



GOLD STANDARD VERIFICATION REPORT

– 1ST PERIODIC –

LOS SANTOS WIND POWER PROJECT

GOLD STANDARD REF. No.: GS-103000000007288

Monitoring Period: 2013-07-01 to 2014-06-30
(incl. both days)

Report No: 10917-14/090

Date: 2015-12-10

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Verification Report:	Report No.		Rev. No.	Date of 1st issue:	Date of this rev.
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Project:	Title:		GS No	Registration date:	Gold Standard No.:
	Los Santos Wind Power Project			2015-06-29	103000000007288
	Verification No.: 1 st periodic verification				
Project Participant(s):	Non Annex 1 country:			Annex 1 country:	
	Costa Rica			Germany	
	PP from non Annex 1 country:			PP from Annex 1 country:	
Cooperativa de Electrificación Rural Los Santos			B.V. Mabanaf, Carbonbay GmbH & Co. KG		
Applied methodology/ies:	Title:			No.:	Scope(s) / TA(s)
	AMC-I-D. Grid connected renewable electricity generation			Ver. 17	01/1.2
Monitoring period and monitoring report	Monitoring period (MP):			Monitoring Report:	
	From:	To:	No. of days:	Draft version:	Final version:
	2013-07-01	2014-06-30	365	2014-08-11	2015-12-03
Verification team / Technical Review and Final Approval:	Verification Team:			Technical review:	Final approval:
	Raul Gonzalez Mitre Oliver Quireza Campos (TL) (TM)			LI Yongjun	Martin Saalmann
Key dates of verification:	Publication of the work plan:			On-site (from):	On-site (to):
	2014-08-11			2014-09-01	2014-09-02
Summary of Verification opinion	Carbonbay GmbH & Co. KG has commissioned the TÜV NORD JI/CDM Certification Program to carry out the 1st periodic verification of the project: "Los Santos Wind Power Project", with regard to the relevant Gold Standard requirements.				
	<p>As a result of this verification, the verifier confirms that:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all operations of the project are implemented and installed as planned and described in the validated project design document and Gold Standard additional Annexes to the project design document, <input checked="" type="checkbox"/> the monitoring plan is in accordance with the applied approved GS methodology, <input checked="" type="checkbox"/> the monitoring plan as set out in the validated project design document and the validated additional Annexes has been followed, <input checked="" type="checkbox"/> the project contributes to sustainability development <input checked="" type="checkbox"/> the monitoring system is in place and functional. The project has generated GHG emission reductions, and <input checked="" type="checkbox"/> the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. <p>TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:</p>				
Emission reductions: [t CO_{2e}]	Verified amount				As per PDD:
	10,889				12,482
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Abbreviations:

CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CO₂	Carbon dioxide
CO₂eq	Carbon dioxide equivalent
CP	Crediting Period
ER	Emission Reduction
ERC	Emission Reduction Calculation Spread Sheet
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GS	Gold Standard
GSP	Gold Standard Passport
GST	Gold Standard Toolkit 2.1
MP	Monitoring Plan
MR	Monitoring Report
PA	Project Activity
PDD	Project Design Document
PP	Project Participant
QA/QC	Quality Assurance / Quality Control
SR	Gold Standard Monitoring Report
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard



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1. INTRODUCTION

Carbonbay GmbH & Co. KG has commissioned the TÜV NORD JI/CDM Certification Program (CP) to carry out the 1st periodic Gold Standard (GS) verification of CPII for the project

“Los Santos Wind Power Project”

with regard to the relevant requirements for Gold Standard project activities. The verifiers have reviewed the implementation of the monitoring plan (MP) in the registered Gold Standard project.

GHG data as well as sustainability aspects for the monitoring period were verified in detailed manner applying the set of requirements, audit practices and principles as required under the Gold Standard requirements^{/GS/} and additional Validation and Verification Standard^{/VVS/} of the UNFCCC.

This report summarizes the findings and conclusions of this 1st periodic verification for CP II of the above mentioned registered Gold Standard project activity.

1.1. Objective

The objective of the verification is the review and ex-post determination by an independent entity of the GHG emission reductions and the contribution to sustainable development. It includes the verification of the:

- implementation and operation of the project activity as given in the PDD and GS Passport,
- compliance of the actual monitoring system and procedures with the provisions of the monitoring plan as a part of registered PDD, the GS monitoring matrix and the applied approved monitoring methodology,
- data given in the monitoring report by checking the monitoring records, the emissions reduction calculation and supporting evidence,
- accuracy of the monitoring equipment,
- quality of evidence,
- significance of reporting risks and risks of material misstatements.

1.2. Scope

The verification of this registered project is based on the validated project design document^{/PDD/}, the validated Gold Standard Passport^{/GSP/}, the carbon monitoring and sustainability monitoring report^{/SR/}, the registered GS validation report^{/VAL/}, supporting documents made available to the verifier and information collected through performing interviews and during the on-site assessment. Furthermore publicly available information was considered as far as available and required.

The verification is carried out on the basis of the following requirements, applicable for this project activity:



-
- Article 12 of the Kyoto Protocol ^{/KP/},
 - guidelines for the implementation of Article 12 of the Kyoto Protocol as presented in the Marrakech Accords under decision 3/CMP.1 ^{/MA/}, and subsequent decisions made by the Executive Board and COP/MOP,
 - other relevant rules, including the host country legislation,
 - CDM Validation and Verification Standard ^{/VVS/},
 - monitoring plan as given in the registered PDD ^{/PDD/},
 - Approved GS methodology ^{/GSM/}
 - Gold Standard Version 2.2 ^{/GS/}
 - Gold Standard Passport ^{/GSP/}.

2. GHG PROJECT DESCRIPTION

2.1. Technical Project Description

The project consists of fifteen 850kW GAMESA wind power turbines installed in Cooperativa de Electrificación Rural Los Santos (COOPESANTOS) concession area in El Guarco and Desamparados, Costa Rica. The project requires a total investment of approximately US\$ 38 million for an installed capacity of 12.75 MW.

