Verification Report

UCR ID: 494

Prepared by

Naturelink Solutions Pvt. Ltd.

Title	**10 MW Biomass based Power Project by Sanjog Sugars & Eco-Power Private Limited**
Project Owner	**M/s. Sanjog Sugars & Eco-Power Private Limited**
Project Location	**At Village: Sangaria, District: Hanumangarh, State: Rajasthan, India-125101** **Coordinates: 29°45'16.86''N, 74°28'00.70" E**
Date	**06/02/2025**

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: 04 (Energy Industries (Renewable/Non renewable))
Validity of UCR approval of Verifier	May - 2022 onwards
Completion date of this VR	06/02/2025
Title of the project activity	10 MW Biomass based Power Project by Sanjog Sugars & Eco-Power Private Limited.
Project reference no. (as provided by UCR Program)	494
Name of Entity requesting verification service	Creduce Technologies Pvt. Ltd. (Aggregator) Sanjog Sugars & Eco-Power 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 shailendra@creduce.tech
Country where project is located	India
Applied methodologies	AMS-I.D: "Grid-connected Renewable electricity generation", Version 18.0

Sectoral Scope(s):	01 Energy Industries (Renewable/Non renewable)
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 "10 MW Biomass based Power Project by Sanjog Sugars & Eco-Power Private Limited." ☒ The project aggregator has correctly described the project activity in the Project Concept Note (dated 29/01/2025) 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 473966 tCO_2e, as indicated in the monitoring report/10/ which are in addition to the reductions that are likely to occur in the 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: 494 Version: 2.0 Date: 06/02/2025
Name of the authorised personnel of UCR Project Verifier and his/her signature with date	 Mr. Shyam Mandliya Lead Assessor Naturelink Solution Pvt. Ltd. Date: 06/02/2025

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1 Project Verification Report

1.1 Executive Summary

The verification work has been contracted by project aggregator Creduce Technologies Private Limited to perform an independent verification of its UCR project titled **"10 MW Biomass based Power Project by Sanjog Sugars & Eco-Power Private Limited.", UCR approved project ID:494**, to establish CoUs generated by the project over the crediting period from 01/01/2013 to 31/12/2024 (both days included).

Verification for the period: 01/01/2013 to 31/12/2024

The total GHG emission reductions over the crediting/verification period stated in the Monitoring Report (MR), submitted are found to be correct and in line with the UCR guidelines. The GHG emission reductions were calculated on the basis of UCR guideline which draws reference from the standard baseline, AMS-I.D–"Grid-connected Renewable electricity generation" Version 18.0. The verification was conducted remotely by way of video calls, by onsite inspection of the plant and submission of documents for verification through emails.

It is certified that the emission reductions from the 10 MW Biomass based Power Project by Sanjog Sugars & Eco-Power Private Limited (UCR ID – 494) for the period 01/01/2013 to 31/12/2024 amounts to **473966** CoUs (**473966 tCO_2e**).

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/9/.
2. To verify the implemented monitoring plan with the registered PCN/9/ applied baseline and monitoring methodology.
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 14064-2:2019.

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 activity involves setting up of 10 MW biomass-based power generation project at Sangaria, Hanumangarh District of Rajasthan, India and is promoted by Sanjog Sugars & Eco-Power Private Limited (SSEPPL). The project activity generates electricity and supplies to the Unified Indian Grid system (earlier as regional (Northern, Eastern, Western, North Eastern-NEWNE) electricity grid)[1]. The project activity consists of installation of one 47 TPH boiler with outlet parameters of 475° C and 66 kg/cm^2 (atm) pressure and one bleed cum condensing turbine of capacity 11.5 MW (normal output) with a rated output of 10 MW.

The Biomass which is used for power generation in the project activity mainly includes cotton stalks and mustard husks available in the region. Other seasonally available renewable biomass residues in small quantities like paddy straw, sugar cane, groundnut husk, and rice husk is utilised in force majeure conditions like change in cropping pattern. The project activity was commissioned on 07/10/2011.

The purpose of the project activity is to utilize the surplus biomass available in the region for generation of electricity and supply to the Indian Grid System to meet the ever-increasing demand for energy in the region and country. Thus, the project activity results in the reduction of GHG emissions associated with the generation of the equivalent amount of power in the fossil fuel dominant electricity grid.

