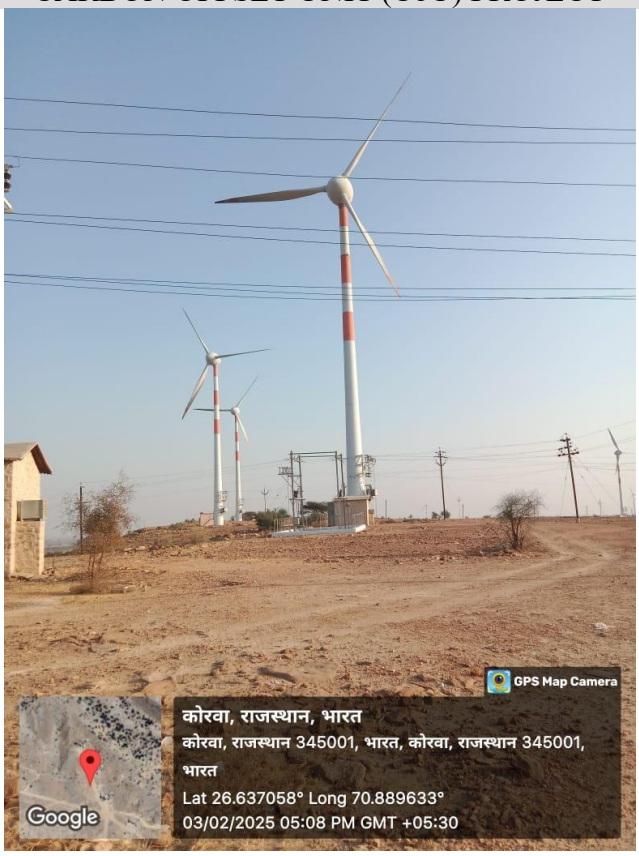
PROJECT CONCEPT NOTE

CARBON OFFSET UNIT (CoU) PROJECT



Title: Bundled Wind Power Project in Jaisalmer (Rajasthan in India) managed by Enercon (India)Ltd.

Version 1.1

Date 13/01/2026

First CoU Issuance Period: 10 Years 06 Months

Date: 01/07/2014 to 31/12/2024

Project Concept Note (PCN)
CARBON OFFSET UNIT (CoU) PROJECT

BASIC INFORMATION	
Title of the project activity	Bundled Wind Power Project in Jaisalmer (Rajasthan in India) managed by Enercon (India)Ltd.
Scale of the project activity	Large Scale Wind Project
Completion date of the PCN	13/01/2026
Project participants	Wind World Wind Farms (Jaisalmer)
Host Party	India
Applied methodologies and standardized baselines	ACM0002.: Grid-connected electricity generation from renewable sources, Version 22.0
Sectoral scopes	01 Energy industries (Renewable/Non-renewable Sources)
Estimated amount of total GHG emission reductions	40,905 CoUs (annually)

SECTION A. Description of project activity

A.1. Purpose and general description of Carbon offset Unit (CoU) project activity >>

The project "Bundled Wind Power Project in Jaisalmer (Rajasthan in India) managed by Enercon (India)Ltd." is located in Village Soda and Korwa, District Jaisalmer, State Rajasthan, Country India.

The details of the registered project are as follows:

S. No.	Name of Customer	No. of M/C	Capacity (MW)	Discom	Commissioning date
1	Enercon Wind Farms (Jaisalmer) Pvt. Ltd.	1	0.6	Jodhpur	26/03/2004
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
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		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	29/03/2004
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	31/03/2004
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	

		1	0.6	Jodhpur	18/05/2004
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	
		1	0.6	Jodhpur	12/06/2004
		41	**24.6**		

Purpose of the project activity:

The project activity involves the development and operation of a Debundled wind power project located at Villages Soda and Korwa, Tehsil Fatehgarh, District Jaisalmer, Rajasthan, India, and managed by Enercon (India) Ltd. The project comprises 41 Wind Electric Converters (WECs) of model E-40, each having a rated capacity of 0.6 MW, resulting in a total installed capacity of 24.6 MW. The project was commissioned under the Rajasthan Wind Power Policy, 2003, with commercial operations commencing on multiple Commissioning dates mentioned above .

As a debundled activity, the project represents a distinct component of a larger wind development program, where individual wind turbines are registered and monitored independently for emission reduction accounting purposes. This approach ensures transparency, avoids double counting, and allows accurate quantification of emission reductions attributable solely to the project boundary.
A long-term Power Purchase Agreement (PPA) has been executed with the Rajasthan DISCOMs (Jodhpur, Jaipur, and Ajmer) through Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPN) for the sale of 100% of the electricity generated to the state grid.

The project utilizes wind energy, a renewable and non-fossil fuel source, to generate grid-connected electricity, thereby displacing electricity that would otherwise be produced by fossil fuel–based thermal power plants operating on coal and other conventional fuels within the regional grid. By injecting clean electricity into the grid, the project reduces the marginal generation from fossil fuel sources, leading to measurable reductions in greenhouse gas (GHG) emissions.

