

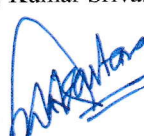

Project Verification Report For Project Titled:

“Alchem Biomass to Energy Project – Neemrana Rajasthan”

ISSUED TO: PROJECT AGGREGATOR**	ISSUED BY: PROJECT VERIFIER
<p>ALCHEM INTERNATIONAL PRIVATE LIMITED, SP-2-5, RIICO INDUSTRIAL AREA, NEEMRANA, RAJASTHAN</p>	<p>SKV SOLUTIONS PRIVATE LIMITED PLOT NO-4/4, A-219, RAJHANS PLAZA AHINSA KHAND-I, INDIRAPURAM GHAZIABAD-201014</p>
<p>PROJECT PROPONENT**: ALCHEM INTERNATIONAL PRIVATE LIMITED, SP-2-5, RIICO INDUSTRIAL AREA, NEEMRANA, RAJASTHAN</p> <p>PROJECT PHYSICAL LOCATION: ALCHEM INTERNATIONAL PRIVATE LIMITED, SP-2-5, RIICO INDUSTRIAL AREA, NEEMRANA, RAJASTHAN</p> <p>** Reference UCR Communication Agreement 2021 Between Project Proponent And Project Aggregator Dated 10th January 2023.</p>	

COVER PAGE	
Project Verification Report Form (VR)	
Complete this form in accordance with the instructions.	
BASIC INFORMATION	
Name of approved UCR Project Verifier / Reference No.	SKV Solutions Private Limited
Type of Accreditation	<input type="checkbox"/> CDM or other GHG Accreditation <input type="checkbox"/> ISO 14065 Accreditation UCR approved Verifier. Provide details (if any) below for the boxes ticked above including the name of the entity that provided the accreditation and the date of validity (DD/MM/YYYY to DD/MM/YYYY) of the approval.
Approved UCR Scopes and GHG Sectoral scopes for Project Verification	Sectoral Scope:01 Energy Industries
Validity of UCR approval of Verifier	From 28-9-2021
Completion date of this VR	11-12-2023 (29-3-2024**)
	**For microscale and small-scale project activities, applied default emission factor of 0.0142 tCO ₂ /tonne of biomass to determine the final amount of emission reductions that can be claimed per vintage
Title of the project activity	“Alchem Biomass to Energy Project – Neemrana Rajasthan”
Project reference no. (as provided by UCR Program)	UCR ID:364
Name of Entity requesting verification service (can be Project Owners themselves or any Entity having authorization of Project Owners, example aggregator.)	ALCHEM INTERNATIONAL PRIVATE LIMITED, SP-2-5, RIICO INDUSTRIAL AREA, NEEMRANA, RAJASTHAN
Contact details of the representative of the Entity, requesting verification service	Contact Focal Point and Contact Number: Mr. Sunil Malik--9811999164 Contact mail id for all official communication:

(Focal Point assigned for all communications)	sunil.malik@alcheminternational.com
Country where project is located	India
Applied methodologies (approved methodologies by UCR Standard used)	AMS.I.C. Thermal energy production with or without electricity version 22.
GHG Sectoral scopes linked to the applied methodologies	SECTORAL SCOPE - 01 Energy industries (Renewable/Non-Renewable Sources)
Project Verification Criteria: Mandatory requirements to be assessed	<input checked="" type="checkbox"/> UCR Standard <input checked="" type="checkbox"/> Applicable Approved Methodology <input type="checkbox"/> Applicable Legal requirements /rules of host country <input checked="" type="checkbox"/> Eligibility of the Project Type <input checked="" type="checkbox"/> Start date of the Project activity <input checked="" type="checkbox"/> Meet applicability conditions in the applied methodology. <input checked="" type="checkbox"/> Credible Baseline <input checked="" type="checkbox"/> Do No Harm Test <input checked="" type="checkbox"/> Emission Reduction calculations <input checked="" type="checkbox"/> Monitoring Report <input checked="" type="checkbox"/> No GHG Double Counting <input type="checkbox"/> Others (please mention below)
Project Verification Criteria: Optional requirements to be assessed	<input checked="" type="checkbox"/> Environmental Safeguards Standard and do-no-harm criteria. <input type="checkbox"/> Social Safeguards Standard do-no-harm criteria
Project Verifier's Confirmation: The <i>UCR Project Verifier</i> has verified the UCR project activity and therefore confirms the following:	<p>The UCR Project Verifier SKV Solutions Private Limited, certifies the following with respect to the UCR Project Activity Alchem Biomass to Energy Project – Neemrana Rajasthan.</p> <input checked="" type="checkbox"/> The Project Owner has correctly described the Project Activity in the Project Concept Note version-3 (dated 11-10-2023 including the applicability of the approved methodology AMS-I.C-V22 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