The project activity utilizes 15 horizontal axis GAMESA G52-850 WTGs with a rated capacity of 850 kW each. The turbine lifetime according to the detailed datasheets for the GAMESA G52-850 is of 20 years. The project feasibility study calculated a plant load factor of 42.68% and the turbine supply contract guarantees a minimum of 42 GWh per year.

The key parameters of the project are given in Table 2-1.

Table 2-1: Technical data of the project activity

Parameter	Unit	Value
Operating data		
Total Power	MW	12.75
No. of turbines	-	15
Rated power	kW	850
Cut- in wind speed	m/s	4
Rated wind speed	m/s	13
Cut-off wind speed	m/s	25
Rotor		
Type	-	3 blades, Upwind /Horizontal axis
Diameter	m	52
Rotational speed at rated power	rpm	14.6-30.8
Swept area	m ²	2,124
Gearbox		
Type	-	1 planetary stage / 2 helical stages
Ratio	1:1.74.5	1:74.5
Nominal Load	kW	850
Generator		
Type	-	Double feed generator
Speed at rated power	rpm	1,320-2,340
Rated power	kW	850
Rated voltage	V AC	690 (phase to phase)
Frequency	Hz	60

2.2. Project Location

The details of the project location are given in Table 2-2:

Table 2-2: Project Location



Description	Project Location
Host Country	Costa Rica
Region:	Cartago
Project location address:	In the districts of San Isidro and San Cristobal, km 40 of the Interamerican Sur Highway. Near the villages La Paz and Casamata
Latitude:	See table below
Longitude:	See table below

Los Santos WPP WTG location per WGS-84 in Decimal Degrees		
WTG	POINT X	POINT Y
1	-83.9885898	9.789753111
2	-83.9886097	9.788363483
3	-83.9894565	9.787312364
4	-83.9947281	9.780450124
5	-83.9950511	9.77956023
6	-83.9951443	9.778594054
7	-83.9953917	9.777811965
8	-83.9957289	9.777068665
9	-83.9891239	9.776567852
10	-83.9887975	9.775685129
11	-83.9786575	9.759992632
12	-83.9790184	9.759236338
13	-83.9789441	9.755217609
14	-83.9770491	9.754077072
15	-83.9771615	9.753203467

2.3. Project Verification History

Essential events since the registration of the project are presented in the following Table 2-3.

Table 2-3: Status of previous Monitoring Periods

#	Item	Time	Status
1	Date of CDM registration	2015-06-29 11	-
2	Date of GS registration	2015-06-26	-
3	Start of CDM crediting period		
4	Start of GS crediting period	2015-07-01	-



An overview of all Post Registration Changes is given in the following table.

Table 2-4: Overview Post Registration Changes

#	Applicable from – to / as of	MP	Type of post registration change ¹⁾	Description	Status ²⁾ / Date
	N/A		N/A	N/A	N/A

- 1) TDfrMP : Temporary deviation from registered monitoring plan
- TDfMM : Temporary deviation from the monitoring methodology
- CrPDD : Corrections to the registered PDD
- PCfrMP : Permanent changes from registered Monitoring Plan
- PCfMM : Permanent changes from Monitoring Methodology
- CoPD : Changes to the project design of a registered project activity
- 2) Approval (by EB) or Acceptance (by DOE)



3. METHODOLOGY AND VERIFICATION SEQUENCE

3.1. Verification Steps

The verification consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the monitoring report / work plan
- A desk review of the Monitoring Report^{/MR/} submitted by the client and additional supporting documents with the use of customised verification protocol^{/CPM/} according to the Validation and Verification Standard^{/VVS/} and additional Gold Standard requirements,
- Verification planning,
- On-Site assessment,
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Draft verification reporting,
- Resolution of corrective actions (if any),
- Final verification reporting,
- Technical review,
- Final approval of the verification.

3.2. Contract review

To assure that

- the project falls within the scopes for which accreditation is held,
- the necessary competences to carry out the verification can be provided,
- Impartiality issues are clear and in line with the CDM and GS accreditation requirements

a contract review was carried out before the contract was signed.

3.3. Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a verification team, consisting of one team leader and two additional team member, were appointed.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the Table 3-1 below.

Table 3-1: Involved Personnel

	Name	Company	Function ¹⁾	Qualification Status ²⁾	Scheme competence ³⁾	Technical competence ⁴⁾	Verification competence ⁵⁾	Host country Competence	On-site visit
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Raul Gonzalez Mitre	BRTUV	TL	SA	<input checked="" type="checkbox"/>	1.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Oliver Quireza Campos	BRTUV	TM	A	<input checked="" type="checkbox"/>	1.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	LI Yongjun	TUV NORD CERT	TR ^{B)}	SA	<input checked="" type="checkbox"/>	1.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Martin Saalman	TUV NORD CERT	FA ^{B)}	SA	<input checked="" type="checkbox"/>	1.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹⁾ TL: Team Leader; TM: Team Member^{A)}; TR: Technical review^{B)}; OT: Observer-Team^{B)}; OR: Observer-TR^{B)}; FA: Final approval^{B)}

^{A)} Team Member: GHG auditor (at least Assessor status), Technical Expert (incl. Host Country Expert or Verification Expert), not ETE

^{B)} No team member: OT, TR, OR, FA

²⁾ GHG Auditor Status: A: Assessor; LA: Lead Assessor; SA: Senior Assessor; T: Trainee; TE: Technical Expert

³⁾ GHG auditor status (at least Assessor)

⁴⁾ Technical Area / TR Subcategory as per S01-VA000-F02 or S01-VA070-F01 (such as 1.1, 1.2, ...)

⁵⁾ In case of verification projects

The team member contributed to the review of documents, the assessment of the project activity and to the preparation of this report under the leadership of the team leader.

Statements of competence for the above mentioned team member are enclosed in annex 3 of this report.

3.4. Verification Planning

In order to ensure a complete, transparent and timely execution of the verification task the team leader has planned the complete sequence of events necessary to arrive at a substantiated final verification opinion.

Various tools have been established in order to ensure an effective verification planning.