During the monitoring period from 2014 to 2024, the project is estimated to generate an average of 46,116.14 MWh per annum, resulting in annual average emission reductions of 40,905 tCO_2e. Over the 10-years 6-month monitoring period, the total GHG emissions avoided amount to 449,955 tCO_2e, with zero project emissions, as no fossil fuels are consumed during electricity generation.

A.2 Do no harm or Impact test of the project activity>>

There are social, environmental, economic and technological benefits which contribute to sustainable development.

Social benefits:

- The project activity will contribute to socio-economic development through improving the infrastructure for road network and other mode of communications in the remote part of the state during both the construction and operational period.
- The project activity will utilize renewable energy source for electricity generation instead of fossil fuel-based electricity generation which would have emitted gaseous, liquid and/or solid effluents/wastes. Thus, the project causes no negative impact on the surrounding environment and contributes to environmental well-being.
- The project activity will contribute towards reduction of the GHG emissions as well as emission of pollutants like SOx, Suspended Particulate Matters (SPMs) etc. by avoiding equivalent amount of power generation from fossil fuel-based power plants.

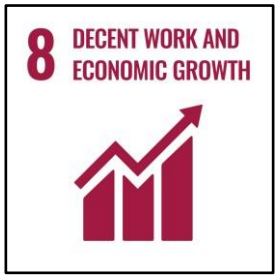
Environmental benefits:

- The project activity will use a clean and renewable source of energy i.e. wind for generating electricity.
- The avoidance of use of fossil fuels in the project activity will considerably reduce GHG emissions on a local as well as global level.
- The project activity will eliminate the consumption of fossil fuels for power generation. Therefore, it will directly contribute to conservation of the limited stock of non-renewable resources (like coal, oil, etc.).

Economic benefits:

- The project activity is located in an otherwise underdeveloped rural area. The successful execution of the project activity will lead to an improvement of the local infrastructure and contribute to the development of the region.
- The project activity involves substantial amount of investment, thus will contribute towards generation of direct and indirect employment opportunities as per the requirement of the skilled and semi-skilled manpower.
- The project will generate electricity utilizing renewable source like wind, thus will increase the contribution of renewable based power generation in the region and will also help in reducing the demand - supply gap of the respective grid.
- Use of a renewable source of energy reduces the dependence on imported fossil fuels and associated price variation, thereby leading to increased energy security.

Goal 7 	➢ The project activity will generate clean energy, which with increased share will increase the affordability at a cheaper rate to end user. The project activity will utilize energy (renewal resource) to generate power. The project activity will increase the share of renewable resource-based electricity to global mix of energy consumption

Goal 8 	➢ Decent work and economic growth. This project generates additional employment for skilled and unskilled people, also the project situated in remote area will provide employment opportunities to unskilled people from villages. The training on various aspects including safety, operational issues and developing a skill set will also be provided for employees. This project will achieve full and productive employment and decent work.
Goal 13 	➢ This 24.6MW Wind power project meets the SDG 13 goal by saving fossil fuel and producing clean energy. This project is expected to reduce 40,905 tCO_2 annually. ➢ In a Greenfield project, electricity delivered to the grid by the project would have otherwise been generated by the operation of grid connected power plants. Thereby the project activity reduces the dependence on fossil fuel-based generation units and as there are no emissions associated with this project it contributes to the reduction of greenhouse gases (GHG) emissions.

