



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

0 – Description of project

0 - Application of approved Gold Standard Methodology (ies) and/or demonstration of SDG Contributions

0 – Duration and crediting period

0 – Summary of Safeguarding Principles and Gender Sensitive Assessment

0 – Outcome of Stakeholder Consultations

Appendix 1 – Safeguarding Principles Assessment (mandatory)

0 - Contact information of Project participants (mandatory)

0 - LUF Additional Information (project specific)

0 - Summary of Approved Design Changes (project specific)

KEY PROJECT INFORMATION

GS ID of Project	GS 6004
Title of Project	Wind Power Project in Tinwari, Rajasthan
Time of First Submission Date	28/07/2022
Date of Design Certification	19/03/2018 (GS Registration Date)
Version number of the PDD	1.0
Completion date of version	28/07/2022
Project Developer	Wind World (India) Limited
Project Representative	Wind World (India) Limited
Project Participants and any communities involved	Wind World (India) Limited First Climate Markets A.G ACT Financial Solutions B.V.
Host Country (ies)	India
Activity Requirements applied	<input type="checkbox"/> Community Services Activities <input checked="" type="checkbox"/> Renewable Energy Activities <input type="checkbox"/> Land Use and Forestry Activities/Risks & Capacities <input type="checkbox"/> N/A
Scale of the project activity	<input type="checkbox"/> Micro scale <input type="checkbox"/> Small Scale <input checked="" type="checkbox"/> Large Scale
Other Requirements applied	
Methodology (ies) applied and version number	ACM0002 (Version 12.2.0, EB 58) "Grid-Connected electricity generation from renewable Sources"
Product Requirements applied	<input type="checkbox"/> GHG Emissions Reduction & Sequestration <input checked="" type="checkbox"/> Renewable Energy Label <input type="checkbox"/> N/A
Project Cycle:	<input type="checkbox"/> Regular <input checked="" type="checkbox"/> Retroactive

Land-use & Forest Key Project Information¹

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)	32,415	32,415	tCO _{2e} /y
3 Good health and well-being	Atleast 1 initiative on health & hygiene	Atleast 1 initiative on health & hygiene	Number
8 Decent Work and Economic Growth	Minimum 1 training	Minimum 1 training	Number
7 Affordable and Clean Energy	34,163.85	34,163.85	MWh/y

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

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Wind World (India) Limited (hereafter referred as “WWIL”) is developing 20.0 MW wind farm in the state of Rajasthan in India. The project consists of 25WECs (Wind Energy Convertor) of Enercon make E-53 type WECs of 800KW capacity each. Annually, the project is expected to generate and supply 34,163.85 MWh of electricity to Rajasthan regional electricity grid which is part of the NEWNE (Northern, Eastern, Western and North-Eastern) grid in India. The clean and green electricity supplied by the project will aide in sustainable growth in the region. WWIL is the project owner and project participant for the project activity.

The Monitoring period under GS is listed below:

¹ Please refer to 0 for detailed information on LUF projects

Monitoring period	CERs
19-03-2016 to 31-12-2018	71,746 tCO _{2e}

The project has applied for transition from GSCERs to GSVERs for the given monitoring period.

A.1.1. Eligibility of the project under Gold Standard

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The project is registered under GS with project ID 6004. However, PD shall confirm that if any such risk of double counting exists, PD commits to retiring eligible units equal to the quantity of GS VERs. Hence there is no possibility to trade emissions that include scope of the proposed project¹.

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

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Not applicable.

A.2 Location of project

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Host Party(ies) : India

Region/State/ Province, etc. : Rajasthan State

City/ Town/Community, etc. : The Project is spread across Salodi, Chensingh Nagar, Bari, Malunga, Bada Kotacha, Digadi Dhani, Balrva & Beru villages of Jodhpur district in the Rajasthan state of India.

The Project is located in Jodhpur district in the Indian State of Rajasthan. The nearest railway station from the project site is Jodhpur, approximately at a distance of 50 Kms. The nearest airport is Jodhpur from site. The wind turbines extend between Latitude N 26.42481 to Latitude N 26.51170 and Longitude E 72.77188 to Longitude E 72.87424.

The latitude and longitude of each WECs is provided below:

Sr No.	WEG Loc No	Village	Latitude (N)	Longitude (E)
1	9	SALODI	26.42828	72.80512
2	48	Chain singh Nagar/Balrva	26.45382	72.8722
3	49	Chain singh Nagar/Balrva	26.45383	72.8699
4	50	Chain singh Nagar/Balrva	26.45661	72.8706
5	51	Chain singh Nagar/Balrva	26.4558	72.86707
6	53	Chain singh Nagar/Balrva	26.45745	72.86628