Risk analysis and detailed audit testing planning

For the identification of potential reporting risks and the necessary detailed audit testing procedures for residual risk areas table A-1 is used. The structure and content of this table is given in Table 3-2 below.

Table 3-2: Table A-1; Identification of verification risk areas



Table A-1: GHG calculation procedures and management control testing / Detailed audit testing of residual risk areas and random testing				
Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
<i>The following potential risks were identified and divided and structured according to the possible areas of occurrence.</i>	<i>The potential risks of raw data generation have been identified in the course of the monitoring system implementation. The following measures were taken in order to minimize the corresponding risks. The following measures are implemented:</i>	<i>Despite the measures implemented in order to reduce the occurrence probability the following residual risks remain and have to be addressed in the course of every verification.</i>	<i>The additional verification testing performed is described. Testing may include:</i> <ul style="list-style-type: none"> - Sample cross checking of manual transfers of data - Recalculation - Spreadsheet 'walk throughs' to check links and equations - Inspection of calibration and maintenance records for key equipment - Check sampling analysis results <i>Discussions with process engineers who have detailed knowledge of process uncertainty/error bands.</i>	<i>Having investigated the residual risks, the conclusions should be noted here. Errors and uncertainties are highlighted.</i>

The completed table A-1 is enclosed in Annex 1 (table A-1) to this report.

Project specific periodic verification checklist

In order to ensure transparency and consideration of all relevant assessment criteria, a project specific GS verification protocol has been developed. The protocol shows, in a transparent manner, criteria and requirements, means and results of the verification. The verification protocol serves the following purposes:

- It organises, details and clarifies the requirements a GS project is expected to meet for verification
- It ensures a transparent verification process where the verifying DOE documents how a particular requirement has been proved and the result of the verification.

The basic structure of this project specific verification protocol for the periodic verification is described in Table 3-3.

Table 3-3: Table A-2; Structure of the project specific periodic verification checklist



Table A-2: Periodic verification checklist

Checklist Item	Reference	Verification Team Comments	Draft Conclusion	Final Conclusion
<i>The checklist items in Table A-2 are linked to the various requirements the monitoring of the project should meet. The checklist is organised in various sections as per the requirements of the topic and the individual project activity. It further includes guidance for the verification team.</i>	<i>Gives reference to the information source on which the assessment is based on.</i>	<i>The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the verification team and how the assessment was carried out. The reporting requirements of the VVS shall be covered in this section.</i>	<i>Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR (see below) is raised. The assessment refers to the draft verification stage.</i>	<i>In case of a corrective action or a clarification the final assessment at the final verification stage is given.</i>

The GS periodic verification checklist (verification protocol) is the backbone of the complete verification starting from the desk review until final assessment. Detailed assessments and findings are discussed within this checklist and not necessarily repeated in the main text of this report.

The completed verification protocol is enclosed in Annex 1 (table A-2) to this report.

3.5. Desk review

During the desk review all documents initially provided by the client and publicly available documents relevant for the verification were reviewed. The main documents are listed below:

- the registered version of the PDD, additional Annexes and further attached documents, including the monitoring plan ^{/PDD/},
- the registered GS validation report ^{/VAL-GS/},
- the last revisions of the carbon and sustainability monitoring reports ^{/MR&SR/}, including the claimed emission reductions for the project
- documentation of previous verifications ^{/VER-CDM/}
- the emission reduction calculation spreadsheet ^{/XLS/}.
- GS Passport ^{/GSP/}

Other supporting documents, such as publicly available information on the Gold standard website, on the UNFCCC website and background information were also reviewed.

3.6. On-site assessment

As most essential part of the verification exercise it is indispensable to carry out an inspection on site in order to verify that the project is implemented in accordance with the applicable criteria. Furthermore the on-site assessment is necessary to check the



monitoring data with respect to accuracy to ensure the calculation of emission reductions. Changes to the key sustainable development indicators and the achievement and implementation of mitigation / compensation measures are other integral parts of the on-site assessment. The main tasks covered during the site visit include, but are not limited to:

- The on-site assessment included an investigation of whether all relevant equipment is installed and works as anticipated.
- The operating staff was interviewed and observed in order to check the risks of inappropriate operation and data collection procedures.
- Information processes for generating, aggregating and reporting the selected monitored parameters were reviewed.
- The duly calibration of all metering equipment was checked.
- The monitoring processes, routines and documentations were audited to check their proper application.
- The monitoring data was checked.
- The data aggregation trails were checked

Before and during the on-site visit the verification team performed interviews with the project participants to confirm selected information and to resolve issues identified in the document review.

Representatives of the communities located in the project sites and Independent Consultant including the operational staff of the project were interviewed. The main topics of the interviews are summarised in Table 3-4.

Table 3-4: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
1. Project Participant & Operations Personnel 2. Consultant	<ul style="list-style-type: none"> - General aspects of the project - Technical equipment and operation - Changes since validation - Monitoring and measurement equipment - Remaining issues from validation - Calibration procedures - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan - Monitoring data management - Data uncertainty and residual risks - GHG emission reduction calculation - Procedural aspects of the verification - Maintenance - Environmental aspects - Gold Standard Requirements



Interviewed Persons / Entities	Interview topics
	- GS monitoring parameters

The list of interviewees is included in chapter 7.4.

3.7. Draft verification reporting

On the basis of the desk review, the on-site visit, follow-up interviews and further background investigation the verification protocol is completed. This protocol together with a general project and procedural description of the verification and a detailed list of the verification findings form the draft verification report. This report is sent to the client for resolution of raised CARs, CLs and FARs.

3.8. Resolution of CARs, CLs and FARs

Non-conformities raised during the verification can either be seen as a non-fulfilment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.

Corrective Action Requests (CARs) are issued, if:

- Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;
- Issues identified in a FAR during validation or previous verifications requiring actions by the project participants to be verified during verification have not been resolved.

The verification team uses the term Clarification Request (CL), which is issued if:

- information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

Forward Action Requests (FAR) indicate essential risks for further periodic verifications. Forward Action Requests are issued, if:

- the monitoring and reporting require attention and / or adjustment for the next verification period.