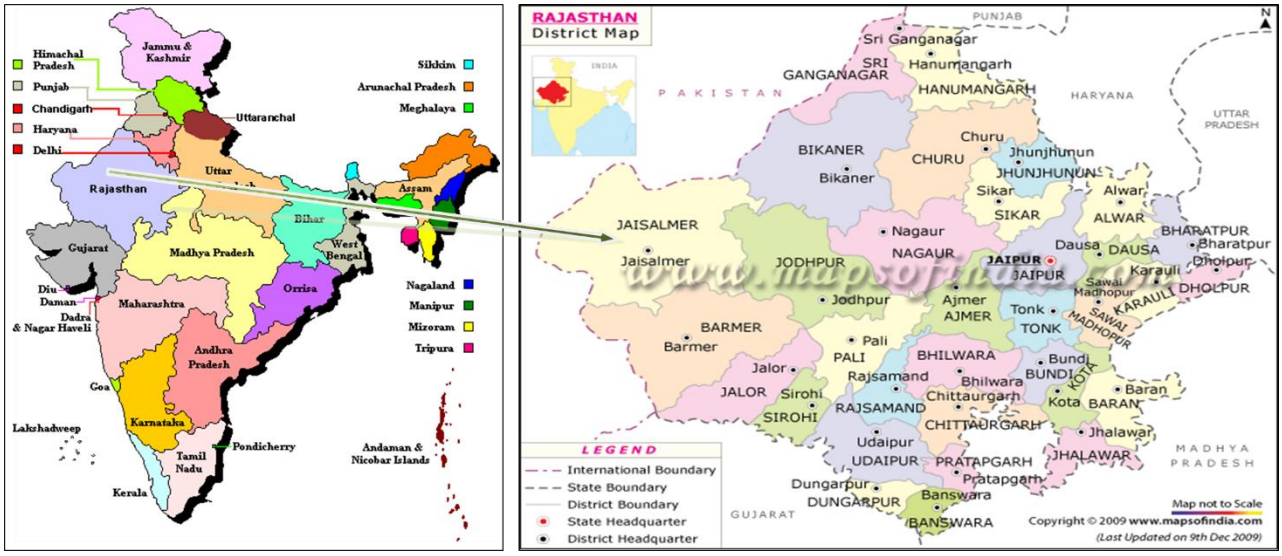
A.3. Location of project activity >>

Country: India.
District: Jaisalmer
Village: Soda and Korwa
Tehsil: Fatehgarh
State: Rajasthan
Code: 345001

S. No.	Loc No	WTG No	Village Name	Capacity (MW)	Discom	Geo-Cordinate	
						Latitude	Longitude
1	EWFJPL-01	91/1425	Soda Bandhan	0.6	Jodhpur	26.64014	70.882987
2	EWFJPL-02	91/1426		0.6	Jodhpur	26.64202	70.882816
3	EWFJPL-03	91/1443		0.6	Jodhpur	26.6392	70.884494
4	EWFJPL-04	91/1440		0.6	Jodhpur	26.67108	70.903294
5	EWFJPL-05	91/1444		0.6	Jodhpur	26.67038	70.903218
6	EWFJPL-06	91/1451		0.6	Jodhpur	26.66467	70.902438
7	EWFJPL-07	91/1453		0.6	Jodhpur	26.66375	70.90243
8	EWFJPL-08	91/1456		0.6	Jodhpur	26.64202	70.882816
9	EWFJPL-09	91/1452		0.6	Jodhpur	26.63153	70.884541
10	EWFJPL-10	91/1454		0.6	Jodhpur	26.65898	70.902844
11	EWFJPL-11	91/1441		0.6	Jodhpur	26.65841	70.903464
12	EWFJPL-12	91/1429		0.6	Jodhpur	26.63425	70.883537
13	EWFJPL-13	91/1430		0.6	Jodhpur	26.61968	70.880095
14	EWFJPL-14	91/1431		0.6	Jodhpur	26.65322	70.907983
15	EWFJPL-15	91/1442		0.6	Jodhpur	26.61855	70.891456
16	EWFJPL-16	91/1455		0.6	Jodhpur	26.65178	70.909115
17	EWFJPL-17	91/1457		0.6	Jodhpur	26.65057	70.909048

18	EWFJPL-18	91/1459	Soda Bandhan	0.6	Jodhpur	26.61313	70.884947
19	EWFJPL-19	91/1460		0.6	Jodhpur	26.61977	70.877041
20	EWFJPL-20	91/1475		0.6	Jodhpur	26.6178	70.894694
21	EWFJPL-21	91/1461		0.6	Jodhpur	26.64287	70.905346
22	EWFJPL-22	91/1462		0.6	Jodhpur	26.64208	70.906104
23	EWFJPL-23	91/1465		0.6	Jodhpur	26.64063	70.901428
24	EWFJPL-24	91/1464		0.6	Jodhpur	26.6387	70.904499
25	EWFJPL-25	91/1463		0.6	Jodhpur	26.638	70.903198
26	EWFJPL-26	91/1467	Soda Bandhan	0.6	Jodhpur	26.6363	70.90113
27	EWFJPL-27	91/1476		0.6	Jodhpur	26.63606	70.899243
28	EWFJPL-28	91/1470		0.6	Jodhpur	26.64195	70.897636
29	EWFJPL-29	91/1471		0.6	Jodhpur	26.61453	70.881104
30	EWFJPL-30	91/1473		0.6	Jodhpur	26.61617	70.885295
31	EWFJPL-31	91/1472		0.6	Jodhpur	26.61935	70.897262
32	EWFJPL-32	91/1474		0.6	Jodhpur	26.61484	70.891358
33	EWFJPL-33	91/1477		0.6	Jodhpur	26.63768	70.889229
34	EWFJPL-34	91/1466		0.6	Jodhpur	26.63691	70.88974
35	EWFJPL-35	91/1469	Soda Bandhan	0.6	Jodhpur	26.63607	70.890161
36	EWFJPL-36	91/1468		0.6	Jodhpur	26.63539	70.891064
37	EWFJPL-37	91/1479		0.6	Jodhpur	26.63452	70.891694
38	EWFJPL-38	91/1480		0.6	Jodhpur	26.62775	70.887919
39	EWFJPL-39	91/1478		0.6	Jodhpur	26.63143	70.890262
40	EWFJPL-40	91/1458		0.6	Jodhpur	26.62523	70.889205
41	EWFJPL-41	91/1498	Korva	0.6	Jodhpur	26.6237	70.888933

