PROJECT CONCEPT NOTE

CARBON OFFSET UNIT (CoU) PROJECT

Title: 20 MW Wind power project in Rajasthan by RSWM Limited

Version 1.0

Date 04-01-2022

First CoU Issuance Period: 8 years

Date: 01/01/2014 to 31/12/2021

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

BASIC INFORMATION	
Title of the project activity	20 MW Wind power project in Rajasthan by RSWM Ltd.
Scale of the project activity	Large Scale
Completion date of the PCN	22/12/2021
Project participants	Creduce Technologies Private Limited (Representator) RSWM Limited (Developer)
Host Party	India
Applied methodologies and standardized baselines	Applied Baseline Methodology: ACM0002: "Grid connected renewable electricity generation", version 20 Standardized Methodology: Not Applicable.
Sectoral scopes	01 Energy industries (Renewable/Non-Renewable Sources)
Estimated amount of total GHG emission reductions	To be estimated during verification [An ex-ante estimate is 33,113 CoUs per year]

SECTION A. Description of project activity

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

The proposed project title under UCR is "20 MW Wind power project in Rajasthan", which is a Wind Power project located in Jaisalmer district of Rajasthan (India). The project is an operational activity with continuous reduction of GHG, currently being applied under "Universe Carbon Registry" (UCR).

Purpose of the project activity:

The project activity is a renewable power generation activity which incorporates installation and operation of 10 Wind Turbine Generators (WTGs) having individual capacity (2.0 MW X 10 Nos) manufactured and supplied by Inox wind with aggregated installed capacity of 20 MW in Village-Ola, Rajgarh and Bhainsara of the state of Rajasthan in India. This project has been promoted by RSWM Limited, who is a leader manufacturer of high quality yarns. The Project will supply 20 MW of the power to RSWM Limited's manufacturing unit in Rajasthan through the state DISCOM, which is a part of the Northern, Eastern, Western and North-Eastern (NEWNE) Electricity Grid of India.

The project got commissioned by March 2013- eight number of WTGs got commissioned on 29/03/2013 and remaining two WTGs on 30/03/2013. As per the ex-ante estimate, the project will generate approximately 36,792 MWh of electricity per annum. The net generated electricity from the project activity is being wheeled to manufacturing facility of PP in Rajasthan for captive consumption through NEWNE grid as per wheeling agreement signed between Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPN) and PP. Through utilisation of renewable power at the manufacturing unit, the project activity would be displacing equivalent quantum of grid electricity resulting in emission reduction of 33,113 tCO_2 per annum. The project activity has been helping in greenhouse gas (GHG) emission reduction by using renewable resources (wind energy) for generating power which otherwise would have been generated using grid mix power plants, which is dominated by fossil fuel based thermal power plants.

The estimated annual average and the total CO_2e emission reduction by the project activity is expected to be 33,113 tCO_2e, whereas actual emission reduction achieved during the first CoU period shall be submitted as a part of first monitoring and verification.

Since the project activity generates electricity through wind energy, a clean renewable energy source it will not cause any negative impact on the environment and thereby contributes to climate change mitigation efforts.

Project's Contribution to Sustainable Development

This project is a greenfield activity where grid power is the baseline. Indian grid system has been predominantly dependent on power from fossil fuel powered plants. The renewable power generation is gradually contributing to the share of clean & green power in the grid, however, grid emission factor is still on higher side which defines grid as distinct baseline.

The Government of India has stipulated following indicators for sustainable development in the interim approval guidelines for such projects which are contributing to GHG mitigations. The Ministry of Environment, Forests & Climate Change, has stipulated economic, social, environment

and technological well-being as the four indicators of sustainable development. It has been envisaged that the project shall contribute to sustainable development using the following ways:

Social well-being: The project would help in generating direct and indirect employment benefits accruing out of ancillary units for manufacturing towers for erection of the Wind Turbine Generator (WTG) and for maintenance during operation of the project activity. It will lead to development of infrastructure around the project area in terms of improved road network etc. and will also directly contribute to the development of renewable infrastructure in the region.

Economic well-being: The project is a clean technology investment decided based on carbon revenue support, which signifies flows of clean energy investments into the host country. The project activity requires temporary and permanent, skilled and semi-skilled manpower at the project location; this will create additional employment opportunities in the region. The generated electricity will be utilised for captive consumption, thereby reducing the demand from the grid. In addition, improvement in infrastructure will provide new opportunities for industries and economic activities to be setup in the area. Apart from getting better employment opportunities, the local people will get better prices for their land, thereby resulting in overall economic development.

