PROJECT CONCEPT NOTE
CARBON OFFSET UNIT (CoU) PROJECT

Title: 50 MW bundled Wind Project by Surya Vidyut Ltd in Gujarat & Rajasthan
Version 1.1
Date 24/07/2025
First CoU Issuance Period: 11 Years 09 Months 18 Days
Date: 13/03/2013 to 31/12/2024

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

BASIC INFORMATION	
Title of the project activity	50 MW bundled Wind Project by Surya Vidyut Ltd in Gujarat & Rajasthan
The scale of the project activity	Large-Scale Wind Project
Completion date of the PCN	24/07/2025
Project participants	M/S Surya Vidyut Limited
Host Party	India
Applied methodologies and standardized baselines	ACM0002-Consolidated baseline methodology for 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	**101,742** CoUs (Annually)

SECTION A. Description of project activity

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

The project titled "50 MW Bundled Wind Project by Surya Vidyut Ltd in Gujarat & Rajasthan" is located in the Surendranagar district of Gujarat and the Jaisalmer district of Rajasthan. It consists of 26 MW in Gujarat and 24 MW in Rajasthan, involving the supply, erection, commissioning, and operation of 25 wind turbine generators (WTGs), each with a rated capacity of 2000 kW. All WTGs are of the Inox 2000DF model. The project is owned by Surya Vidyut Ltd, hereinafter referred to as the Project Proponent (PP).

The details of the registered project are as follows:

Purpose of the project activity:

Surya Vidyut Ltd has installed 50 MW wind farm in the state of Gujarat & Rajasthan in India. Inox Renewables & Surya Vidyut Ltd is the equipment supplier and the operations and maintenance contractor for the Project. There are 25 Wind Energy Convertors ("WEC's") of with rated capacity 2000 kW each. The generated electricity is supplied to Electricity Distribution Company (DISCOM) under a long-term power purchase agreement (PPA). The expected operational lifetime of the project is for 25 years. The project being a renewable energy generation activity, leads to reduction in fossil fuel dominated electricity generation from the Indian grid.

The purpose of the project activity is to generate emission free and environment friendly electricity from the wind energy potential available in the region. The project is expected to generate and supply **3 1,14,563 MWh** of electricity annually to the Indian grid. The project thus addresses the demand–supply gap in the state of Rajasthan & Gujarat and will assist the sustainable growth, conservation of resources and reduction of greenhouse gas emissions by using renewable energy source like wind energy. The project activity will contribute towards reduction of greenhouse gas (GHG) emission from the atmosphere, which has been estimated to be approximately **101,742 tCO2e** per year, by displacing an equivalent amount of electricity generation through the operation of existing fuel mix in the grid comprising mainly of fossil fuel-based power plants. Thus, the project does not only reduce the demand-supply gap of the respective grid, but also helps in reducing other pollutants like SOx, NOx, etc. from the atmosphere. In the absence of the project activity the equivalent amount of electricity would have been generated from the connected/ new power plants in the Indian grid, which are/ will be predominantly based on fossil fuels.

This is also the pre-project scenario. The technology employed for the project is well proven and safe.