The technical specification is listed below;

Description	Specifications
Make	ISGEC JOHN THOMPSON
Type	Natural circulation, vertical bi-drum, semi-outdoor installation
Maximum continuous rating	47TPH
Grate	Travelling grate water tube
Steam pressure at superheater outlet	66 kg/cm^2
Steam temperature at superheater outlet	475± 5°C
Feed water temperature at economizer inlet	130 °C
Registered No. and Manufacture year	RJ-1765, 2008

Technical parameters of Turbogenerator:

Description	Specifications
Make	Triveni Engineering & Industries Limited
Type	Multistage, Horizontal axle blade design, Impulse type bleed cum condensing steam turbine
Rated capacity of turbine	10000 kW
Steam pressure of turbine inlet	64 kg/cm^2
Steam temperature at turbine inlet	475°C
Condenser pressure	0.1 kg/cm^2

Cooling water temperature at inlet to condenser	32°C

Technical specification of Air-cooled condenser:

Description	Specifications
Make	GEI Industrial Systems Ltd.
Turbine exhaust steam flow rate	41.7 tons/hr
Turbine back pressure	0.18 bar
Turbine exhaust steam enthalpy	576.93 kcal/kg
ACC design ambient temperature	42 °C

Technical specification of Electrostatic precipitator:

Description	Specification
Make	Thermax Ltd.
Gas Flow	124200 Am^3/hr
Gas temperature	160°C
Dust concentration at ESP inlet	10 gm/Nm^3
Clean gas burden at ESP outlet with all fields	50 mg/Nm^3

Technical specification of AC generator:

Description	Specifications
Make	TDPS
Output	15000 kVA
Standard	IS 4722
Voltage (AC)	11000 V
Current (AC)	767 A
Frequency	50 Hz

As mentioned in the monitoring report/10/11/ and emission reduction calculation sheet/12/ submitted for verification, the project replaces anthropogenic emissions of greenhouse gases (GHGs) estimated to be approximately 473966 tCO_2e for the said period under verification.

The project is a small-scale activity. The methodology applied in the monitoring report is verified against the AMS-III.D, "Grid-connected Renewable electricity generation", Version 18.0/4/ Verified total emission reduction (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	07/10/2011
Start date of this Monitoring Period	01/01/2013
Carbon credits claimed up to	31/12/2024
Leakage Emission	-
Project Emission	-
Total ERs generated (tCO_2e)	473966

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.	Lead Assessor & Technical Expert	Mandliya	Shyam	Naturelink Solutions Pvt. Ltd.	Yes	Yes	Yes

Technical Reviewer and Approver of the Verification report

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

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/9/, MR/10/17/, emission reduction calculation sheet/11/18/, Methodology – AMS-I.D/4/.

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

Date of inspection:	01/02/2025 to 01/02/2025			
No.	**Activity performed**	**Site location**	**Date**	**Auditee**
1.	Opening meeting	Project location	01/02/2025	Rohit Makkasar Manish Kumar
2.	Evidence gathering activities	Project location	01/02/2025	
3.	Closing meeting	Project Location	01/02/2025	

2.1.3 Interviews: Online

No.	**Interview**			**Date**	**Subject**
	Last name	**First name**	**Affiliation**		
1.	Makkasar	Rohit	(Factory Manager)	01/02/2025	Legal ownership of the project, Implementation of the project, start date and crediting period, Double counting of the carbon credits
2.	Kumar	Manish	(Sr. Manager Account)	01/02/2025	Overview of the plant, Project boundary, Monitoring plan,
3.	Trivedi	Kashyap	Senior Consultant - CTPL	01/02/2025	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	NIL	NIL
General description of project activity	NIL	NIL	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	NIL	NIL
• Baseline scenario	NIL	NIL	NIL
• Estimation of emission reductions or net anthropogenic removals	NIL	NIL	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	NIL	NIL