For a detailed list of all CARs, CLs and FARs raised in the course of the verification pl. refer to chapter 4.



3.9. Final reporting

Upon successful closure of all raised CARs and CLs the final verification report including a positive verification opinion can be issued. In case not all essential issues could finally be resolved, a final report including a negative verification opinion is issued.

The final report summarizes the final assessments w.r.t. all applicable criteria.

3.10. Technical review

Before submission of the final verification report a technical review of the whole verification procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the verification opinion and the topic specific assessments as prepared by the verification team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

3.11. Final approval

After successful technical review an overall (esp. procedural) assessment of the complete verification will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

After this step the verification team will submit the verification report including the verification opinion to the client via e-mail and to Gold Standard via the GS registry.



4. VERIFICATION FINDINGS

In the following paragraphs the findings from the desk review of the monitoring report^{/MR/}, the calculation spreadsheet^{/ERC/}, PDD^{/PDD/}, the Validation Report^{/VAL/} and other supporting documents, as well as from the on-site assessment and the interviews are summarised.

The summary of CAR, CL and FAR issued are shown in Table 4-1:

Table 4-1: Summary of CAR, CL and FAR

Verification topic	No. of CAR	No. of CL	No. of FAR
A – Description of project activity	0	0	0
B – Implementation of project activity	0	0	0
C – Description of Monitoring System	1	0	0
D – Carbon Data and Parameters	0	0	0
E - Calculation of Emission Reductions	0	0	0
F – Sustainability Monitoring Parameters	3	0	0
SUM	4	0	0

The findings of the verification process are summarized in the tables below.

Finding	CAR C1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The inclusion of the EF parameter in the SR is not in line with the GS Passport and the GS-Annex I. Related question: C.1		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the MR is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	The EF has been updated and used to calculate calculated for the GS emission reductions.		
	<input checked="" type="checkbox"/> Changes in MR	Section(s):	New version No.: 2.3
	<input checked="" type="checkbox"/> Changes in XLS	Worksheet(s): GS EF	New version No.: 2.2



Finding	CAR C1
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>The inclusion of the EF in the SR is appropriate as this is different with the EF used for the CDM part.</p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p> <input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed </p>

Finding	CAR D1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>The actual number of employees and minimum salaries in the MP are missing in the SR.</p> <p>Related question D.2.1</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the MR is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i></p>	<p>The monitoring indicator number 9 has been included in the monitoring report. Evidences provided to the DOE.</p>		
	<input checked="" type="checkbox"/> Changes in MR	Section(s):Monitoring	New version No.:2.3
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>The actual number of employees and the comparison of minimum salaries provided in the MR are in line with the evidences from the official sources.</p>		
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p> <input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed </p>		

Finding	CAR D2		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>The SR does not contain the actual number and type of training either the monitored working conditions.</p> <p>Related question: D.2.2.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the MR is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i></p>	<p>The monitoring indicator number 6 includes now the trainings performed by the personnel during the monitoring period</p>		
	<input checked="" type="checkbox"/> Changes in MR	Section(s): Monitoring	New version No.:2.3
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:



Finding	CAR D2
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>The number of training provided and the statement of absence of accidents included in the MR is in line with the training evidences provided by the project owner.</p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p> <input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed </p>

Finding	CAR D3		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>1. The actual bird mortality rate monitored during the MP is missing in the SR. 2. As the sonometer was not calibrated before or during the monitoring period, clarification is requested.</p> <p>Related question: D.2.4, D.2.2</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the MR is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i></p>	<p>1. The monitoring parameters have been completely updated after registration of the project under GS. Evidences are provided. 2. The manufacturer does not recommend an exact calibration frequency as seen in the manual. The equipment was calibrated on August 14, 2015 by an external laboratory (Laboratorio Costarricense de Metrología).</p> <p>The results of the calibration show that the equipment was working properly, the difference to the calibrator at 70, 94 and 114 dB(A) was less than 1 dB(A).</p>		
	<input checked="" type="checkbox"/> Changes in MR	Section(s): Monitoring	New version No.:2.3
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. The reported cases of bird mortality in the MR are in line with the reports provided by the project operator. 2. The clarification provided by the PP was verified by reviewing the user manual of the instrument EXTECH HD600, serial number Z199615 and in is considered correct. Furthermore the PP has planned in the SR to calibrate the instrument frequently.</p>		
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p> <input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed </p>		



5. SUMMARY OF VERIFICATION ASSESSMENTS

The following paragraphs include the summary of the final verification assessments after all CARs and CRs are closed out. For details of the assessments pl. refer to the discussion of the verification findings in chapter 4 and the verification protocol (Annex 1).

5.1. Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity.

Table 5-1: Project Parties and project participants

Characteristic	Party	Project Participant
Non-Annex 1	Costa Rica	Cooperativa de Electrificación Rural Los Santos
Annex 1	Germany	B.V. Mabanaf, Carbonbay GmbH & Co. KG

5.2. Implementation of the project

During the verification, a site visit was carried out from 2014-09-01 to 2014-09-02. On the basis of this site visit and the reviewed project documentation it can be confirmed that w.r.t. the realized technology, the project equipment, as well as the monitoring and metering equipment, the project has been implemented and operated as described in the registered PDD and the GS Passport.

5.3. Project history:

This is the 1st monitoring period of the first crediting period and no FARs being identified during the validation.

5.4. Compliance with the carbon monitoring plan:

The carbon monitoring plan was verified (as CDM project) by TÜV NORD, according to verification report^{VER-CDM/}. The monitoring system and all applied procedures are in compliance to monitoring plan of the registered PDD. Evidence was available to the verification team to check the compliance of the monitoring plan.

The reporting procedures reflect the requirements of the monitoring plan for the carbon monitoring criteria. All relevant data is stored for the whole monitoring period and traceable to the computer server at the PP office.