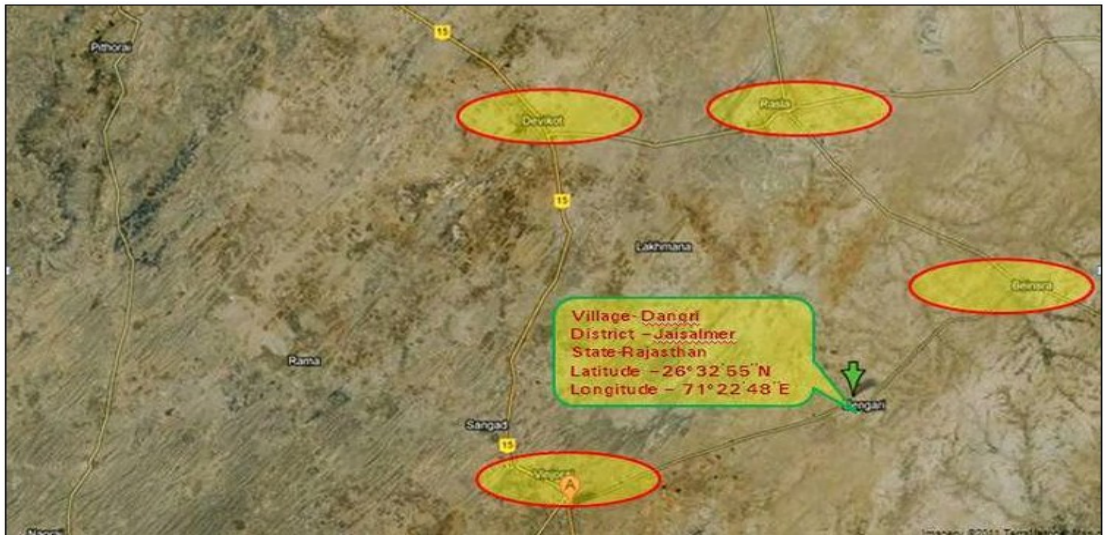
Relevant dates for the project activity (e.g. Site, commissioning, continued operation periods, etc.):

The WECs under the project activity were commissioned between 13/03/2013 and 31/12/2014. The expected operational lifetime of the project is for 25 years.

50MW

Sr. No	Loc. No.	WTG ID No.	Capacity Kw	Site	District	Date of Comm.
1	GGM-02	IWISL/200014-15/3469	2000	Karban	Surendranagar	31-12-2014
2	GGM-04	IWISL/200014-15/3470	2000	Karban	Surendranagar	31-12-2014
3	GGM-03	IWISL/200014-15/3471	2000	Karban	Surendranagar	31-12-2014
4	GGM-126	IWISL/200014-15/3472	2000	Tajpar	Surendranagar	31-12-2014
5	GGM-16	IWISL/200014-15/3473	2000	Chobari	Surendranagar	31-12-2014
6	GGM-19	IWISL/200014-15/3475	2000	Chobari	Surendranagar	31-12-2014
7	GGM-133	IWISL/200014-15/3476	2000	Dhokadv a	Surendranagar	31-12-2014
8	GGM-117	IWISL/200014-15/3477	2000	Jivapar(A nandpar)	Surendranagar	31-12-2014
9	GGM-110	IWISL/200014-15/3478	2000	Jivapar(A nandpar)	Surendranagar	31-12-2014
10	GGM-109	IWISL/200014-15/3479	2000	Golida	Surendranagar	31-12-2014
11	GGM-09	IWISL/200014-15/3480	2000	Bhojpari	Surendranagar	31-12-2014
12	GGM-10	IWISL/200014-15/3481	2000	Bhojpari	Surendranagar	31-12-2014
13	GGM-141	IWISL/200014-15/3474	2000	Gunda	Surendranagar	31-12-2014
14	DAN-T-123	040209-005 (LS)	2000	Malusar	Jaisalmer	23-03-2013
15	DAN-T-230	4200313451/55 (ABB)	2000	Malusar	Jaisalmer	23-03-2013
16	DAN-T-231	4200313451/56 (ABB)	2000	Malusar	Jaisalmer	23-03-2013
17	DAN-T-81	040209-001 (LS)	2000	Malusar	Jaisalmer	23-03-2013
18	DAN-T-83	040553-007 (LS)	2000	Malusar	Jaisalmer	23-03-2013
19	DAN-T-30	040208-005	2000	Dangri & Ramsar	Jaisalmer	13-03-2013
20	DAN-T-31	040209-003	2000	Dangri & Ramsar	Jaisalmer	13-03-2013
21	DAN-T-32	040208-006	2000	Dangri & Ramsar	Jaisalmer	13-03-2013
22	DAN-T-33	040553-001	2000	Dangri & Ramsar	Jaisalmer	13-03-2013
23	DAN-T-36	040553-002	2000	Dangri & Ramsar	Jaisalmer	13-03-2013
24	DAN-T-54	4200313451/49	2000	Dangri & Ramsar	Jaisalmer	13-03-2013

25	DAN-T-224	040208-002	2000	Dangri & Ramsar	Jaisalmer	13-03-2013



Satellite View of Dangri site WTG (RJ)

