Gold Standard
for the Global Goals

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

PUBLICATION DATE **14.10.2020**

VERSION **v. 1.2**

RELATED SUPPORT

- **TEMPLATE GUIDE Key Project Information & Project Design Document v.1.2**

This document contains the following Sections

KEY PROJECT INFORMATION

GS ID of Project	7755
Title of Project	Wind Energy Project in Gujarat by Enn Enn Corp Limited
Time of First Submission Date	21/01/2020
Date of Design Certification	14/04/2022
Version number of the PDD	05
Completion date of version	08/11/2022
Project Developer	Enn Enn Corp. Limited
Project Representative	EKI Energy Services Limited
Project Participants and any communities involved	Enn Enn Corp. Limited
Host Country (ies)	India
Activity Requirements applied	☐ Community Services Activities ☒ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Scale of the project activity	☐ Micro scale ☒ Small Scale ☐ Large Scale
Other Requirements applied	GS4GG
Methodology (ies) applied and version number	AMS-I.D. "Grid connected renewable electricity generation" (Version 17)
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Project Cycle:	☐ Regular ☒ Retroactive

Land-use & Forest Key Project Information[1]

Not applicable

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)	Climate Action	20,682	tCO_2e / annum
7 Affordable and Clean Energy Contribution to Climate Security & Sustainable Development	Affordable and clean Energy	22,130	MWh
8 Descent Work and Economic Growth	Descent Work and Economic Growth	1 training /annum and 10 people employed	No.

Project is eligible for seeking issuance of GS4GG Gold Standard Verified Emission Reductions (GSCERs) as per GHG emission reduction & sequestration product requirements (Version 2.1). Kindly refer below sections for the same.

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

The project activity involves the implementation of 12.6 MW capacity wind power project consisting of 6 Wind Turbine Generators (WTG's) of 2100 KW capacity each by Enn Enn Corp Limited. These wind mills are located at Rajkot and Surendranagar district in the state of Gujarat. The project will generate energy through renewable source i.e. wind. The kinetic energy of wind is converted into mechanical energy and subsequently into electrical energy. Kinetic energy which is carried by wind when passes through the blades of the WTG, is converted to mechanical energy which rotates the connected generator and which in turn produces the electricity.

The electricity thus produced will be displacing the grid electricity which would have been otherwise generated through sources dominated by fossil fuel based power plants. The project activity thereby reduces the emission of greenhouse gases which would have been generated from such fossil fuel based power plants.

[1] Please refer to 0 for detailed information on LUF projects

The details of the project and the state of installation are mentioned in the table:-

Name of the PP	Capacity in MW	Connection with Grid	State	Usage of Electricity
Enn Enn Corp. Limited	12.6 MW	Indian Grid	Gujarat	Sale to grid

The project activity is promoted by Enn Enn Corp. Limited. Thus Enn Enn Corp. Limited is acting as PP for the project activity.

Sectoral Scope: 01: Grid-connected electricity generation from renewable sources

Methodology: AMS I.D. "Grid connected renewable electricity generation" Version 17[2]

Project Type: I. Renewable energy projects

Tools referred with above methodology are:

Tool to calculate the emission factor for an electricity system - Version 04.0 (EB 75, Annex 15)

Scenario existing prior to the implementation of project activity:

The project activity is a green field project, which means no power generation facility existed at the project site in the pre-project scenario. Hence, absence of any project activity is a befitting pre-project scenario at project site.

Baseline Scenario:

The electricity produced by the project activity will be supplied to state electricity board, which lies in NEWNE regional grid (Now Indian Grid), as prescribed by Central Electricity Authority (CEA), country's apex power sector planning body, under the federal Government of India. In the absence of the project activity, same amount of electricity would have been delivered into the grid by the existing and proposed fossil fuel fired power plants. The current project activity, therefore, precludes the emission of greenhouse gases (GHGs) that would have resulted in the absence of this renewable energy-based power project activity.
Hence, NEWNE regional grid (Now Indian Grid) has been considered for baseline emission calculations for the project activity.

Evidently, the pre-project scenario is same as the baseline scenario.

[2] https://cdm.unfccc.int/filestorage/V/9/L/V9LRSXKP24Q7YT6HZDUBO3C0ING8AJ.1/EB61_repan17_Revision_AMS-I.D_ver17.pdf?t=SWZ8cmwxMmt3fDAZpXgn4hwo0QkrQvGsK340

Contribution to Sustainable development:

Ministry of Environment, Forests and Climate Change, GoI, has stipulated economic, social, environment and technological well-being as the four indicators of sustainable development. The project contributes to sustainable development using the following ways.

- **Social well-being:** The project would help in generating employment opportunities during the construction and operation phases. The project activity will lead to development in infrastructure in the region like development of roads and also may promote business with improved power generation.

- **Economic well-being:** The project is a clean technology investment in the region, which would not have been taken place in the absence of the carbon credit benefits the project activity will also help to reduce the demand supply gap in the state.

  The project activity will generate power using zero emissions Wind based power generation which helps to reduce GHG emissions and specific pollutants like SOx, NOx, and SPM associated with the conventional thermal power generation facilities.

- **Technological well-being:** The successful operation of project activity would lead to promotion of Wind based power generation and would encourage other entrepreneurs to participate in similar projects.

- **Environmental well-being:** Wind being a renewable source of energy, it reduces the dependence on fossil fuels and conserves natural resources which are on the verge of depletion. Due to its zero emission the Project activity also helps in avoiding significant amount of GHG emissions.

A.1.1. Eligibility of the project under Gold Standard

The project activity meets the eligibility criteria as per section 4 of GS4GG Principles & Requirements -v1.2 as described below:

- The project applies methodology AMS-I.D, (Version 17)[3], Sectoral Scope: 01, which is an approved methodology under Gold Standard.

[3] https://cdm.unfccc.int/filestorage/V/9/L/V9LRSXKP24Q7YT6HZDUBO3C0ING8AJ.1/EB61_repan17_Revision_AMS-I.D_ver17.pdf?t=SWZ8cmwxMmt3fDAZpXgn4hwo0QkrQvGsK340

- The project type is power generation using Wind Energy which is an eligible project type as it is in accordance with 1.1.1 a) and 1.1.1 b) of the Eligible Project Types & Scope under Renewable Energy Activity Requirements.
- The project activity results in displacement of electricity from thermal power stations while contributing to sustainable development of India. Hence, the project contributes to the Gold Standard Vision and Mission.
- Wind power is an approved project type and does not require approval from Gold Standard.
- This project activity is not associated with geo-engineering or energy generated from fossil fuel or nuclear, fossil fuel switch, nor does it enhances or prolongs such energy generation.

General Eligibility Criteria under Renewable Energy Activity Requirements

Project Type: As discussed above, the project type is eligible.

Project Location: The project is located in India. Further details have been provided in section A.4 of this report.

Project scale: The project activity is 12.6 MW Wind Power Project and thus, qualifies under small scale projects (non-micro scale project). Project Area and Boundary are defined in line with the applicable Methodologies or product Requirements.

The project activity got registered under CDM with project ID 10073.

Please refer following link for the same.

https://cdm.unfccc.int/Projects/DB/URSCert1417432071.89/view

As per section 4 of GS4GG Principles & Requirements -v1.2, 4.1.2 (b) "The project demonstrates its proposed contribution to the sustainable Development Goals (SDGs), meaning at least an impact on SDG 13 plus two other SDGs.".

The project has applied for Gold Standard labelling, under GS4GG scheme.

The project has applied for Gold Standard labelling, under GS4GG scheme.

Further as per GS4GG , Renewable Energy Label Product Requirements V.1.2, as per para 2.1.3,

(a) applicable impact quantification methodologies for emission reductions has been established. (Please refer section B.6.1 & B.7.1 of GS-PDD)

(b) the Project is eligible for seeking issuance of GS4GG Gold Standard Verified Emission Reductions (GSVERs) as per GHG emission reduction & sequestration product requirements (Version 2.1)
(C) & Renewable Energy Label Product requirements (V 1.2)
Also, with reference to para 2.1.5 requirement of Renewable Energy Label Product Requirements V.1.2, (a) PP has submitted declaration regarding the double counting and declaration added to monitoring report also. (b) Submitted annual report on the amount of net electricity supplied to the national grid (C) The project activity has got registered under CDM with project ID 10073, monitoring parameters includes the month-wise energy generation (in MWh) (and supplied to grid) in ER calculation sheet & in GS-MR transparently. (d) PP hereby confirms that project is not registered under i-REC program.

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

Enn Enn Corp Limited is the project proponent (PP) of project activity and have the legal right to control and operate the project activity.

The project ownership has been demonstrated through below supporting documents:

1. **Commissioning certificates –** The letter from State Nodal Agency to Enn Enn Corp. Limited for commissioning of generation facility indicates that PP have the legal right to control and operate the project activities.
2. **Contract with EPC contractor –** The purchase order on the name of Enn Enn Corp. Limited indicates that PP have the legal right to control and operate the project activities.