Technological well-being: The project activity employs state of art technology i.e. 2 MW WTGs which has high power generation potential with optimised utilization of land. The successful operation of project activity would lead to promotion of this technology and would further push R&D efforts by technology providers to develop more efficient and better machinery in future. Hence, the project leads to technological well-being.

Environmental well-being: The project activity will generate power using zero emissions wind-based power generation facility which helps to reduce GHG emissions and specific pollutants like SOx, NOx, and SPM associated with the conventional thermal power generation facilities. The project utilizes wind energy for generating electricity which is a clean source of energy. The project activity will not generate any air pollution, water pollution or solid waste to the environment which otherwise would have been generated through fossil fuels. Thus, the project causes no negative impact on the surrounding environment contributing to environmental well-being.

With regards to ESG credentials:

At present specific ESG credentials have not been evaluated, however, the project essentially contributes to various indicators which can be considered under ESG credentials. Some of the examples are as follows:

Under Environment:
Environmental criteria may include a company's energy use, waste, pollution, natural resource conservation, and treatment of animals etc. For the project proponent, energy use pattern is now based on renewable energy due to the project and it also contributes to GHG emission reduction and conservation of depleting energy sources associated with the project baseline. Also, the criteria can be further evaluated on the basis of any environmental risks which the company might face and how those risks are being managed by the company. Here, as the power generation will be based on wind power, the risk of environmental concerns associated with non-renewable power generation and risk related to increasing cost of power etc. are now mitigated. Hence, project contributes to ESG credentials.

Under Social:
Social criteria reflect on the company's business relationships, qualitative employment, working

conditions with regard to its employees' health and safety, interests of other stakeholders' etc. With respect to this project, the Project Proponent has robust policies in place to ensure equitable employment, health & safety measures, local jobs creation etc. Also, the organizational CSR activities directly support local stakeholders to ensure social sustainability. Thus, the project contributes to ESG credentials.

Under Governance:

Governance criteria relates to overall operational practices and accounting procedure of the organization. With respect to this project, the Project Proponent practices a good governance practice with transparency, accountability and adherence to local and national rules & regulations etc. This can be further referred from the company's annual report. Also, the project activity is a wind power project owned and managed by the proponent for which all required NOCs and approvals are received. The electricity generated from the project can be accurately monitored, recorded and further verified under the existing management practice of the company. Thus, the project and the proponent ensure good credentials under ESG.

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

There was no harm identified form the project and hence no mitigations measures are applicable.

Rational: as per 'Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India)', final document on revised classification of Industrial Sectors under Red, Orange, Green and White Categories (07/03/2016), it has been declared that wind project activity falls under the "White category". White Category projects/industries do not require any Environmental Clearance such as 'Consent to Operate' from PCB as such project does not lead to any negative environmental impacts. Additionally, as per Indian Regulation, Environmental and Social Impact Assessment is not required for Wind Projects.

Nevertheless, Stakeholders gathered at the commonly agreed location at Sakara Panchyat Samiti office (Village elected body office), Rajasthan, India on 14/02/2013 by the PP to understand, discuss, record all possible concerns related environment and socio-economic aspects of the project so that as per requirements mitigation measures can be taken. Along with personal invitation, public notices were placed in local newspapers to invite people for the consultation meeting with the agenda of inviting public comments on the project activity. The feedback and inputs received from stakeholders confirm that no negative impact is foreseen by the stakeholders.

