



VOLUNTARY CARBON STANDARD 2007.1

SUPPLEMENTARY VALIDATION REPORT

15 MW BIOMASS RESIDUE BASED POWER PROJECT AT GHAZIPUR, INDIA

Report No: 53601410 - 10/297

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Report Title:	Approved by:
Supplementary validation report of "15 MW Biomass Residue Based Power Project at Ghazipur, India"	Rainer Winter
Client:	Project Title:
Sukhbir Agro Energy Limited.	15 MW Biomass Residue Based Power Project at Ghazipur, India
Summary:	
The project activity meets the criteria of the clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD as per VCS 2007 and is likely to achieve the estimated emission reductions.	
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Abbreviations

CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CO₂	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CP	Certification Program
CL	Clarification Request
DNA	Designated National Authority
EB	CDM Executive Board
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
PDD	Project Design Document
QC/QA	Quality control/Quality assurance
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
VCS - PD	VCS - Project Description
VCU	Voluntary Carbon Unit
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

The objective of the validation is to assess whether the VCS PD follows the VCS 2007.1 standard particularly the clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD.

This supplementary validation report is only valid in conjunction with the CDM registered documents for the project “15 MW Biomass Residue Based Power Project at Ghazipur, India” reference No. 2708.

1.2 Scope and Criteria

The scope of the validation covers the clauses of 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD as required by the Policy Announcement from VCS Association on 19th March 2008.

1.3 VCS project Description

The project activity is undertaken by Sukhbir Agro Energy Limited (SAEL) in Ghazipur district of Uttar Pradesh state, India. The project involves installation of a new 15MW capacity steam turbine to generate electricity and export surplus power to the regional grid. The project use rice husk, a by-product of paddy processing, as fuel. The project activity thus reduces GHG emissions by displacing the fossil fuel dominated grid based electricity with biomass residues based renewable electricity.

Under the project activity SAEL installed a new 70 tonnes per hour (TPH) capacity travelling grate boiler and a new 15 MW extraction cum condensing turbine to generate electricity, along with all accessories and equipments. The cogeneration system is commissioned within the premises of a 40 TPH milling capacity Rice Mill for paddy processing and a 500 tonnes per day (TPD) Solvent Extraction Plant. The surplus electricity from the project activity is exported to the regional grid.

The project activity uses rice husk for combustion and generation of steam. Rice husk is a byproduct of paddy processing. The rice grain is covered with a woody husk or hull (rice husk), which is indigestible and is to be removed in the first step during processing for making the rice edible. Under the project, part of the rice husk requirement is met by the in-house generation of rice husk in the rice mill. The remaining quantity will be procured from surrounding areas.

A detailed description of the VCS project has been described in the CDM PDD of the project registered as CDM project activity with the CDM EB, reference No. 2708

<http://cdm.unfccc.int/Projects/DB/RWTUV1245587342.33/view>

1.4 Level of Assurance

The verification has been planned and organized to achieve a

- ☒ reasonable level of assurance
- ☐ limited level of assurance.

2 METHODOLOGY

The supplementary validation of the project consisted of the following steps:

2.1 Review of Document

The Supplementary VCS PD^{/PD/} and supporting background documents related to the project design and baseline were reviewed.

Furthermore, the validation team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

The references used in the course of this validation are summarized in section 5.

2.2 Resolution of any material discrepancy

Material discrepancies identified in the course of the validation are addressed either as CARs, CLs or FARs.

A **Corrective Action Request (CAR)** is established where:

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence the project results,
- the requirements deemed relevant for validation of the project with certain characteristics have not been met or
- there is a risk that the project would not be registered or that emission reductions would not be able to be verified and certified.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first verification.

A detailed list of the CARs CLs and FAR raised and discussed in the course of this validation is included in the next section 3 of this report.

3 ASSESSMENT OF VCS-PD

In this section the assessments and findings from the desk review of the VCS PD, site visit, interviews and supporting documents as well as the final assessments are summarised. Table 3-1 includes an overview of all raised CARs, CLs and FARs.