Based on above evidences, the project ownership is with **Enn Enn Corp. Limited**.

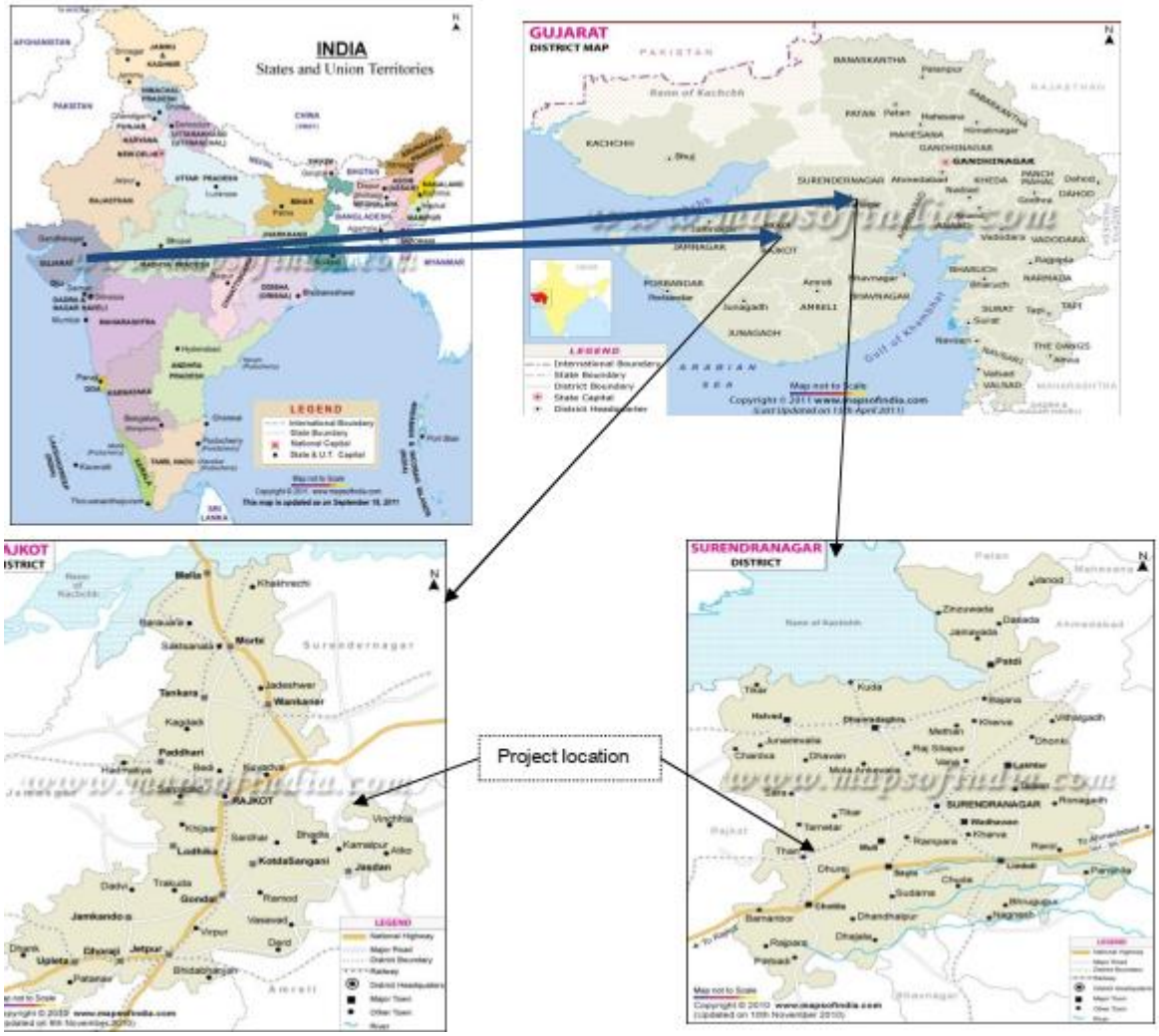
A.2 Location of project

Host Country: India
State: Gujarat
District: Rajkot & Surendranagar
Dahisara Village, Taluka- Jasdan
Pipaliya Dhoro Village, Taluka-Chotila
Khadvavdi Village, Taluka- Jasdan

Barvada Village, Taluka- Jasdan

Physical / Geographical location:

Unique identification	Commission-ing date	Loc-ation no.	Geographical Coordinates	Village	Taluka	District
SEL/2100/11-12/2349	30/09/2011	JSD-43	22^0 11’ 21.6” N 71^0 08’ 49.7” E	Dahisara	Jasdan	Rajkot
SEL/2100/11-12/2350	30/09/2011	JSD-44	22^0 11’ 09.6” N 71^0 09’ 01.7” E	Dahisara	Jasdan	Rajkot
SEL/2100/11-12/2346	30/11/2011	JSD-76	22^0 08’ 17.2” N 71^0 04’ 30.9” E	Pipaliya dhoro	Chotila	Surendra nagar
SEL/2100/11-12/2426	29/03/2012	JSD-51	22^0 08’ 17.3” N 71^0 10’ 55.8” E	Barvada	Jasdan	Rajkot
SEL/2100/11-12/2347	30/11/2011	JSD-24	22^0 09’ 27.8” N 71^0 09’ 34.3” E	Pipaliya dhoro	Chotila	Surendra nagar
SEL/2100/11-12/2348	18/11/2011	JSD-25	22^0 09’ 52.2” N 71^0 09’ 29.2” E	Khadvavdi	Jasdan	Rajkot



A.3 Technologies and/or measures

Technology of the small scale project activity:

The project activity incorporates installation of six number of 2100 kW S-88 wind turbine generator of Suzlon Energy Limited. In wind energy based power generation, the kinetic energy of the wind is being converted to mechanical energy and subsequently to electric energy. The wind, when passes through the blades of the WTG, its kinetic energy is converted into mechanical energy, which rotates the wind turbine's blades. The wind blade supplies the mechanical energy to the generator thereby producing electricity.

Specification of S – 88/2100 KW WTG[4]:

S. No	Parameters	Specification
Operating data		
1.	Installed electrical output	2100 kW
2.	Cut in wind speed	4 m/s
3.	Rated wind speed	14 m/s
4.	Cut out wind speed	25 m/s
5.	Hub height	79m (Foundation top equal to ground level)
6.	Wind Class	IEC-IIA
7.	Rotational speed	15 to 17.6 rpm
Rotor		
1.	Pitch System	Pitch regulated, electrical
2.	Rotor Diameter	88 m
3.	Rotor Swept Area	6082 m2
4.	Material Type	Epoxy bounded fibre glass
Generator		
1.	Type	Single fed induction Generator with slip rings, variable rotor resistance with SUZLON-FLEXI-SLIP control system
2.	Rated Power	2100 kW
3.	Rated voltage	3 Phase- 690 V AC
4.	Frequency	50 Hz
5.	Protection	IP 54, IP2 3 for slip ring unit
6.	Insulation Class	Class H
7.	Cooling system	Air-cooled
8.	Slip control	Unique flexi slip providing slip up to 16.67%
Gear box		
1.	Gear box type	3 stage (1 planetary and 2 helical)
2.	Gear ratio	1:98.8
3.	Nominal Load	2200 kW
Yaw system		
1.	Yaw drive system	3 electrical driven planetary drives
2.	Yaw bearing type	Slide bearing with gear ring & automatic greasing system
Braking system		

[4] http://www.suzlon.com/pdf/S88%20product%20brochure.pdf

1.	Aerodynamic brake	3 independent systems with blade pitching mechanism
2.	Mechanical brake	Hydraulic disc brake, activated by Hydraulic Pressure + mechanical rotor lock, activated by hydraulic pressure
Certification		
1.	Design standards	GL 2003
2.	Quality	ISO 9001:2000, ISO 9001:2008, ISO14001:2004 AND OHSAS 18001:2007
Tower		
1.	Tower type	Tabular Tower (4 sections)
2.	Corrosion protection	Epoxy/ PU coated

The project activity is deployed taking into consideration all aspects of environmentally safe and sound technology. Moreover, there has been no technology transfer involved in the project activity.

A.4 Scale of the project

The project is a small scale project utilizing Wind Turbine Generators (WTGs) to generate electricity. The total installed capacity of the project is 12.6 MW. As per GHG Emission Reduction & Sequestration product requirement V.2.1, para 9.1.2 , small scale project are defined as Type 1 : Renewable energy projects with maximum output capacity of 15 MW(e) or 45 MW(th). As the total installed capacity of the project is 12.6 MW, the project is eligible under monitoring methodology and GHG Emission reductions and sequestration product requirements.

A.5 Funding sources of project

There is no public funding from Annex 1 countries and no diversion of Official Development Assistance (ODA) involved in the project activity.