	<p>and conservatively.</p> <p><input checked="" type="checkbox"/> The Project Activity is likely to generate GHG emission reductions amounting to the estimated 107406 tCO₂ (107406 CoUs) as indicated in the PCN, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable UCR rules.</p> <p><input checked="" type="checkbox"/> The Project Activity is not likely to cause any net-harm to the environment and/or society.</p> <p><input checked="" type="checkbox"/> The Project Activity complies with all the applicable UCR rules¹ and therefore recommends UCR Program to register the Project activity with above mentioned labels.</p>
<p>Project Verification Report, reference number and date of approval</p>	<p>SKV/UCR/006</p> <p>VERIFICATION REPORT UCR PROJECT ID: 364</p> <p>11-12-2023 (29-3-2024**)</p> <p><small>**For microscale and small-scale project activities, applied default emission factor of 0.0142 tCO₂/tonne of biomass to determine the final amount of emission reductions that can be claimed per vintage</small></p>
<p>Name of the authorised personnel of UCR Project Verifier and his/her signature with date</p>	<p>Manoj Kumar Srivastava</p>  

A.PROJECT VERIFICATION REPORT:

Executive Summary:

Objective:

SKV Solutions Private Ltd has been contracted by project aggregator Alchem International Private Limited to perform an independent verification of its UCR project titled “**Alchem Biomass to Energy Project – Neemrana Rajasthan**” **UCR approved project ID:364**, to establish number of CoUs generated by project over the crediting period **01/01/2013 to 31/12/2022 (both days included).**

Scope:

The scope of the verification is the independent and objective review and ex post determination of the monitored reductions in GHG emission by the project activity. The verification is based on the validated and UCR approved Project Concept Note (PCN) and the Monitoring Report (MR). The project is assessed against the requirements of the UCR protocol, UCR programme verification Guidance Document, UCR Standard, UCR Programme Manual and related rules and guidelines.

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 project is not part of present assignment and projects deemed validated post registration by UCR. The scope of verification is limited to parameters identified through monitoring report and emission reduction as presented in the excel spread sheet and emission reduction calculation sheet which was reviewed.

As per UCR guideline site visit was not mandatory to be conducted however keeping in mind the integrity of statement the physical site visit was conducted and verification opinion is formed based on assessment of submitted document by UCR approved project aggregator on behalf of project owner as well as the assessment visit conducted on 22-9-2023.

The documents submitted are authentic and true as per undertaking provided to verifier by the project aggregator. Further the authenticities of submitted document were confirmed by the project proponent in written mail communication to verifier. Any misrepresentation/omission, even advertently, shall be sole responsibility of project aggregator and project owner.

Summary:

The project titled **Alchem Biomass to Energy Project – Neemrana Rajasthan** bearing UCR project id: 364 which is approved by UCR registry which is equivalent to validation.

The purpose of the project activity is the setup of Boilers of to generate steam using biomass (rice husk) as fuel. The project involves setting up of boiler of capacity 8TPH to meet the thermal energy requirement at Alchem International manufacturing facility. As a part of the manufacturing process Alchem requires steam and 100% of this steam is generated from biomass (rice husk). Alternately this fuel could have been generated from any other solid fuel (coal). In addition to replacing fossil fuel with renewable fuels, the project proponent has also installed bag filters to reduce ash emissions from the chimneys, over and above the standards prescribed by the state pollution control board.

Project location is SP-2-5, RIICO Industrial Area, Neemrana, Rajasthan in the state of Rajasthan in India.

The verification process involves scrutiny of documents submitted by authorized person Mr. Sunil Malik (Alchem International Private Limited) on behalf of project owner (Alchem International Private Limited). UCR communication agreement between project aggregator and project owner (aggregator and owner is same company represented by two different individuals holding two different position) verified which was submitted to verifier by project aggregator. Also project related documents submitted to verifier as per checklist was verified. List of such documents available in subsequent part of this report under section I.

