Verification Report

UCR ID: 445

Prepared by

Naturelink Solutions Pvt. Ltd.

Title	**2.1 MW Wind Power Project by SVPL**
Project Owner	**M/s. Simpolo Vitrified Private Limited**
Project Location	**Village: Sukhsan, Dist.: Kutch, Gujarat, India.** **Coordinates: 23°17'04.5"N 69°18'17.8"E**
Date	**06/03/2025**

COVER PAGE Project Verification Report Form (VR)	
BASIC INFORMATION	
Name of approved UCR Project Verifier / Reference No.	Naturelink Solutions Pvt. Ltd.
Type of Accreditation	☐ CDM Accreditation ☐ ISO 14065 Accreditation ☒ UCR Approved Verifier
Approved UCR Scopes and GHG Sectoral scopes for Project Verification	Sectoral Scope: 01 Energy Industries
Validity of UCR approval of Verifier	May - 2022 onwards
Completion date of this VR	06/03/2025
Title of the project activity	2.1 MW Wind Power Project by SVPL
Project reference no. (as provided by UCR Program)	445
Name of Entity requesting verification service	M/s. Creduce Technologies Private Limited (Aggregator) M/s. Simpolo Vitrified Private Limited (Project owner)
Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)	Mr. Shailendra Singh Rao (Creduce Technologies Pvt. Ltd.) shailendra@creduce.tech Mr. Manshukh Kaila (M/s. Simpolo Vitrified Pvt. Ltd.) mtp@simpolo.net
Country where project is located	India
Applied methodologies	AMS-I.D: Grid connected renewable electricity generation– Version 18.0/4/
Sectoral Scope(s):	01 Energy industries (Renewable/Non-renewable Sources)

Project Verification Criteria: Mandatory requirements to be assessed	☒ UCR Verification Standard ☒ Applicable Approved Methodology ☐ Applicable Legal requirements /rules of the host country ☒ Eligibility of the Project Type ☒ Start date of the Project activity ☒ Meet applicability conditions in the applied methodology ☒ Credible Baseline ☒ Do No Harm Test ☒ Emission Reduction calculations ☒ Monitoring Report ☒ No GHG Double Counting ☐ Others (please mention below)
Project Verification Criteria: Optional requirements to be assessed	☒ Environmental Safeguards Standard and do-no-harm criteria ☐ Social Safeguards Standard do-no-harm criteria
Project Verifier's Confirmation: The *UCR Project Verifier* has verified the UCR project activity and therefore confirms the following:	The UCR-approved verifier Naturelink Solution Pvt. Ltd., verifies the following with respect to the UCR Project Activity "2.1 MW Wind Power Project by SVPL" ☒ The project aggregator has correctly described the project activity in the Project Concept Note/7/ including the applicability of the approved methodology AMS-I.D/4/ and meets the methodology applicability conditions and has achieved the estimated GHG emission reductions, complies with the monitoring methodology and has calculated emission reductions estimates correctly and conservatively. ☒ The project activity is likely to generate GHG emission reductions amounting to the estimated 10518 tCO_2e, as indicated in the monitoring report V.2 /08/, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable UCR rules, including ISO 14064-2 and ISO 14064-3.

	☒ The project activity is not likely to cause any net-harm to the environment and/or society ☒The project activity complies with all the applicable UCR rules and therefore recommends UCR Program to register the Project activity with above mentioned labels.
Project Verification Report, reference number and date of approval	Verification Report UCR UCR ID: 445 Version: 1.0 Date: 06/03/2025
Name of the authorised personnel of UCR Project Verifier and his/her signature with date	 Ms. Trapti Joshi GHG Assessor Naturelink Solution Pvt. Ltd. Date: 06/03/2025

Table of Contents

1. Project Verification Report

1.1 Executive Summary

The verification work has been contracted by project aggregator M/s. Creduce Technologies Pvt Ltd (aggregator) and M/s. Simpolo Vitrified Pvt. Ltd. (Owner) to perform an independent verification of its UCR project titled **"2.1 MW Wind Power Project by SVPL", UCR approved project ID:445**, to establish a number of CoUs generated by the project over the crediting period from 01/07/2021 to 31/12/2023 (both days included).

Verification for the period: 01/01/2021 to 31/12/2023

In our opinion, the total GHG emission reductions over the crediting/verification period stated in the Monitoring Report (MR) V.2 /08/, submitted are found to be correct and in line with the UCR guidelines/02/. The GHG emission reductions were calculated based on UCR guideline/02/ which draws reference from, the standard baseline, AMS-I. D: Grid connected renewable electricity generation– Version 18.0/4/. The verification was done remotely by way of video calls for site inspection of the plant and submission of documents for verification through emails.

It is certified that the emission reductions from the "2.1 MW Wind Power Project by SVPL" (UCR ID – 445) for the period 01/07/2021 to 31/12/2023 amounts to **10518** CoUs (**10518 tCO_2e**).