The project is entirely funded by equity and thus no external funding sources have been used.

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

B.1. Reference of approved methodology (ies)

Methodology: AMS I.D. "Grid connected renewable electricity generation" (Version17)[5]

Tool: "Tool to calculate the emission factor for and electricity system" (version 04.0)

This GS4GG PDD has been developed using the latest version of methodology AMS-I.D version 17.0. The latest version of methodology is AMS-I.D version 17.0 and the project activity meets the applicability and eligibility criteria of latest version of methodology also.

B.2. Applicability of methodology (ies)

Scope 01-Energy Industries (Renewable/non-renewable sources).

Approved small-scale baseline methodology AMS-I.D, version 17: "Grid connected renewable electricity generation."

The project activity generates power through a renewable source of energy (wind) and supplies it to the regional grid. This electricity would, otherwise, have been generated through fossil fuel sources connected to INDIAN grid (Now Indian Grid). The project activity meets the applicability conditions of the selected methodology.

Choice of selected methodology has been justified by showing that the project activity meets each applicability conditions of the selected methodology in table below:

Sl. no.	Applicability Criteria	Justification of choice

[5] https://cdm.unfccc.int/filestorage/V/9/L/V9LRSXKP24Q7YT6HZDUBO3C0ING8AJ.1/EB61_repan17_Revision_AMS-I.D_ver17.pdf?t=SWZ8cmwxMmt3fDAZpXgn4hwo0QkrQvGsK340

<table>
<tr><td>1.</td><td>This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:
(a) Supplying electricity to a national or a regional grid; or
(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</td><td>The project activity includes renewable energy generation using wind as the renewable source. And the electricity thus produced is being to the NEWNE grid (Now Indian Grid). Hence, this criterion is applicable.</td></tr>
<tr><td>2.</td><td>Illustration of respective situations under which each of the methodology (i.e. AMS-I.D, AMS-I.F and AMS-I.A) applies is included in Table 2.</td><td>The project activity supplies electricity to a national/regional grid. Hence, in accordance to the Table 2 shown below, the project activity fits into the approved methodology AMS I.D.
<table>
<tr><th></th><th>Project type</th><th>AMS -I.A</th><th>AMS-I.D</th><th>AMS-I.F</th></tr>
<tr><td>1</td><td>Project supplies electricity to a national/regional grid</td><td></td><td>√</td><td></td></tr>
<tr><td>2</td><td>Project displaces grid electricity consumption (e.g. grid import) and/or captive fossil fuel electricity generation at the user end (excess electricity may be supplied to a grid)</td><td></td><td></td><td>√</td></tr>
<tr><td>3</td><td>Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling)</td><td></td><td>√</td><td></td></tr>
<tr><td>4</td><td>Project supplies electricity to a mini grid[4] system where in the baseline all generators use exclusively fuel oil and/or diesel fuel</td><td></td><td></td><td>√</td></tr>
<tr><td>5</td><td>Project supplies electricity to household users (included in the project boundary) located in off grid areas</td><td>√</td><td></td><td></td></tr>
</table></td></tr>
</table>

3.	This methodology is applicable to project activities that: (a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a capacity addition; (c) Involve a retrofit of (an) existing plant(s); or (d) Involve a replacement of (an) existing plant(s).	The project activity involves installation of six new WTGs of 2.1 MW each at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant). Hence, option (a) of this criterion is applicable.
4.	Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology: • The project activity is implemented in an existing reservoir with no change in the volume of reservoir; • The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m2; • The project activity results in new reservoirs and the power density of the power plant, as per	The project activity does not include installation of hydro power plants. Hence, this criterion is not applicable.

	definitions given in the project emissions section, is greater than 4 W/m2.	
5.	If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	The project activity has only renewable component i.e. 6 WTGs of 2.1 MW each are installed. The total capacity hence cumulates to 12.6 MW which is certainly less than 15 MW. Hence, this criterion for renewable component is applicable.
6.	Combined heat and power (co- generation) systems are not eligible under this category.	The project activity does not include installation of any combined heat and power (co-generation) systems. Hence, this criterion is not applicable.
7.	In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.	The project activity does not involve addition of renewable energy generation units at an existing renewable power generation facility. Hence, this criterion is not applicable.
8.	In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.	No retrofitting or replacement is done in the project activity. Hence, this criterion is not applicable.

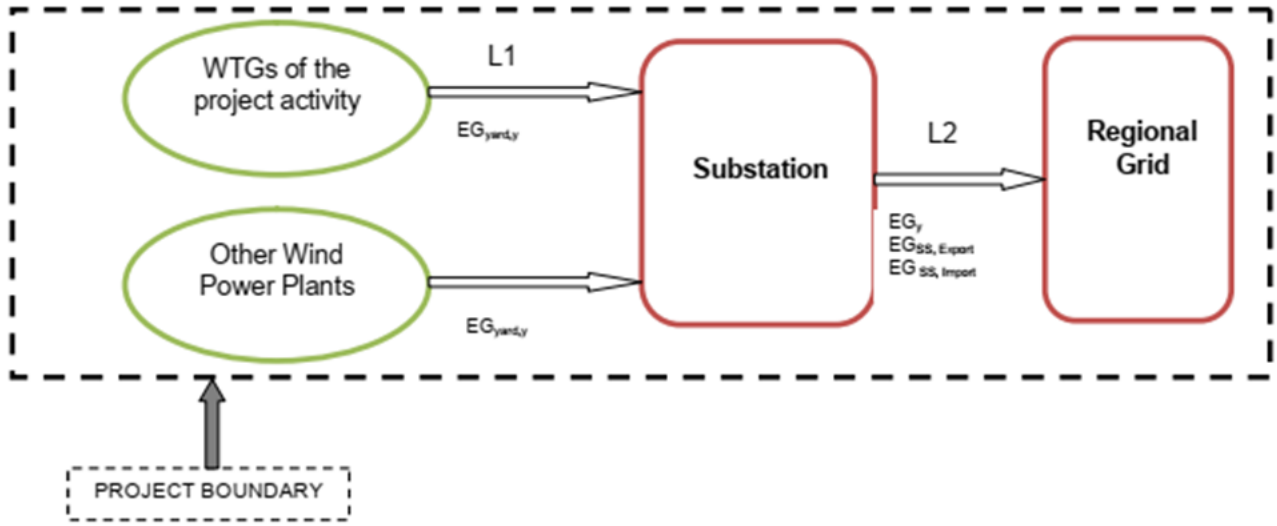
Project is registered with CDM in version 17 of AMS I.D. And meets all the applicability criteria set out under the selected small scale methodology.

Thus GS4GG PDD is applicable with AMS I.D version 17 of methodology.

B.3. Project boundary

As per AMS I.D, "the physical, geographical site of the renewable generation source delineates the project boundary."

The project boundary is illustrated on the following page:



Source		GHGs	Included?	Justification/Explanation
Baseline	Grid Connected Electricity Generation	CO_2	Yes	Main emission source.
		CH_4	No	Minor emission source
		N_2O	No	Minor emission source
Project	Greenfield wind Power Project Activity	CO_2	No	No CO_2 emissions are emitted from the project
		CH_4	No	Project activity does not emit CH_4
		N_2O	No	Project activity does not emit CH_4

B.4. Establishment and description of baseline scenario

According to the methodology available in paragraph 19 of Type I.D., the baseline scenario is that 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.

As per paragraph 22, the baseline emissions are the product of electrical energy baseline $EG_{BL,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor.

$BE_y = EG_{BL,y} X EF_{CO2,grid,y}$

Where:

BE_y = Baseline Emissions in year y (tCO_2)

$EG_{BL,y}$ = Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)

$EF_{CO2,grid,y}$ = CO_2 Emission Factor in year y (tCO_2/MWh)

As per paragraph 23, the Emission Factor can be calculated in a transparent and conservative manner as follows:

(a) A combined margin (CM), consisting of the combination of Operating Margin (OM) and Build Margin (BM) according to the procedures prescribed in the 'Tool to calculate the emission factor for an electricity system'.

OR

(b) The weighted average emissions (in tCO_2/MWh) of the current generation mix. The data of the year in which project generation occurs must be used."

The approach proposed in the "Option (a)" i.e. "Combined Margin" has been used for ascertaining baseline emissions and corresponding emission reductions. The OM and BM emission factor have been considered from the information (CO_2 Baseline Database for the Indian Power Sector -Version 16.0, March'21) published by the Central Electricity Authority (CEA), Ministry of Power, Govt. of India.

As per methodology, combined grid emission factor as per the "Tool to calculate the emission factor for an electricity system" version 04 is calculated as below.

CO_2 Baseline Database for the Indian Power Sector, Version 16, March'21[6] published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission reduction.