3 Project Verification findings

3.1 Identification and eligibility of project type

Means of Project Verification	The project is eligible as per UCR General project eligibility criteria and guidance Version 6.0/2/ which is acceptable. The project has been registered under UNFCCC CDM project activity (ID-5723) for the period 13/02/2012 to 31/12/2020, however no carbon credits has been issued as per UNFCCC website. The operations started since 07/10/2011 which is the earliest commissioning date of the manufacturing facility. Prior to the commencement of the project activity, the project owner has received Commissioning certificate /12/ issued by Rajasthan Renewable Energy Corporation Limited (RRECL) for the installation and operation of Grid connected electricity generation boiler. Project applies an approved CDM monitoring and baseline methodology AMS-I. D Grid-connected Renewable electricity generation, Version 18.0/4/.
Findings	No findings raised
Conclusion	The project is eligible as per the requirements of the UCR General project eligibility criteria and guidance Version 18.0./2/ Further project verification team cross checked the other GHG programmes like Clean Development Mechanism (CDM) Registry, VERRA Registry, Gold Standard (GS) Registry and found that project was registered under CDM registry (ID-5723). The project was registered and verified for the period 13/02/2012 to 31/12/2020, however no CERs were issued on the registry. Hence, the project activity is eligible for crediting period of 01/01/2013 to 31/12/2024.

3.2 General description of project activity

Means of Project Verification	The proposed project activity consists of steam generator of 47 TPH capacity at 66 kg/cm2(atm) pressure, 475 °C temperature. The boiler is bi-drum, natural circulation and balanced draft type. The combustion system of the boiler shall be travelling grate with spreader stoker. The boiler unit includes superheater, economizer, drum and air-preheater. The boiler includes sub systems like pressure parts, feeding system, firing system, draft system, feed water system, Electro Static Precipitator (ESP) and chimney. The steam generated from the boiler drives the steam turbine of bleed cum condensing type with a normal output of 11.5 MW and rated output of 10 MW. The turbo generator unit is provided with all

	necessary auxiliary equipment including condensate pump, ejectors, gland steam condenser, ejector condenser. The electrical power generated is fed to the Indian Grid. This is a green field project. Prior to proposed project activity, there was no Grid connected renewable energy generation boiler in operation at the project location which was verified by the interview with project personnel. The Location details has been verified during the remote inspection and geo coordinates verified through google earth/Maps. The project activity described and applied AMS-I.D, Grid connected renewable energy generation, Version 18.0/4/.
Findings	No findings were raised
Conclusion	The description of the project activity is verified to be true based on the review of PCN/9/, MR/17/.

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 energy generation, Version 18.0/4/. Baseline condition is "in the absence of the proposed project activity, the electrical energy demand would have been supplied to the processing plants by national grid which is coal intensive" and clearly mentioned in PCN/9/ and MR/10/17/.
Findings	No findings were raised
Conclusion	The project activity is clearly depicting the applied methodology/4/ and its standardized baseline and meets the requirements of UCR standards/2/.

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,	The project activity is a renewable energy project i.e., a biomass-based power project which falls under applicability criteria option 1

	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 consumer facility via national/regional grid through a contractual arrangement such as wheeling.	b) the project owner has done a power purchase agreement/11/ with RVPN to supply the electricity generated by power plant.
	1. 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 option (a) of applicability criteria 2 is applicable as project is a greenfield plant/unit. Hence the project activity meets the given applicability criterion.
	2. 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 per definitions given in the project emissions section, is grated than 4 W/m^2	The project activity involves the installation of 47 TPH Thermal boiler having turbine capacity of 10 MW; hence, this criterion is not applicable.
	3. 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	The project activity involves the installation of 47 TPH Thermal boiler having turbine capacity of 10 MW; hence, this criterion is not applicable.

	renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	
	4. Combined heat and power (co-generation) systems are not eligible under this category.	The project is not cogeneration system, hence this criterion is not applicable.
	5. 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 distinct from the existing units.	There is no capacity addition, thus the criterion is not applicable to this project activity
	6. 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 project activity involves the installation of 47 TPH Thermal boiler having turbine capacity of 10 MW; hence, this criterion is not applicable.
	7. 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-I.C.: Thermal energy production with or without electricity" shall be explored.	The project activity involves the installation of 47 TPH Thermal boiler having turbine capacity of 10 MW; hence, this criterion is not applicable.
	8. In case biomass is sourced from dedicate plantations, the applicability criteria in the tool "Project emissions from cultivation of biomass" shall apply.	The project activity does not involve biomass sourced from dedication plantations.