Nonconformities reported where required leading to further correction in project documents. The summary of CAR/CL is available in subsequent part of this report under section J.

Mr. Srivastava is team leader and verifier for the project activity who has worked for CDM project both as consultant as well as validator/verifier. Further Mr. Srivastava is qualified assessor for Quality Management System and Environmental Management System.

The document submitted by the project aggregator is deemed submission for validated project on behalf of project owner.

Based on documents submitted SKV can provide its opinion that project during its claimed crediting period has achieved emission reduction of 107406 tCO₂ (**107406 CoUs**) As claimed through PCN/MR and ER sheet. As a conservative approach SKV applies 5% error ⁺⁻ and lower side of emission reduction is verified and certified.

B. Project Verification team, technical reviewer and approver:

The project verification team consists of following person.

Project Verification team

No	Role	Last name	First name	Affiliation (e.g. name of central or other office of UCR Project Verifier or outsourced entity)	Involvement in		
					Doc review	On-Site inspection	Interviews
1.	Team Leader and Validator	Srivastava	Manoj	SKV	YES	NO	NO
2	Technical Expert	Srivastava	Manoj	SKV	YES	NO	NO
3	Financial/ Other Expert	Hemant	Tiwari	SKV	YES	NO	NO

Technical reviewer and approver of the Project Verification report

No	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of UCR Project Verifier or outsourced entity)
1.	Technical reviewer	I	Tiwari	Hemant	
...	Approver	I	Tiwari	Hemant	

C. Means of Project Verification:

Desk/document review

The project documents submitted to UCR approved verifier SKV solutions private limited which was reviewed at SKV office at Ghaziabad. The documents review involves verification of legal status of individual project owner for consistency, project related documents like installation and commissioning of equipment used in project activity. Environmental clearances from state or central pollution control board, Consent to establish and operate, monitoring related meters/parameters equipment measuring instruments and their calibration records, to establish running of equipments for the crediting period etc.

The PCN is made available to verifier post approval by UCR which is considered as validated documents and the content of validated PCN are considered as record wherever required. Further the communication agreement made between project owner and project aggregator is document of UCR registry hence the project aggregator is treated as authorized representative of project owner. All the documents submitted by project aggregator to verifier is treated as documents submission on behalf of project owner.

The list of submitted document is available in subsequent section of this verification report under section “Document reviewed or referenced”-section I. Also, these documents are referred, where required, as subscript to facilitate linkage of verified documents to verification report. {for example project aggregator₁ means aggregator is identified from document 1 in section I}

On-Site inspection- 22-9-23

Date of off site inspection: 22/09/2023 to 22/09/2023		Site visit was conducted for physical verification of installation and it inspected under running condition.	
No.	Activity performed Off-Site	Site location	Date
1.	Physical verification of manufacturing site	Neemrana	22-9-23
2.	Verification of boiler house, steam section and manufacturing process	Neemrana	22-9-23
3.	Conducting interview with plant representative. Mr Sunil Malik and Mr. N.K.Singh were interviewed	Neemrana	22-9-23

Interviews: Conducted during the site visit

No.	Interview			Date	Subject
	Last name	First name	Affiliation		
1.	Malik	Sunil	Group head – Corporate Compliance	22-9-23	Overall project activity
2.	Singh	Narender	Unit head	22-9-23	About plant and machinery and emission reduction.

Sampling approach:

For the verification of monitoring parameter of biomass and steam generation sample log sheet scanned copy was made available to verifier and the same has been verified. Data is being monitored on an hourly basis resulting in generation on daily log sheet reported by plant person available shift. A physical visit of the installation site was conducted, and hence physical verification of logbook was also done. Based on these log sheets the client manages the logbook available at the plant, which contains the data for the crediting period. The client has summarized the data for biomass consumed and steam generation on a weekly basis from the plant logbook for the crediting period. This weekly data is submitted to the verifier as data for the crediting period and the same has been verified.