As per Methodological tool: Tool to calculate the emission factor for an electricity system (Version 04.0, EB75, Annex 15), following six steps have been followed:

(a) Step 1: Identify the relevant electricity systems;
(b) Step 2: Choose whether to include off-grid power plants in the project electricity system (optional);
(c) Step 3: Select a method to determine the operating margin (OM);
(d) Step 4: Calculate the operating margin emission factor according to the selected method;
(e) Step 5: Calculate the build margin (BM) emission factor;
(f) Step 6: Calculate the combined margin (CM) emission factor.

Step 1: Identify the relevant electricity systems

As described in tool "For determining the electricity emission factors, identify the relevant project electricity system. Similarly, identify any connected electricity systems". It also states that "If the DNA of the host country has published a delineation of the project electricity system and connected electricity systems, these delineations should be used". Keeping this into consideration, the Central Electricity Authority (CEA), Government of India has divided the Indian Power Sector into five regional grids viz. Northern, Eastern, Western, North-eastern and Southern.

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

Table: Geographical Scope of Indian Electricity Grid

Northern	Eastern	Western	North-Eastern	Southern

[6] https://cea.nic.in/cdm-co2-baseline-database/?lang=en

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

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

Project participants may choose between the following two options to calculate the operating margin and build margin emission factor:

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

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

The Project Participant has chosen only grid power plants in the calculation.

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

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

(a) Simple OM; or

(b) Simple adjusted OM; or

(c) Dispatch data analysis OM; or

(d) Average OM.

The data required to calculate Simple adjusted OM and Dispatch data analysis OM is not possible due to lack of availability of data to project developers. The choice of other two options for calculating operating margin emission factor depends on generation of

electricity from low-cost/ must-run sources. In the context of the methodology low cost/must run resources typically include hydro, geothermal, Solar, low cost biomass, nuclear and solar generation.

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

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

Data Source: Central Electricity Authority (CEA) database Version 16, March'21[7]

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

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

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

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

OR

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

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

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

[7] https://cea.nic.in/cdm-co2-baseline-database/?lang=en

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

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

Net Generation in Operating Margin (GWh) (incl. Imports)			
	2017-18	2018-19	2019-20
INDIAN Grid	960,693	995,957	965,009

Simple Operating Margin (tCO_2/MWh) (incl. Imports)			
	2017-18	2018-19	2019-20
INDIAN Grid	0.9543	0.9603	0.9555

Weighted Generation Operating Margin	
INDIAN Grid	**0.9568**

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

As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 04.0, EB 75, Annex 15) para 70:

In terms of vintage of data, project participants can choose between one of the following two options:
(a) Option 1 - for the first crediting period, calculate the build margin emission factor ex ante based on the most recent information available on units already built for sample group m at the time of PDD submission to the DOE for validation. For the second crediting period, the build margin emission factor should be updated based on the most recent information available on units already built at the time of submission of the request for renewal of the crediting period to the DOE. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used. This option does not require monitoring the emission factor during the crediting period.

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

Option 1 as described above is chosen by PP to calculate the build margin emission factor for the project activity. BM is calculated ex-ante based on the most recent

information available at the time of submission of PD and is fixed for the entire crediting period.

Build Margin (tCO2/MWh) (not adjusted for imports)	
	2019-20
INDIAN Grid	**0.8682**

Step 6: Calculate the combined margin (CM) emission factor ($EF_{grid,CM,y}$)

As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 04.0, EB 75, Annex 15) para 79:

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

(a) Weighted average CM; or

(b) Simplified CM.

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

The combined margin emissions factor is calculated as follows:

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

Where:

$EF_{grid,BM,y}$ = Build margin CO_2 emission factor in year y (t CO_2/MWh)

$EF_{grid,OM,y}$ = Operating margin CO_2 emission factor in year y (t CO_2/MWh)

W_{OM} = Weighting of operating margin emissions factor (per cent)

W_{BM} = Weighting of build margin emissions factor (per cent)

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

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

Therefore, $\mathbf{EF_{grid,CM,y}}$ = 0. 9568 * 0.75 + 0. 8682 * 0.25

= **0. 9346 tCO_{2e}/MWh**

Baseline emission factor (EF_y)

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

Therefore, $EF_y = EF_{grid,CM,y} = 0.9346$ t CO_2/MWh.

BE_y = 22,130 x 0. 9346

= **20,682 tCO_2e**

B.5. Demonstration of additionality

Please refer to section B.5. of the PDD[8], Additionality is in line with Tool for the demonstration and assessment of additionality.

B.5.1 Prior Consideration

According to paragraph 34 of Project Standard Version-07, the project activities having start date prior 02/08/2008 are required to demonstrate that CDM was seriously considered in decision to implement the project activity. For demonstration of serious CDM considerations following chronology of events are provided:

The project is commissioned and exact chronology of the events is explained below. The chronology of events is tabulated as well:-

Sr. No.	Activities	Date
1.	Purchase order (Start date of the project activity)	20/04/2011
2.	CDM intimation received by UNFCCC	05/10/2011
3.	CDM intimation sent to Host Party DNA	11/10/2011
4.	Public notice for local stakeholders' consultation meeting	19/10/2011
5.	Local stakeholders' consultation meeting	24/10/2011
6.	Project CDM registration with UNFCCC	04/12/2014
7.	GS stakeholder consultation meeting	28/11/2019
8.	GS Submission	23/01/2020
9.	GS Preliminary review approval	22/06/2021

[8] https://cdm.unfccc.int/Projects/DB/URSCert1417432071.89/view

From above chronological event it is revealed that there is no gap between real actions (qualified under guidelines provided EB-62 Annex-13), this it is concluded that CDM was considered seriously in decision to implement the project activity

B.5.2 Ongoing Financial Need

Not applicable

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	The project is helping in Emission in tCO_2 by implementing renewable energy projects in host country i.e. in India. (13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy /strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)
8 Descent Work And Economic Growth	8.5 By 2030,achive 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. 1.6 By 2020, substantially reduce the proportion of youth Not in employment, education or training	1. 1 no. of trainings provided to employees Per year (8.6.1 proportion of youth (aged 15-24 years) not in education, employment or training) 2. Employment generated Due to project activity (8.5.1 average hourly Earnings of female and Male employees, by Occupation, age and Persons with Disabilities.

7 Affordable and Clean energy	7.2 By 2030, increase Substantially the share of Renewable energy in the Global energy mix.	Electricity produced & Supplied to grid. (7.2.1 Renewable energy Share in the total final Energy consumption)

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

SDG Goal	**Methodological choices/approaches for estimating the SDG outcome**
SDG 7 –Affordable and Clean Energy : Ensure access to affordable, reliable, sustainable and modern energy for all	Measurement Method: - Electricity produced and supplied to the grid is monitored through energy meter. Net electricity will be calculated by state electricity board and O&M operator on monthly basis and provided in the share certificate/monthly report or equivalent. The other parameters used for net electricity supplied to grid are mentioned in monitoring plan. QA/QC Process: This parameter is monitored monthly and value of parameter will be cross checked with invoices. The meters will be calibrated on regular frequency.
SDG 8 – Descent Work and Economic Growth: Promote inclusive and sustainable economic growth, employment and decent work for all	Measurement Method: - Training and employment generation is monitored through training records, staff register or letter from O&M contractor for training and employment details or HSE/HR records. QA/QC Process: This parameter is based on records, data and no any QA/QC procedure required. The DOE can confirm this parameter with interview with PP or Site incharge or employees for training and employment generation.
SDG 13 – Climate Action : Take urgent action to combat climate change and its impacts	Measurement Method: - The emission reduction parameter is calculated as product of net electricity supplied to grid and grid emission factor. The grid emission factor is ex- ante parameter and determined based on data obtained from "CO_2 Baseline Database for Indian Power Sector" version 16, published by the Central Electricity Authority, Ministry of Power, Government of India. This is in line with "Tool to

	calculate the emission factor for an electricity system, version 4.0". The emission reductions are calculated as per registered PDD and as per methodology requirement. QA/QC Process: This parameter is calculated, and no any QA/QC procedure required.

B.6.2 Data and parameters fixed ex ante

SDG13: **Climate Action:** The project would lead to reduction of approx. 20,682 tCO_2e per annum.

SDG 7: Affordable and Clean Energy: The project is expected to generate 22,130 MWh of clean energy per annum

SDG 8: **Decent Work and Economic Growth:** The project provides employment to around 10 persons.

B.6.3 Ex ante estimation of SDG Impact

SDG 13- Climate Action

Formula used to calculate the net emission reduction for the project activity is
$ER_y = BE_y - PE_y - LE_y$

Where,

ER_y = Emission Reduction in tCO_2/year
BE_y = Baseline emission in tCO_2/year
PE_y = Project emissions in tCO_2/year
LE_y = Leakage Emissions in tCO_2/year

Baseline Emission (BE_Y)

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

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

$EG_{PJ,y}$ = Total quantity of net electricity delivered to the recipient facility
$EF_{grid,y}$ = Baseline emission factor
= 0.9346 tCO_2/MWh

BE_y = 22,130* 0. 9346

= 20,682 tCO_2/year

Since $ER_y = BE_y$
Therefore, ER_y = 20,682 tCO_2/year

Name of the SPVs	Capacity	PLF (%)	Generated Power (MWh) p.a.	Baseline Emission Factor (tCO_2/MWh)	Baseline Emissions (tCO_2/year)
Enn Enn Corp. Limited	12.6 MW	20.05%	22,130	0.9346	20,682

SDG 7 – Affordable and Clean Energy:

The project activity will generate 22,130 MWh per year of affordable and clean energy.