Objective

The objective of this verification is to have an independent third-party assessment of whether the project activity conforms to the qualification criteria set out in the UCR Program Manual/1/, UCR CoU Standard/2/ and UCR verification standard/3/ to attain real, measurable, accurate and permanent emission reductions.

Scope

The scope of the verification is the independent, objective review and ex-post determination of the monitored reductions in GHG emission by the project activity.

1. To verify the project implementation and operation with respect to the registered PCN/7/.
2. To verify the implemented monitoring plan with the registered PCN/7/ applied baseline and monitoring methodology/4/.
3. To verify that the actual monitoring systems and procedures follow the monitoring plan.
4. To evaluate the GHG emission reduction data and express a conclusion whether the reported GHG emission reduction data is free from material misstatement
5. To verify that reported GHG emission data is sufficiently supported by evidence.
6. Agreement stating assurance to avoid double accounting for the project to be verified, along with required proof.

The project is assessed against the requirements of the UCR Program Manual/1/, UCR CoU Standard/2/ and UCR verification standard/3/, ISO 14064-2.

Due professional care has been exercised and ethical conduct has been followed by the assessment team during the verification process. The verification report is a fair presentation of the verification activity. The validation of the project is not part of the present assignment and project is deemed validated post-registration by UCR.

1.2 Description of the Project

The project consists of one WTG with a capacity of 2.1 MW which was manufactured and supplied by Suzlon Energy. Wheeling agreement/15/ is signed between Paschim Gujarat Vij Company Limited (PGVCL) and PP. M/s Simpolo Vitrified Pvt. Ltd. is the owner of this project. The project generates clean energy by utilizing the kinetic energy of the wind.

The project activity aims to harness the kinetic energy of wind (a renewable source) to generate electricity. Wheeling agreement/15/ is signed between Paschim Gujarat Vij Company Limited (PGVCL) and PP. 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 powerplants. Currently, the NEWNE grid is connected to large numbers of fossil fuel-based power plants.

Technical details for the turbine with a capacity of 2.1 MW manufactured by Suzlon Energy are as follows:

Operational Data	
WF Capacity	2.1 MW
Make of WTG	Suzlon Energy
No. of WTG	1
Rotor diameter	111.8 m
Rotor swept area	9852 m^2
Rated power	2.1 MW
Cut in wind speed	3.0m/s
Rated wind speed	12.5m/s
Cut out wind speed	30.0m/s (3-second average) 21.0m/s (10-minute average)
Tower Hub heights	90m | 120m | 140m
Tower type	Steel Tubular | Hybrid Lattice
Blade Make	Suzlon SB54
Generator frequency	50Hz / 60Hz

As mentioned in the monitoring report Ver.2.0/8/ and emission reduction calculation sheet/11/ submitted for verification, the project replaces anthropogenic emissions of greenhouse gases (GHGs) estimated to be 10518 tCO_2e for the verification period, there on displacing 11687.709 MWh amount of electricity from the generation of fossil-fuel based power plants connected to the Indian electricity grid.

The project activity uses kinetic energy of wind to generate electricity by installation of a wind turbine generator having a capacity of 2.1 MW. The project is a small-scale activity. The methodology applied in the monitoring report is verified against the AMS-I. D: Grid connected renewable electricity generation - Version 18.0/4/ total emission reductions (ERs) achieved through the project activity during the monitoring period is summarised below:

Summary of the Project Activity and ERs Generated for the Monitoring Period	
Project start date	30/06/2021
Start date of this Monitoring Period	01/07/2021
Carbon credits claimed up to	31/12/2023
Total ERs generated (tCO_2e)	10518
Leakage Emission	0
Project Emission	0

1.3 Project Verification team, technical reviewer and approver:

Project verification team

Sr. No.	Role	Last name	First name	Affiliation	Involvement in		
					Doc review	Remote inspection	Interviews
1.	GHG Assessor	Joshi	Trapti	Naturelink Solutions Pvt. Ltd.	Yes	Yes	Yes

Technical Reviewer and Approver of the Verification report

Sr. No.	Role	Type of resource	Last name	First name	Affiliation
1.	Internal Technical Reviewer	IR	Mandliya	Shyam	Naturelink Solutions Pvt. Ltd.

2 Verification Process

2.1.1 Desk/document review

The desk review was conducted by the verification team that included:

- A review of data and information presented to assess its completeness
- A review of the initial PCN/7/ and MR Version 2.0/08/, emission reduction calculation sheet/11/, Applied Methodology - AMS. I. D/4/.
- A cross-check between information provided in the monitoring report /8/ and data from other sources such as certificate of share of electricity generated by wind farm/17/, Commissioning Certificates/13/ or similar data sources;
- A review of calculations and assumptions made in determining the GHG data and emission reductions calculation/11/;

The list of submitted documents is available in a subsequent section of this verification report under appendix - 2 “Document reviewed or referenced”.