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	--	03	NIL
General description of project activity	--	02	NIL
Application and selection of methodologies and standardized baselines	--	--	--
- Application of methodologies and standardized baselines	--	01	NIL
- Deviation from methodology and/or methodological tool	--	--	--
- Clarification on applicability of methodology, tool and/or standardized baseline	--	02	NIL
- Project boundary, sources and GHGs	--	01	NIL
- Baseline scenario	--	03	NIL
- Estimation of emission reductions or net anthropogenic removals	--	--	NIL
- Monitoring Report	--	06	NIL
Start date, crediting period and duration	--	01	NIL
Environmental impacts	--	--	NIL
Project Owner- Identification and communication	--	04	NIL
Others (please specify)			NIL
Total	--	18	NIL

D. Project Verification findings:

D.1. Identification and eligibility of project type:

Means of Project Verification	<p>Project has taken reference of CDM methodology AMS-I.C. version 22 Thermal energy production with or without electricity.</p> <p>The project involves combustion of biomass in boiler for generating head and meeting the thermal energy requirement of manufacturing process. Industry required such quantum of heat as evident from the documents verified like production data, boiler specification, company turn over and biomass bills. Further physical inspection was carried to verify the same on 22-9-2023.</p>
Findings	<ol style="list-style-type: none"> 1. Please provide the consent to operate, pollution board approval and its renewal. 2. Methodology is not applied as it is rather referenced the same is not reflecting in PCN. 3. The version of reference methodology not mentioned in the PCN.
Conclusion	<p>Project activity is described through UCR approved PCN. The UCR approved format is used for description and project meets the requirement of UCR verification standard and UCR project standard.</p> <p>UCR project communication agreement submitted to verifier and the same has been verified. Methodology referenced and applied appropriately describing the project type. The eligibility of project aggregator is verified using UCR communication agreement, Project correctly applies the verification standard, UCR project standard and UCR regulations.</p> <p>CPCB approval and consent to operate provided and the same has been verified. The entity was under operation during the period and claim seems valid.</p> <p>The project activity is overall meeting the requirements of UCR Verification standard and UCR project standard.</p>

D.2. General description of project activity:

Means of Project Verification	<p>The project activity involves the setting up of a biomass fired boiler for the purpose of generating heat (steam) which is used in industrial process of API manufacturing at Alchem international manufacturing facility. Boiler commissioning certificate verified. Purchase order of boiler verified. Also, the related statutory clearance documents such as pollution control board, EC compliance report, NOC from statutory body, Consent to operate its renewal verified.</p>
Findings	<ol style="list-style-type: none"> 1. The crediting period is not correctly defined. 2. Project location latitude and longitude not mentioned.
Conclusion	<p>The project would have consumed equivalent quantum of coal to</p>

	<p>generate the same amount of heat which would have resulted in emission of carbon dioxide as coal has high emission factor and fossil fuel. There is over all emission reduction in GHG and there is no significant negative impact on environment hence project qualifies for no net harm to environment principle.</p> <p>The project activity overall meets the requirement of UCR verification standard and UCR project standard and related requirements.</p>
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D.3.Application and selection of methodologies and standardized baselines:

D.3-1.Application of methodology and standardized baselines:

Means of Project Verification	Project has taken reference of CDM methodology AMS-I.C-version22.Thermal energy production with or without electricity. The methodology is correctly identified as the project activity is related to methodology. Project description verified through purchase order of plant and machinery, Boiler, and related document and commissioning certificate. Applicability of methodology clearly explained in section B.2 of registered PCN.
Findings	1. The version of reference methodology is not mentioned in the PCN also PCN and MR version is not updated.
Conclusion	Methodology application is appropriate meeting the requirements of UCR and its standardized baseline. The methodology version is correct and valid. Referenced methodology is applicable to project activity.

D.3-2.Clarification on applicability of methodology, tool and/or standardized baseline:

Means of Project Verification	Methodology has not been applied “as it is” rather it is referenced. The applicability of baseline is clearly established in section B.2 of the registered PCN. Biomass used by the project plant is limited to biomass available from surrounding mainly from rice husk. Aggregate emissions reductions are less than 60 kt CO2 equivalent annually from all Type III components of the project activity. Project related documents like purchase order of boiler, plant and machinery and commissioning certificate were submitted and verified.
Findings	1. Version of PCN is not mentioned in the document. 2. Version of MR is not mentioned in MR.
Conclusion	The methodology is applied correctly along with associated tools and standardized baseline used correctly.