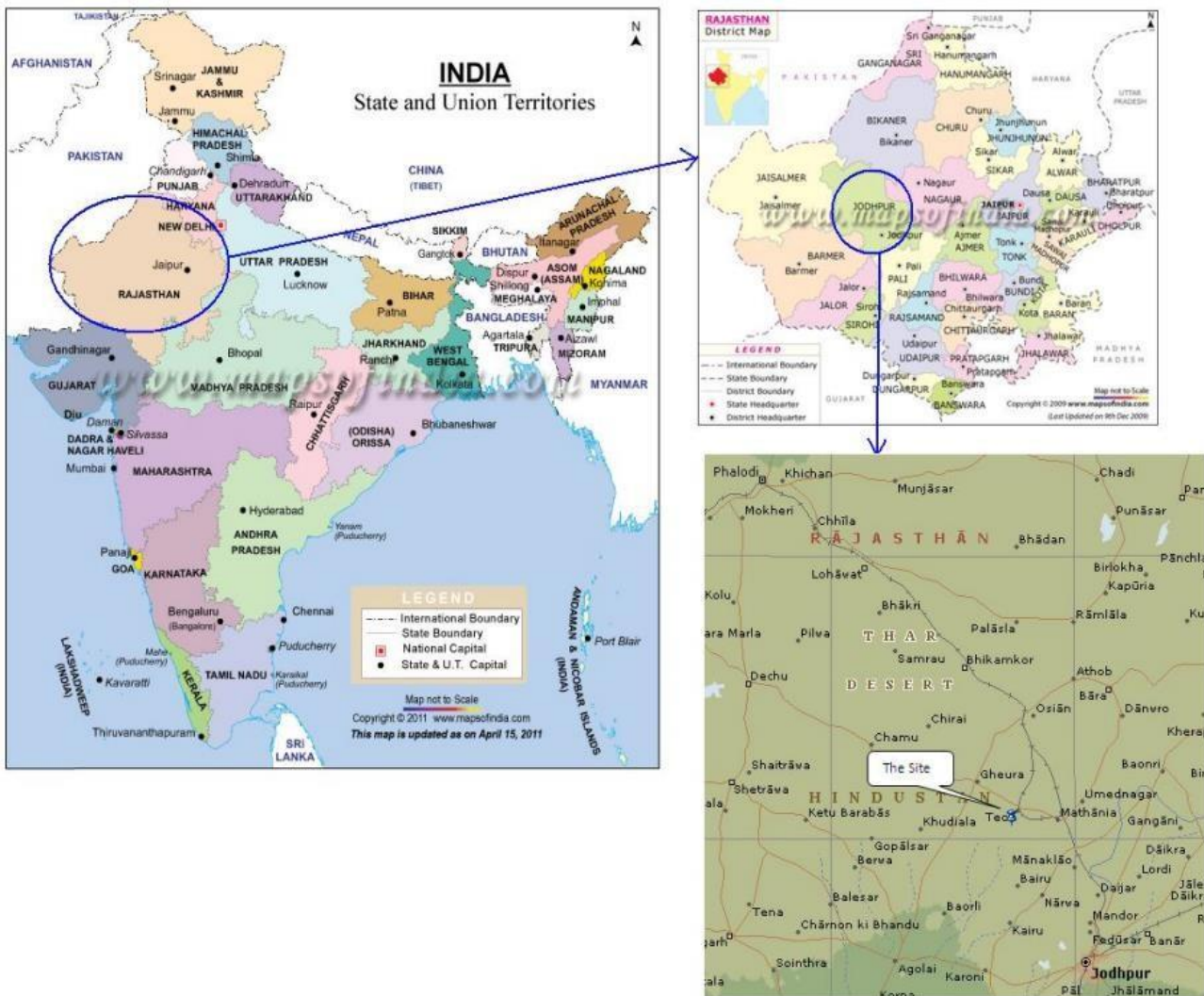
¹ The PD also confirms that no emission reduction cap has been enforced. As of now there is no requirement, standard, guideline, or provision regarding the trade of emissions by the host country.

TEMPLATE- T-PreReview_V1.2-Project-Design-Document

7	82	Bari	26.47798	72.83214
8	83	Bari	26.47596	72.82855
9	112	Malunga	26.45374	72.77689
10	113	Malunga	26.45609	72.77677
11	114	Malunga	26.45756	72.77531
12	115	Malunga	26.46012	72.77523

13	116	Malunga	26.45891	72.77188
14	129	Digadi Dhani (Malunga)	26.49696	72.79726
15	130	Bada Kotacha	26.50309	72.8007
16	131	Bada Kotacha	26.50395	72.79868
17	133	Bada Kotacha	26.50955	72.79788
18	134	Bada Kotacha	26.5117	72.79732
19	136	Digadi Dhani (Malunga)	26.50604	72.79201
20	137	Digadi Dhani (Malunga)	26.50539	72.79512
21	501	Chain singh Nagar/Balrva	26.45836	72.86488
22	504	Beru	26.42481	72.87424
23	515	Digadi Dhani (Malunga)	26.50039	72.79619
24	516	Digadi Dhani (Malunga)	26.50245	72.79325
25	517	Digadi Dhani (Malunga)	26.50828	72.79092

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



A.3 Technologies and/or measures

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Brief description of the installed technology and equipment:

The Wind Technology is supplied by Wind World (India) Ltd. who promoted WW-53 technology (previously known as Enercon) with rated capacity 800 KW for each WEC. The electricity supplied to the grid is metered from main and check meters at 33kV that are connected to the 25 turbines of the project activity.

A.4 Scale of the project

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Large scale

A.5 Funding sources of project

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Not Applicable

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

B.1. Reference of approved methodology (ies)

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Title: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"

Reference: Approved consolidated baseline methodology ACM0002 (Version 12.2.0, EB 58)

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

Tool to calculate the emission factor for an electricity system – Version 02.2.1

Tool for the demonstration and assessment of Additionality – version 05.2

Further information with regards to the methodology/tools can be obtained at

<https://cdm.unfccc.int/methodologies/DB/VJI9AX539D9MLOPXN2AY9UR1N4IYGD>

B.2. Applicability of methodology (ies)

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Not Applicable

B.3. Project boundary

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Source	GHGs	Included?	Justification/Explanation	
Baseline scenario	Grid connected electricity generation	CO ₂	Yes	In the baseline scenario the electricity would have been sourced from the Southern grid which in turn would be connected to fossil fuel fired power plants which emit CO ₂ .
		CH ₄	No	No Methane generation is expected to be emitted
		N ₂ O	No	No Nitrous oxide generation is expected to be emitted
	Greenfield wind energy conversion	CO ₂	No	The project activity does not emit any emission
		CH ₄	No	No methane generation is expected to be emitted

N₂O No No Nitrous oxide is expected to be emitted

B.4. Establishment and description of baseline scenario

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Not Applicable

B.5. Demonstration of additionality

Not applicable

B.5.1 Prior Consideration

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Not applicable

B.5.2 Ongoing Financial Need

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Not applicable

B.6. Sustainable Development Goals (SDG) outcomes

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact
		Indicator (Proposed or SDG Indicator)
SDG 3: Good Health and well-being	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	Initiatives like Health Camps conducted in the state, RO installation, basic sanitation & Hygiene awareness program etc. Initiatives related to books, bags & drinking water facilities and basic infrastructure or daily usable materials etc.
SDG 7 Affordable and clean Energy	7.2: By 2030, increase substantially the share of renewable energy in the global energy mix	Electricity produced and supplied to the grid in MWh
SDG 8 Decent Work and Economic Growth	8.5 By 2025, achieve full and productive employment and	1. No. of trainings provided to the employees

	decent work for all women and men, including for young people and person with disability, and equal pay for work of equal value.	2. Employment generated due to project activity during construction as well as O&M phase.
SDG 13 Climate Action (mandatory)	13.2: By 2025, integrate climate change measures into national policies, strategies and planning	Emission reductions in tCO ₂

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

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Not applicable

B.6.2 Data and parameters fixed ex ante

SDG13

Data/parameter	EF _{OM,y}
Unit	tCO ₂ e/MWh
Description	Operating Margin Emission Factor of NEWNE Electricity Grid ² (currently the Indian Grid)
Source of data	“CO ₂ Baseline Database for Indian Power Sector”, version 6.0, published by the Central Electricity Authority, Ministry of Power, Government of India. The “CO ₂ Baseline Database for Indian Power Sector” is available at http://www.cea.nic.in/reports/planning/cdm_co2/cdm_co2.htm
Value(s) applied	0.99431

² As per CEA database version 11 (released in April 2016), in previous years the Indian electricity system was divided into two grids, the NEWNE and Southern Grid as described above. These are now integrated as a single Indian Grid covering all the states. Thus, the project activity earlier was considered under NEWNE Grid which is now referred as Indian Grid.