2.1.2 Remote Inspection

As per UCR Verification Standard Version 2.0/3/, the verification team conducted a remote inspection of project activity via video conferencing on 17/02/2025 at locations Kutch district as mentioned in the table below.

Date of Remote inspection:	17/02/2025			
No.	**Activity performed On-Site**	**Site location**	**Date**	**Project Personnel**
1.	Opening meeting	Project location	17/02/2025	Mr. Mansukh T. Kaila, Director Milan Chauhan, Site In-charge (Kutch), SVPL
2.	Remote inspection of all installation	Project location (Kutch)	17/02/2025	Mr. Mansukh T. Kaila, Director Milan Chauhan, Site In-charge (Kutch), SVPL Mr. Kashyap Trivedi – Senior Consultant, CTPL
3.	Closing meeting	Project location (Kutch)	17/02/2025	Mr. Mansukh T. Kaila, Director

				Milan Chauhan, Site In-charge (Kutch), SVPL Mr. Kashyap Trivedi – Senior Consultant, CTPL

The following parameters were assessed but not limited to:

- An assessment of the implementation and operation of the registered project activity as per the registered PCN/7/;
- A review of information flows for generating, aggregating, and reporting the monitoring parameters;
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PCN/7/ and MR /8/;
- A cross-check of the monitoring equipment including calibration reports and observations of monitoring practices against the requirements of the PCN/7/ and MR Version 2.0/08/, and the selected methodology/4/;
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

2.1.3 Interviews

No.	Interview			Date	Subject
	Last name	First name	Affiliation		
1.	T. Kaila	Mansukh	Director	17/02/2025	Legal ownership of the project, Implementation of the project, start date and crediting period, Double counting of the carbon credits, Monitoring Plan
2.	Chauhan	Milan	Site In-charge	17/02/2025	Project boundary, Procedure of the generation and export of electricity, Site installation details, details of energy meter and recording of the electricity generation, calibration of energy meter Procedure of the generation and export of the electricity, details of energy meter and recording of the electricity generation, site installations

					details, calibration of energy meter
3.	Trivedi	Kashyap	Senior Consultant – Creduce Technologies Pvt. Ltd.	17/02/2025	Project Overview, PCN, Monitoring Report, Methodology, eligibility criteria, Baseline emissions, Emission Reduction Calculation

2.1.4 Clarification request (CLs), corrective action request (CARs) and forward action request (FARs) raised

Areas of Project Verification findings	No. of CL	No. of CAR	No. of FAR
Green House Gas (GHG)			
Identification and Eligibility of project type	NIL	01	NIL
General description of project activity	NIL	01	NIL
Application and selection of methodologies and standardized baselines	--	--	--
• Application of methodologies and standardized baselines	NIL	NIL	NIL
• Deviation from methodology and/or methodological tool	NIL	NIL	NIL
• Clarification on applicability of methodology, tool and/or standardized baseline	NIL	NIL	NIL
• Project boundary, sources and GHGs	NIL	01	NIL
• Baseline scenario	NIL	NIL	NIL
• Estimation of emission reductions or net anthropogenic removals	NIL	01	NIL
• Monitoring Report	NIL	NIL	NIL
Start date, crediting period and duration	NIL	NIL	NIL
Environmental impacts	NIL	NIL	NIL
Project Owner- Identification and communication	NIL	NIL	NIL
Others (please specify)	01	NIL	NIL
Total	01	04	NIL

3 Project Verification findings

3.1 Identification and eligibility of project type

Means of Project Verification	The project activity involves setting up of a new WTG to harness the wind energy and use it for captive consumption i.e., the Indian grid system through wheeling and banking arrangement. In the absence of the project activity, the equivalent amount of power would have been generated by the operation of grid-connected fossil fuel-based power plants and by the addition of new fossil fuel-based generation sources into the grid. The power produced from other conventional sources which are predominantly fossil fuel based. The project activity aims to harness the kinetic energy of wind (a renewable source) to generate electricity. The wheeling agreement is signed between Paschim Gujarat Vij Company Limited (PGVCL) and PP. The project also delivers real, measurable and additional emission reduction of 10518 tCO_2e over the crediting period. Project applies an approved CDM monitoring and baseline methodology AMS-I.D: Grid connected renewable electricity generation - Version 18.0./4/
Findings	CAR-04 was raised
Conclusion	The project is eligible as per the requirements of the UCR General project eligibility criteria and guidance Version 7.0/2/. The project activity is a renewable power generation activity which incorporates installation and operation of single Wind Turbine Generator (WTG) having capacity of 2.1 MW manufactured and supplied by Suzlon Energy respectively in district Kutch of the state of Gujarat in India. This project has been promoted by M/s Simpolo Vitrified Pvt Ltd. The project verification team cross checked the other GHG programmes like Clean Development Mechanism (CDM) Registry, VERRA Registry, Gold Standard (GS) Registry for the information regarding the consistency of the title of the project activity, GPS coordinates, Legal Ownership of the Project activity and confirmed that the project was not submitted or registered under any other GHG programmes and non-voluntary non-GHG Programs.