Satellite View of Chotila site WTG (GJ)

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:

- Utilizing wind energy instead of burning fossil fuels for electricity generation significantly decreases the emission of harmful pollutants, fostering cleaner air, water, and soil.
- Leveraging wind energy aids in preserving natural resources and minimizing detrimental impacts on the environment, contributing to overall ecological well-being.
- Moreover, harnessing wind energy offers a sustainable alternative to burning fossil fuels, which not only mitigates pollution but also conserves natural habitats and biodiversity, supporting healthier ecosystems and enhancing environmental resilience.

Economic benefits:

- 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.
- 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.
- Use of a renewable source of energy reduces the dependence on imported fossil fuels and associated price variation, thereby leading to increased energy security.

SDG Goals	Description
Goal 3 	This Project activity Ensures healthy lives and promote well-being for all at all ages by Providing REACH - Paediatric Healthcare Programme in Various districts in the state of Gujarat like Kamrej, Mandvi, Mangrol, Olpad in Surat, Vagra.
Goal 4 	This Project activity is promoting SDG4 by giving Shiksha Setu (Quality education programme) (Rural and Urban Slum area) in Sabarmati in Ahmedabad, Kamrej in Surat, Vadgam in Banaskantha Kadi in Mehsana, in the state of Gujarat.
Goal 7 	This Wind energy project will generate clean electricity at a more accessible price for consumers. By utilizing a renewable resource, the project contributes to a growing share of clean energy sources in the global energy mix, ultimately reducing reliance on fossil fuels.
Goal 8 	This Wind project strengthens the local community by generating employment for the locals wherein a safe and inclusive work environment that empowers women is promoted.
Goal 13 	This 50 MW wind power project meets the SDG 13 goal by displacing fossil fuel-based energy generation by producing clean energy. This project is expected to reduce **101,742** tCO_2 emissions per year.

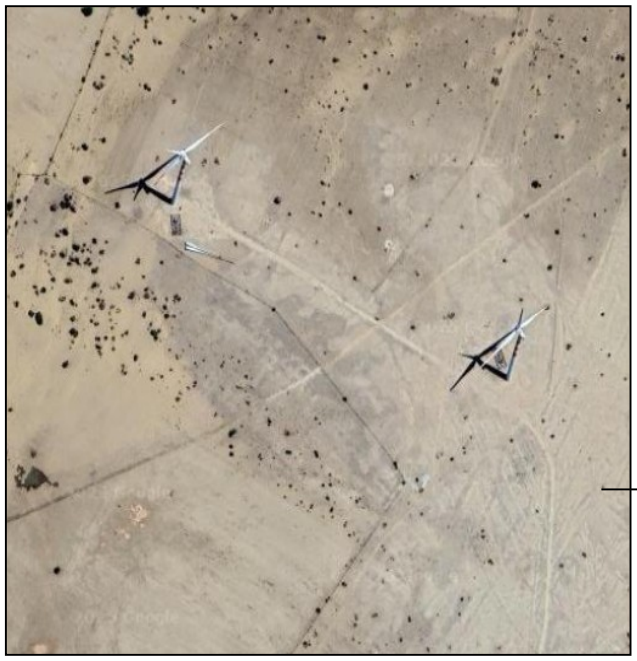
A.3. Location of project activity >>

This wind power plant area is located at Dangri, Ramsar & Mahidad villages in the state of Gujarat & Rajasthan.