D.3-3. Project boundary, sources and GHGs:

Means of Project Verification	<p>Project boundary is appropriately defined in PCN version 02 which is physical and geographical site of boiler and its auxiliaries, plant generating steam located at project site and physical location of boiler house.</p> <p>The project boundary description is considered true, for reference environment clearance letter and its renewal verified. The source of GHG is correctly reported as per reference methodology.</p> <p>GHG considered in the baseline scenario is CO₂, N₂O not considered for simplification which is conservative. Activity is installation of new Greenfield project hence leakage is not considered. IPCC default value is used for calculation along with national grid emission factor as available in India which is acceptable as per methodology.</p>
Findings	<p>1. Please provide unique location of project site using suitable longitude and latitude.</p>
Conclusion	<p>Project boundary is correctly defined in revised PCN version 02. Also, project longitude and latitude mentioned correctly. GHG source correctly identified and reported. The project meets the requirements of UCR project standard, Verification standard and methodology requirements for boundary, GHG source.</p>

D.3-4. Baseline scenario:

Means of Project Verification	<p>In the project baseline scenario, the gases coming from coal fired boiler would have been emitted into the atmosphere. Also, steam would be generated from coal fired boiler to meet the industrial energy requirement. This is described suitably in PCN taking reference to methodology AMS.I.C. Thermal energy production with or without electricity version 22. Baseline scenario is appropriately defined in revised PCN/MR version -02 under section B5.</p>
Findings	<p>1. Please provide boiler technical specification as supplied by supplier.</p> <p>2. Please provide supporting for boiler efficiency.</p> <p>3. Please provide one undertaking for this (debundling) on letter head duly signed.</p>
Conclusion	<p>Baseline scenario is appropriately described. Boiler commissioning certificate, its renewal, technical specification made available to verifier which has been verified. Also undertaking letter for debundling was made available. Further the project activity is greenfield project. The conservative or default value for emission considered. The baseline scenario is in accordance with UCR project verification standard and UCR project standard.</p>

D.3-5. Estimation of emission reductions or net anthropogenic removal:

Means of Project Verification	Monitoring plan as defined in section B8 of monitoring report version 2 identifies the parameters which were being monitored during the crediting period. The parameter includes steam generation quantity, Quantity of biomass consumed, steam temperature and pressure. For emission factory IPCC default values used which is publicly available. For monitored data the sample plant log sheets submitted and the same has been verified. Based on data extraction from logbook the project proponent has provided weekly data for measured parameters which has been verified. These monitored data and default values used for the estimation of emission reduction which is correct. Further the monitored data is reported in excel spread sheet to calculate the emission reduction which correctly utilized the data to arrive at estimation of emission reduction during the crediting period.
Findings	NIL
Conclusion	Emission reductions are correctly calculated. The data used are either monitored at plant or default values applied. For the measured data the reported values provided in weekly data sheet summary for the crediting period. The instruments are calibrated and hence the emission reduction is reported correctly and meets the requirements of UCR verification standard and UCR project standard.

D.3-6. Monitoring Report:

Means of Project Verification	Monitoring report/PCN submitted to verifier where in monitoring plan was made available. The monitoring data reported through PCN/MR were either measured or default values were used as per reference methodology. The list of major data measured, or default value applied are as under. <ol style="list-style-type: none"> 1. Biomass weight. 2. Methane content in biogas. 3. Grid emission factor- UCR standard value considered. 4. Pressure of steam 5. Temperature of steam 6. Moisture content in biomass 7. Calorific value of biomass 8. Calibration certificate of measuring instruments <p>While assessing the parameters the clarifications were sought and project aggregator provided the clarification.</p>
Findings	<ol style="list-style-type: none"> 1. Please provide steam measurement record as per monitoring report description. 2. Please provide record of biomass weight as per monitoring report

	<p>description.</p> <p>3. Please provide the record of pressure monitored for the crediting period.</p> <p>4. Please provide the record for temperature of steam as per description in monitoring report.</p> <p>5. Please provide the supporting document for calorific value of biomass for the crediting period.</p> <p>6. Please provide the calibration certificate.</p>
Conclusion	<p>Monitoring parameter as reported through PCN/MR adequately represents the parameters relevant to emission reduction calculation. The calibration report ensures the accuracy of data reported. The number of CoUs generation is calculated based on this accurately reported data. The calculation was done using excel sheet where all the parameters reported. The emission factor for electricity is as per UCR standard for electricity component.</p> <p>Based on monitoring and emission reduction calculations are correctly calculated and reported.</p> <p>The monitoring report meets the requirements of UCR project verification requirements.</p>