SDG 8 - Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. More than 10 people employed and more than 1 training /annum.

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

SDG 13: Climate Action

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

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

Where,

$EG_{PJ,y}$ = Total quantity of net electricity delivered to the recipient facility

$EF_{grid,CM,y}$ = Baseline emission factor = 0.9346 tCO_2/MWh

BE_y = 22,130 * 0.9346
= 20,682 tCO_2/year

Since $ER_y = BE_y$

Therefore, ER_y = 20,682 tCO_2/year

Year	Baseline estimate	Project estimate	Net benefit
01/09/2019 to 31/08/2020	20,682	0	20,682
01/09/2020 to 31/08/2021	20,682	0	20,682
01/09/2021 to 31/08/2022	20,682	0	20,682
01/09/2022 to 31/08/2023	20,682	0	20,682
01/09/2023 to 31/08/2024	20,682	0	20,682
01/09/2024 to 03/12/2024	5,270	0	5,270
Total	**108,680**	**0**	**108,680**
Total number of crediting years	**5.25**		
Annual average over the crediting period	20,682	0	20,682

SDG 7: Affordable and Clean Energy

Net generation per year= 22,130 MWh/year

Year	Baseline estimate	Project estimate	Net benefit
01/09/2019 to 31/08/2020	0	22,130	22,130
01/09/2020 to 31/08/2021	0	22,130	22,130
01/09/2021 to 31/08/2022	0	22,130	22,130
01/09/2022 to 31/08/2023	0	22,130	22,130
01/09/2023 to 31/08/2024	0	22,130	22,130
01/09/2024 to 03/12/2024	0	5,639	5,639
Total	**0**	**116,289**	**116,289**
Total number of crediting years	**5.25**		
Annual average over the crediting period	0	22,130	22,130

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment at least 10 persons.
Also project activity improves the quality of employment by giving training to employee. Thus minimum 1 training per year will be conducted by the project activity.

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 13

Data / Parameter	**ER_y**
Unit	tCO_{2e}/year
Description	Emission reductions achieved per year
Source of data	As per Estimated ER sheet. During the verification, the results shall be obtained from the Actual ER sheet.
Value(s) applied	20,682
Measurement methods and procedures	The baseline emissions are the product of electrical energy baseline $EG_{PJ,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.
Monitoring frequency	As per monitoring period
QA/QC procedures	Not Applicable
Purpose of data	To Monitor the SDG 13 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of GS-CERs for this project activity, whichever occurs later.

SDG 7 (7.2.1 Renewable energy share in the total final energy consumption)

Data / Parameter	**$EG_{PJ,y}$**
Unit	MWh/y
Description	Quantity of net electricity generation supplied by the project plant/unit in year y in MWh
Source of data	Monthly joint meter reading reports
Value(s) applied	22,130

Measurement methods and procedures	The electricity exported / supplied by the project activity is measured through meters (ABT Meters) having accuracy class of 0.2s. It is difference of export and import of project activity.
Monitoring frequency	Continuous measurement & monthly recording
QA/QC procedures	The frequency of calibration is once in 5 years[9]. The monthly electricity supplied by the project activity in the JMR report is cross checked with other source of data. In the absence or delay in the meter calibration appropriate Guidelines will be applied appropriately to confirm the conservativeness of metering.
Purpose of data	To Monitor the SDG 7 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

Other monitoring parameters require to calculate $EG_{PJ,y}$ as per registred CDM PDD.

Data / Parameter	$EG_{SS,\ Export}$
Unit	MWh
Description	Electricity export to the grid by the Project Activity and the other PPs connected to the same sub-station
Source of data	Jointly taken by the Suzlon and State Utility in the form of JMR (Joint Meter Reading) on monthly basis.
Value(s) applied	This data will not be directly used for the calculation of emission reduction. State Utility will use this value for the apportionment calculation and the PP does not have any role in the calculation.

[9] https://cea.nic.in/regulations-category/metering-regulations/?lang=en

Measurement methods and procedures	The meter reading at ABT meter at substation is taken jointly by the representatives of Suzlon and State Utility on monthly basis.
Monitoring frequency	Continuous monitoring, hourly measurement and monthly recording.
QA/QC procedures	The ABT meter at the substation is of 0.2s accuracy class and is maintained by GETCO (Gujarat Energy Transmission Corporation Limited).
Purpose of data	To Monitor the SDG 7 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

Data / Parameter	$EG_{SS,\ Import}$
Unit	MWh
Description	Electricity Import from the grid by the Project Activity and the other PPs connected to the same sub-station
Source of data	Jointly taken by the representatives of Suzlon and State Utility in the form of JMR on monthly basis.
Value(s) applied	This data will not be directly used for the calculation of emission reduction. State Utility will use this value for the apportionment calculation and the PP does not have any role in the calculation.
Measurement methods and procedures	The meter reading at ABT meter at the substation is taken jointly by the representatives of Suzlon and State Utility on monthly basis.
Monitoring frequency	Continuous monitoring, hourly measurement and monthly recording.
QA/QC procedures	The ABT meter at the substation is of 0.2S accuracy class and is maintained by GETCO (Gujarat Energy Transmission Corporation Limited).
Purpose of data	To Monitor the SDG 7 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last

	issuance of VERs for this project activity, whichever occurs later.

Data / Parameter	$EG_{yard,y}$
Unit	MWh
Description	The electricity generated by wind mills of the project activity, recorded by the yard meters near the wind mill.
Source of data	Reading taken by Suzlon
Value(s) applied	This data will not be directly used for the calculation of emission reduction. State Utility will use this value for the apportionment calculation and the PP does not have any role in the calculation.
Measurement methods and procedures	Each WTG is equipped with a yard meter. The generation data of individual WTG can be monitored through these meters.
Monitoring frequency	Continuous monitoring, hourly measurement and monthly recording
QA/QC procedures	Accuracy of these meters is also 0.2S.
Purpose of data	To Monitor the SDG 7 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

SDG 8.5.1 (Average hourly earnings of female and male employees, by occupation, age and persons with disabilities)

Data / Parameter	**Number of employment generation**
Unit	Number
Description	Number of people employed directly due to the project activity
Source of data	Plant records or The training records for all the employees/Letter from O&M contractor for employment

	generation/ DOE interview with employees, local stakeholders etc.
Value(s) applied	10
Measurement methods and procedures	The total number of persons working in the plant would be calculated based on the daily log available at site. This parameter also monitor number of men/women employed by the project activity. The project activity ensures that "equal pay for work of equal value" for both men and women and there is no any discrimination against women. "The employment covers number of men and number of women employed by the project activity. The job is of type temporary/permanent or skilled/unskilled, local/ non-local etc. Also it is ensued that peoples will get equal payment for equal work. The payment will be based on work and no any gender inequality for payment for work of equal value". The average hourly earnings of a person is calculated on the basis notification from the order published by the Chief Labour Commissioner (Central)[10]. Further preference will be given to the local people for employment in skilled and unskilled jobs based upon their skills and competency. The same can be verified at the time of verification.
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	The number of persons employed would be mentioned in the plant register, which can be crossed checked with daily attendance register.
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	-

SDG 8.6.1 (Proportion of youth (aged 15-24 years) not in education, employment or training)

[10] https://clc.gov.in/clc/min-wages

Data / Parameter	**Quality of Employment**
Unit	Number
Description	No. of training conducted
Source of data	Plant records or The training records for all the employees/Letter from O&M contractor for employment generation/ DOE interview with employees, local stakeholders etc.
Value(s) applied	1 training per year
Measurement methods and procedures	Together with the technology supplier, the Project organize training for the staff on the technology and the monitoring of the plant operation, and the emergency and safety procedures.
Monitoring frequency	Annual
QA/QC procedures	The training records for all the employees
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	-