Findings	No findings were raised
Conclusion	The methodology applied/4/ is appropriately meeting the requirements of UCR standard/2/ and its standardized baseline. The methodology version is correct and valid. The referenced methodology is applicable to project activity.

3.3.3 Project boundary, sources and GHGs

Means of Project Verification	As per the applied methodology AMS-III.D version 18.0/4/, the spatial extent of the project boundary includes a manufacturing facility where production of power generation from biomass. The components of the project boundary mentioned in the PCN/9/ were checked against the para 19 of the applied methodology/4/. The project verification team conducted a desk review of the implemented project to confirm the appropriateness of the project boundary identified and all GHG sources required by the methodology have been included within the project boundary. It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology or accuracy of the emission reductions. The project boundary is clearly depicted with the help of a pictorial depiction in section A.3. of the PCN/9/ and duly verified by the verification team via remote inspection of the project activity.
Findings	No findings were raised.
Conclusion	The project verification team was able to assess that complete information regarding the project boundary has been provided in PCN/9/ & MR/17/. The project verification team confirms that the identified boundary, and selected emissions sources are justified for the project activity.

3.3.4 Baseline scenario

Means of Project Verification	As per the consolidated methodology AMS-I.D. Version 18.0/4/, baseline scenario is that the electricity generated by the 10 MW turbine 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. Thus, the project activity results in lower GHG emissions as compared to the conventional electrical energy production.

	The baseline scenario defined in PCN/9/ and MR/10/17/ in the absence of the project activity; the energy would have been produced and supplied by grid.
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.

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/9/ and MR/10/ is in accordance with applied methodology/4/.

Project Verification team checked section B.5 and C.5.1 of the PCN/9/ & MR/10/17/ respectively to confirm whether all formulae to calculate baseline emissions, project emission and leakage emission have been applied in line with applied methodology/4/.

As per the para 28 and 43 of the applied methodology/4/, baseline emission reduction calculation is,

$BEy = EG_{BL,y} \times EF_{CO2,grid,y}$

Where,

$BE_{elec,y}$ = Baseline emissions due to displacement of electricity during the year *y* in tons of CO_2

$EG_{i,j,y}$ = The quantity of electricity supplied to the recipient *j* by generator, that in the absence of the project activity would have been sourced from *i*th source (*i* can be either grid or identified existing source) during the year *y* in MWh.

$EF_{Elec,i,j,y}$ = The CO_2 emission factor for the electricity source *i* (grid or identified existing source), displaced due to the project activity, during the year *y* in tons CO_2/MWh.

$$BE_{elec,y} = EG_{i,j,y} \times EF_{Elec,i,j,y}$$

Year	Electricity delivered in MWh	Emission factor tCO2/MWh	Baseline emissions
2013	6604	0.84	5547
2014	3261		2739
2015	2880		2419

2016	59194		49723
2017	63609		53431
2018	61491		51652
2019	60254		50614
2020	64852		54476
2021	60174		54156
2022	61057		54951
2023	55586	0.9	50027
2024	67855	0.757	51367
Total	**566816**	-	**481103**

BE = 481103 tCO_2e

Emission reductions

$ER_y = BE_y - PE_y - LE_y$

Where:

ER_y = Emission reductions in year y (tCO_{2e}/y)

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

PE_y = Project emissions in year y (t CO_2/y)

LE_y = Leakage emissions in year y (t CO_2/y)

For, PE= As per the UCR notification dated 04/10/2023 for the biomass-based grid power supply projects “For microscale and small-scale project activities, apply a default emission factor of 0.0142 tCO_2/tonne of biomass or biomass residue or biomass-based briquettes, to determine the final amount of emission reductions that can be claimed per vintage”

Hence for the period 2021-2024, UCR recommended emission factor of 0.0142 tCO_2/tonne of biomass has been applied in project emissions and subsequently emission reductions are calculated which is verified by Emission reduction calculation sheet/18/

PE= 7137 tCO_2

LE=0 as no leakage is applicable under this methodology.