Table 3-1: Overview of CARs, CLs and FARs issued

No.	Topic / Chapter	CAR	CL	FAR
3.1	VCS PD Template Section - 1.12	-	-	-
3.2	VCS PD Template Section - 1.13	-	-	-
3.3	VCS PD Template Section - 1.14	-	-	-
3.4	VCS PD Template Section - 8.1	-	-	-
3.5	VCS PD Template Section - 8.2	-	-	-
3.6	VCS PD Template Section - 1.12	-	-	-
-	SUM	0	0	0

3.1 VCS PD Template Section - 1.12

Description

The project involves installation of 15MW rice husk based cogeneration plant in a rice mill. The steam produced in the plant is being used for the rice processing and the electricity generated is used for captive purpose and the surplus electricity is supplied to the regional grid. The project activity uses rice husk, a by-product of paddy processing, as fuel.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

Since the project activity is a new cogeneration plant and it does not involve any GHG emission from date of commissioning, it is found that the project has not been implemented to create GHG emissions primarily for the purpose of its subsequent

removal or destruction.

3.2 VCS PD Template Section - 1.13

Description

The project is registered under CDM EB, UNFCCC reference no. 2708 and has not applied for any other form of environmental credit^{/UD-LET/}. The project does not have any legal binding or commitment of emission reductions^{/PP-DCL/}.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

The project activity is registered only under CDM in UNFCCC on 2010-01-12 with the project reference number is 2708. Hence it is confirmed that the project has not considered any other environmental credit like renewable energy certificates.

3.3 VCS PD Template Section - 1.14

Description

The project is not rejected under any other GHG program^{/UD-LET/}; rather it is registered as a CDM Project activity under UNFCCC with reference no. 2708^{/PP-DCL/}.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐

Final Assessment

The project activity is not rejected under any other GHG program^{/UD-LET/} and it only got registered with UNFCCC as a CDM project.

3.4 VCS PD Template Section – 8.1

Description

The project title is “15 MW Biomass Residue Based Power Project at Ghazipur, India” which is developed by M/s. Sukhbir Agro Energy Limited.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

The project title and the name of project proponents were cross-checked with the Host Country approval letter^{/LOA/} and found to be correct

3.5 VCS PD Template Section – 8.2

Description

Not Applicable

Related Findings

- ☐ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

Not Applicable



4 SUPPLEMENTARY VALIDATION STATEMENT

The project activity meets the criteria of the clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD as per VCS 2007 and is likely to achieve the estimated emission reductions.

Essen, 2010-08-17

A handwritten signature in blue ink, appearing to read 'Ma. Paa. Puratchikkanal'.

TÜV NORD JI/CDM Certification
Program

Ma. Paa. Puratchikkanal

TÜV India Pvt Ltd, Bangalore

Validation Team Leader

A handwritten signature in blue ink, appearing to read 'Rainer Winter'.

TÜV NORD JI/CDM Certification
Program

Rainer Winter

Final Approval

5 REFERENCES

Table 5-1: Documents provided by the project participant

Reference	Documents
/CAL/	Calibration certificate from UP power corporation limited for apex meter & check meter dated 25.06.10
/COE/	Consent for establishment dated 08.09.2006 from Uttar Pradesh Pollution control Board
/COP/	Consent for operation under air & water dated 22.12.2008 from Uttar Pradesh pollution control Board
/CR&SYN/	Commissioning and synchronisation report
/INS/	Boiler inspection certificate dated 11.11.2009
/LOA/	Letter of Approval from the host country dated 3 September 2008.
/LOG/	Log sheet copy w.r.t the the cogeneration plant. The monitored parameters are temperature and pressure of steam at the boiler, rice husk consumption, moisture content and NCV of rice husk.
/NCV/	Rice husk test certificates (NCV & Moisture content) from 'Idma laboratories'
/PDD/	Registered PDD for the project UNFCCC reference number 2708 http://cdm.unfccc.int/Projects/DB/RWTUV1245587342.33/view
/PP-DCL/	Declaration of the PP for the VCS Clauses 1.1.3 & 1.1.4 dated 6 June 2010.
/TRAIN/	Training records of monitoring personals
/VAL/	Registered Validation report for the project UNFCCC reference number 2708 http://cdm.unfccc.int/UserManagement/FileStorage/8CHEQV2B/FMD1GURWSA09J6ZLX03KYT

Table 5-2: Background investigation and assessment documents

Reference	Document
/ACM0006/	Consolidated methodology for electricity generation from biomass residues"

Reference	Document
	is applied to the project activity (Version 6.2)
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
VCS	Voluntary Carbon Standard 2007.1
/VDS-PD-T/	VCS PD Template
/VVM/	Validation and Verification Manual (Version as per EB51)

Table 5-3: Websites used

Reference	Link	Organisation
/vcs/	www.v-c-s.org	VCSA
/unfccc/	http://cdm.unfccc.int	UNFCCC