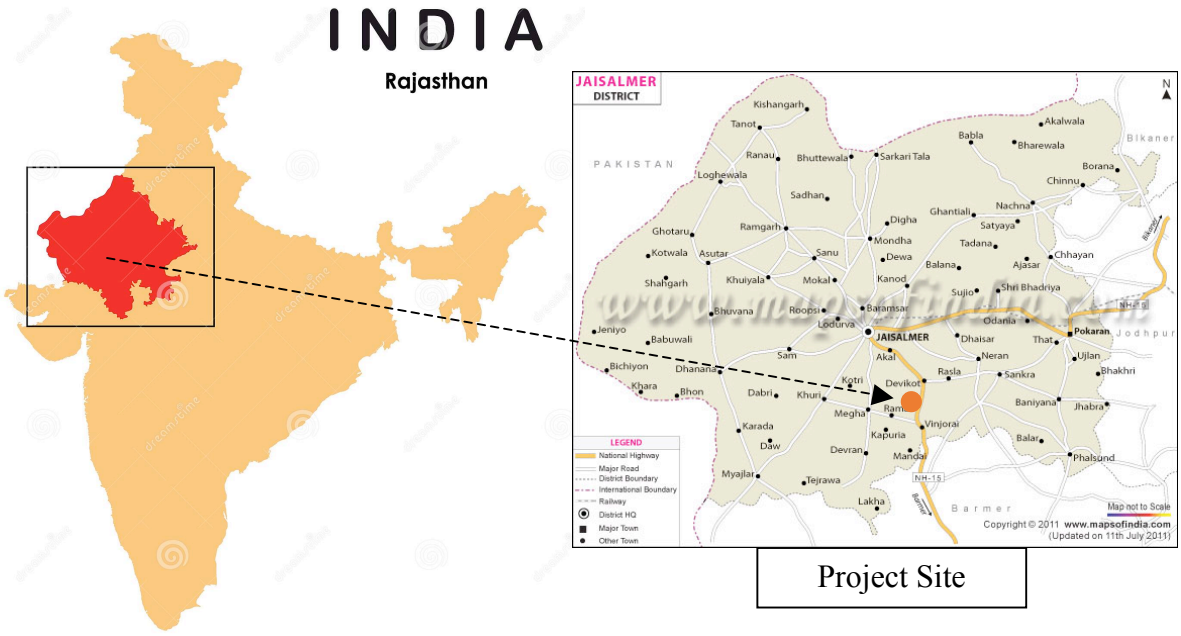
Additionally, there are social, environmental, economic and technological benefits which contribute to sustainable development. The key details have been discussed in the previous section.

A.3. Location of project activity >>

The project location is situated at village- Ola, Rajgarh and Bhainsara, District-Jaisalmer in the state of Rajasthan. The nearest airport is in Jodhpur. The project site is well connected by district and village roads to the nearest town. The geographic co-ordinates of the project locations have been provided below.

WTG No	Latitude	Longitude	Village	Tehsil	District
DAN T-289	26°30' 40"	71°29' 50"	Ola	Pokaran	Jaisalmer
DAN T-142	26°33' 37"	71°30' 57"	Rajgarh	Pokaran	Jaisalmer
DAN T-143	26°33' 40"	71°30' 42"	Rajgarh	Pokaran	Jaisalmer
DAN T-148	26°35' 01"	71°30' 17"	Bhainsara	Pokaran	Jaisalmer
DAN T-149	26°34' 56"	71°29' 51"	Bhainsara	Pokaran	Jaisalmer
DAN T-150	26°35' 19"	71°29' 36"	Bhainsara	Pokaran	Jaisalmer
DAN T-151	26°35' 17"	71°29' 54"	Bhainsara	Pokaran	Jaisalmer
DAN T-152	26°35' 33"	71°29' 37"	Bhainsara	Pokaran	Jaisalmer
DAN T-153	26°35' 44"	71°29' 29"	Bhainsara	Pokaran	Jaisalmer
DAN T-241	26°34' 41"	71°30' 10"	Bhainsara	Pokaran	Jaisalmer

The representative location map is included below:



(Courtesy: google map and images)

A.4. Technologies/measures >>

The proposed project activity is installation and operation of 10 Wind Turbine Generators (WTGs) having individual capacity 2 MW manufactured and supplied by Inox Wind with aggregated installed capacity of 20 MW in the state of Rajasthan state of India.

Technical details for 2 MW Machine manufactured by Inox Wind are as follows:

Rotor:	
Diameter	93.3 m
Swept area	6785 m2
Tower	
Type	Conical Tubular Steel Tower
Tower Height	78 m
Generator:	
Type	Double Fed Induction Generator
Rated power	2.0 MW
Voltage	690 V AC
Frequency	50 Hz

Apart from the above technical specification of WTGs, the connectivity of all the WTGs is to a Central Monitoring Station (CMS) through high speed WLAN modem or fibre optic cable which helps in providing real time status of the turbine at CMS with easy GUI (Graphical User Interface) and ability to monitor the functioning of the turbine from CMS.