D.4.Start date, crediting period and duration:

Means of Project Verification	<p>The plant commissioning certificate made available to establish the start date of project for the plant. Also the purchase order of boiler was made available to establish the start date of steam generation. The crediting period is from 01-01-2013 until 31-12-2022. The project life is well beyond current crediting period also the project is running as verified through major legal documents submitted to verifier during the verification. Also, the physical site visit was conducted on 22-9-2023 by verifier to physically verify the installation, boiler house, manufacturing facility and use of biomass as fuel. Further the statutory document like state pollution control board consent to establish and operate verified where the major parameter under consent are listed.</p>
Findings	<p>1. Please revise the crediting period.</p>
Conclusion	<p>The start date, crediting period and project duration reported correctly and this meets the requirements of UCR verification standard and UCR project standard.</p>

D.5.Positive Environmental impacts:

Means of Project Verification	Validated PCN, compliance reports, statutory and legal clearances, verified. The project activity involves generation of steam from renewable biomass. In absence of project activity, the same would have been generated by using fossil fuel (coal) leading to emission of to Global warming. Because of project activity the net equivalent fossil fuel saved hence project has overall positive impact on environment.
Findings	--
Conclusion	The positive environmental impact meets the requirement of UCR verification standard and UCR project standard.

D.6.Project Owner- Identification and communication:

Means of Project Verification	Alchem International Private limited is the project owner. The statutory document for the existence of company as legal entity verified which includes certificate of incorporation, factory license, pollution control board consent to operate and its renewal for the crediting period, boiler commissioning document, boiler inspector certificate for the operation of boiler for the crediting period.
Findings	<ol style="list-style-type: none"> 1. Please provide the document to establish the legal status of project owner. 2. Please provide the factory license and its renewal. 3. Please provide the pollution control board approval and its renewal. 4. Please provide the boiler commission certificate and its renewal.
Conclusion	Project owner identified through communication agreement signed between PP and PA. The project aggregator and project owner are same entity represented by two different individuals from organization. Equipment purchases order and commission verified. Also, legal document like pollution control board document, NOC clearly establishes the project owner. The identification and communication correctly meet the requirement of project verification and UCR project standard.

D.7.Positive Social Impact:

Means of Project Verification	Project has provided temporary 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. The purchase of biomass gives long term opportunity to farmers as the biomass is ultimately produced by the farmers in the region. Overall social impact of project implementation is positive on the surrounding area.
Findings	---
Conclusion	Project has overall positive social impact.

D.8.Sustainable development aspects (if any)-N/A

Means of Project	
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Verification	
Findings	
Conclusion	

E.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 similar engagement with same entity for the carbon credit related activity.
- Verification team consists of experience personnel.
- Technical review is performed by experienced and independent person.

F.Project Verification opinion:

The “SKV Solutions Private Limited” has performed a verification of the emission reductions reported for the project titled “**Alchem Biomass to Energy Project – Neemrana Rajasthan.**”

UCR ID:364 located at Alchem International Private Limited, SP-2-5, RIICO Industrial Area, Neemrana, Rajasthan,

Limited for the period: 01/01/2013 to 31/12/2022.

In our opinion, the GHG emissions reductions reported for the project in the monitoring report submitted to SKV are fairly stated.

The GHG emission reductions were calculated correctly based on the approved baseline and monitoring methodology AMS-I.C-V22 and the monitoring plan and formulae provided in the PCN/MR/ER spread sheet. During verification, SKV identified the corrective action request/Corrections/Clarifications, which have been closed by SKV following appropriate clarifications by project aggregator.

SKV Solutions Private Limited is able to certify that the emission reductions from the “Alchem Biomass to Energy Project –Neemrana Rajasthan” at Neemrana ,Rajasthan” for the period 1st January 2013 to 31st December 2022 amount to 107406 tCO₂ equivalent.

G.Abbreviations:

Abbreviations	Full texts
UCR	Universal Carbon Registry
SKV	SKV solutions private limited
AIPL	Alchem International Private Limited
MR	Monitoring report
GWP	Global Warming Potential
PCN	Project Concept Note
ER	Emission Reduction
CoUs	Carbon offset Units.