3.2 General description of project activity

Means of Project Verification	The proposed project activity with title under UCR “2.1 MW Wind Power Project by SVPL” in Gujarat is a grid-connected renewable power generation activity which incorporates installation and operation of one Wind Turbine Generator (WTG) having capacity 2.1 MW, manufactured and supplied by Suzlon Energy in the Gujarat

	State in India. The project is an operational activity with continuous reduction of GHG, currently being applied under “Universal Carbon Registry” (UCR). The project activity aims to harness the kinetic energy of wind (a renewable source) to generate electricity. Wheeling agreement/15/ is signed between Paschim Gujarat Vij Company Limited (PGVCL) and PP. 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 powerplants. Currently, the NEWNE grid is connected to large numbers of fossil fuel-based power plants. The purpose of the project activity is to utilize clean technology that harnesses wind kinetic energy to generate electricity which would be used to meet the electrical demand of PO. The Location details has been verified during the remote inspection and geo coordinates verified through google earth/Maps. The project owner declared in the PCN/7/ the lifetime of the project activity is 20 Years as guaranteed by the suppliers of wind turbine and same has been verified in the technical specification/12/ provided by the project owner.
Findings	CAR 01 was raised
Conclusion	The description of the project activity is verified to be true based on the review of PCN/7/, MR Ver.2/8/ and Commissioning Certificate/13/ of wind power plant components.

3.3 Application and selection of methodologies and standardized baselines

3.3.1 Application of methodology and standardized baselines

Means of Project Verification	The project activity applied AMS-I. D: Grid connected renewable electricity generation– Version 18.0/4/ falls into the small-scale category as per CDM methodology. “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” which is as per the project activity and clearly mentioned in PCN/7/ and MR Ver 02.0 /8/.
Findings	No finding was raised
Conclusion	The methodology applied is appropriately meeting the requirements of UCR General project eligibility criteria and guidance/2/,

	standardized baseline. The methodology version is correct and valid. The referenced methodology is applicable to project activity.

3.3.2 Clarification on applicability of methodology, tool, and/or standardized baseline

Means of Project Verification	Applicability as per AMS-I. D version 18.0	Verifier assessment
	1. This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass: a. Supplying electricity to a national or a regional grid; or b. Supplying electricity to an identified consu6mer facility via national/regional grid through a contractual arrangement such as wheeling.	The project activity is a renewable energy project i.e., a wind power project which falls under applicability criteria option 1 b) the project owner has done a wheeling agreement/15/ with PGVCL to supply the electricity generated by wind power plant.
	2. This methodology is applicable to project activities that: a. Install a greenfield plant; b. Involve a capacity addition in (an) existing plant(s); c. Involve a retrofit of (an) existing plant(s); d. Involve a rehabilitation of (an) existing plant(s)/ unit(s); or e. Involve a replacement of (an) existing plant(s).	The project activity is a greenfield plant and it has verified with the commissioning certificates/13/. Hence, applied methodology can be applied to project activity.
	3. Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology: a. The project activity is implemented in an existing reservoir with no change in the volume of reservoir; b. The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m2. c. The project activity results in new reservoirs and the power density of the power plant, as	The project activity involves the installation of 2.1 MW WTG; hence, this criterion is not applicable.

	per definitions given in the project emissions section, is grated than 4 W/m^2	
	4. If the new unit has both renewable and non-renewable components (e.g., a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	The proposed project activity is 2.1 MW wind power project and it has been verified with the commissioning certificates/13/, technical specifications/12/.
	5. Combined heat and power (co-generation) systems are not eligible under this category.	The project is a wind power project and thus, the criterion is not applicable to this project activity
	6. In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct6 from the existing units.	The proposed project is a greenfield 2.1 MW wind power project, i.e., the only component is a renewable power project below 15 MW, thus the criterion is not applicable to this project activity
	7. In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.	The proposed project is a greenfield 2.1 MW wind power project, i.e., the only component is a renewable power project below 15 MW, thus the criterion is not applicable to this project activity
	8. In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. If the recovered methane is used for electricity generation for supply to a grid, then the baseline for the electricity component shall be in accordance with procedure prescribed under this methodology. If the recovered methane is used for heat generation or cogeneration other applicable Type-I methodologies such as “AMS-	The proposed project is a greenfield 2.1 MW wind power project; hence, this criterion is not applicable to this project activity.

	I.C.: Thermal energy production with or without electricity" shall be explored.	
	9. In case biomass is sourced from dedicate plantations, the applicability criteria in the tool "Project emissions from cultivation of biomass" shall apply.	No biomass is involved, the project is only a wind power project and thus the criterion is not applicable to this project activity.
Findings	No finding was raised	
Conclusion	The verification team confirms that all the applicability criteria set by the applied CDM methodology/4/ and its eligible tools are met. The relevant information against those criteria is also included in the PCN/7/ and MR Ver. 2.0/8/. The selected CDM methodology for the project activity is applicable.	