A Supervisory Control & Data Acquisition System (SCADA) provides a graphical representation of data providing ease to understand the behaviour of WTG, long time data storage facility, access to daily generation report and power curve related information & helps to analyse the problem with graphical tools offline as well as online. The other specifications include a safety system with instrumentation for tracking individual functions of the wind turbine generator. The life time of the WTG is 20 years as per manufacturer specifications.

In the absence of the project activity the equivalent amount of electricity imported from NEWNE grid would have been generated from the NEWNE grid, which is predominantly based on fossil fuels[1], hence baseline scenario of the project activity is the grid-based electricity system, which is also the pre-project scenario.

[1] http://www.cea.nic.in/executive_summary.html

A.5. Parties and project participants >>

Party (Host)	Participants
India	**Creduce Technologies Private Limited (Representator)** Contact person: Shailendra Singh Rao Mobile: +91 9016850742, 9601378723 Address: 2-O-13,14 Housing Board Colony, Banswara, Rajasthan - 327001, India **RSWM Limited (Developer)** Address: Bhilwara Towers, A-12, Sector-1, Noida – 201 301 (U.P.)

A.6. Baseline Emissions>>

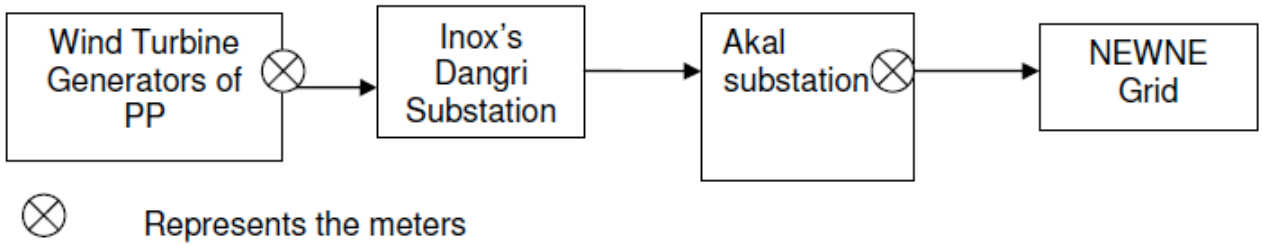
The baseline scenario identified at the PCN stage of the project activity is:

- Grid

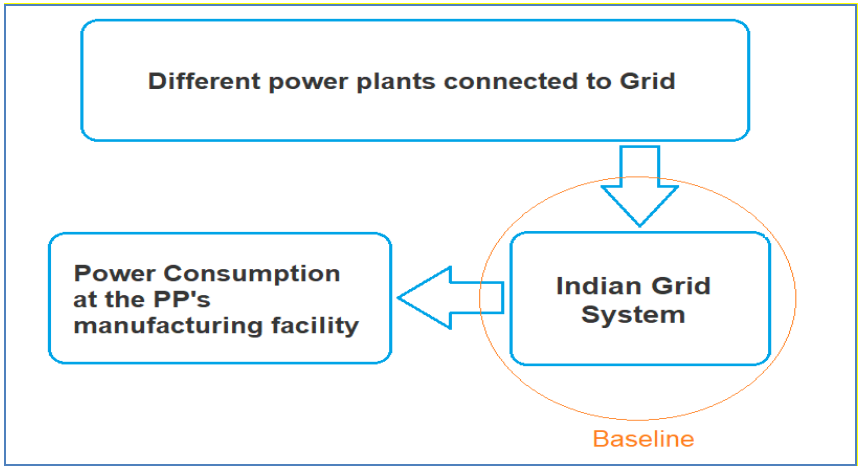
In the absence of the project activity, the equivalent amount of electricity would have been imported from the regional grid (which is connected to the unified Indian Grid system (NEWNE Grid)), which is carbon intensive due to predominantly sourced from fossil fuel-based power plants. Hence, baseline scenario of the project activity is the grid-based electricity system, which is also the pre-project scenario.

Schematic diagram showing the baseline scenario:

Project Scenario:



Baseline Scenario:



A.7. Debundling>>

This project activity 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:
I - Renewable Energy Projects

CATEGORY:
ACM0002 (Title: "Grid connected renewable electricity generation", version 20)

Note: Project Proponent is applying the version 20 of the methodology as the project is a CDM registered project under the ID 9460 with the version 15 of the applied methodology.