5.5. Compliance with the sustainability monitoring plan:

The SD indicators as per the GS matrix are monitored and reported appropriately and cross-verified by means of desk review of supporting documents, interviews with the PP and selected stakeholders. The monitoring system and all applied procedures are in compliance to the sustainability monitoring plan in the registered renewed PDD and the Gold Standard principles. During the site visit, the verification team has randomly selected 3 stakeholders to confirm that the correctness of the parameters reported by the PP and also to check whether Continuous Input/Grievance Mechanism is working has been working during the monitoring period. The asked questions were based on requirements of the Annex I, Rules, the Toolkit to the Gold Standard version 2.2. ^{/SDI/} and the Annex-W for the Continuous Input/Grievance mechanism.. The questions asked were basically based on requirements of the Annex I, Rules and Toolkit to the Gold Standard version 2.2. ^{/SDI/} The main topics included, but not limited to, the followings:

- Other Pollutant - Noise generation, waste generation
- Soil condition - roads condition
- Biodiversity - Bird mortality, reforestation and vegetation
- Quality of employment - Training of the staff, Occupational Health and Safety
- Access to affordable and clean energy services - Plan load factor
- Quantitative employment and income generation - Number of contracts
- Communication with the PP - Continuous Input/Grievance Mechanism.

A summary of interview questions and feedback received are presented in the below table:

SD indicator	Questions for households during the site interviews	Summary of feedback
Soil condition	1. How is the soil quality after the installation and operation of the WTG?	It is not affected
	2. What is the main crops/farming activities taking place in your household?	Coffee plantation
Other pollutants	3. Is the noise generated by the WTG significant?	It is not significant as the WTG are not close to the houses
Biodiversity	4. Do you think the project affect the fauna of the site.	It could affect birds
	5. Do you think the project affects the flora of the site	Under construction yes, but the project proponent is doing reforestation
Quality of employment	6. Do you think that this project offers opportunities for employment?	Yes, it is very good opportunity for employment of local residents



SD indicator	Questions for households during the site interviews	Summary of feedback
	7. Do you think that this project could provide more permanent jobs?	Also permanent jobs are offered by the project proponents
Access to affordable and clean energy services	8. Do you have electricity access before and now?	Before there were more blackouts but this was solved with the project
	9. How much on average do you have to pay for electricity in the past? How is it compared with the actual situation with the project?	The prices did not change but we have participation thought the cooperative
	10. Do you think the project will contribute to a long lasting solution for your energy needs?	Yes, because the energy is generated locally
Quantitative employment and income generation	11. What is the main way of making money in your household? Can this project bring new jobs?	The main way before the project is agriculture. The project offers a new work area for some residents.
	12. Do you think that the salaries offered to workers in this project would be better than the average salary?	Yes
-	13. How do you communicate your questions or comments to the PP	In construction phase the personnel of the plant organize public meetings and always is possible to communicate directly with the designated personnel of the plant.

A detailed data and assessments for each sustainable development indicator is provided in Annex 1.

5.6. Compliance with the monitoring methodology:

The monitoring system is in compliance with the applied monitoring methodology “AMS-I.D. Grid connected renewable electricity generation version 17.

5.7. Carbon data and parameters:

The carbon parameters were verified (as CDM project) by TÜV NORD, according to verification report^{VER-CDM/}. During the verification all relevant monitoring parameters (as listed in the PDD) have been verified with regard to the appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures.

It can be confirmed that all monitoring parameters have been measured / determined without material misstatements and in line with all applicable standards and relevant requirements.



5.8. Contribution to sustainable development:

During the verification, the SD indicators were verified with regards to the appropriateness that will contribute to sustainable development.

It was evidenced that the project mainly contributes to sustainable development in the following parameters :

- Reforestation/recuperation of the area/soil with native species.
- Employment local population
- Contributes to improve the livelihood of the poor
- Improved access to energy services through rural electrification
- Contributes to human and institutional capacity.

5.9. Monitoring report:

A Gold Standard Sustainable Monitoring Report (SR) along with relevant supporting documents was submitted to the verification team by the project participants. These documents form the basis for the verification opinion of TÜV NORD.

During the verification, mistakes and needs for clarification were identified. The PP has carried out the requested corrections so that it can be confirmed that the Monitoring report is complete and transparent and accordance with the registered PDD, the GS Passport and relevant GS requirements.

5.10. Sampling:

5.11. Implementation of the sampling plan:

The PP has not applied any sampling plan.

5.12. Sampling approaches during verification:

The verification team has not applied any sampling plan

5.13. ER Calculation:

As per registered PDD-CDM and Passport-GS two different grid emission factor (EF) were calculated because data with different vintage were used. The latest published data were used for OM and BM calculations as follow:



The EF was determined ex-ante and estimated as a combined margin emission factor ($EF_{grid, CDM, y}$). As requested in the pre-feasibility assessment and registered CDM PDD the following EF have been applied:

- CDM EF = 0.35559 TCO₂/MWh - Vintage 2007 - 2009
- GS EF = 0.2972 TCO₂/MWh - Vintage 2011- 2013

Also as the monitoring periods for CDM and GS are different, the final ER calculation is different.

The ER calculation was verified (as CDM project) by TÜV NORD, according to verification report^{VER-CDM/}.

During the verification mistakes in the ER calculation were identified. Corresponding CARs were raised. A revised ER calculation was prepared by the PP and presented to the verification team. All raised issues were addressed appropriately so that all corresponding CARs could be closed out. Thus it is confirmed that the ER calculation is overall correct.

5.14. Quality Management:

Quality Management procedures for measurements, collection and compilation of data, data storage and archiving, calibration, maintenance and training of personnel in the framework of this GS/CDM project activity have been defined. The procedures defined can be assessed as appropriate for the purpose. No significant deviations thereof have been observed during the verification.

5.15. Comparison with ex-ante estimated emission reductions:

The ER calculation was verified (as CDM project) by TÜV NORD, according to verification report^{VER-CDM/}. The MR includes a comparison of the calculated actual emission reductions with the ex-ante calculated values in the registered PDD.

Ex-Ante ERs: 12,482 tCO₂e

Ex-Post ERs: 10,889 tCO₂e

The ex-post value is found to be lower than the ex-ante determined value, therefore no further justification is required.