The location of the project site has been shown below:



Project Activity

A.4. Technologies/measures >>

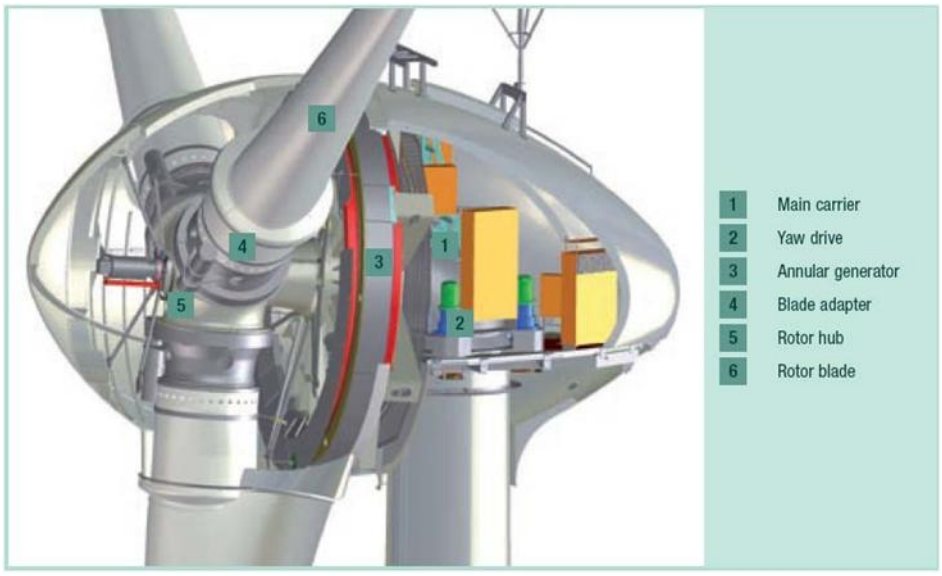
The project activity consists of 41 WEGs of E-40 and each machine capacity is of 600 kW (E-40) totalling to the capacity of 24.6 MW. The WEGs generates 3-phase power at 400V, which is stepped up to 33 kV and connected to 33kV metering points. From 33 kV metering point electricity transmitted to WWIL Sub-station. At sub-station electricity is step-up to 132 kV. From WWIL substation electricity is further evacuated to the state electricity grid at 132kV. The Project can operate in the frequency range of 47.5–51.5 Hz and in the voltage range of 400 V ± 12.5%.

Turbine model	E-40
Rated power	600
Rotor diameter	48m
Hub height	74.85 m
Turbine Type	Gearless horizontal axis wind turbine with variable rotor speed
Power regulation	Independent electromechanical pitch system for each blade.
Design lifetime	20years
Cut in wind speed	2.5 *m/s*
Rated wind speed	12 *m/s*
Extreme Wind Speed	59.5 *m/s*
Rated rotational speed	31.5 rpm
Operating range rot. speed	16.0 - 31.5 rpm
Orientation	Upwind

Braking	Aerodynamic
Output Voltage	400 V
Tower	74 m concrete

Since the project activity involves power generation from wind, it does not involve any GHG emissions for generating electricity.

E-40 Diagram (Cross sectional drawing of nacelle E-40 / 600 kW)