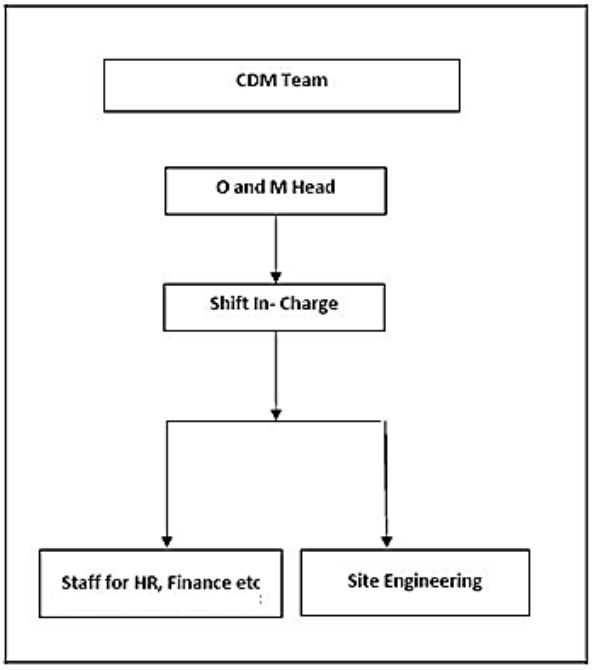
B.7.2 Sampling plan

No Sampling is required

B.7.3 Other elements of monitoring plan

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

The authority and responsibility for registration, monitoring, measurement, reporting and reviewing of the data rests with the project participant. PP proposed the following structure for data monitoring, collection, data archiving and calibration of equipment's for this project activity. The team comprises of the following members:



Responsibility
• Reviewing the monthly and annual generation statistics. • Evaluating the GHG performance of the project activity. • Identifying the opportunities for future improvement • Addressing grievance related to project activity.
• Implementation of corrective appropriate measures in case any discrepancies are identified in the reported parameters. • Review of monthly report. • Ensuring calibration of monitoring equipment as and when required.
• Monitoring and reporting the GHG performance related parameters following the guidance provided in the project design document • Preparation of monthly and annual generation statistics. • Reporting of any discrepancies identified in the reporting parameters. • Ensuring calibration of the monitoring equipments as and when required.

Data Measurement:

The export and import energy will be measured continuously using meters. Readings of meters shall be taken on monthly basis by authorized officer of EPC contractor in the presence of PP or representative of PP. Based on the Meter Reading Statement, the electricity being produced by the project activity will be evaluated. The metered data can be cross checked with other suitable data source (like daily generation report).

Data collection and archiving:

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

Emergency preparedness:

The project activity will not result in any unidentified activity that can result in substantial emissions from the project activity. No need for emergency preparedness in data monitoring is visualized.

Personnel training

In order to ensure a proper functioning of the project activity and a properly monitoring of emission reductions, the staff (GS team) will be trained. The plant helpers will be

trained in equipment operation, data recording, reports writing, operation and maintenance and emergency procedures in compliance with the monitoring plan.

In case of mismatch between billing (JMR) period cycle and monitoring period cycle, the daily generation electricity data will be used to calculate the electricity for specific period.

In case common metering arrangement at substation, apportioning will be followed by state electricity board and PP is geeing the value of export/import or net electricity export and this value will be considered for emission reduction calculations

Apportioning:

In case of mismatch of date between the start date of the billing cycle and the start date of monitoring period the data will be apportioned in line to the daily generation values for the said mismatch period.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

Start date of the project activity is 20/04/2011 (CDM Start date).

C.1.2 Expected operational lifetime of project

25 Years 00 Months

C.2. Crediting period of project

C.2.1 Start date of crediting period

01/09/2019 ((retroactive period which starts with crediting period start date with other standard or maximum two years before the date of first submission (submission for preliminary review i.e. 21/01/2020), whichever occurs later.

C.2.2 Total length of crediting period

5 Years 3 Months 3 days (fixed)

01/09/2019 to 03/12/2024 (end date of CDM crediting period)

Ref. https://cdm.unfccc.int/Projects/DB/URSCert1417432071.89/view

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 summarized below.

Principles	Mitigation Measures added to the Monitoring Plan
Principle 1. Human Rights	Not applicable
Principle 2. Gender Equality	Not applicable
Principle 3. Community Health, Safety and Working Condition	Not applicable
Principle 4.1 Sites of Cultural and Historical Heritage	Not applicable
Principle 4.2 Forced Eviction and Displacement	Not applicable
Principle 4.3 Land Tenure and Other Rights	Not applicable
Principle 4.4 - Indigenous people	Not applicable
Principle 5. Corruption	Not applicable
Principle 6.1 Labour Rights	Not applicable
Principle 6.2 Negative Economic Consequences	Not applicable
Principle 7.1 Emissions	Not applicable
Principle 7.2 Energy Supply	Not applicable
Principle 8.1 Impact on Natural Water Patterns/Flows	Not applicable
Principle 8.2 Erosion and/or Water Body Instability	Not applicable

Principle 9.1 Landscape Modification and Soil	Not applicable
Principle 9.2 Vulnerability to Natural Disaster	Not applicable
Principle 9.3 Genetic Resources	Not applicable
Principle 9.4 Release of pollutants	Not applicable
Principle 9.5 Hazardous and Non-hazardous Waste	Not applicable
Principle 9.6 Pesticides & Fertilisers	Not applicable
Principle 9.7 Harvesting of Forests	Not applicable
Principle 9.8 Food	Not applicable
Principle 9.9 Animal husbandry	Not applicable
Principle 9.10 High Conservation Value Areas and Critical Habitats	Not applicable
Principle 9.11 Endangered Species	Not applicable

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?	As per Gold Standard Gender Policy, para 4.2 "Foundational gender-sensitive requirement – This strengthens Gold Standard's 'do no harm' approach and addresses safeguards to prevent or mitigate adverse impacts on women or men and girls and boys. Such action is mandatory for all projects seeking Gold Standard certification and includes compliance with the gender 'do no harm'

	safeguards, gender gap analysis and gender sensitive stakeholder consultations." The project is utilization of the renewable energy (wind) project and it is not a gender sensitive project because the project does not adversely impact women or men. PP have HR policy which mention that, they do not differentiate between women and men. PP also conducted stakeholder meeting which was open for participation by all and both men and women had participated in the stakeholder meeting conducted. The HR policy of PP and the stakeholder meeting documents are submitted. Hence, it is established that, there is no gender discrimination by PP and that PP is strictly adhering with their policies.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	India is party to "Convention on the Elimination of All Forms of Discrimination against Women" and the project is aligned its labour policies which does not discriminate on gender. PP have HR policies in place which demonstrate that there is no gender discrimination. Also, PP is following best practices by having anti sexual harassment policy, whistle blower policy and CSR policy in place.
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	The Project shall complete the following gender assessment questions below: **1.** Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits?

No, the Project being a renewable energy (wind) project does not reduce access to or control of resources for women. Also, the PP have HR policies in place which demonstrate that women are treated equally.

2. Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)?

No, the Project beneficiaries in terms of employment and social upliftment of the area are common for both the gender. The project does not adversely affect men and women in marginalised or vulnerable communities. Employment opportunities have been provided by the PP to the local people from the nearby villages around the project site which in turn has improved the livelihood and living standards of the local people.

3. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)?

No, the HR policy of PP mentions that all employees are given equal opportunities for betterment irrespective of the gender and provides equal opportunity to women/ men to participate in the decisions of the project activities.

4. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)?

Yes the project takes into account gender roles and abilities of women/men. Job profile is allocated based on the type of

work to be carried out. The project takes into account gender roles and abilities of women/men. PP has provided employment to both the genders without any discrimination. Also, the HR policy of PP mentions that all employees are given equal opportunities for betterment irrespective of the gender.

5. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities?

No, the project activity does not contribute to increase in women's workload that adds to their care responsibilities or prevents them from engaging in other activities. The HR policy of PP mentions that all employees are given equal opportunities and also there is no discrimination. PP also have Anti sexual harassment policy for prevention of any sexual harassment and thus it can be justified that the project contribute towards increased participation of women workload and promotes their active participation.

6. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?

No, the project will not potentially reproduce or it will not deepen discrimination against women based on gender. The HR policy of PP mentions that all employees are given equal opportunities for betterment irrespective of the gender. Thus it can be justified that, the project contribute towards increased participation of women workload and promotes their active participation.

	7. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services? No, the project will not limit women's ability to use, develop and protect natural resources. The HR policy of PP mentions that all employees are given equal opportunities for betterment irrespective of the gender. **8.** Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards? No, the project activity will not expose women and girls to further risk or hazards. The project does not involve in generation of Hazardous and Non-hazardous Waste. Standard health & safety procedures are followed at site during operation and maintenance. PP follows the National Policy on Safety, Health and Environment at work[11], published by Ministry of Labour and Employment, Government of India. Also due to improved electricity availability the usage of fuel for lighting or heating needs would be reduced resulting in indoor air quality improvement. Thus from the above justifications it can be concluded that an expert opinion is not required to justify gender requirements for the project activity.