PA	Project Aggregator
PP/PO	Project Proponent/Project Owner- used interchangeably in report.
EI	External Individual
OE	Outsourced External
CDM	Clean Development Mechanism
CAR	Corrective Action Request
CL	Clarification Request
FAR	Forward Action Request
KLPD	Kilo L/day.

H.Competence of team members and technical reviewers:

No	Role	Last name	First name	Competence Description
1.	Team Leader and validator	Srivastava	Manoj	Mr. Srivastava is post graduate engineer having more than 10 years of experience in the field of Carbon mitigation projects. He is also qualified Validator/Verified and lead auditor for CDM. Also Mr. Srivastava is certified energy manager and lead auditor for quality management system and environmental management system.
..	Technical Expert	Srivastava	Manoj	Mr. Srivastava is post graduate engineer having more than 10 years of experience in the field of Carbon mitigation projects. He is also qualified Validator/Verified and lead auditor for CDM. Also Mr. Srivastava is certified energy manager and lead auditor for quality management system and environmental management system
..	Financial/ Other Expert	Tiwari	Hemant	Mr. Hemant Tiwari is MBA by qualification and has work experience of more than 10 in various position in manufacturing, testing and certification bodies.

I.Document reviewed or referenced:

No.	Author	Title	References to the document	Provider
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1.	UCR	Universal carbon registry communication agreement		Other (PA)
2.	SKV	Initial questionnaire for Verification		SKV/PA
3.	AIPL	PCN with its revision		PA/PP
4.	AIPL	Monitoring report with its revision		PA/ PP
5.	AIPL	Emission Calculation sheet with its revision.		PA/ PP
6.	NOC Pollution control board	Consent to establish from the pollution control board, statutory body		PA/ PP
7.	Ministry of corporate affairs	Certificate of incorporation AIPL		PA/ PP
8.	Rajasthan Pollution Control Board	Consent to establish		PA/ PP
9.	Rajasthan Pollution control Board	Renewal of consent to operate		PA/ PP
10.	Factory inspector	Factory license with its renewal from statutory body.		PA/ PP
11.	Cheema Boiler Limited	Purchase order for boilers		PA/ PP
12.	Cheema Boilers limited	Technical specification for boiler		PA/ PP
13.	Director of boilers	Boiler registry number for boiler		PA/ PP
14.	AIPL	Calibration certificate – weighing machine		PA/ PP
15.	AIPL	Steam data for the crediting period		PA/ PP
16.	AIPL	Biomass data for the crediting period.		PA/ PP
17.	AIPL	Calibration certificate-pressure gauge		PA/ PP
18.	AIPL	Organization chart		PA/ PP
19.	Biomass and steam generation weekly summary sheet for crediting period	Signed summary sheet by AIPL		PA/ PP
20.	Calibration schedule of measuring instruments	Summary sheet of calibration schedule for measuring instruments.		PA/ PP
21.	Social Welfare work summary	Description of social and amount by AIPL		PA/ PP

J. Clarification request, corrective action request and forward action request:

Table 1. CAR/CLs from this Project Verification

CAR/CL ID	01	Section no.	D.1	Date: 08/09/2023
Description of CL				
1. Please provide the consent to operate, pollution board approval and its renewal. 2. Methodology is not applied as it is rather referenced the same is not reflecting in PCN. 3. The version of reference methodology not mentioned in the PCN.				
Project Owner's response				Date: 11/09/2023
1. Please find attached consent to operate, pollution control board initial consent and its latest renewal. 2. PCN revised with the comments that Methodologies are referenced and not applied. Also, methodology tools, monitoring parameters, etc are applied. Since major part of methodology was applied except additionality criteria which is not applied hence, we used in document that methodology is applied. 3. PCN revised with the Versions of the methodologies updated in revised PCN.				
Documentation provided by Project Owner				
Pollution control board consent and its renewal. Revised PCN version 03 submitted.				
UCR Project Verifier assessment				Date: D07/10/2023
The consent to operate and its renewal from the statutory body, state pollution control board submitted and the same has been verified. Further the renewal of consent also submitted for the current period which establishes the running of plant and machinery. Also revised PCN Version 02 submitted with correction as in response above. Clarification is accepted.				