A.5. Parties and project participants >>

Party (Host)	Participants
India (Host)	Wind world (India)Ltd

A.6. Baseline Emissions>>

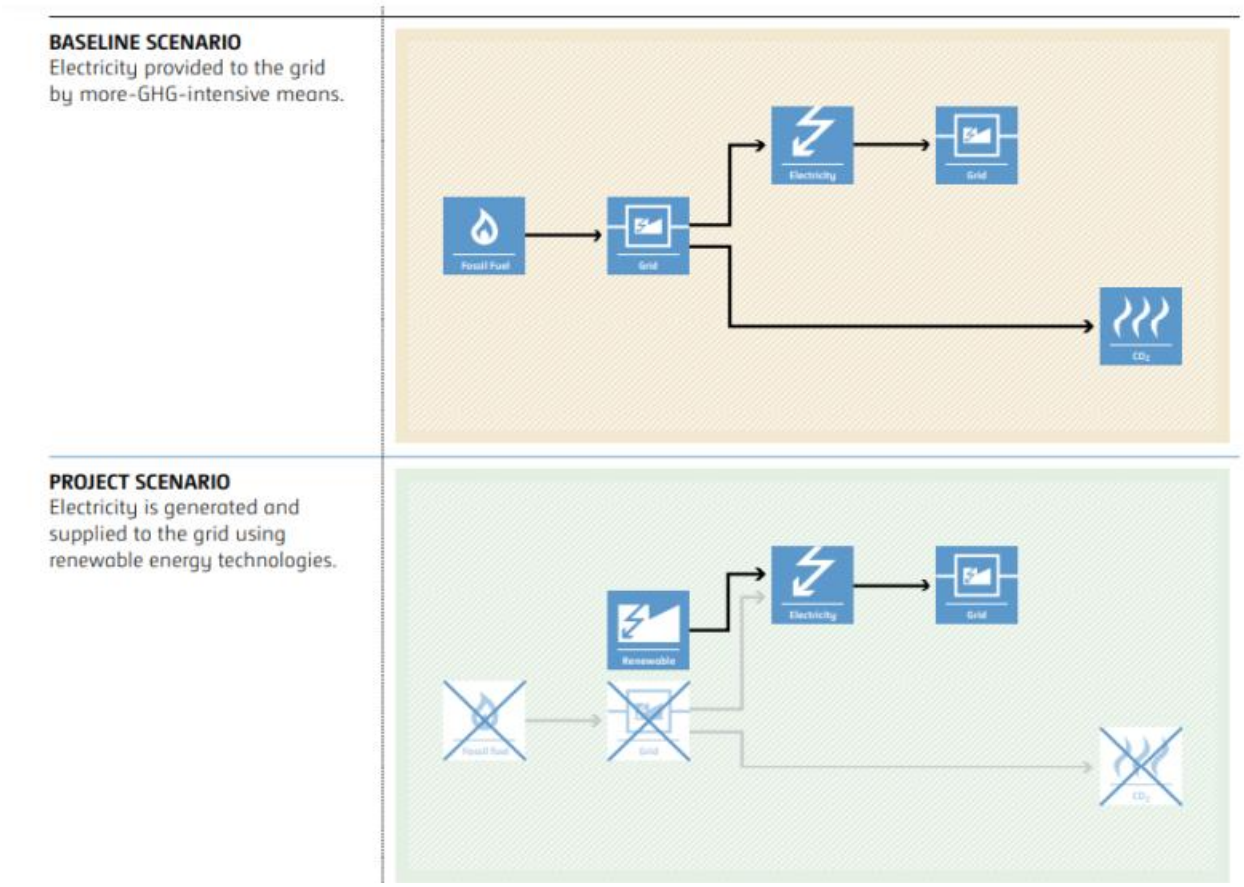
The baseline scenario identified at the PCN stage of the project activity is:

The scenario existing prior to the implementation of the project activity, is electricity delivered to the facility by the project activity that would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources. This is a green field project activity. There was no activity at the site of the project participant prior to the implementation of this project activity. Hence pre-project scenario and baseline scenario are the same.

As per the approved consolidated methodology ACM0002 Version 22, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following: “If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation

sources to the grid".

The Schematic diagram showing the baseline scenario:



A.7. Debundling>>

The project activity is a debundled project of CDM with registration number 0310[1]. The crediting period for this project under CDM was from 01/07/2004 to 30/06/2014 (Fixed), which has now ended. The project proponent (PP) seeks verification under UCR starting from 01/07/2014, meaning the crediting period for UCR begins from that date. Therefore, there is no double counting for this project.

[1] CDM: Bundled Wind power project in Jaisalmer (Rajasthan in India) managed by Enercon (India) Ltd.

SECTION B. Application of methodologies and standardized baselines

B.1. References to methodologies and standardized baselines >>

SECTORAL SCOPE –01 Energy industries (Renewable/Non-renewable sources)

TYPE I **- Renewable Energy Projects**

CATEGORY- ACM0002., Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0

B.2. Applicability of methodologies and standardized baselines >>

Applicability Criteria.	**Applicability status**
1)This methodology is applicable to grid-connected renewable energy power generation project activities that: (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating plant(s)/unit(s); (d) Involve a rehabilitation of (an) existing plant(s)/unit(s), or (e) Involve a replacement of (an) existing plant(s)/unit(s). (f) Install a Greenfield power plant together with a grid-connected Greenfield pumped storage power plant. The greenfield power plant may be directly connected to the PSP or connected to the PSP through the grid.	The proposed project involves establishing a new grid-connected renewable wind power plant, confirming to the specified criteria.
2) In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that: (a)Integrate BESS with a Greenfield power plant; (b) Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic1 or wind power plant(s)/unit(s); (c) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s); (d) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s). (e) Integrate a BESS together with a Greenfield power plant that is operating in coordination with a PSP. The BESS is located at site of the greenfield renewable power plant.	The project entails installing a new grid-connected renewable wind power project without the integration of a Battery Energy Storage System (BESS). Therefore, this condition does not apply to the project activity.
3)The methodology is applicable under the following conditions: (a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit; (b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power	The proposed project involves installing new wind power plants without integrating a Battery Energy Storage System (BESS). Thus, the mentioned criterion does not apply

capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity; (c) In case of Greenfield project activities applicable under paragraph 7(a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g., by referring to feasibility studies or investment decision documents); (d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies2 may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g., week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period. (e) In case the project activity involves PSP, the PSP shall utilize the electricity generated from the renewable energy power plant(s) that is operating in coordination with the PSP during pumping mode	
4)In case of hydro power plants, one of the following conditions shall apply: a)The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of reservoirs; or b)The project activity is implemented in an existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (7) is greater than 4 W/m2; or c)The project activity results in new single or multiple reservoirs and the power density calculate equation (7), is greater than 4 W/m2. d)The project activity is an integrated hydro power project involving multiple reservoirs, where the power density of any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m2, all of the following conditions shall apply. (i)The power density calculated using the total installed	The proposed project involves the installation of wind power plants/units. Hence, the mentioned criterion is not applicable.

capacity of the integrated project, as per equation (8), is greater than 4 W/m2; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii)Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2 are: a) Lower than or equal to 15 MW; and b) Less than 10 per cent of the total installed capacity of integrated hydro power project.	
5)In the case of integrated hydro power projects, project proponent shall: a)Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or b)Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability indifferent seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.	The proposed project activity involves the installation of wind power plants/units. Therefore, the mentioned criteria are not applicable.
6) In the case of PSP, the project participants shall demonstrate in the PDD that the project is not using water which would have been used to generate electricity in the baseline.	The proposed project activity involves installing wind power plants/units. Therefore, the specified criteria are not applicable.
7)The methodology is not applicable to: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass-fired power plants;	The proposed project activity involves installing wind power plants/units. Therefore, the specified criteria are not applicable.
8)In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance	The proposed project activity involves installing wind power plants/units. Therefore, the specified criteria are not applicable.

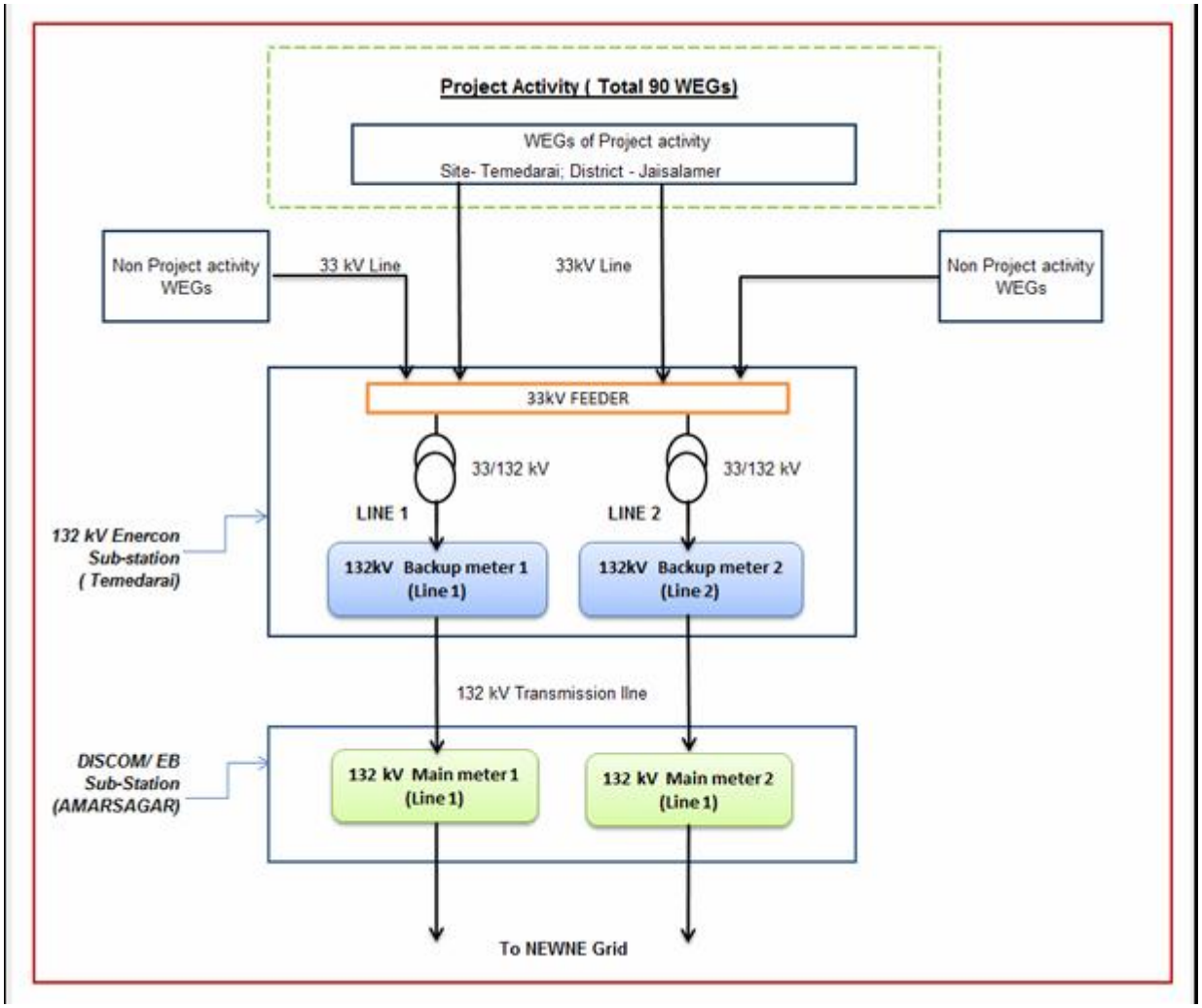
B.3. Applicability of double counting emission reductions >>