[11] https://labour.gov.in/sites/default/files/SafetyHealthandEnvironmentatWorkPlace.pdf

Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	Expert was not required to assist with Gender issues at the stakeholder consultation. As per para 4.4 of the Gender Policy, the PP had organised a stakeholder consultation meeting for which the local people were invited irrespective of the gender and the locals were invited for the stakeholder meeting through public notice which was accessible for both the genders. The stakeholder consultation documents are provided from which it can be seen that there was participation from both the genders. In order to get continuous feedback from the local stakeholders, PP has also placed a grievance register at the site, which is accessible to all irrespective of gender, for recording any grievance/feedback about the project. The comments received in the grievance register, shall be resolved by the team of PP at the earliest. Thus from the above justifications it can be concluded that an expert opinion is not required to justify gender requirements for the project activity.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

E.1 Summary of stakeholder mitigation measures

Solicitation of comments from stakeholders:

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.

The project involves installation of 6 (six) numbers of Wind Turbine Generators (WTGs) of capacity 2.1 MW each cumulating to a total capacity of 12.6 MW. The project is located at Rajkot & Surendranagar district in the state of Gujarat.

A meeting was organized by Enn Enn Corp Ltd. on 28/11/2019 at the Site Office, Rajkot, Gujarat) to inform the local stakeholders about the project activity and discuss their concerns, if any, regarding the project activity. The identified stakeholders including Sarpanchs , member of village panchayat, and residents of the neighboring villages were invited to the meeting through a personal invitation and a public notice dated

14/11/2019.Also, the email has been sent to relevant stakeholders like NGOs, DNA officials, Gold Standard officials along with project documents.

The agenda of the meeting was as follows:

- Welcome Speech
- Introduction to Climate Change and Clean Development Mechanism
- Gold Standard for Global Goals
- Views expressed by the villagers
- Interactive session with the stakeholders
- Vote of Thanks

After the detailed discussion, some of the stakeholders raised questions about the project technology to clear their doubts.

Summary of comments received:

The project is submitted to GS under retroactive type as start date of project was prior to first submission of project activity to Gold Standard. The same project was also under CDM registration cycle and registered. Thus first physical Local Stakeholder Consultation meeting was conducted as per CDM requirement. However this requirement of "GS4GG Gold Standard for the Global Goals Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines" has been followed by the project activity.

The first physical Local stakeholder consultation was carried out by inviting the local stakeholders through public notice. The notice was for all Local stakeholders and not a gender specific. Thus gender equality has been followed during consultation. Since project is developed in particular site, for project, the nearby local villagers are most relevant and who are directly and indirectly may be affected. Thus putting public notice at project site/nearby village involves engagement of all stakeholders for the project activity. During that initial physical stakeholder consultation, the project information was given and taken feedback for the project activity. The information about feedback register also given to stakeholders so that they can give their feedback at any time. Thus continuous input and Grievance Mechanism has been followed during first physical consultation.

A summary of the comments and queries from the stakeholders are presented below along with the responses from the representatives of the project participants:

Comment / Query from Stakeholder	**Response from Representative of the Project Participant**
Whether the project provided employment opportunities or improve economic development of the area?	Yes, The project has provided employment opportunities to the local people depending upon their skill and qualification.
Whether the operation of the plant result in increased temperature in the	No, This was not taken into consideration as the question was generic and not

surroundings?	related to any social, economic impact.
How the project activity benefit the villages around the project site and their residents?	Yes, The project activity has benefited the nearby villagers by providing employment opportunities to locals, there is immense opportunity for economic development of the area like- increase in business opportunities, improvement in transportation; and various social activities shall help to uplift the standard of living.

The stakeholders also acknowledged the socio-economic benefits of the project activity including improved infrastructure in the region, and employment opportunities for local residents.

Thus the requirement of "GS4GG Gold Standard for the Global Goals Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines" has been followed by the project activity.

The PP also placed a grievance register onsite in where the stakeholder can put down his/her complain and the same if found genuine will be addressed immediately.

Report on consideration of comments received:

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

There were no further comments raised by the stakeholders and they were totally in support for setting up of the of project in the region. The local stakeholders expressed their support to the project.

The meeting was concluded by vote of thanks to all the participants.

Stakeholder Feedback Round:

The Stakeholder feedback round has done through online method. Email invitations were sent to GS partnered NGO's and MoEFCC. The relevant documents of project activity like GS4GG PDD, project Technical summary were made available during Stakeholder feedback round.

As per GS toolkit, for SFR process physical meeting is not mandatory. Thus, online e-mail has sent to NGOs, Govt. officials, GS personnel, etc.

The list of invites to whom the SFR e-mail has been sent will be shared to the DOE assessment team at the time of Design Review.

SFR round initiated on 22/06/2021 and completed on 22/08/2021, no negative comments has been received during this SFR process.

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 Register to be maintained at Project location. **Justification:** CDM officer appointed related to CDM-GS documentation at plant. Thus it is appropriate publicly accessible location at which local stakeholders can provide their feedback on the project. This location is also conducive to continuous and regular checks for stakeholder comments. Also Grievance Register has been kept at PP office so that any stakeholder can give their comments to PP.
GS Contact (mandatory)	help@goldstandard.org
Telephone access	Mr. Manish Dabkara, representative of Project Participant is responsible and his mobile number +91 9907534900 shall be available for any stakeholder comment. **Justification:** For those who are unable to travel to site or are not literate, they may contact the Project Implementer via telephone. Persons dialing this telephone number have access to a Project representative who speaks both English and the national language, Hindi.
Internet/email access	Email address: Manish Dabkara, manish@enkingint.org **Justification:** An email id of the project Implementer has been provided for continuous input / grievance for the convenience of stakeholders with internet access.

Nominated Independent Mediator (optional)	No Independent mediator is assigned. However, Mr. Manish Dabkara, has been assigned as the point of contact for all the local issues. **Justification:** The use of a Nominated Independent Mediator is not being employed. As the use of the process book, telephone and internet is sufficiently capture feedback as necessary.

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.

Assessment Questions/ Requirements	Justification of Relevance (Yes/potentially/no)	How Project will achieve Requirements through design, management or risk mitigation.	Mitigation Measures added to the Monitoring Plan (if required)
Principle 1. Human Rights			
1. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights 2. The Project shall not discriminate with regards to participation and inclusion	No	The Project is not in conflict with the economic livelihood of the local community. The Project does not cause any human rights abuse and respects internationally proclaimed human rights issue. Further, the Project meets the local labor law requirements thus does not cause any human rights abuse. The India has ratified the United Nations Human Rights Rules and regulations. The India ratified	Not applicable

		the same as per web link[12] given below. The project adheres to the host country's commitment to: Universal Declaration of Human Rights (UDHR) International Covenant on Economic, Social and Cultural Rights, India Accession 10/04/79[13] International Covenant on Civil and Political Rights India Accession10.04.79[14]	
Principle 2. Gender Equality			
1. The Project shall not directly or indirectly		The Project promotes gender	Not applicable

[12] http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=79&Lang=EN
[13] http://hrlibrary.umn.edu/research/ratification-india.html &
http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=79&Lang=EN

[14] http://hrlibrary.umn.edu/research/ratification-india.html &
http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=79&Lang=EN

lead to/contribute to adverse impacts on gender equality and/or the situation of women 2. Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work 3. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks 4. (where required) Summary of opinions and recommendations of an Expert Stakeholder(s)	No	equality and the empowerment of women. The Project does not cause any discrimination against women. The project Proponent does not indulge in discrimination on basis of gender, race, religion, sexual orientation. The project abide by the Factories Act that prohibits any form of discrimination and is in accordance with the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) , India ratified it on 09/07/1993 with certain reservations[15] and international Convention on the Elimination of All Forms of Racial	

[15] http://nhrc.nic.in/documents/india_ratification_status.pdf & http://www.un.org/womenwatch/daw/cedaw/

		Discrimination; India ratified the convention on 03/12/1968 with certain reservation[16]	
Principle 3. Community Health, Safety and Working Conditions			
1. The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community	No	The project is renewable (wind) energy project and does not have exposure to increased health risks and shall not adversely affect the health of the workers and the community. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments" – PP ensures safe access and planned prevention to avoid any kind of accident. All the safety and hygiene measures are being ensured in order maintain a safe and healthy	Not applicable

[16] http://nhrc.nic.in/documents/india_ratification_status.pdf & http://www.refworld.org/docid/3ae6b3940.html

		environment for the workers at site. In case of any emergency, the site in-charge will ensure to take adequate action and preventive measures to avoid any miss happening. Necessary health and safety measures will be taken during construction and operation phase, relevant staff will be trained to be able to work with high voltages.	
Principle 4.1 Sites of Cultural and Historical Heritage			
Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?	**No**	No cultural heritage is observed on the project site, thus no harm observed. Compliance with India's commitment to International Covenant on Economic, Social and Cultural Rights 10.04.79 will ensure no damage to critical cultural heritage.	Not applicable
Principle 4.2 Forced Eviction and Displacement			

Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	No	The project has received the necessary approvals from the local authorities and does not lead to any resettlement. India (the Ministry of Rural developmenthave the "The National Rehabilitation and Resettlement Policy, 2007 https://dolr.gov.in/node/88219 The project activity do not have any major impact on land use patterns. In accordance with Article 1 of the International Covenant on economic, Social and Cultural Rights the program does not complicit in involuntary resettlement. No Expropriation has been conducted on any private land involved in project activity. Land has been purchased by PP directly from the owner of the land through direct negotiation of commercial terms. There has not been involvement of any government agency in the acquiring the land. The land is	Not applicable

		acquired on mutual consent between private land owner and PP, thus there are no any issues of dissatisfaction of private land owner.	