Choice of data or Measurement methods and procedures	Operating Margin (OM) emission factor has been calculated as per Option A, i.e. generation weighted average CO2 emissions per unit electricity generation using the most recent 3 years' (2007-08; 2008-09; 2009-10) Operating Margin (OM) emission factor values from the "CO2 Baseline Database for Indian Power Sector", Version 6.0, 1st March, 2011 published by the Central Electricity Authority (CEA), Government of India. The database is the publicly available official database on emission factors for all regional grids in India.
Purpose of data	The data is used to calculate baseline emission reduction
Additional comment	This value is calculated on ex-ante basis and will remain fixed for the entire crediting period.

Data/parameter	$EF_{BM,y}$
Unit	tCO ₂ e/MWh
Description	Build Margin Emission Factor of NEWNE Electricity Grid
Source of data	"CO2 Baseline Database for Indian Power Sector", version 6.0, published by the Central Electricity Authority, Ministry of Power, Government of India. The "CO2 Baseline Database for Indian Power Sector" is available at http://www.cea.nic.in/reports/planning/cdm_co2/cdm_co2.htm
Value(s) applied	0.81231
Choice of data or Measurement methods and procedures	Most recent value of Build Margin (BM) Emission Factor (for the year 2009-10) from the "CO2 Baseline Database for Indian Power Sector", Version 6.0, 1st March, 2011, Central Electricity Authority, Government of India, has been used. This database is the publicly available official database on emission factors for all regional grids in India.
Purpose of data	The data is used to calculate baseline emission reduction
Additional comment	This value is calculated on ex-ante basis and will remain fixed for the entire crediting period.

Data/parameter	$EF_{CM,y}$
Unit	tCO ₂ e/MWh
Description	Combined Margin Emission Factor of NEWNE Electricity Grid
Source of data	<p>"CO₂ Baseline Database for Indian Power Sector", version 6.0, published by the Central Electricity Authority, Ministry of Power, Government of India.</p> <p>The "CO₂ Baseline Database for Indian Power Sector" is available at http://www.cea.nic.in/reports/planning/cdm_co2/cdm_co2.htm</p>
Value(s) applied	0.94881
Choice of data or Measurement methods and procedures	<p>The Combined Margin (CM) Emission Factor has been calculated (for the year 2009-10) as a weighted sum of Operating Margin emission factor and Build Margin emission factor taking the weight age value as 0.75 and 0.25 respectively as per the "Tool to calculate the emission factor for an electricity system" and on the basis of the data available at the time of PDD submission from the publicly available official database on emission factors for all regional grids in India. The detailed calculation and value of CM have been explained in the section B.6.1 and Annex 3 of the PDD respectively.</p>
Purpose of data	The data is used to calculate baseline emission reduction
Additional comment	This value is calculated on ex-ante basis and will remain fixed for the entire crediting period.

Climate Security and Sustainable Development

SDG 7

Data/parameter	$EG_{\text{facility},y}$
Unit	MWh (Mega-watt hour)/ Year
Description	Net electricity generation supplied to the grid by the project activity
Source of data	Generation break-up sheets prepared by the developer (WWIL), which is based on monthly JMR reading recorded at main meter installed at DISCOM sub-station and the LCS controller meter (panel meter) reading.
Value(s) applied	34,163.85
Choice of data or Measurement methods and procedures	<ul style="list-style-type: none"> - There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa. - There is also a backup metering (one main & one check meter) located at 132kV Wind World’s Sub-Station at Salodi. - All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station. - Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative (WWIL). - Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated. - Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, Enercon prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the - Individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors. - Based on this breakup sheet the PP raises an invoice and submits to the Discom. - The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice

	<p>raised by individual investors. The audits are conducted by senior official based at the circle office of individual</p> <ul style="list-style-type: none"> - Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor. - Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity <p>Measurement & Recording of electricity:</p> <ul style="list-style-type: none"> -Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis. -Panel meter (LCS controller) measures the net electricity generation (Gross Export - Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.
<p>Purpose of data</p>	<p>The data is used to calculate emission reduction</p>
<p>Additional comment</p>	<p>The data will be archived both in electronic and hard paper format for crediting period + 2 years.</p>

Data/parameter	EG _{Import,y}
Unit	MWh (Mega-watt hour)
Description	Electricity Import from grid by the Project Activity
Source of data	Generation break up sheets prepared by the developer (WWIL), which is based on monthly joint meter reading recorded at main meter installed at DISCOM sub-station and the LCS controller meter (panel meter) reading.
Source of data	Generation break up sheets prepared by the developer
Value(s) applied	-
Choice of data or Measurement methods and procedures	<p>recorded at main meter installed at DISCOM sub-station</p> <ul style="list-style-type: none"> - There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa. - There is also a back up metering (one main & one check meter) located at 132kV WWIL sub-station at Salodi. - All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station. - Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative. - Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated. - Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, PP prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors. - Based on this breakup sheet the PP raises an invoice and submits to the Discom. - The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice raised by individual investors. The audits are conducted by senior official based at the circle office of individual Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor. - Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity.

	<p>Measurement & Recording of electricity:</p> <ul style="list-style-type: none"> - Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis. - Panel meter (LCS controller) measures the net electricity generation (Gross Export – Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	EG _{JMR,Import}
Unit	MWh (Mega-watt hour)
Description	Electricity import by project activity & non-project activity recorded by main meter installed at DISCOM sub-station.
Source of data	Monthly JMR sheets recorded by representative of both DISCOM & WWIL.
Value(s) applied	-
Choice of data or Measurement methods and procedures	<ul style="list-style-type: none"> - There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa. - There is also a backup metering (one main & one check meter) located at 132kV WWIL sub-station at Salodi. - All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station. - Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative. - Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated. - Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, PP

	<p>prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors.</p> <ul style="list-style-type: none"> - Based on this breakup sheet the PP raises an invoice and submits to the Discom. - The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice raised by individual investors. The audits are conducted by senior official based at the circle office of individual Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor. - Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity. <p>Measurement & Recording of electricity:</p> <ul style="list-style-type: none"> - Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis. - Panel meter (LCS controller) measures the net electricity generation (Gross Export – Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	$EG_{JMR, Export}$
Unit	MWh (Mega-watt hour)
Description	Electricity export by project activity & non-project activity recorded by main meter installed at DISCOM sub-station.
Source of data	Monthly JMR sheets recorded by representative of both DISCOM & WWIL.
Value(s) applied	-

Choice of data or Measurement methods and procedures

- There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa.
- There is also a back up metering (one main & one check meter) located at 132kV WWIL sub-station at Salodi.
- All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station.
- Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative.
- Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated.
- Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, PP prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors.
- Based on this breakup sheet the PP raises an invoice and submits to the Discom.
- The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice raised by individual investors. The audits are conducted by senior official based at the circle office of individual Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor.
- Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity.