The project activity is a debundled project of CDM with registration number 0310. The crediting period for this project under CDM was from 01/07/2004 to 30/06/2014 (Fixed), which has now ended. The project proponent (PP) seeks verification under UCR starting from 01/07/2014, meaning the crediting period for UCR begins from that date. Therefore, there is no double counting for this project.

B.4. Project boundary, sources and greenhouse gases (GHGs)>>

According to the applicable methodology, the spatial extent of this project activity includes the project site, and all the power plants connected physically to the electricity system (grid) that the power project is connected to. Therefore, the project boundary includes all the 41 WECs of the other customers connected to the sub-station and metering points. The project activity is further connected to the network of state transmission utility which Falls under the network of Indian grid. Thus, the project boundary also includes all the power plants physically connected to the Indian grid.

Project boundary:



The baseline study of the Indian grid shows that the main sources of GHG emissions under the baseline scenario are CO_2 emissions from the conventional power generating systems. Other

emissions are that of CH_4 and N_2O but both emissions have been excluded for simplification. The project activity generates

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 Indian grid which in turn would be connected to fossil fuel fired power plants which emit CO_2.
		CH_4	No	No methane is expected to be emitted.
		N_2O	No	No nitrous oxide is expected to be emitted.
Project Scenario	Greenfield wind energy conversion system	CO_2	No	The project activity does not emit any emissions.
		CH_4	No	No methane is expected to be emitted.
		N_2O	No	No nitrous oxide is expected to be emitted.

B.5. Establishment and description of baseline scenario (UCR Standard or Methodology) >>

As per the approved consolidated methodology ACM0002. version - 22, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:

"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"

The project activity involves setting up of a new grid connected wind power plant to harness the green power from wind energy. In the absence of the project activity, the equivalent amount of power would have been supplied by the Indian grid, which is fed mainly by fossil fuel fired plants. The power produced at grid from the other conventional sources which are predominantly fossil fuel based. Hence, the baseline for the project activity is the equivalent amount of power produced at the Indian grid.

As per approved consolidated methodology ACM0002, version 22.0, emission reduction is estimated as difference between the baseline emission and project emission after factoring into leakage

Emission reductions are calculated as per methodology ACM0002, Version 22.0 Equation 17 :

$$ER_y = BE_y - PE_y \quad \textbf{(Eq. 1)}$$

Where,

ER_y = Emissions reductions in year y (t CO2)

BE_y = Baseline emissions in year y (t CO2)

PE_y = Project emissions in year y (t CO2)

Baseline Emissions

The baseline emissions as per methodology ACM0002, Version 22.0, para 57 ; encompass solely the CO2 emissions stemming from electricity generation in power plants displaced by the project activity. The methodology operates on the assumption that any electricity generation exceeding baseline levels would have originated from established grid-connected power plants and the integration of new grid-connected power plants.

The Baseline emissions as per methodology ACM0002, Version 22.0 Equation 11 in year y can be calculated as follows:

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

Where:

BE_y= Baseline emissions in year *y* (tCO_2/yr)

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

$EF_{grid,y}$= Grid Emission factor in year y (tCO_2/MWh)

Since the project activity is the installation of a new grid connected renewable power plant (green field project), hence, $EG_{PJ,y}$ has been calculated as :

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

Where:

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

EGfacility,y = Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* (MWh/yr)

A "grid emission factor" denotes the CO2 emission factor (measured in tCO2/MWh) associated with each unit of electricity supplied by an electricity system. The UCR suggests employing an emission factor of 0.9[2] from 2013 to 2023 and Emission Factor of 0.757 tCO2/MWh for 2024 as a cautious estimate for Indian projects. The same emission factor is utilized for computing emission reductions for the Project Activity.