Details of Latitude & Longitude of Individual machines have been Given below: -

Sr. No.	Site	Turbine No	Latitude	Longitude
1	Dangri	DANT30	26.52611	71.38889
2	Dangri	DANT31	26.52376	71.38012
3	Dangri	DANT32	26.52076	71.38072
4	Dangri	DANT33	26.51962	71.38671
5	Dangri	DANT36	26.50852	71.388
6	Dangri	DANT54	26.53945	71.41059
7	Dangri	DANT224	26.52738	71.38597
8	Dangri	DANT81	26.50679	71.45766
9	Dangri	DANT83	26.5132,	71.45957
10	Dangri	DANT123	26.51764	71.45656
11	Dangri	DANT230	26.50229	71.46296
12	Dangri	DANT231	26.49755	71.4625
13	Mahidad	GGM109	22.19413	71.18876
14	Mahidad	GGM09	22.28008	71.16618
15	Mahidad	GGM02	22.30344	71.15412
16	Mahidad	GGM126	22.261	71.18119
17	Mahidad	GGM16	22.25465	71.20959
18	Mahidad	GGM10	22.27581	71.17246
19	Mahidad	GGM19	22.25308	71.19512
20	Mahidad	GGM04	22.29861	71.15314
21	Mahidad	GGM133	22.2168	71.22437
22	Mahidad	GGM117	22.22879	71.14662
23	Mahidad	GGM03	22.29923	71.14864
24	Mahidad	GGM110	22.26252	71.15079
25	Mahidad	GGM141	22.26936	71.13118

The location of the project site has been shown below:



Rajasthan

Gujarat

A.4. Technologies/measures >>

The project activity involves 25 numbers of wind energy converters (WECs) of Enercon make (2000) kW with internal electrical lines connecting the Project with local evacuation facility. The WECs generates 3-phase power at 400V, which is stepped up to 33 KV. The Project can operate in the frequency range of 47.5–51.5 Hz and in the voltage range of 400 V ± 12.5%. The other salient features of the state -of-art-technology are:

Inox WT2000DF

S. No.	Description	Value
1	Project Capacity	50 MW
	a) WTG model	Inox WT2000DF
	b) Nos. of WTGs	25
	c) WTG rating	2.0 MW
	d) Hub height of turbines	80 m
	e) Rotor diameter of turbines	93 m
2	Site	Village Dangri, Dist. Jaisalmer, Rajasthan
3	Land particulars	Barren non-agricultural land with flat terrain
4	Annual average wind speed at hub height of 80 m	6.3 m/s
5	Long term wind speed data used for correlation with wind mast data	NCEP/NCAR reanalysis data for 20 years
6	Software used for estimating annual energy yield	WindPro and WAsP
7	Annual gross energy generation from wind farm (GWh/yr)	115.15

In the absence of the project activity the equivalent amount of electricity would have been generated from the connected/ new power plants in the Indian grid, which are/ will be predominantly based on fossil fuels, hence baseline scenario of the project activity is the grid-based electricity system, which is also the pre-project scenario. Since the project activity involves power generation from wind, it does not involve any GHG emissions for generating electricity.