Measurement & Recording of electricity:

- Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis.
- Panel meter (LCS controller) measures the net electricity generation (Gross Export – Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.

Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	$EG_{\text{controller}}$
Unit	MWh (Mega-watt hour)
Description	<p>Net electricity generation (Gross Export – Gross Import) by a WEC of project activity or non-project activity, as measured at the controller (LCS meter) at project site. Each WEC has exclusive LCS meter that records net electricity generation (Gross Export – Gross Import) from the WEC (project or non-project).</p> <p>Where,</p> <p>i is any WEC between 1 to $j+k$.</p> <p>j is number of WEC of project activity connected to main meter at DISCOM substation and backup meter at WWIL substation.</p> <p>k is number of WEC of non-project activity connected to main meter at DISCOM substation and backup meter at WWIL substation.</p>
Source of data	Monthly controller generation report (LCS) sourced from SCADA system installed at project site.
Value(s) applied	
Choice of data or Measurement methods and procedures	LCS meter measures the net electricity generation (Gross Export – Gross Import) by WEG and doesn't provide individual reading of Export & Import. The value is monitored continuously and recorded daily by the online monitoring station at the site. In addition to the daily generation report and monthly generation report are also available at monitoring station.
Purpose of data	The data is used to calculate emission reduction

Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.
Data/parameter	$\Sigma EG_{\text{controller},i}$
Unit	MWh (Mega-watt hour)
Description	<p>Summation of net electricity generation (Gross Export – Gross Import) by all the WEGs (j number of WEGs) of project activity, as measured at the controller (LCS meter) at project site. Each WEC has exclusive LCS meter that records net electricity generation (Gross Export – Gross Import) from the WEG (project or non-project).</p> <p>Where, i is any WEG between 1 to j+ k, j is number of WEG of project activity connected to main meter at DISCOM substation and backup meter at WWIL substation. k is number of WEG of non-project activity connected to main meter at DISCOM substation and backup meter at WWIL substation</p>
Source of data	Monthly controller generation report (LCS) sourced from SCADA system installed at project site.
Value(s) applied	-
Choice of data or Measurement methods and procedures	The value is monitored continuously and recorded daily by the online monitoring station at the site. In addition to the daily generation report and monthly generation report are also available at monitoring station.
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	$\Sigma EG_{\text{controller},j}$
Unit	MWh (Mega-watt hour)
Description	<p>Summation of net electricity generation (Gross Export – Gross Import) by all the WEGs (j number of WEGs) of project activity, as measured at the controller (LCS meter) at project site. Each WEC has exclusive LCS meter that records net electricity generation (Gross Export – Gross Import) from the WEG (project or non-project).</p> <p>j is number of WEG of project activity connected to main meter at DISCOM substation and backup meter at WWIL substation</p>
Source of data	Monthly controller generation report (LCS) sourced from SCADA system installed at project site.
Value(s) applied	-
Choice of data or Measurement methods and procedures	The value is monitored continuously and recorded daily by the online monitoring station at the site. In addition to the daily generation report and monthly generation report are also available at monitoring station.
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

SDG 8

Data/parameter	Quality of Employment (Unemployment rate, by sex, age and persons with disabilities)
Unit	Number of Training Programs/Workshops/ Awareness Programs
Description	Training provided to employees and O&M staff regarding occupational health management, safeguards put in place
Source of data	Documentation pertaining to training programmes, awareness generation activities, photographs, interviews etc.
Value(s) applied	Once annually
Choice of data or Measurement methods and procedures	List of training programmes conducted by project developer
Purpose of data	To monitor the contribution to SDG 8
Additional comment	-

Data/parameter	Quantitative employment and income generation
Unit	Number of jobs created in the operations and maintenance of the wind farm
Description	Number of employees
Source of data	Number of jobs generated during the operation of the wind farm
Value(s) applied	The project activity is located at Tinwari Site & connected to Salodi Substation. At Salodi Substation various sites are connected where local staff is employed. The number of jobs created due to the project activity is divided under following categories: <ul style="list-style-type: none"> - Service Staff - Other Staff

	<p>20 local people were employed for the project activity in the baseline scenario.</p> <p>In addition to this, because of the infrastructure development (road construction, road repairs, cleaning of substation etc.), local villagers are getting short time jobs thus leading to income generation. Since this is an indirect benefit of the project activity in terms of income generation, it is not possible to exactly quantify the same. However, it can be conservatively stated that around 50 people have got additional livelihood/income generation opportunities because of the project activity.</p>
Choice of data or Measurement methods and procedures	Additional job opportunities created for the local population. Income generation to be enhanced by creating relatively high value job opportunities through training and capacity building
Purpose of data	To monitor the contribution to SDG 8
Additional comment	-

SDG 3

Data/parameter	Human and intuitional capacity
Unit	Total number of initiatives, events and programmes, primarily Health and Education Camps
Description	Health and education related activities conducted for well-being of locals/villagers
Source of data	Records of organized events, photographs, proof of payments etc.
Value(s) applied	Since access to basic education, health, basic amenities and infrastructural facilities are basic factors to facilitate human and institutional capacity development; various initiatives have been undertaken by the project developer to contribute to these thematic areas. The contribution will be made during monitoring period
Choice of data or Measurement methods and procedures	-

Purpose of data	To monitor the contribution to SDG 3 (Ensure healthy lives and promote well-being for all at all ages)
Additional comment	-

B.6.3 Ex ante estimation of SDG Impact

>>

Sustainable Development Goals Targeted	SDG Impact Annually
13 Climate Action (Mandatory)	32,415 tCO _{2eq.} / Year
3 Health and Well-being	Atleast 1 initiative like Health Camp / year
8 Decent Work and Economic Growth	Min. 1 Training / Year
7 Affordable and Clean Energy	34,163.85 MWh/year

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

Year	Baseline estimate	Project estimate	Net benefit
Year 1 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 2 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 3 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 4 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 5			

SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 6 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 7 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 8 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 9 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Year 10 SDG 3 SDG 8 SDG 7 SDG 13	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}
Total			
Total number of crediting years			
Annual average over the crediting period	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}	1 health camp 1 training 34,163.85MWh 32,415 tCO _{2e}

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 13

Data / Parameter	EF_{OM,y}
Unit	tCO _{2e} /MWh
Description	Operating Margin Emission Factor of NEWNE Electricity Grid ³ (currently the Indian Grid)
Source of data	The "CO ₂ Baseline Database for Indian Power Sector" is available at http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver6.pdf
Value(s) applied	0.99431
Measurement methods and procedures	"CO ₂ Baseline Database for Indian Power Sector", version 5 published by the Central Electricity Authority, Ministry of Power, Government of India.
Monitoring frequency	NA
QA/QC procedures	NA
Purpose of data	The data is used to calculate baseline emission reductions
Additional comment	The value is calculated on ex-ante basis and it will remain same throughout the crediting period.