5.16. Overall Aspects of the Verification:

All necessary and requested documentation was provided by the project participants so that a complete verification of all relevant issues could be carried out.

Access was granted to the wind farm installation and the some households of the local inhabitants which are relevant for the project performance and the monitoring activities.

No issues have been identified indicating that the implementation of the project activity and the steps to claim emission reductions are compliant with the GS requirements or any other scheme the monitoring is referring to.



Hints for next periodic Verification:

No FAR has been raised during this monitoring period.



6. VERIFICATION AND CERTIFICATION STATEMENT

Carbonbay GmbH & Co. KG has commissioned the TÜV NORD JI/CDM Certification Program to carry out the 1st periodic verification of CPII for the project: "Los Santos Wind Power Project", with regard to the relevant requirements for GS project activities. The project reduces GHG emissions due to displacement of electricity from the national grid which is generated partially from fossil sources. . This verification covers the period from 2013-07-01 to 2014-06-30 (including both days).

In the course of the verification, 4 Corrective Action Requests (CAR) was raised and successfully closed, no Clarification Requests (CL) and no Forward Action Request (FAR) was raised. The verification is based on the draft monitoring report, revised monitoring report, the monitoring plan as set out in the registered PDD, the validation report, emission reduction calculation spreadsheet and supporting documents made available to the TÜV NORD JI/CDM CP by the project participant.

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the validated project design document.
- the monitoring plan is in accordance with the applied approved GS methodology grid connected renewable electricity generation, version 17.
- the installed equipment essential for measuring parameters required for calculating emission reductions are calibrated appropriately.
- the monitoring system is in place and functional. The project has generated GHG emission reductions.

As the result of the 1st periodic verification, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. The emission reductions are calculated in compliance with the monitoring plan and Gold Standard conservativeness principle. Furthermore all parameters listed in the Sustainability monitoring plan are duly monitored and verified. TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Emission reductions 2013	4,456	tCO ₂ e
Emission reductions 2014	6,433	tCO ₂ e
Total Emission reductions	10,889	tCO ₂ e

Queretaro, 2015-12-03

Raul Gonzalez Mitre

TÜV NORD JI/CDM Certification Program
Verification Team Leader

Essen, 2015-12-10

Martin Saalmann

TÜV NORD JI/CDM Certification Program
Final Approval



7. REFERENCES

Table 7-1: Documents provided by the project participant(s)

Reference	Document
/EIA/	<ul style="list-style-type: none"> - Environmental Impact Assessment, Wind Project Los Santos, No. 739-2003- SETENA, Farm 1, addendum for Farm 2 and 3 (2007). - Environmental Impact Assessment, Wind Power Project Phase II, No. 1156-2007-SETENA, for Farm 4, 5, 6 and 7, Addendum (2009). - Assessment on the birds population "Diagnostico del estado poblacional de aves", Final report, Fundación NEUTROPICA, Apr 2011-Apr 2012. - Map "Geographic Location of the Wind Farm".
/EM/	<ul style="list-style-type: none"> - Evaluation Reports "Informes Regenciales", 739-2003-SETENA, by Luis Roberto Torre Rodriguez, for Farms 1,2 and 3. (every two months) - Evaluation Reports "Informas Regenciales", 1156-2007-SETENA, by Luis Roberto Torre Rodriguez, Farms 4, 5, 6 and 7. - Environmental Logbooks "Bitacoras Ambiental", (every two months) for project 739-2003-SETENA. - Environmental Logbooks "Bitacoras Ambiental", (every two months) for project 1156-2007-SETENA.
/Employment/	<ul style="list-style-type: none"> - Services contract between COOPESANTOS and Comando de Seguridad Los Santos S.A. for security services, including 8 persons dated - 2012-01-01 with validity of 2 years. - Services contract between COOPESANTOS and Comando de Seguridad Los Santos S.A. for security services, including 8 persons dated 2014-01-01 with validity of 2 years. - Services contract between COOPESANTOS and Franklin Monestel Piedra for maintenance services in properties including roads and green areas maintenance and equipment and buildings maintenance , including at least 3 persons, 2012-01-01 with validity of 2 years. - Services contract between COOPESANTOS and Franklin Monestel Piedra for maintenance services in properties including roads and green areas maintenance and equipment and buildings maintenance , including at least 3 persons, 2013-01-01 with validity of 2 years. - Employment contract between COOPESANTOS and its employees. The personnel relate directly with the Wind Farm are 6, plus 6 employees with activities not exclusives for the wind farm.
/LAW/	<p><u>Legislation:</u></p> <ol style="list-style-type: none"> 1. Electricity General Law given by Decree No. 93-96, 2007. 2. Regulation of the Electricity General Law given by Decree No. 93-96, 2007. 3. Regulation of the administrator of the majority market given by Decree No. 93-96, 2007. <p><u>Legislation:</u></p>



Reference	Document
	<p>4. Technical Norm for use, operation and control of electricity meters – AR-DTCON, 21-12-2001.</p> <p><u>Permits & Licenses:</u></p> <p>5. Environmental Resolution No. 344-2009-SETENA, 10/02/2009.</p> <p>6. Environmental Resolution No. 2882-2010-SETENA, 30/11/2010.</p>
/MESR/	- Monthly Environmental and Social Management Reports “Informes de Gestión Ambiental y Social”, from November 2010 to August 2012
/MR/	<ol style="list-style-type: none"> 1. CDM-Monitoring Report 1st “Los Santos Wind Power Project”, version 1.1, 2014/08/07. 2. CDM-Monitoring Report 1st “Los Santos Wind Power Project”, version 1.2, 2014/08/11. 3. CDM-Monitoring Report 1st “Los Santos Wind Power Project”, version 2, 2015/02/02. 4. CDM-Monitoring Report 1st “Los Santos Wind Power Project”, version 3, 2015/03/25. 5. CDM-Monitoring Report 1st “Los Santos Wind Power Project”, version 3.3, 2015/07/09.
/GPS/	- Maps with the coordinates of the WTG.
/GSP/	<ul style="list-style-type: none"> - Draft GS Passport “Los Santos Wind Power Project” version 01, dated from 2014-08-27. - Final GS Passport “Los Santos Wind Power Project” version 2.2, dated from 2015-03-24. - Final GS Passport “Los Santos Wind Power Project” version 3.0, dated from 2015-04-07. - Final GS Passport “Los Santos Wind Power Project” version 3.1, dated from 2015-04-07.
/Soil/	<ul style="list-style-type: none"> - Reports from maintenance (roads and vegetation covering) and reforestation. - Invoices
/Other_Pollutants/	<ul style="list-style-type: none"> - Noise Emission Study, Jun 2010, GAMESA, - Noise Emission Assessment, June 2013, COOPESANTOS - Noise Level Verification, June 2012, COOPESANTOS
/ODA/	ODA Declaration
/PTR/	<p>Personnel training records for 11 employees of COOPESANTOS:</p> <ol style="list-style-type: none"> 1. Training certificates on wind power generation. 2. Training certificates on health, safety and first aids.
/SFR/	Stakeholder Feedback Round Evidence to stakeholders including public, local NGO, Local government, GS Expert