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

The project activity involves generation of grid connected electricity from the construction and operation of a new wind power based power project for captive consumption of the power at the PP's facility. The project activity has installed capacity of 20 MW which will qualify for a large scale project activity under Type-I of the Large Scale methodology. The project status is corresponding to the methodology ACM0002, version 20 and applicability of methodology is discussed below:

Applicability Criterion	Project Case
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 plants/units; (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s).	The project activity consists of **installation of Greenfield power plant** at a site where no renewable power plant was operated prior to the implementation of the project activity. Thus, it meets the said applicability condition.
2. The project activity may include renewable energy power plant/unit of one of the following types: 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;	The project activity is the installation of 10 numbers of wind turbine generators (WTGs). Hence, meets this criterion.

3. In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power 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.	The project activity does not involve capacity additions, retrofits, rehabilitations or replacements. Hence this criterion is not applicable to the project activity.
4. In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or (b) The project activity is implemented in 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, calculated using equation (7), is greater than 4 W/m2; or (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for 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 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 shall be: a. Lower than or equal to 15 MW; and b. Less than 10 per cent of the total	The project activity is not a hydro power plant. Hence this applicability criterion is not relevant to the project activity.

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 in different 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 of five years prior to the implementation of the CDM project activity.	The project activity is not a hydro power plant. Hence this applicability criterion is not relevant to the project activity.
6. 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/units.	Project activity does not involve: (a) Switching from fossil fuels to renewable energy sources at the site of the project activity. (b) Biomass fired plants. Hence this criterion is not applicable.
7. 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 project is not a retrofit, rehabilitations, replacements or capacity addition; hence this applicability criterion is not relevant.
8. In addition, the applicability conditions included in the tools referred to above apply.	Applicability conditions of the applied tool are justified.

From the above it is concluded that the project activity meets all the applicability conditions of the methodology ACM0002 version 20 "Grid connected electricity generation from renewable sources".

The project activity also meets the following applicability conditions of "Tool to calculate the emission factor for an electricity system".

Applicability Criterion	Project Case
1. This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	The project activity substitutes grid electricity by supplying renewable power to grid. Hence this criterion is applicable.
2. In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	Since the project electricity system is not located partially or totally in Annex I country hence this criterion is not applicable.

The project activity also meets the applicability conditions given in "Tool for the demonstration and assessment of additionality".

Other tools mentioned in the methodology are not applicable for this project activity.

In addition to this, all approved Standardized baselines are not applicable for the project activity.

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

There is no double accounting of emission reductions in the project activity due to the following reasons:

- Project is uniquely identifiable based on its location coordinates,
- Project has dedicated commissioning certificate and connection point,
- Project is associated with energy meters which are dedicated to the consumption point for project developer

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

As per applicable methodology ACM002 version 20, "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."

Thus, the project boundary includes the Wind Turbine Generators (WTGs) and the Indian grid system.

Source		Gas	Included?	Justification/Explanation
Baseline	Grid connected electricity generation	**CO_2**	**Yes**	**Main emission source**
		CH_4	No	Minor emission source
		N_2O	No	Minor emission source
		Other	No	No other GHG emissions were emitted from the project

Source		Gas	Included?	Justification/Explanation
Project	Greenfield Wind Power Project Activity	CO_2	No	No CO_2 emissions are emitted from the project
		CH_4	No	Project activity does not emit CH_4
		N_2O	No	Project activity does not emit N_2O
		Other	No	No other emissions are emitted from the project

B.5. Establishment and description of baseline scenario >>

This section provides details of emission displacement rates/coefficients/factors established by the applicable methodology selected for the project.

As per the approved consolidated methodology ACM0002 version 20, 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 wind power plant to harness the green power from wind energy and to use for captive purpose via grid interface through wheeling arrangement. 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.

A "grid emission factor" refers to a CO_2 emission factor (tCO_2/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO_2/MWh for the 2014- 2020 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Also, for the vintage 2021, the combined margin emission factor calculated from CEA database in India results into higher emission than the default value. Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach.