Data / Parameter	EF_{BM,y}
Unit	tCO _{2e} /MWh
Description	Build Margin Emission Factor of NEWNE Electricity Grid (currently the Indian Grid)
Source of data	The "CO ₂ Baseline Database for Indian Power Sector" is available at http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver6.pdf
Value(s) applied	0.81231

³ As per CEA database version 11 (released in April 2016), in previous years the Indian electricity system was divided into two grids, the NEWNE and Southern Grid as described above. These are now integrated as a single Indian Grid covering all the states. Thus, the project activity earlier was considered under NEWNE Grid which is now referred as Indian Grid.

Measurement methods and procedures	"CO ₂ Baseline Database for Indian Power Sector", version 5 published by the Central Electricity Authority, Ministry of Power, Government of India.
Monitoring frequency	NA
QA/QC procedures	NA
Purpose of data	The data is used to calculate baseline emission reductions
Additional comment	The value is calculated on ex-ante basis and it will remain same throughout the crediting period.

Data / Parameter	EF_{CM,y}
Unit	tCO _{2e} /MWh
Description	Combined Margin Emission Factor of NEWNE Electricity Grid (currently the Indian Grid)
Source of data	The "CO ₂ Baseline Database for Indian Power Sector" is available at http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver6.pdf
Value(s) applied	0.94881
Measurement methods and procedures	"CO ₂ Baseline Database for Indian Power Sector", version 5 published by the Central Electricity Authority, Ministry of Power, Government of India.
Monitoring frequency	NA
QA/QC procedures	NA
Purpose of data	The data is used to calculate baseline emission reductions
Additional comment	The value is calculated on ex-ante basis and it will remain same throughout the crediting period.

SDG 7

Data/parameter	EG _{facility,y}
Unit	MWh (Mega-watt hour)/ Year
Description	Net electricity generation supplied to the grid by the project activity
Source of data	Generation break-up sheets prepared by the developer (WWIL), which is based on monthly JMR reading recorded at main meter installed at DISCOM sub-station and the LCS controller meter (panel meter) reading.

Value(s) applied	34,163.85
Choice of data or Measurement methods and procedures	<ul style="list-style-type: none"> - There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa. - There is also a backup metering (one main & one check meter) located at 132kV Wind World’s Sub-Station at Salodi. - All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station. - Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative (WWIL). - Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated. - Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, Enercon prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the - Individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors. - Based on this breakup sheet the PP raises an invoice and submits to the Discom. - The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice raised by individual investors. The audits are conducted by senior official based at the circle office of individual - Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor. - Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity <p>Measurement & Recording of electricity:</p>

	<p>-Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis.</p> <p>-Panel meter (LCS controller) measures the net electricity generation (Gross Export - Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.</p>
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	EG _{Import,y}
Unit	MWh (Mega-watt hour)
Description	Electricity Import from grid by the Project Activity
Source of data	Generation break up sheets prepared by the developer (WWIL), which is based on monthly joint meter reading recorded at main meter installed at DISCOM sub-station and the LCS controller meter (panel meter) reading.
Source of data	Generation break up sheets prepared by the developer
Value(s) applied	-
Choice of data or Measurement methods and procedures	<p>recorded at main meter installed at DISCOM sub-station</p> <ul style="list-style-type: none"> - There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa. - There is also a back up metering (one main & one check meter) located at 132kV WWIL sub-station at Salodi. - All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station. - Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative. - Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated. - Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, PP prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors. - Based on this breakup sheet the PP raises an invoice and submits to the Discom. - The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice raised by individual investors. The audits are conducted by senior official based at the circle office of individual Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor. - Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity.

	<p>Measurement & Recording of electricity:</p> <ul style="list-style-type: none"> - Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis. - Panel meter (LCS controller) measures the net electricity generation (Gross Export – Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	EG _{JMR,Import}
Unit	MWh (Mega-watt hour)
Description	Electricity import by project activity & non-project activity recorded by main meter installed at DISCOM sub-station.
Source of data	Monthly JMR sheets recorded by representative of both DISCOM & WWIL.
Value(s) applied	-
Choice of data or Measurement methods and procedures	<ul style="list-style-type: none"> - There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa. - There is also a backup metering (one main & one check meter) located at 132kV WWIL sub-station at Salodi. - All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station. - Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative. - Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated. - Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, PP

	<p>prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors.</p> <ul style="list-style-type: none"> - Based on this breakup sheet the PP raises an invoice and submits to the Discom. - The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice raised by individual investors. The audits are conducted by senior official based at the circle office of individual Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor. - Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity. <p>Measurement & Recording of electricity:</p> <ul style="list-style-type: none"> - Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis. - Panel meter (LCS controller) measures the net electricity generation (Gross Export – Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	$EG_{JMR, Export}$
Unit	MWh (Mega-watt hour)
Description	Electricity export by project activity & non-project activity recorded by main meter installed at DISCOM sub-station.
Source of data	Monthly JMR sheets recorded by representative of both DISCOM & WWIL.
Value(s) applied	-

Choice of data or Measurement methods and procedures

- There is a billing metering point (one main & one check meters) located at 132kV Discom’s sub-station at PS-8 Narwa.
- There is also a back up metering (one main & one check meter) located at 132kV WWIL sub-station at Salodi.
- All the above meters are 0.2% accuracy class. There are other WEGs apart from the project activity WEGs, that are connected to these meters at respective sub-station.
- Monthly Joint Meter Recording recorded is done at billing metering point at PS-8 Narwa sub-station by Discom utility in the presence of PP’s representative.
- Joint meter reading records the values of export, import based on which the net export by all the WEGs (Project as well as non-project) connected to billing metering point at the DISCOM sub-station (PS-8 Narwa) is calculated.
- Based on the monthly JMR reading and the LCS controller reading of Project as well as non-project WEGs, PP prepares the breakup sheet which indicates the energy Exported, Imported & net electricity supplied by the individual WEGs. This breakup sheet is then submitted to Discom authority as well as the individual investors.
- Based on this breakup sheet the PP raises an invoice and submits to the Discom.
- The Discom authority conducts a thorough review based on the JMR readings, breakup sheets and the invoice raised by individual investors. The audits are conducted by senior official based at the circle office of individual Discom and only after the authorisation of submitted documents/ records by the superintending engineer of the respective Discom, are the payments released to the individual investor.
- Net electricity supplied to the grid is a calculated value and is used in calculation of emission reduction of the project activity.

