and enhance them?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

NA

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

ERROR! REFERENCE SOURCE NOT FOUND.	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

NA

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO
ERROR! REFERENCE SOURCE NOT FOUND.	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	<input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO

<div> <div>ERROR!</div> <div>REFERENCE</div> <div>SOURCE</div> <div>NOT</div> <div>FOUND.</div> </div>	<div> <div>risk of spreading alien species into areas in which they have not already been established?</div> <div> <input type="checkbox"/> YES <input type="checkbox"/> POTENTIALLY <input checked="" type="checkbox"/> NO </div> </div>
<div> If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements. </div> <div> <div>NA</div> </div>	

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	Kosher Climate India Private Limited
Registration number with relevant authority	
Street/P.O. Box	27th Main, HSR Layout
Building	#109, 2nd Floor
City	Bangalore
State/Region	Karnataka
Postcode	560102
Country	India
Telephone	080-25720814
E-mail	
Website	vamsi@kosherclimate.com
Contact person	www.kosherclimate.com
Title	Managing Director
Salutation	Mr
Last name	M
Middle name	
First name	Vamsi Krishna
Department	
Mobile	
Direct tel.	
Personal e-mail	

APPENDIX 3 - LUF ADDITIONAL INFORMATION

Risk of change to the Project Area during Project Certification Period:	
Risk of change to the Project activities during Project Certification Period:	
Land-use history and current status of Project Area:	
Socio-Economic history:	
Forest management applied (past and future)	
Forest characteristics (including main tree species planted)	
Main social impacts (risks and benefits)	
Main environmental impacts (risks and benefits)	
Financial structure	
Infrastructure (roads/houses etc):	
Water bodies:	
Sites with special significance for indigenous people and local communities - resulting from the Stakeholder Consultation:	
Where indigenous people and local communities are situated:	
Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance:	

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

>> NA

A4.2. Describe the impacts of design change on the following

a. Additionality

>>

b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

>>

c. Compliance with the monitoring plan of the applied methodology

>>

d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

>>

e. Scale of the project activity

>>

f. Stakeholder consultation

>>

g. Sustainable development criteria

>>

h. Safeguarding assessment

>>

i. Compliance with applicable legislation

>>

j. **Only for LUF Projects:** Transparent summary of all approved changes in Project Area, Eligible Area and accompanying changes in ex-ante emissions removals.

DATE OF APPROVED DESIGN CHANGE (MM/DD/YYYY)	PROJECT AREA (HA)		ELIGIBLE AREA (HA)		EX-ANTE ESTIMATE (TCO2E)	
	INCREASE OR DECREASE ?	VALUE (HA)	INCREASE OR DECREASE?	VALUE (HA)	INCREASE OR DECREASE ?	PERCENTAGE (%)

Revision History

Version	Date	Remarks
1.5	29 June 2023	Editorial changes to match V2.1 of the Safeguarding Principles Requirements
1.4	21 June 2023	Editorial changes to match V2.0 of the Safeguarding Principles Requirements
1.3	14 April 2023	Integrated the design change memo as annex of the document. Editorial changes
1.2	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1.0	10 July 2017	Initial adoption