[2]As per UCR CoU Standard Update: 2024 Vintage UCR Indian Grid Emission Factor Announced | by Universal Carbon Registry | Jan, 2025 | Medium

Project Emission:
Regarding project emissions, ACM0002 version 22.0 specifies that only emissions related to fossil fuel combustion, emissions from the operation of geothermal power plants due to the release of non-condensable gases, and emissions from water reservoirs of hydroelectric plants should be taken into account. Since the project involves a wind power project, emissions from renewable energy plants are negligible
Hence (PEy = 0).

Leakage Emission:

Leakage, as outlined in ACM0002 version 22.0, para 5.6, is considered to be zero as there is no transfer of energy-generating equipment in the project activity
Hence (LEy = 0).

While the actual emission reduction achieved during the initial crediting period will be submitted during the first monitoring and verification, an ex-ante estimation is provided for reference.

Estimated Annual or Total baseline emission reductions (BEy)= 40,905 CoUs /year

Year	Net Generation	EF	Baseline Emissions	Project Emissions	Emission Reductions
	MWh	(tCO2/MWh)	(tCO_2e)	(tCO_2e)	(tCO_2e)
2014	46116.14	0.9	41504.53	0.00	41504.53
2015	46116.14	0.9	41504.53	0.00	41504.53
2016	46116.14	0.9	41504.53	0.00	41504.53
2017	46116.14	0.9	41504.53	0.00	41504.53
2018	46116.14	0.9	41504.53	0.00	41504.53
2019	46116.14	0.9	41504.53	0.00	41504.53
2020	46116.14	0.9	41504.53	0.00	41504.53
2021	46116.14	0.9	41504.53	0.00	41504.53
2022	46116.14	0.9	41504.53	0.00	41504.53
2023	46116.14	0.9	41504.53	0.00	41504.53
2024	46116.14	0.757	34909.92	0.00	34909.92
Total Emission reduction	**507277**		**415045**	**0**	**449955**
Average Emission Reduction	50728		41505	0	**40,905**

B.6. Prior History>>
The project activity is a debundled project of CDM with registration number 0310. The crediting period for this project under CDM was from 01/07/2004 to 30/06/2014 (Fixed), which has now ended. The project proponent (PP) seeks verification under UCR starting from 01/07/2014, meaning the crediting period for UCR begins from that date.

B.7. Changes to start date of crediting period >>
There is no change in the start date of crediting period.

B.8. Permanent changes from PCN monitoring plan, applied methodology or applied standardized baseline >>

There are no permanent changes from registered PCN monitoring plan and applied methodology

B.9. Monitoring period number and duration>>

First Issuance Period: 10Years 06 Months - 01/07/2014 to 31/12/2024

B.8. Monitoring plan>>

Data and Parameters available at validation (ex-post values):

Data/Parameter	EG,pj,y
Data unit	MWh
Description	Net electricity supplied to the grid by the Project activity.
Measurement methods and procedures	Data Type: Measured Monitoring equipment: Energy Meters are used for monitoring Calibration frequency: once in five years (as per CEA Indian provision) Cross checking: Quantity of net electricity supplied to or consumed at PP's facility will be cross-checked from the monthly bills or invoices raised. The Net electricity supplied to the grid will be calculated by the values of electricity export to the grid.The Net electricity is recorded as following: Thus, $EG_{PJ,y} = EG_{Net,Export}$
Value Applied	50728 Mwh .(Annualized average value has been considered here for an ex-ante estimation only, whereas this is an-ex post parameter hence actual value shall be applied during monitoring and verification)
Monitoring frequency	The net energy exported to the grid is measured every month using calibrated energy meter by the State Electricity Board authorities in the presence of the project implementer or its representatives. The meter/s shall be jointly inspected, and sealed by authorised representatives of the company and the state utility. Measuring procedure: Will be measured by an export-import energy meter. The net electricity exported by the project plant would either be directly sourced as a measured parameter or be calculated by deducting the amount of imported electricity from the total amount

	of exported electricity. Accuracy class of energy meter: 0.2s Calibration Frequency: As per the Central Electricity Authority the testing and calibration frequency should be once in five years[3].
Purpose of data	For baseline emission calculations

Data and Parameters available at validation (ex-ante values):

Data / Parameter:	$EF_{Grid,y}$
Data unit:	tCO2 /MWh
Description:	A "grid emission factor" refers to a CO2 emission factor (tCO2/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO2/MWh for the period 2013 - 2023 and 0.757 tCO2/MWh from 2024 as a fairly conservative estimate for Indian projects. Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach.
Source of data:	UCR CoU Standard Update: 2024 Vintage UCR Indian Grid Emission Factor Announced | by Universal Carbon Registry | Jan, 2025 | Medium
Measurement procedures (if any):	-
Monitoring frequency:	Ex-ante fixed parameter
QA/QC procedures:	For the calculation of Emission Factor of the grid
Any comment:	-

[3] https://cea.nic.in/wp-content/uploads/2020/02/meter_reg.pdf