A.5. Parties and project participants >>

Party (Host)	Participants
India (Host)	M/S Surya Vidyut Limited

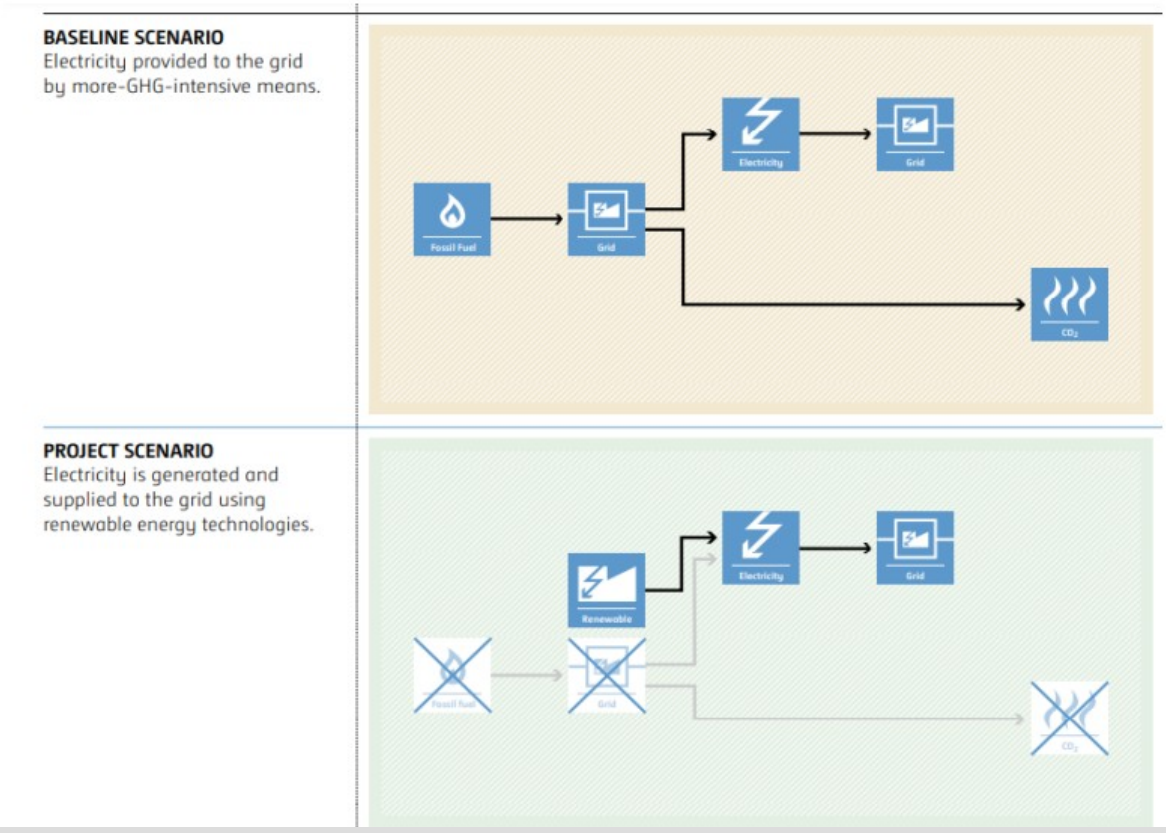
A.6. Baseline Emissions>>

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>>

This Project is not a debundled component of a larger project activity.

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 **- 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 ensures the prevention of double counting through the following measures:

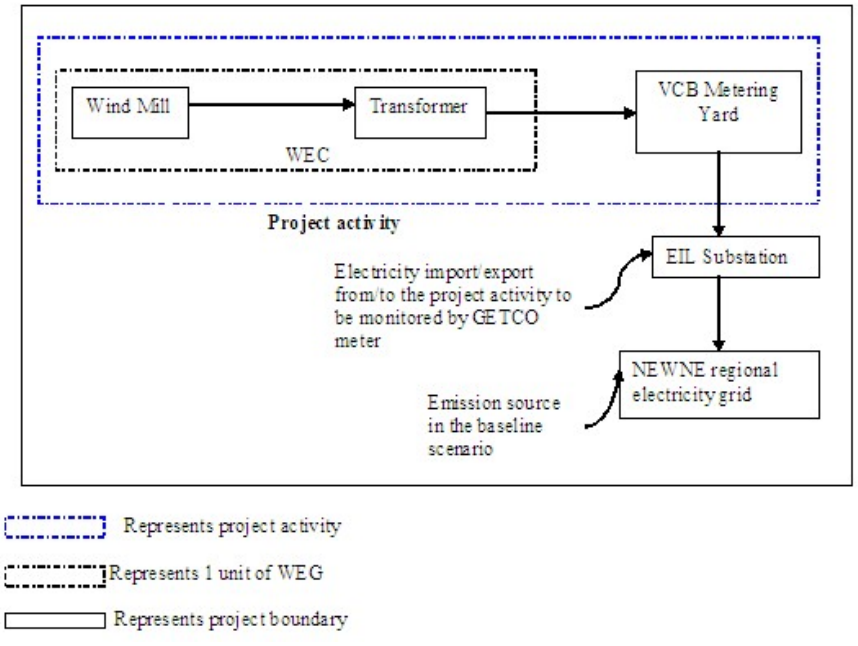
- It is uniquely identified by its geographic coordinates, a dedicated commissioning certificate, and a specific grid connection point.
- Exclusive energy meters are installed and linked directly to the project activit's consumption points.

Out of the total 50 MW bundled capacity, 24 MW located in Jaisalmer district, Rajasthan, was initially considered for registration under the Clean Development Mechanism (CDM)1. However, the project proponent did not proceed with CDM registration, and the project remains unregistered under CDM. The project activity is seeking verification exclusively under UCR and has not sought registration under any other GHG program, except CDM, which was not pursued. No validations, verifications, or issuances have occurred, ensuring no risk of double-counting of COUs.