3.3.3 Project boundary, sources and GHGs

Means of Project Verification	As per the applied methodology AMS-I. D version 18.0/4/, the spatial extent of the project boundary includes industrial, commercial facilities consuming energy generated by the system. The project verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified and GHG sources required by the methodology have been included within the project boundary. The project location is clearly depicted with the help of a pictorial depiction in section A.3. of the PCN/7/ and duly verified by the project verification team via geographical coordinates, commissioning certificate/13/ of the project activity & wheeling agreement/15/.
Findings	CAR-02 was raised
Conclusion	The project verification team was able to assess that complete information regarding the project boundary has been provided in PCN/7/ and MR /8/ and could be assured from the single line diagram/10/, commissioning certificate/13/, geographical coordinates and wheeling agreement/15/ The components of the project boundary mentioned in the section B.4 of PCN/7/ were verified against the para 18 of the applied methodology. The project verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified and GHG sources required by the methodology have been included within the project boundary.

	The verification team has confirmed that the project boundary has included all the relevant source of GHG emission from the project activity.

3.3.4 Baseline scenario

Means of Project Verification	As per the approved consolidated methodology AMS-I.D. Version 18/4/, 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 WTG to harness the wind energy and use it for captive consumption i.e., the Indian grid system through wheeling and banking arrangement. In the absence of the project activity, the equivalent amount of power would have been generated by the operation of grid-connected fossil fuel-based power plants and by the addition of new fossil fuel-based generation sources into the grid. The power produced from 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) that 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 2013 - 2020 years as a conservative estimate for Indian projects not previously verified under any GHG program. Also, for the vintage 2021-2023, the combined margin emission factor calculated from the CEA database/5/ in India results in higher emissions than the default value. Hence, the UCR recommended emission factor has been considered to calculate the emission reduction under a conservative approach.
Findings	No findings were raised.
Conclusion	The project verification team concluded that the identified baseline scenario reasonably represents what would occur in the absence of the project activity. The calculated baseline emission for each vintage year of crediting period is rounded down as per UCR CoU verification standard /3/.

3.3.5 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	The project verification team checked whether the equations and parameters used to calculate GHG emission reductions or net anthropogenic GHG removals for PCN/7/ and MR Ver 02.0 /8/ is in accordance with applied methodology. Project Verification team checked section B.5 and C.5.1 of the PCN/7/ & MR Ver 02.0 /8/

respectively to confirm whether all formulae to calculate baseline emissions, project emission and leakage have been applied in line with the underlying methodology.

The UCR recommends an emission factor of 0.9 tCO_2/MWh for the 2013 - 2020 years as a conservative estimate for Indian projects not previously verified under any GHG program. Also, for the vintage 2021-2023, the combined margin emission factor calculated from the CEA database/5/ in India results in higher emissions than the default value. Hence, the same emission factor has been considered to calculate the emission reduction under a conservative approach.

The emission reduction calculation has been done as per the CDM SSC methodology AMS-I.D, Version 18.0/4/.

$BE_y = EG_{BLy} X EF_{CO2,y}$

Where,

BE_y = Baseline Emissions in year y; tCO_2

EG_{BLy}= Quantity of net electricity displaced as a result of the implementation of the CDM project activity in year y (MWh)

$EF_{CO2,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y.

Project emissions:

As per paragraph 25 of the applied methodology, For most renewable energy project activities, $PE_y = 0$. Since wind power is a GHG emission-free source of energy project emission considered as Zero for the project activity

Leakage Emissions:

As per the paragraph 29 of the applied methodology AMS-I.D Version 18.0/4/, there are no emissions related to leakage in this project.

Emission reductions

As per Paragraph 30 of the applied methodology, emission reductions are calculated as follows

$ER_y = BE_y - PE_y - LE_y$

Where:

ER_y = Emission reductions in year y (tCO_2e/y)

BE_y = Baseline Emissions in year y (t CO_2e/y)

PE_y = Project emissions in year y (t CO_2e/y)

LE_y = Leakage emissions in year y (t CO_2e/y)

Year	Electricity generated (MWh)	Emission factor (tCO_2/MWh)	Total Emission reduction (tCO_2e)
2021	2088.502	0.9	1879.6518
2022	4843.426	0.9	4359.0834
2023	4755.781	0.9	4280.2029

	Total	10518.0000
Findings	CAR-03 was raised	
Conclusion	The combined margin emission factor as per CEA database "CO_2 Baseline Database for the Indian Power Sector" current version 20, December 2024/5/ is 0.918 tCO_2/MWh which results into higher emission factor than the UCR recommended emission factor of 0.9 tCO_2/MWh; Hence for 2021-23 vintage UCR default emission factor remains conservative as per UCR General project eligibility criteria and guidance/2/. Project Verification team confirm that the algorithms and formulae proposed to calculate project emissions, baseline emissions, leakage and emission reductions in the PCN/7/ and MR ver. 2.0/08/ is in line with the requirements of the selected methodology AMS-I.D, version 18.0/4/ For emission reduction calculation, the assessment team confirms that All assumptions and data used by the project participants are listed in the PCN/7/ and MR /08/ including their references and sources. All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PCN/7/ and MR /08/. The baseline methodology and the applicable tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions.	