CAR/CL ID	02	Section no.	D.2	Date: 08/09/2023
Description of CL				
1. The crediting period is not correctly defined. 2. Project location latitude and longitude not mentioned.				
Project Owner's response				Date: 11/09/2023
1. Crediting period correctly defined in the revised PCN version 2 2. Project location latitude and longitude mentioned in revised PCN version 2.				
Documentation provided by Project Owner				
1. Revised PCN version 2.				
UCR Project Verifier assessment				Date: 07/10/2023
Revised PCN submitted with requisite correction. Accepted				

CAR/CL ID	03	Section no.	D.3-4	Date: 08/09/2023
Description of CL				
1. Please provide boiler technical specification as supplied by supplier. 2. Please provide supporting for boiler efficiency. 3. Please provide one undertaking for this (debundling) on letter head duly signed.				
Project Owner's response				Date: 11/09/2022

1. Technical specification as supplied by the supplier attached	
2. Technical specification as provided by the boiler supplier attached.	
3. Please find the undertaking attached.	
Documentation provided by Project Owner	
1. Boiler supplier specification	
2. Undertaking for project not being debundled project.	
UCR Project Verifier assessment	Date: 07/10/2023
The submitted documents verified Clarification is accepted.	

CAR/CL ID	04	Section no.	D.3-6	Date: 08/09/2023
Description of CL				
1. Please provide steam measurement record as per monitoring report description.				
2. Please provide record of biomass weight as per monitoring report description.				
3. Please provide the record of pressure monitored for the crediting period.				
4. Please provide the record for temperature of steam as per description in monitoring report.				
5. Please provide the supporting document for calorific value of biomass for the crediting period.				
6. Please provide the calibration certificate.				
Project Owner's response				Date: 11/09/2023
1. Steam measurement record attached.				
2. Please find the log sheet for biomass attached.				
3. Please find the log sheet for pressure attached.				
4. Biogas log sheet attached for steam temperature.				
5. Please find attached the test report for the calorific value of biomass.				
6. Please find attached the calibration certificate for the measuring instruments including weighing bridge.				
Documentation provided by Project Owner				
Plant logbook for the biomass, steam quantity, temperature, pressure.				
Calorific value test report				
Calibration certificates.				
UCR Project Verifier assessment				Date: 07/10/2023
Weekly data for the crediting period submitted which is duly signed by concern incharge at factory works manager. The sheet captures data as listed in clarification.				
Further the test report for calorific value of biomass is provided. Also, the calibration certificate made available.				

CAR/CL ID	05	Section no.	D.4	Date: 08/09/2023
Description of CL				
1. 1. Please revise the crediting period.				
Project Owner's response				Date: 11/09/2023
1. Please find revised PCN version 2 attached				
Documentation provided by Project Owner				
Revised PCN version 2				
UCR Project Verifier assessment				Date: 07/10/2023
PCN with correctly mentioning the crediting period submitted. Clarification accepted.				

CAR/CL ID	06	Section no.	D.6	Date: 08/09/2023
Description of CL				
1. Please provide the document to establish the legal status of project owner. 2. Please provide the factory license and its renewal. 3. Please provide the pollution control board approval and its renewal. 4. Please provide the boiler commission certificate and its renewal.				
Project Owner's response				Date: 11/09/2023
1. Please find certificate of incorporation attached. 2. Please find factory license attached. 3. Pollution control board initial consent and its latest renewal attached. 4. Boiler inspector certificate from statutory body attached.				
Documentation provided by Project Owner				
Certificate of incorporation Factory license Pollution control board consent and renewal. Boiler purchase order/technical specification and Boiler inspector certificate.				
UCR Project Verifier assessment				Date: 07/10/2023
Submitted documents are third party legal document. Certificate of incorporation verified at MCA web site. Clarification accepted.				

Table 2. CARs from this Project Verification

CAR/CL as in above table.

Table 3. FARs from this Project Verification-NIL

FAR ID	xx	Section no.	D.5	Date: DD/MM/YYYY
Description of FAR				
Project Owner's response				Date: DD/MM/YYYY
Documentation provided by Project Owner				
UCR Project Verifier assessment				Date: DD/MM/YYYY

Project picture-Factory Main Entrance Gate:



Project picture: Biomass



Project Picture: Biomass feeding point



Project Picture: Steam pipe line



Project picture: Steam utilization in process



Project picture: Boiler Section



Project picture: Biomass



Project Picture: Weighing bridge





VERIFICATION REPORT UCR PROJECT ID: 339