Measurement & Recording of electricity:

- Main and Back up meters measures the electricity (export & Import) on continuous basis and recorded by state utility on monthly basis.
- Panel meter (LCS controller) measures the net electricity generation (Gross Export – Gross Import) on continuous basis and daily/monthly data can be sourced/recorded from online SCADA system.

Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

Data/parameter	$EG_{\text{controller}}$
Unit	MWh (Mega-watt hour)
Description	<p>Net electricity generation (Gross Export – Gross Import) by a WEC of project activity or non-project activity, as measured at the controller (LCS meter) at project site. Each WEC has exclusive LCS meter that records net electricity generation (Gross Export – Gross Import) from the WEC (project or non-project).</p> <p>Where,</p> <p>i is any WEC between 1 to $j+k$.</p> <p>j is number of WEC of project activity connected to main meter at DISCOM substation and backup meter at WWIL substation.</p> <p>k is number of WEC of non-project activity connected to main meter at DISCOM substation and backup meter at WWIL substation.</p>
Source of data	Monthly controller generation report (LCS) sourced from SCADA system installed at project site.
Value(s) applied	
Choice of data or Measurement methods and procedures	LCS meter measures the net electricity generation (Gross Export – Gross Import) by WEG and doesn't provide individual reading of Export & Import. The value is monitored continuously and recorded daily by the online monitoring station at the site. In addition to the daily generation report and monthly generation report are also available at monitoring station.
Purpose of data	The data is used to calculate emission reduction

Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.
<p>Data/parameter</p> <p>Unit</p> <p>Description</p> <p>Source of data</p> <p>Value(s) applied</p> <p>Choice of data or Measurement methods and procedures</p> <p>Purpose of data</p> <p>Additional comment</p>	<p>$\Sigma EG_{\text{controller},i}$</p> <p>MWh (Mega-watt hour)</p> <p>Summation of net electricity generation (Gross Export – Gross Import) by all the WEGs (j number of WEGs) of project activity, as measured at the controller (LCS meter) at project site. Each WEC has exclusive LCS meter that records net electricity generation (Gross Export – Gross Import) from the WEG (project or non-project).</p> <p>Where, i is any WEG between 1 to j+ k, j is number of WEG of project activity connected to main meter at DISCOM substation and backup meter at WWIL substation. k is number of WEG of non-project activity connected to main meter at DISCOM substation and backup meter at WWIL substation</p> <p>Monthly controller generation report (LCS) sourced from SCADA system installed at project site.</p> <p>-</p> <p>The value is monitored continuously and recorded daily by the online monitoring station at the site. In addition to the daily generation report and monthly generation report are also available at monitoring station.</p> <p>The data is used to calculate emission reduction</p> <p>The data will be archived both in electronic and hard paper format for crediting period + 2 years.</p>

Data/parameter	$\Sigma EG_{\text{controller},j}$
Unit	MWh (Mega-watt hour)
Description	<p>Summation of net electricity generation (Gross Export – Gross Import) by all the WEGs (j number of WEGs) of project activity, as measured at the controller (LCS meter) at project site. Each WEC has exclusive LCS meter that records net electricity generation (Gross Export – Gross Import) from the WEG (project or non-project).</p> <p>j is number of WEG of project activity connected to main meter at DISCOM substation and backup meter at WWIL substation</p>
Source of data	Monthly controller generation report (LCS) sourced from SCADA system installed at project site.
Value(s) applied	-
Choice of data or Measurement methods and procedures	The value is monitored continuously and recorded daily by the online monitoring station at the site. In addition to the daily generation report and monthly generation report are also available at monitoring station.
Purpose of data	The data is used to calculate emission reduction
Additional comment	The data will be archived both in electronic and hard paper format for crediting period + 2 years.

SDG 8

Data/parameter	Quality of Employment (Unemployment rate, by sex, age and persons with disabilities)
Unit	Number of Training Programs/Workshops/ Awareness Programs
Description	Training provided to employees and O&M staff regarding occupational health management, safeguards put in place
Source of data	Documentation pertaining to training programmes, awareness generation activities, photographs, interviews etc.
Value(s) applied	Once annually
Choice of data or Measurement methods and procedures	List of training programmes conducted by project developer
Purpose of data	To monitor the contribution to SDG 8
Additional comment	-

Data/parameter	Quantitative employment and income generation
Unit	Number of jobs created in the operations and maintenance of the wind farm
Description	Number of employees
Source of data	Number of jobs generated during the operation of the wind farm
Value(s) applied	<p>The project activity is located at Tinwari Site & connected to Salodi Substation. At Salodi Substation various sites are connected where local staff is employed.</p> <p>The number of jobs created due to the project activity is divided under following categories:</p> <ul style="list-style-type: none"> - Service Staff - Other Staff <p>20 local people were employed for the project activity in the baseline scenario.</p>

<p>Choice of data or Measurement methods and procedures</p>	<p>In addition to this, because of the infrastructure development (road construction, road repairs, cleaning of substation etc.), local villagers are getting short time jobs thus leading to income generation. Since this is an indirect benefit of the project activity in terms of income generation, it is not possible to exactly quantify the same. However, it can be conservatively stated that around 50 people have got additional livelihood/income generation opportunities because of the project activity.</p> <p>Additional job opportunities created for the local population. Income generation to be enhanced by creating relatively high value job opportunities through training and capacity building</p>
<p>Purpose of data</p>	<p>To monitor the contribution to SDG 8</p>
<p>Additional comment</p>	<p>-</p>

SDG 3

Data/parameter	Human and intuitional capacity
Unit	Total number of initiatives, events and programmes, primarily Health and Education Camps
Description	Health and education related activities conducted for well-being of locals/villagers
Source of data	Records of organized events, photographs, proof of payments etc.
Value(s) applied	Since access to basic education, health, basic amenities and infrastructural facilities are basic factors to facilitate human and institutional capacity development; various initiatives have been undertaken by the project developer to contribute to these thematic areas. The contribution will be made during monitoring period
Choice of data or Measurement methods and procedures	-
Purpose of data	To monitor the contribution to SDG 3 (Ensure healthy lives and promote well-being for all at all ages
Additional comment	-

B.7.2 Sampling plan

>>

No sampling process is involved, hence not applicable.