ER = 473966 – 7137 – 0

Net ER = 473966 tCO_2e

Based on the above estimation emission reductions based on the data provided parameters is 473966 tCO_2e

Findings	No findings were raised
Conclusion	Project Verification team confirm that the algorithms and formulae proposed to calculate project emissions, baseline emissions, leakage

	and emission reductions in the PCN/9/ and MR/17/ is in line with the requirements of the selected methodology AMS-I.D, Version 18.0/4/ For the calculation, the assessment team confirms that All assumptions and data used by the project participants are listed in the PCN/9/ 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/9/ & MR/17/. All values used in the PCN/9/ & MR/17/ are considered reasonable in the context of the proposed project activity The baseline methodology and the applicable tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions; All calculations are complete and without any omissions.

3.3.6 Monitoring Report

Means of Project Verification	The monitoring report/10/ submitted by the PP has been verified thoroughly against the requirements of applied methodology/4/ and UCR standard/2/ for the calculation of GHG emission reductions. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and monitoring parameters are applied in line with the requirement of the methodology and relevant in the context of the UCR program. The procedures have been reviewed by the assessment team through document review and interviews with the respective monitoring personnel. Relevant points have been discussed with the project owner specifically; monitoring methodology, data management and calibration of the equipment.
Findings	No findings were raised
Conclusion	The project verification team confirms that, The monitoring report/10/ follows the applicable methodology/4/ and UCR standard/2/. The monitoring parameter reported in MR/17/ adequately represents the parameters relevant to emission reduction calculation. The calibration report of weigh bridge ensures the accuracy of the data reported. The number of CoUs generation is calculated based on the accurately reported data. The calculation was done using an excel sheet where all the parameters were reported.

	The emission factor for electricity consumption is as per UCR standard/2/. In the monitoring report/10/, emission reduction calculations are correctly calculated and reported and meets the requirements of UCR project verification standard/3/

3.4 Start date, crediting period, and duration

Means of Project Verification	The Start date of the project activity is considered as 07/10/2011 which is the date on commissioning certificate was issued to the project activity. However as per the UCR standard, monitoring period for this instance is from 01/01/2013 to 31/12/2024 which was verified as per the UCR standard/2/.
Findings	No finding was raised.
Conclusion	The start dates and the crediting period type & length have been verified and found to be in accordance with UCR project standard/2/.

3.5 Environmental impacts and safeguard assessment

Means of Project Verification	The project activity has obtained Commissioning certificate from Gujarat Pollution Control Board and complying with all the rules and regulations mentioned thereof hence project activity causes no additional damage to the environment. Out of all the safeguards no risks were identified to the environment due to the project implementation and operation.
Findings	No finding was raised.
Conclusion	Based on the documentation review the project verification team can confirm that Project Activity is not likely to cause any negative harm to the environment but would have a positive impact

3.6 Project Owner- Identification and communication

Means of Project Verification	The information and contact details of the project owner was verified has been appropriately incorporated in the PCN/9/ The legal owner of the project is Sanjog Sugars & Eco-Power Private Limited and same to be demonstrated by the project owner through the commissioning certificates.
Findings	No finding was raised.

Conclusion	The project verification team confirms that the information of the project owners has been authorized.

3.7 Positive Social Impact

Means of Project Verification	Out of all the safeguards no risks were identified to the society due to the project implementation and operation. Only positive impacts identified by the Project owner which is not likely to cause any harm. The following have been identified as positive impacts of the project activity. Social – Jobs – Long-term jobs (> 1 year) **created**. Social – Welfare- Women's empowerment. Social - Health & Safety - Reducing / increasing accidents. Project has provided long term employment to local people during its installation and commissioning. Also post commissioning some of people have employed permanently and local people were engaged leading to social financial benefit to surrounding. Overall social impact of project implementation is positive on the surrounding area.
Findings	--
Conclusion	Project has overall positive social impact.