Principle 4.3 Land Tenure and Other Rights			
a. Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership? b. For Projects involving land use tenure, are there any uncertainties with regards to land tenure, access rights, usage rights or land ownership?	**No**	The project has received the necessary approvals from the local authorities and does not lead to any resettlement. There are no any uncertainties with regards land tenure, access rights, usage rights or land ownership. Thus land tenure and other rights are with PP.	Not applicable
Principle 4.4 - Indigenous people			
Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	**No**	The project is located at site where there are no any peoples residing. The project is located at barren land.	Not applicable
Principle 5. Corruption			
1. The Project shall not involve, be complicit in	**No**	The project is renewable (wind) energy project and does not	Not applicable

or inadvertently contribute to or reinforce corruption or corrupt Projects		contribute to or reinforce corruption of any kind. Indulgence in corruption is an illegal activity in the host country and the local labor compliance takes into account of the same. The project abides by the United Nations Convention Against Corruption. India ratification 09.05.11[17]	
Principle 6.1 Labour Rights			
1. The Project Developer shall ensure that all employment is in compliance with national labour occupational health and safety laws and with the	No	Forced labor is an illegal activity in the host country and the local labor compliance takes into account of the same. Further, India is a party to ILO and forced labour is illegal in India.	Not applicable

[17] http://www.unodc.org/unodc/en/treaties/CAC/signatories.html

principles and standards embodied in the ILO fundamental conventions 2. Workers shall be able to establish and join labour organisations 3. Working agreements with all individual workers shall be documented and implemented and include: a) Working hours (must not exceed 48 hours per week on a regular basis), AND b) Duties and tasks, AND c) Remuneration (must include provision for		The project does not employ any form of forced or compulsory labour. Employees can quit their Services at any time. The project complies with the Factories Act in India that prohibits forced or compulsory labour[18] The project activity does not involve any child labour.	

[18] http://www.ilo.org/dyn/natlex/docs/WEBTEXT/32063/64873/E87IND01.htm

payment of overtime), AND d) Modalities on health insurance, AND e) Modalities on termination of the contract with provision for voluntary resignation by employee, AND f) Provision for annual leave of not less than 10 days per year, not including sick and casual leave. 4. No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion) 5. The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and			

reporting of accidents and incidents, and emergency preparedness and response measures			
Principle 6.2 Negative Economic Consequences			
1. Does the project cause negative economic consequences during and after project implementation?	**No**	No potential risks to the local economy. The financial sustainability of the Projects implemented, also including those that will occur beyond the Project Certification period.	Not applicable
Principle 7.1 Emissions			
Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No	The project is renewable energy technology (Wind based power generation Technology) and does not lead any increase in greenhouse gas emissions over the Baseline Scenario.	Not applicable
Principle 7.2 Energy Supply			

Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?	No	The project activity supplies energy to national grid and project activity displaces equivalent quantity of electricity which would have been generated by fossil fuel dominated grid connected power plants.	Not applicable
Principle 8.1 Impact on Natural Water Patterns/Flows			
Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	No	The project is renewable energy technology (Wind based power generation Technology) and does not affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s).	Not applicable
Principle 8.2 Erosion and/or Water Body Instability			

a. Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion? b. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?	No	The project is renewable energy technology (Wind based power generation Technology) and does not affect Erosion and/or water body stability.	Not applicable
Principle 9.1 Landscape Modification and Soil			
Does the Project involve the use of land and soil for production of crops or other products?	No	The project proponent has implemented Environment Health Safety and Social guideline which takes into account the same. The project activity involves barren land and does not involve use of land and soil for production of crops or other products. The project does not involve any landscape modification or	Not applicable

		soil. Hence there is no any impact of this principle.	
Principle 9.2 Vulnerability to Natural Disaster			
Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	No	The project is renewable energy technology (Wind based power generation Technology). The Project will not be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions. Thus this section is Not Applicable.	Not applicable
Principle 9.3 Genetic Resources			

Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development, or take place in facilities or farms that include GMOs in their processes and production)?	No	The project is renewable energy technology (Wind based power generation Technology). The Project not be negatively impacted by the use of genetically modified organisms or GMOs. Thus this section is Not Applicable.	Not applicable
Principle 9.4 Release of pollutants			
Could the Project potentially result in the release of pollutants to the environment?	No	The project has received environmental clearance from the State Pollution control Board. Further the EHSS guidelines takes into account the same. The project does not lead to release of any hazardous substances that pose threat to the environment. Rather it aims at reducing the air pollution that is prevalent due to use of	Not applicable

		fossil fuel power plants. The project promotes environmental protection through the use of cleaner technology. The project abides by the stipulations of the Indian Environment Protection Act 1986[19]	
Principle 9.5 Hazardous and Non-hazardous Waste			

[19] https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjG3vH-9Y7xAhUS7HMBHceLA4gQFjALegQIFhAD&url=https%3A%2F%2Fwww.indiacode.nic.in%2Fbitstream%2F123456789%2F6196%2F1%2Fthe_environment_protection_act%252C1986.pdf&usg=AOvVaw02seTh_DZIe-27t60Ns5V3

Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	No	The project is renewable energy technology (Wind based power generation Technology). The project does not involve generation of Hazardous and Non-hazardous Waste. Standard procedure is followed at site during operation and maintenance.	Not applicable
Principle 9.6 Pesticides & Fertilisers			
Will the Project involve the application of pesticides and/or fertilisers?	No	The project is renewable energy technology (Wind based power generation Technology) power generation. There are no any involvement of pesticides and/or fertilizers. Thus this principle is Not Applicable.	Not applicable
Principle 9.7 Harvesting of Forests			
Will the Project involve the harvesting of forests?	No	The project is renewable energy technology (Wind based power generation Technology) power generation. The project activity does not involve any harvesting	Not applicable

		of forests. Thus this principle is Not Applicable.	
Principle 9.8 Food			
Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	No	The project is renewable energy technology (Wind based power generation Technology) power generation. The Project does not modify the quantity or nutritional quality of food available. Thus this principle is Not Applicable.	Not applicable
Principle 9.9 Animal husbandry			
Will the Project involve animal husbandry?	No	The project is renewable energy technology (Wind based power generation Technology) power generation. The Project does not involve animal husbandry. Thus Not Applicable	Not applicable
Principle 9.10 High Conservation Value Areas and Critical Habitats			

Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No	No cultural heritage is observed on the project site, thus no harm observed. Compliance with India's commitment to International Covenant on Economic, Social and Cultural Rights 10.04.79 will ensure no damage to critical cultural heritage.	Not applicable
Principle 9.11 Endangered Species			
a. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? b. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	No	There are no any endangered species identified at project site and also no species have the route through area. The project activity does not impact other endangered species through trans-boundary affects.	Not applicable

APPENDIX 2- CONTACT INFORMATION OF PROJECT PARTICIPANTS

Organization name	Enn Enn Corp. Limited
Registration number with relevant authority	NA
Street/P.O. Box	Kadampali Society, Opp Jeevan Bharti School, Nanpura
Building	Abhishek House
City	Surat
State/Region	Gujarat
Postcode	395001
Country	India
Telephone	+91 261 2460444
E-mail	info@ennenncorp.com
Website	www.ennenngroup.com
Contact person	Abhsihek N Shah
Title	Director
Salutation	Mr.
Last name	Shah
Middle name	N.
First name	Abhishek
Department	Management
Mobile	+91-9925599900
Direct tel.	N.A.
Personal e-mail	abhishek@ennenngroup.com

Organization name	EKI Energy Services Limited
Registration number with relevant authority	NA
Street/P.O. Box	Office No. 201, Plot 48, Scheme 78 Part 2
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City	Indore
State/Region	Madhya Pradesh
Postcode	452010
Country	India
Telephone	+91 731 4289086
E-mail	supratik@enkingint.org
Website	www.enkingint.org
Contact person	Supratik Datta
Title	DGM (Operation - Climate Change)
Salutation	Mr.
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Middle name	
First name	Supratik
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Mobile	+91-7489924009
Direct tel.	-
Personal e-mail	supratik@enkingint.org

APPENDIX 3- LUF ADDITIONAL INFORMATION

(Not Applicable)

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-SUMMARY OF APPROVED DESIGN CHANGES

Please refer to Design Change Requirements for more information on procedures governing Design Changes

(Not Applicable)

Revision History

Version	Date	Remarks
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