B.7.3 Other elements of monitoring plan

>>

Not applicable

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

>>

Date of issuance of official circular i.e. 07/05/2011 has been considered as the project start date

C.1.2 Expected operational lifetime of project

>>

20 years

C.2. Crediting period of project

C.2.1 Start date of crediting period

>>

19/03/2016

C.2.2 Total length of crediting period

>>

6 years and 3.5months

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

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

Principles	Mitigation Measures added to the Monitoring Plan
3.1 Human Rights	Not Required
3.2 Gender Equality and Women’s Rights	Not Required
3.3 Community Health, safety and Working Conditions	Not Required
3.4.1 Sites of Cultural and Historical Heritage	Not Required
3.4.2 Forced Eviction and Displacement	Not Required
3.4.3 Land Tenure and Other Rights	Not required
3.4.4 Indigenous Peoples	Not required
3.5 Corruption	Not required
3.6.1 Labour Rights	Not required
3.6.2 Negative Economic Consequences	Not required
4.1.1 Emissions	Not required
4.1.2 Energy Supply	Not required
4.2.1 Impact on natural water patterns and flow	Not required
4.2.2 Erosion and/or water body stability	Not required
4.3.1 Landscape Modification and Soil	Not required
4.3.2 Vulnerability to Natural Disaster	Not required
4.3.3 Genetic Resources	Not required
4.3.4 Release of pollutant	Not required
4.3.5 Hazardous and Non-hazardous waste	Not required
4.3.6 Pesticides and fertilizers	Not required
4.3.7 Harvesting of forest	Not required
4.3.8 Food	Not required
4.3.9 Animal Husbandry	Not required

4.3.10 High Conservation Value Area and Critical Habitats Not required

4.3.11 Endangered Species Not required

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

<p>Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?</p>	<p>As per Gold Standard Gender Policy, para 13(i) “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.” This project is gender-sensitive in design. All stakeholders, irrespective of the gender, were invited and given a chance to give their feedback during the stakeholder feedback round. All the sustainable development activities that are planned and implemented by the project developer takes into account the need of the local people, irrespective of their gender.</p>
<p>Question 2 - Explain how the project aligns with existing country policies, strategies and best practices</p>	<p>A signatory to the Convention for the Elimination of Discrimination against Women⁴ and the UN Convention on the Rights of the Child⁵, India has a number of progressive laws that support gender equality and ending discrimination and violence against women. The Government of India was represented at</p>

⁴ https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-8&chapter=4&lang=en

⁵ https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-11&chapter=4&clang=en

the 2013 session of the Commission on the Status of Women⁶, where Member States committed to ending all forms of violence against women. They recognized that there is a need to address the economic and political underpinnings of violence; ensure access to justice; strengthen multi-sectoral approaches; and end harmful traditional practices that negatively impact women. Under the Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act 2013, the Government of India has pledged to establish 100 One Stop Crisis Centres and the creation of a INR 1000 Crore Nirbhaya Fund to respond to Violence against Women and Girls. More recently, the Criminal Law (Amendment) Act of 2013 expands the scope of sexual and gender based crimes against women.

The Project aligns with the national policies and thus the Project Developer has a in place to ensure that every employee is treated with dignity and respect and afforded equitable treatment. The project developer also takes into account participation by both men and women. Further, the sustainable development activities designed are implemented for equal participation of both men and women.

<p>Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?</p>	<p>Please refer to the responses provided under "Safeguarding Principle 3.2 - Gender Equality and Women's Rights" under section B.1 - Analysis of social, economic and environmental impacts.</p>
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⁶ <http://www.un.org/womenwatch/daw/csw/57sess.htm>

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

Yes, the project applies the stakeholder-related procedures. From the GS Stakeholder guidelines, section 1.4 "In developing a Project, taking gender issues into account would require that local stakeholder consultation processes reach a wide range of community representatives in ways that ensure equal and effective participation of women and men in consultation, and that gender issues are fully factored into comprehensive social and environmental impact assessments." The Local Stakeholder Consultation Meeting had an overall aim for active participation from men and women equally in the meeting. All the villagers were invited for the consultation through News Paper Advertisement & invitation pasted in Gram Panchayat (local administration) Office. The meeting was conducted in local language.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

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

E.1 Summary of stakeholder mitigation measures

>>

Not Applicable

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)	There is a register in place to record all the grievances raised by the employees and other stakeholders
GS Contact (mandatory)	help@goldstandard.org

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			
<ol style="list-style-type: none"> 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 The Project shall not discriminate with regards to participation and inclusion 	No	<ol style="list-style-type: none"> During construction and operation of the project the project proponent respected all the human rights. The project is not in any kind of conflict with the livelihood of local people. Project proponent had conducted stakeholder’s consultation and sought their opinion. The project will not employ any personnel based on gender, race, religion, sexual orientation or any other basis. As the Constitution of the host country prohibits discrimination on the basis of a person's race, sex, religion, place of birth, or social status. The host country has 	Not Required

		signed the Convention 100 (equal remuneration) and convention 111 (discrimination in employment /occupation) under the ILO Declaration on Fundamental Principles and rights ⁷ .	
Principle 2. Gender Equality			
<ol style="list-style-type: none"> 1. The Project shall not directly or indirectly 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 	No	<ol style="list-style-type: none"> 1. No, there is no possibility of adverse effect. 2. The project does not discriminate on basis of gender, caste or religion. 3. The project is aligned to India’s strategy for elimination of all discrimination. India ratified the International Convention on the Elimination of All Forms of Racial Discrimination on 03/12/1968 with certain reservation⁸. 	Not Required

⁷ <http://www.mfcindia.org/main/bgpapers/bgpapers2013/am/bgpap2013c.pdf>

⁸ http://nhrc.nic.in/documents/india_ratification_status.pdf

<p>equivalent national commitment to aid in assessing gender risks 4. (where required) Summary of opinions and recommendations of an Expert Stakeholder(s)</p>			
<p>Principle 3. Community Health, Safety and Working Conditions</p>			
<p>1. The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community</p>	<p>No</p>	<p>The project is in compliance with all relevant local and national laws. The Project does not threaten human health or environment and does not adversely affect the health of the workers and the community.</p>	<p>Not Required</p>
<p>Principle 4.1 Sites of Cultural and Historical Heritage</p>			
<p>Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?</p>	<p>No</p>	<p>The project does not alter, damage or remove any cultural heritage. As per the list of cultural heritage sites in</p>	<p>Not required</p>
<p>>></p>			