Net GHG Emission Reductions and Removals

Thus, $ER_y = BE_y - PE_y - LE_y$

Where:

ER_y = Emission reductions in year y (tCO_2/y)

BE_y = Baseline Emissions in year y ($t CO_2/y$)

PE_y = Project emissions in year y (tCO_2/y)

LE_y = Leakage emissions in year y (tCO_2/y)

Baseline Emissions

Baseline emissions include only CO_2 emissions from electricity generation in power plants that are

displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

$BE_y = EG_{PJ,y} \times EF_{grid,y}$

BE_y	=	Baseline emissions in year y (t CO_2)
$EG_{PJ,y}$	=	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)
$EF_{grid,y}$	=	UCR recommended emission factor of 0.9 tCO_2/MWh has been considered. (Reference: General Project Eligibility Criteria and Guidance, UCR Standard, page 4)

Project Emissions

As per ACM0002 version 20, only emission associated with the fossil fuel combustion, emission from operation of geo-thermal power plants due to release of non-condensable gases, emission from water reservoir of Hydro should be accounted for the project emission. Since the project activity is a wind power project, project emission for renewable energy plant is nil.

Thus, PEy =0.

Leakage

As per ACM0002 version 20, 'If the energy generating equipment is transferred from another activity, leakage is to be considered.' In the project activity, there is no transfer of energy generating equipment and therefore the leakage from the project activity is considered as zero.

Hence, LEy= 0

The actual emission reduction achieved during the first CoU period shall be submitted as a part of first monitoring and verification. However, for the purpose of an ex-ante estimation, following calculation has been submitted:

Estimated annual baseline emission reductions (BEy)

= 36,792 MWh/year *0.9 tCO2/MWh

= 33,113 tCO2/year (i.e. 33,113 CoUs/year)

B.6. Prior History>>

The project activity is a bundle of wind machines. Following are the key details under the prior history of the project:

(a) The project activity was applied under Clean Development Mechanism (CDM) of UNFCCC to consider generation or issuance of carbon credits under the project title and ID "Project 9460: Wind power project in Rajasthan" and got registered on 03 September 2014. However, Verification for the period took place for the period between 3rd September 2014 to 30th September 2020, Yet no issuance of credits have taken place so far.

(b) The project has not applied under any other GHG mechanism; also for the current period of COUs, the CDM verification has also not been initiated. Hence project will not cause double accounting of carbon credits (i.e. COUs).

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

There is no change in the start date of crediting period.
The crediting period under UCR has been considered from 01/01/2014.

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

Not applicable.

B.9. Monitoring period number and duration>>

First Issuance Period: 8 years – 01/01/2014 to 31/12/2021 (inclusive of both dates).

B.8. Monitoring plan>>

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

Data / Parameter	UCR recommended emission factor
Data unit	tCO_2 /MWh
Description	A "grid emission factor" refers to a CO_2 emission factor (tCO_2/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO_2/MWh for the 2014- 2020 years 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	https://a23e347601d72166dcd6-16da518ed3035d35cf0439f1cdf449c9.ssl.cf2.rackcdn.com//Documents/UCRStandardNov2021updatedVer2_301121081557551620.pdf
Value applied	0.9
Measurement methods and procedures	-
Monitoring frequency	Ex-ante fixed parameter
Purpose of Data	For the calculation of Emission Factor of the grid
Additional Comment	The combined margin emission factor as per CEA database (current version 16, Year 2021) results into higher emission factor. Hence for 2021 vintage UCR default emission factor remains conservative.

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

Data / Parameter	$EG_{PJ,facility,y}$
Data unit	MWh
Description	Net electricity supplied to the NEWNE grid facility by the project activity
Source of data	Share certificate issued by GETCO (Rajasthan Energy Transmission Corporation Limited)
Measurement procedures (if any):	Data Type: Measured Monitoring equipment: Energy Meters are used for monitoring Archiving Policy: Electronic Calibration frequency: Once in 5 years (considered as per provision of CEA India). The net electricity generated by the project activity will be calculated from net electricity supplied to grid from the share certificate issued by state utility (currently GETCO) on monthly basis for respective WTGs. The amount of energy supplied by the WTGs are continuously monitored and recorded once a month. The same can be cross-checked from the State utility website which is publicly available.
Measurement Frequency:	Monthly
Value applied:	36,792

QA/QC procedures applied:	Continuous monitoring, hourly measurement monthly recording. Tri-vector (TVM)/ABT energy meters with accuracy class 0.2s
Purpose of data:	The Data/Parameter is required to calculate the baseline emission.
Any comment:	Data will be archived electronically for a period of 36 months beyond the end of crediting period. Since the renewable power generated from the project is used for captive consumption via wheeling, hence during the monitoring and verification the provision of the wheeling agreement may be referred.