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

As per applicable methodology, the spatial extent of the project boundary includes the project power plant, and all power plants connected physically to the electricity system that the project power plant is connected to. Hence, the project boundary includes the project site where the power plant has been installed, associated power evacuation infrastructure, energy metering points, switch yards and other civil constructs and connected to the Indian grid of Rajasthan. & Gujarat.

Project boundary:



[1] CDM: Wind Power Project in Jaisalmer District of Rajasthan

The baseline study of the Indian grid shows that the main sources of GHG emissions under the baseline scenario are CO2 emissions from the conventional power generating systems. Other emissions are that of CH4 and N2O 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 >>

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)

BEBEy = 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 17 in year y can be calculated as follows:

BE y = EG PJ, y * EF grid, CM, 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 CDM 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 :

EGPJ,y = EGfacility,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 CDM 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.

[2]As per UCR CoU Standard Update: 2024 Vintage UCR Indian Grid Emission Factor Announced | by Universal

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)= 101,742CoUs /year (101,743 tCO_{2eq}/year)

Year	Net Electricity Generation	Baseline Emissions	Project Emissions	Leakage	Emission Reductions	EF
	Mwh	(tCO_2e)	(tCO_2e)	(tCO_2e)	(tCO_2e)	(tCO2/MWh)
Year 1	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 2	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 3	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 4	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 5	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 6	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 7	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 8	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 9	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 10	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 11	1,14,563	103107	0.00	0.00	103106.95	0.9
Year 12	1,14,563	86724	0.00	0.00	86724.40	0.757
Total Emission reduction	**13,74,759**	**1220901**	**0**	**0**	**1220900**	
Average Emission Reduction	1,14,563	101742	0	0	1,01,742	

B.6. Prior History>>

Out of the total 50 MW bundled capacity, 24 MW located in Jaisalmer district, Rajasthan, was initially considered for registration under the Clean Development Mechanism (CDM)[3]. However, the project proponent did not proceed with CDM registration, and the project remains unregistered under CDM. The project activity is seeking verification exclusively under UCR and has not sought registration under any other GHG program, except CDM, which was not pursued. No validations, verifications, or issuances have occurred, ensuring no risk of double-counting of COUs.

B.7. Changes to start date of crediting period >>

The start date of crediting under UCR is considered as 13/03/2013 and no GHG emission reduction has been claimed so far.

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: 11 Years 09 Months 18 Days – 13/03/2013 to 31/12/2024

B.8. Monitoring plan>>

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 2013 – 2023 years & 0.757 tCO2/MWh for 2024 onwards as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach.
Source of data Value(s) applied	UCRCoUStandardAug2022updatedVer6_090822220127104470.pdf (rackcdn.com) https://medium.com/@UniversalCarbonRegistry/ucr-cou-standard-update-2024-vintage-ucr-indian-grid-emission-factor-announced-ddb790cdc603
Measurement methods and procedures	-
Monitoring frequency	Ex-ante fixed parameter
Purpose of data	For the calculation of Emission Factor of the grid

[3] CDM: Wind Power Project in Jaisalmer District of Rajasthan

Data and Parameters to be monitored (ex-post values)

Data / Parameter:	$EGpj_{,y}$ net
Data unit:	MWh
Description:	Net electricity supplied to the Indian grid facility by the project activity.
Source of data:	Joint Meter Reading Report
Measurement procedures (if any):	Data Type: Measured Monitoring equipment: Energy Meters are used for monitoring Calibration frequency: Once in 5 years (considered as per provision of CEA India). 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 by TSNPDCL/NPDCTL whichever is applicable. 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, EGPJ,y = EGNet,Export
Value Applied	**114,563 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:	Monthly 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
QA/QC procedures:	Continuous monitoring, hourly measurement by site In-charge, monthly recording in Sub-station. Tri-vector (TVM)/ABT energy meters with accuracy class 0.2s.
Purpose of Data	Calculation Of Baseline Emission