3.3.6 Monitoring Report

Means of Project Verification	The monitoring report /8/ submitted by the PP has been verified thoroughly and is in compliance with the applicable methodology and UCR General project eligibility criteria and guidance/2/ for the calculation of GHG emission reductions. As per section B.2 of the MR/8/, this project has avoided 10518 tons of CO_2 emissions during this monitoring period. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that monitoring parameters are applied in line with the requirement of the methodology and relevant in the context of the program. The procedures have been reviewed by the assessment team through document review, interviews with the respective monitoring personnel and site assessment. Monitoring methodology, data management and calibration of the energy meter were also discussed with project owner. Calibration of Energy meter is carried out by Bharti Automation (P) Ltd.

		S. No.	Meter No.	Make	Accuracy	Calibration Date
		1.	GJ4886B	Secure	0.2	08/04/2023
Findings	No finding was raised.					
Conclusion	The project verification team confirms that, The monitoring report /8/ is in compliance with the applicable methodology and UCR General project eligibility criteria and guidance/2/. The monitoring parameters reported in PCN/7/ and MR Ver.2.0/08/ adequately represents the parameters relevant to emission reduction calculation. The calibration reports/14/ ensures the accuracy of the data reported. The number of CoUs generation is calculated based on accurately reported data. The calculation was done using an excel sheet where all the parameters were reported. UCR recommended emission factor for electricity generation is opted which is conservative. The monitoring report Version 2.0/8/ meets the requirements of UCR project verification requirements. The Project has the capability to address SDG 7 Affordable and Clean Energy, SDG 8 Decent Work and Economic Growth and SDG 13 Climate Action.					

3.4 Start date, crediting period and duration

Means of Project Verification	The Commissioning certificate/13/ of the installation of the project activity has been verified as per PCN/7/ and MR Ver. 2.0/08/.
Findings	No findings raised.
Conclusion	The expected lifetime of the project activity is 20 years which is verified by the technical specification/12/. Crediting period is from 01/07/2021 to 31/12/2023 which is appropriate as per UCR General project eligibility criteria and guidance/2/.

3.5 Environmental impacts and safeguard assessment

Means of Project Verification	As The guidelines on Environmental Impact Assessment have been published by Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India (GOI) under Environmental Impact Assessment notification January 2025. Further amendments to the notification have been done, The Wind Power projects up to 25 MW are listed in white category, hence, No EIA required.

	The impact of the project activity on the environmental safeguards has been carried out. Out of all the safeguards no risks were identified to the environment due to the project implementation and operation The following have been indicated as positive impacts: **Environment Air -** CO_2 emissions: The project activity being renewable power generation avoids CO_2 emissions that would have occurred in baseline scenario due to the electricity generation in thermal power plants. **Environment - Natural Resources:** Replacing fossil fuels with renewable sources of energy. **Impacts identified as 'Harmless':** **Solid waste Pollution:** - Any Solid-waste if generated from the plant shall be discarded in accordance with host country regulation. The parameter is being monitored as 'Project Waste' and Proper mitigation action has been implemented for waste management. **Land use:** since the wind power plant does not require larger area, there is no significant damage to land. **Emission due to transportation of wind components**: The emissions associated with the transport of the modules are insignificant compare to manufacturing facilities. **Solid waste Pollution from end-of-life products equipment:** - Waste generated from the plant.
Findings	No findings raised.
Conclusion	The project activity displaces fossil fuel consumption and provides affordable and clean energy. The project has also avoided total 10518 tCO_2e, hence it has positive impact.

3.6 Project Owner- Identification and communication

Means of Project Verification	The information and contact details of the project owner has been appropriately incorporated in the PCN/7/ and MR Ver. 2.0/8/ which was checked. The legal owner of the project activity has been identified through the commissioning certificates/13/ & Wheeling agreements/15/ issued by equipment suppliers.
Findings	No findings raised.
Conclusion	The project verification team confirms that the legal ownership of the project belongs to M/s Simpolo Vitrified Pvt. Ltd.

3.7 Others (DAA)

Means of Project Verification	The verification team has referred other GHG programs to avoid double counting of emission reduction
Findings	CL 01 was raised.
Conclusion	It was verified that the project is has not applied for registration and issuance elsewhere with the Avoidance of double accounting agreement/9/ provided stating not taking benefits of double counting.