		India by UNESCO ⁹ , it is clear that the project site is not a cultural heritage site.	
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 does not involve and is not complicit in involuntary resettlement of peoples in any way. The Project Developer has also Obtained all necessary clearances from nodal agencies and NOCs from all the Gram Panchayats for establishing the project.	Not Required
>>			
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	No	A. The project has all the legal, customary rights on the land and does not require any change to land tenure arrangements. The proponent has also obtained necessary clearances from nodal agencies and NOCs from	Not required

⁹ <http://whc.unesco.org/en/statesparties/in>

uncertainties with regards to land tenure, access rights, usage rights or land ownership?		all the Gram Panchayats for establishing the plant. B. This is not applicable as the project does not require any change to land tenure arrangements.	
>>			
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 a wind power project and it is not located on land/territory claimed by any indigenous peoples.	Not Required
>>			
Principle 5. Corruption			
1. The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	No	The proponent confirms that there is no corruption involved in the project activity The host country has strict laws ¹⁰ and robust arrangements to prevent such activities.	Not Required

¹⁰ <http://cbi.nic.in/>

		The DOE has been provided with company internal policies and it is clear that it has laid provisions to prevent/identify any corruption.	
Principle 6.1 Labour Rights			
<ol style="list-style-type: none"> 1. The Project Developer shall ensure that all employment is in compliance with national labour occupational health and safety laws and with the 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 	No	<ol style="list-style-type: none"> 1. The proponent assures that there will be no bonded or forced labor during construction and operation of the project activity. Uniform policy will be implemented for all employees. The host country has robust laws in place prohibiting forced and compulsory labor¹¹. 2. The proponent confirms that all the fundamental rights 	Not Required

¹¹ <http://labour.nic.in/content/>

<p>workers shall be documented and implemented and include:</p> <ul style="list-style-type: none"> 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 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 		<p>of the employees will be respected. The rights of industrial trade unions and their members have been protected by law in India since 1926 by The Trade Unions Act, 1926¹²:</p> <ul style="list-style-type: none"> 3. Working agreements with all individual workers are documented and implemented 4. Child labor is strictly prohibited in the country¹³ The proponent assures that no child labor will be employed during construction and operation of the plant. The project proponent has a set mechanism to ensure the age of all the temporary/ permanent employees during the life time of the project. 	
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¹² <http://ncw.nic.in/acts/TheTradeUnionsAct1926.pdf>

¹³ http://www.indianchild.com/child_labour_law_in_india.htm

<p>10 days per year, not including sick and casual leave.</p> <p>4. No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion)</p> <p>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</p>		<p>5. The Project Developer has an active safety team which ensures that all employees are given appropriate equipment and training. The same is properly documented and appropriate measures taken in case of emergencies.</p>	
<p>Principle 6.2 Negative Economic Consequences</p>			
<p>1. Does the project cause negative economic consequences during and after project implementation?</p>	<p>No</p>	<p>There are no negative economic impacts or potential risks to the local economy due to the project activity.</p>	<p>Not required</p>
<p>>></p>			
<p>Principle 7.1 Emissions</p>			

Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No	The project is a wind power project and does not lead to any greenhouse gas emissions in project scenario.	Not required
>>			
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 is connected to the grid, as well as being a wind power project it will be a net provider of power to the local grid.	Not required
>>			
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 being a windpower project will not have any such impacts.	Not Required
>>			
Principle 8.2 Erosion and/or Water Body Instability			

<p>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?</p>	<p>No</p>	<p>1. The project activity has developed activities for prevention of soil erosion by various landscaping measures. 2. The project area is not susceptible to excessive erosion or water body Instability.</p>	<p>Not required</p>
<p>>></p>			
<p>Principle 9.1 Landscape Modification and Soil</p>			
<p>Does the Project involve the use of land and soil for production of crops or other products?</p>	<p>No</p>	<p>The project being a wind power project does not involve the use of land and soil for production of crops or other products.</p>	<p>Not Required</p>
<p>>></p>			
<p>Principle 9.2 Vulnerability to Natural Disaster</p>			
<p>Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?</p>	<p>No</p>	<p>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.</p>	<p>Not required</p>
<p>>></p>			

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 a wind power project. The project does not have any impact by use of GMOs.	Not required
>>			
Principle 9.4 Release of pollutants			
Could the Project potentially result in the release of pollutants to the environment?	No	The project being a wind power project does not lead to release of any pollutant	Not required
>>			
Principle 9.5 Hazardous and Non-hazardous Waste			
Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	No	The project during operational phase uses various type of oil/lubricants, grease which are classified as hazardous. These waste are handled in line with hazardous waste management rules and are disposed of accordingly.	Not required
>>			

Principle 9.6 Pesticides & Fertilisers			
Will the Project involve the application of pesticides and/or fertilisers?	No	The project is a wind power project. The Project will not involve the application of pesticides and/or fertilisers	Not required
>>			
Principle 9.7 Harvesting of Forests			
Will the Project involve the harvesting of forests?	No	The project being a windpower project does not involve the harvesting of forests.	Not required
>>			
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 a wind power project. The Project does not have any impact on the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives.	Not required
>>			
Principle 9.9 Animal husbandry			
Will the Project involve animal husbandry?	No	The project being a wind power project does not involve animal Husbandry	Not required
>>			
Principle 9.10 High Conservation Value Areas and Critical Habitats			

<p>Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?</p>	<p>No</p>	<p>The project is a wind power project. The Project does not affect or alter largely intact or HCV ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified.</p>	<p>Not required</p>
<p>>></p>			
<p>Principle 9.11 Endangered Species</p>			
<p>a. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)?</p> <p>b. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?</p>	<p>No</p>	<p>a. There are no endangered species identified as potentially being present within the Project boundary.</p> <p>b. The Project does not impact other areas where endangered species may be present through transboundary affects.</p>	<p>Not required</p>
<p>>></p>			

APPENDIX 2- CONTACT INFORMATION OF PROJECT PARTICIPANTS

Organization name	Wind World (India) Limited
Registration number with relevant authority	
Street/P.O. Box	A-9, Veera Industrial Estate, Veera Desai Road, Andheri (W)
Building	Wind World Tower
City	Mumbai
State/Region	Maharashtra
Postcode	400053
Country	India
Telephone	+91-22-6692 4848
E-mail	yogeshh.mehra@windworldindia.com
Website	
Contact person	
Title	Managing Director
Salutation	Mr.
Last name	Mehra
Middle name	
First name	Yogesh
Department	Corporate
Mobile	+91-98200 40301
Direct tel.	+91-260-2221508
Personal e-mail	yogeshh.mehra@windworldindia.com

APPENDIX 3- LUF ADDITIONAL INFORMATION

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

APPENDIX 4-SUMMARY OF APPROVED DESIGN CHANGES

Not Applicable as there is no design change.

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