3.8 Sustainable development aspects (if any)

Means of Project Verification	Not Applicable
Findings	--
Conclusion	The Project has the capability to address SDG 7 Affordable and Clean Energy and SDG 13 Climate Action

3.9 Others (Double Counting of Credits)

Means of Project Verification	The project has been registered under UNFCCC CDM project activity (ID-5723) for the period 13/02/2012 to 31/12/2020, however no carbon credits has been issued as per UNFCCC website. An agreement stating that project activity will not cause double counting of the credits is also checked as per clause 1.8, Universal Carbon Registry Program Manual (Ver 6.1) August 2024.

Findings	CL 01 was raised
Conclusion	Double accounting agreement/8/ is signed between PO and Aggregator and found to appropriate as per clause 1.8, Universal Carbon Registry Program Manual (Ver 6.1) August 2024/1/.

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. Version 18.0/4/, Project Concept Note (PCN)/9/, Monitoring Report /17/, Emission reduction calculation sheet/18/, Power purchase agreement/12/, and documents mentioned in Appendix-2.

The verification team raised Clarification Requests (CLs) 01 Nos. which were closed satisfactorily.

The emission reduction amounts to 473966 CoUs (473966 tCO_2e) from the project activity "10 MW Biomass based Power Project by Sanjog Sugars & Eco-Power Private Limited. (UCR ID – 494)" for the period 01/01/2013 to 31/12/2024 has been verified with reasonable level of assurance as per the UCR Verification standard /3/.

6 Competence of team members and technical reviewers

No.	Last name	First name	Affiliation	Technical Competence
1.	Mandliya	Shyam	Lead Assessor and Technical Expert	Mr. Shyam Mandliya is having M.E 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.
2.	Joshi	Trapti	Internal Technical Reviewer	Ms. Trapti Joshi is having M.Tech. In Environmental Engineering. She has experience in conducting environmental audits in CDM/VCS/GS registry. She has performed the Renewable sector and Waste handling projects. Also, she has done Master's thesis in Solid waste management project through LCA Gabi Software.

Appendix 1: Abbreviations

Abbreviations	Full texts
UCR	Universal Carbon Registry
CEA	Central Electricity Authority
MR	Monitoring report
PCN	Project Concept Note
VR	Verification Report
VS	Verification Statement
DAA	Double Accounting Agreement
PP/PO	Project Proponent / Project Owner
PA	Project Aggregator
ER	Emission Reduction
CoUs	Carbon offset Units.
tCO_2e	Tons of Carbon Dioxide Equivalent
kWh	Kilo-Watt Hour
MWh	Mega-Watt Hour
CDM	Clean Development Mechanism
SDG	Sustainable Development Goal
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 18.0, August 2024	UCR website
2.	UCR	UCR CoU Standard (General project eligibility criteria and guidance)	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 energy generation"	Version 18.0	CDM website
5.	CEA	Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2022	Dated 28/02/2022	-
6.	CEA	CO_2 baseline database for the Indian Power sector	Version 20.0 dated December 2024	-
7.	Creduce	Communication agreement between PP and PO	Dated 29/01/2025	PA
8.	Creduce	Double Accounting Agreement	Dated 03/02/2024	PA
9.	Creduce	Project concept note	Version 1.0, dated 29/01/2025	PA
10.	Creduce	Monitoring report	Version 1.0, dated 01/02/2025	PA
11.	Creduce	Emission reduction excel	Version 1.0 dated 01/02/2025	PA
12.	RVPN	Power purchase agreement	-	PA
13.	SCEPL	Energy Bills	-	PA
14.	CDM	Registered PDD	Dated 02/01/2012	UNFCCC
15.	CDM	Registered MR	Dated 11/04/2024	UNFCCC
16.	CDM	Final Verification report	Dated 13/04/2024	UNFCCC
17.	Creduce	Monitoring report	V2.0 dated 06/02/2024	PA
18.	Creduce	Emission reduction calculation sheet	V2.0 dated 06/02/2024	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 (DAA)	**Date:** 01/02/2025
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 (v. 6.1, August 2024)				
Project Owner's response				**Date:** 03/02/2025
Double accounting agreement is provided				
Documentation provided by Project Owner				
Double accounting agreement				
UCR Project Verifier assessment				**Date:** 04/02/2025
Double accounting agreement is checked and found to be confirming the UCR program manual *(v. 6.1, August 2024), hence CL 01 stands closed.*				

Table 2. CARs from this Project Verification

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				