4 Internal quality control:

- Due professional care has been taken while reviewing the submitted document.
- There is no conflict of interest as the verifier has no other engagement with either the aggregator or project owner directly or indirectly.
- Verification team consists of experienced personnel.
- Technical review is performed by an independent person.

5 Project Verification opinion:

The project verification was conducted on the basis of UCR Program Manual/1/, UCR General project eligibility criteria and guidance/2/, UCR Verification standard /3/, AMS-I. D: Grid connected renewable electricity generation– Version 18.0/4/, Wheeling agreements/15/, Calibration Reports/14/, Commissioning Certificates/13/, Project Concept Note (PCN)/7/, Monitoring Report (MR) Version 2.0/08/ and documents mentioned in Appendix-2.

Verification team raised 01 Nos. of Clarification Requests (CLs) and 04 Nos. of Corrective Actions Requests (CARs) and they were corrected, verified, and closed satisfactorily.

It is hence certified with reasonable level of assurance that the emission reductions from the project 2.1 MW Wind Power Project by SVPL (UCR ID – 445) for the period 01/07/2021 to 31/12/2023 amounts to **10518** CoUs (10518 tCO_2e) as per the UCR Verification standard/3/.

6 Competence of team members and technical reviewers

No.	Last name	First name	Role and Affiliation	Technical Competence
1.	Joshi	Trapti	GHG Assessor - NSPL	Ms. Trapti Joshi is having M.Tech. In Environmental Engineering. She has experience in conducting environmental audits in CDM/VCS/GS/UCR registry. She has performed verification of Renewable sector and Waste handling projects. Also, she has done Master's thesis in Solid waste management project through LCA Gabi Software.
2.	Mandliya	Shyam	Technical Reviewer - NSPL	Mr. Shyam Mandliya has completed his masters in Chemical Engineering. He has expertise in environmental audits. He has performed environmental monitoring of different industries in Gujarat for air, water, and hazardous waste. He has also contributed to the community-based biogas project development.

Appendix 1: Abbreviations

Abbreviations	Full texts
UCR	Universal Carbon Registry
CPCB	Central Pollution Control Board
GERC	Gujarat Electricity Regulatory Commission
GEDA	Gujarat Energy Development Agency
GETCO	Gujrat Energy Transmission Corporation Limited
PGVCL	Paschim Gujarat Vij Company Limited.
CEA	Central Electricity Authority
NSPL	Naturelink Solutions Private Limited
MR	Monitoring report
PCN	Project Concept Note
VR	Verification Report
VS	Verification Statement
DAA	Avoidance of Double Accounting Agreement
COD	Commercial Operation Date
PO	Project Owner
PA/ PP	Project Aggregator / Project Proponent
PPA	Power Purchase Agreement
ER	Emission Reduction
CoUs	Carbon offset Units
tCO_2e	Tons of Carbon Dioxide Equivalent
kWh	Kilo-Watt Hour
MWh	Mega-Watt Hour
kW	Kilo-Watt
MW	Mega-Watt
CDM	Clean Development Mechanism
SDG	Sustainable Development Goal
SVPL	Simpolo Vitrified Private Limited
CAR	Corrective Action Request
CL	Clarification Request
FAR	Forward Action Request
GHG	Green House Gas

Appendix 2: Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1	UCR	UCR Program Manual	Version 6.1, August 2024	UCR website
2	UCR	UCR General project eligibility criteria and guidance (CoU Standard)	Version 7.0, August 2024	UCR website
3	UCR	UCR Program Verification standard	Version 2.0, August 2022	UCR website
4	CDM	AMS-I. D: Grid connected renewable electricity generation	Version 18.0	CDM website
5	CEA	CO_2 baseline database for the Indian Power sector	Version 20.0 dated December 2024	-
6	CEA	Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2022	Dated 28/02/2022	-
7	Creduce	Project Concept Note	Version 1.0 dated 31/05/2024	PA
8	Creduce	Monitoring report for this monitoring period (01/07/2021 to 31/12/2023)	Version 2.0 dated 10/02/2025	PA
9	Creduce	Assurance to avoid double accounting by project owners	Double accounting agreement signed on 20/07/2024	PA
10	PO	Single Line Diagram	-	PA
11	Creduce	Emission reduction excel – “2.1 MW Wind Power Project”	Version 2.0 dated 10/02/2025	PA
12	GEDA	Technical specification of 2.1 MW wind farm capacity	-	PA
13	GEDA	Project Commissioning certificates	Dated 30/06/2021(Kutch)	PA
14	Bharti Automation (P) Ltd.	Calibration reports: Meter no.: GJ4886B	Dated 08/04/2023	PA
15	PGVCL & PO	Wheeling agreement for captive use	Dated 29/06/2021	PA

16	PA	Communication agreement between PP and PO	Dated 31/05/2024	PA
17	GETCO	Energy Generation Certificates	-	PA

Appendix 3: Clarification request, corrective action request and forward action request

Table 1. CLs from this Project Verification

CL ID	01	**Section no.:** 3.7	Others (Double counting of credits)	**Date:** 12/02/2025
Description of CL				
Document stating that the project activity will not cause double counting is not available as per requirement of clause 1.8, Universal Carbon Registry Program Manual (Ver 6.1) August 2024.				
Project Owner's response				**Date:** 15/02/2025
Double accounting agreement is provided.				
Documentation provided by Project Owner				
Double accounting agreement				
UCR Project Verifier assessment				Date: 19/02/2025
Double accounting agreement is checked and found to be conforming as per clause 1.8, Universal Carbon Registry Program Manual (Ver 6.1) August 2024. Thus, CL 01 is closed				

Table 2. CARs from this Project Verification

CAR ID	01	**Section no.:** 3.2	General description of project activity	**Date:** 12/02/2025
Description of CAR				
In basic information section of MR Ver.1 dated 05/02/2025, the date of MR completion cannot be prior to the termination date of the monitoring period as per requirement of UCR CoU standard Version 07.0 (page no. 8 to 10).				
Project Owner's response				**Date:** 15/02/2025
It was typo error, now date of MR completion is updated to 10/02/2025 MR version 02.0 as per requirement of UCR CoU standard Ver.7 (page no. 8 to 10).				
Documentation provided by Project Owner				
MR version 02.0 dated 10/02/2025				
UCR Project Verifier assessment				Date: 19/02/2025
Assessment team reviewed the MR completion date in the basic information section of the MR ver. 02 which is now found correct as per the requirement of UCR CoU standard Ver.7 (page no. 8 to 10). Thus, CAR 01 is closed.				

CAR ID	02	Section no.: 3.3.3	Project Boundary, sources and GHGs	Date: 12/02/2025
Description of CAR				
In section A.2 of MR version 1.0 dated 05/02/2025, location of the project activity is not defined correctly on the google map as per requirement of UCR CoU standard Ver.7 (page no. 5 & 6).				
Project Owner's response				**Date:** 15/02/2025
It was typo error; PP has updated the Geo-coordinates of the project activity in the Section A.2 of MR version 2.0 which is as per the requirement of UCR CoU standard Ver.7 (page no. 5 & 6).				
Documentation provided by Project Owner				
MR version 2.0 dated 10/02/2025				
UCR Project Verifier assessment				Date: 19/02/2025
Geo-coordinates (23°17'04.5"N,69°18'17.8"E) of the project activity in the Section A.2 of MR version 2.0 are verified with the google earth and found that are correct and showing the location of the project activity i.e. Sukhsan village in the Kutch district in the Gujrat state. Thus, CAR 02 is closed.				

CAR ID	03	Section no.: 3.3.5	Estimation of emission reduction or net anthropogenic removal	Date: 12/02/2025
Description of CAR				
The SLDC provided for the energy generation details for the period November 2022 does not contain the energy generation for the proposed project activity as per the requirements of the UCR CoU standard Ver.7 (page no. 8 to 10).				
Project Owner's response				**Date:** 15/02/2025
PP has now updated the energy generation details for the period November 2022 as per the requirements of the UCR CoU standard Ver.7 (page no. 8 to 10).				
Documentation provided by Project Owner				
SLDC for the November 2022 MR version 2.0 dated 10/02/2025				
UCR Project Verifier assessment				**Date**: 19/02/2025
Energy generation details for the period November 2022 has been reviewed and verified with the provided SLDC generation report issued by GETCO which is found correct as per the requirements of the UCR CoU standard Ver.7 (page no. 8 to 10). Thus, CAR 03 is closed.				

CAR ID	04	Section no.: 3.1	Identification and eligibility of project type	Date: 12/02/2025
Description of CAR				
In basic information and section C.10 of MR ver.1 dated 05/02/2025, the monitoring period is not written correctly as per requirement of UCR CoU standard Ver.7 (page no. 8 to 10).				
Project Owner's response				**Date:** 15/02/2025
PP has updated the Monitoring period (01/07/2021 to 31/12/2023) in the basic information and section C.10 of MR ver.2 dated 10/02/2025 which is written as per the requirement of UCR CoU standard Ver.7 (page no. 8 to 10).				
Documentation provided by Project Owner				
MR version 2.0 dated 10/02/2025				
UCR Project Verifier assessment				**Date**: 19/02/2025
Monitoring period (01/07/2021 to 31/12/2023) in the basic information and section C.10 of MR ver.2 dated 10/02/2025 has been reviewed and found it correct as per the requirement of UCR CoU standard Ver.7 (page no. 8 to 10). Thus, CAR 04 has closed.				

Table 3. FARs from this Project Verification

FAR ID	--	Section no.		Date:
Description of FAR				
Project Owner's response				**Date:**
Documentation provided by Project Owner				