Reference	Document
	and International NGOs for Stakeholder Feedback Round, including: <ul style="list-style-type: none"> - Invitation posted on public places - Invitation per e-mail - Invitation letters with door by door - Presentation in power point. - Minutes for stakeholders Feedback Round. - Attendance register of the stakeholders meeting. - Questionnaires applied to the attendants.
/SR/	<ul style="list-style-type: none"> - Sustainable Monitoring Report Los Santos Wind Power Project ", dated 2014-08-11. - Sustainable Monitoring Report Los Santos Wind Power Project ", version 2, dated 2015-05-12. - Sustainable Monitoring Report Los Santos Wind Power Project ", version 2.2 dated 2015-08-18. - Sustainable Monitoring Report Los Santos Wind Power Project ", version 2.3 dated 2015-11-02.
/XLS/	Emission reduction calculation spreadsheet

Table 7-2: Background investigation and assessment documents

Reference	Document
/AMS/	AMS-I.D - Grid connected renewable electricity generation (version 17)
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
/GSR/	Gold Standard Requirements (Version 2.2)
/GST/	Gold Standard Toolkit (Version 2.2)
/IPCC/	Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual
/KP/	Kyoto Protocol (1997)
/LL/	<ul style="list-style-type: none"> - Labour Code and its laws, Ministry of Work and Social Insurance, Costa Rica. - Minimum salaries for professional on Engineering "Colegio Federado de Ingenieros y Arquitectos de Costa Rica". 2014-07-15. - Official newspaper 35, "Gaceta digital" Costa Rica, Minimum salaries as of July 2014.

Reference	Document
/MA/	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))
/VAL/	Validation Report for CDM project “Los Santos Wind Power Project”, dated 2012-12-06
/VAL-GS/	GS Validation Report “Los Santos Wind Power Project”, dated 2015-07-27.
/VER-CDM/	Verification Report for CDM project “Los Santos Wind Power Project”, dated 2015-07-09.
/VVS/	Validation and Verification Standard (Version 7)

Table 7-3: Websites used

Reference	Link	Organisation
/dna-hp/	www.minae.go.cr	Ministerio del Ambiente y Energia (MINAE)
/dna-op/	www.government.nl/ministries/ie/nm	DNA Netherlands - Ministry of Infrastructure and the Environment / Directorate for Climate, Air and Noise
/dna-op/	www.dehst.de/EN/Climate-Projects/climate-projects_node.html	DNA Germany - German Emissions Trading Authority
/esmp/	www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=10166	Ecosystem Market Place
/gs/	www.cdmgoldstandard.org/	Gold Standard
/ipcc/	www.ipcc-nggip.iges.or.jp	IPCC publications
/oecd/	www.oecd.org/dac/stats/daclistofodarecipients.htm	OECD
/undp/	www.undp.or/mdg	UNDP
/unfccc/	http://cdm.unfccc.int	UNFCCC

Table 7-4: List of interviewed persons

Reference	Mol ¹	Name	Organisation / Function
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Reference	Mol ¹		Name	Organisation / Function
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Jeffrey Luna	General Manager - COPESANTOS
/IM01/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	Raquel Fallas F.	Environment Manager - COPESANTOS
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Ronald Castillo	Generation Assistant - COPESANTOS
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Olger Robles	O&M Chief - COPESANTOS
/IM02/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Sergio Degener	Consultant – Anaconda
/IM03/	T	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Ivan Hernandez	Regional Manager GS
/IM03/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	Ma. Elena Carrillo	Community La Paz
/IM03/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	Mery Padilla	Community Palmital Sur
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Fernando Cordero	Community San Cristobal

¹⁾ Means of Interview: (Telephone, E-Mail, Visit)



ANNEX

- A1:** Verification Protocol
- A2:** Statements of Competence of involved Personnel



ANNEX 1: VERIFICATION PROTOCOL

Table A-1: GHG calculation procedures and management control testing / detailed audit testing of residual risk areas and random testing

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
Raw data generation				
<ul style="list-style-type: none"> • Installation of measuring equipment • Dysfunction of installed equipment • Maloperation by operational personnel • Downtimes of equipment • Exchange of equipment • Change of measurement equipment characteristic • Insufficient accuracy • Change of technology • Accuracy of values 	<ul style="list-style-type: none"> • Installation of modern equipment • Process automation • Internal data review • Regular visual inspections of installed equipment • Only skilled and trained personnel operates the relevant equipment • Daily raw data checks • Immediate exchange of dysfunctional equipment • Stand-by duty is organized 	<ul style="list-style-type: none"> • Inadequate installation / operation of the monitoring equipment • Inadequate exchange of equipment • Change of personnel • Undetected measurement errors • Inappropriateness of Management system procedures w.r.t. monitoring plan requirements (e.g. substitute value strategies) • Non-application of management system procedures • Insufficient accuracy • Inappropriate QA/QC 	<ul style="list-style-type: none"> • Site – visit • Check of equipment • Check of technical data sheets • Check of suppliers information / guarantees • Check of calibration records, if applicable • Check of maintenance records • Counter-check of raw data and commercial data • Check of CDM management system • Check of CDM related procedures 	<ul style="list-style-type: none"> • See Table A-2



Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
<ul style="list-style-type: none"> supplied by Third Parties 	<ul style="list-style-type: none"> Training Internal audit procedures Internal check of QA/QC measures of involved Third Parties 	measures of Third Parties	<ul style="list-style-type: none"> Application of CDM management system procedures Check of trainings Check of responsibilities Check of QA/QC documentation / evidences of involved Third Parties 	
Raw data collection and data aggregation				
<ul style="list-style-type: none"> Wrong data transfer from raw data to daily and monthly aggregated reporting forms IT Systems Spread sheet programming Manual data transmission Data protection Responsibilities 	<ul style="list-style-type: none"> Cross-check of data Plausibility checks of various parameters. Appropriate archiving system Clear allocation of responsibilities Application of CDM Management system procedures Usage of standard software solutions 	<ul style="list-style-type: none"> Unintended usage of old data that has been revised Incomplete documentation Ex-post corrections of records Ambiguous sources of information Non-application of management system procedures Manual data transfer mistakes 	<ul style="list-style-type: none"> Check of data aggregation steps Counter-calculation Data integrity checks by means of graphical data analysis and calculation of specific performance figures Check of management system certification Check of data archiving system 	<ul style="list-style-type: none"> See Table A-2



Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
	(Spreadsheets) <ul style="list-style-type: none"> Limited access to IT systems Data protection procedures 	<ul style="list-style-type: none"> Unintended change of spreadsheet programming or data base entries Problems caused by updating/upgrading or change of applied software 	<ul style="list-style-type: none"> Check of application of Management system procedures 	
Other calculation parameters				
<ul style="list-style-type: none"> Emission factors, oxidation factors, coefficients 	<ul style="list-style-type: none"> The values and data sources applied are defined in the PDD and monitoring plan 	<ul style="list-style-type: none"> Unintended or intended Modification of calculation parameters Wrong application of values Misinterpretations of the applied methodology and/or the PDD Missing update of applicable regulatory framework (e.g. IPCC values) 	<ul style="list-style-type: none"> Update-check of regulatory framework Countercheck of the applied MP in the MIR against the methodology and the PDD 	<ul style="list-style-type: none"> See Table A-2
Calculation Methods				

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
<ul style="list-style-type: none"> Applied formulae Miscalculation Mistakes in spreadsheet calculation 	<ul style="list-style-type: none"> Advanced calculation and reporting tools A CDM coordinator is in charge of the CDM related calculations Usage of tested / counterchecked Excel spreadsheets Involvement of external consultants 	<ul style="list-style-type: none"> The danger of miscalculation can only be minimized. 	<ul style="list-style-type: none"> Countercheck on the basis of own calculation. Spread sheet walk-through. Plausibility checks Check of plots 	<ul style="list-style-type: none"> See Table A-2
Monitoring reporting				
<ul style="list-style-type: none"> Data transfer to the author of the monitoring report Data transfer to the monitoring report Unintended use of outdated versions 	<ul style="list-style-type: none"> An experienced consultant is responsible for monitoring reporting. CDM QMS procedures are defined 	<ul style="list-style-type: none"> The danger of data transfer mistakes can only be minimized Inappropriate application of QMS procedures 	<ul style="list-style-type: none"> Counter check with evidences provided. Audit of procedure application 	<ul style="list-style-type: none"> See Table A-2



Table A-2: (Project specific) Periodic Verification Checklist

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
A. Description of the project activity				
<p>A.1. Purpose and general description of the project activity</p> <p><i>Check if the MR includes the following:</i></p> <ul style="list-style-type: none"> - Purpose of the PA and the measures taken to reduce GHG emissions - Brief description of the installed technology and equipment - Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods etc.) - Total emission reductions achieved in this monitoring period 	/SR/	<p>The verification team has checked section the MR and confirms that the information provided is complete and correct with regards to the following:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Purpose of the PA and the measures taken to reduce GHG emissions <input checked="" type="checkbox"/> Brief description of the installed technology and equipment <input checked="" type="checkbox"/> Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods etc) <input checked="" type="checkbox"/> Total emission reductions achieved in this monitoring period <p>In this context the following findings have been identified: N/A</p>	OK	OK
<p>A.2. Location of project activity</p> <p><i>Check if the MR reflects correctly the following:</i></p> <ul style="list-style-type: none"> - Host Party(ies) - Region / State / Province etc. - City / Town / Community etc. - Physical / geographical location (e.g. Latitude and Longitude) 	/SR/ /PDD/ /IM01/	<p>The verification team has checked the MR and confirms by means of comparison with the information given in the PDD and information gathered during the site visit that the information provided is complete and correct with regards to the following:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Host Party(ies) <input checked="" type="checkbox"/> Region / State / Province <input checked="" type="checkbox"/> City / Town / Community 	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>A.3. Parties and Project Participants Check if the MR includes all PPs: - All PPs as displayed on the GS website</p>	/SR/ /gs/	<p><input checked="" type="checkbox"/> Physical / Geographical location In this context no findings have been identified: The verification team has checked the MR as well as the GS website and confirms that: <input checked="" type="checkbox"/> all PPs as displayed on the project related GS website are correctly listed In this context no findings have been identified: N/A</p>	OK	OK
<p>A.4. Reference of applied methodology Check if the MR correctly describes / includes the following: - Reference to the applicable version of the methodology - Reference to the applicable version(s) of relevant methodological tools</p>	/SR/ /MR/ /PDD/ /gs/	<p>The verification team has checked the MR and confirms by means of comparison with the information given in the PDD and displayed on the UNFCCC/ GS website that the information provided is complete and correct with regards to the following: <input checked="" type="checkbox"/> Number, title and version of the applicable GSF Methodology <input checked="" type="checkbox"/> Name and version of applicable GSF methodological tools In this context the following findings have been identified: N/A</p>	OK	OK
<p>A.5. Crediting period of project activity Check if the MR correctly includes the following: - Start date of the crediting period. - Length and type of the crediting period</p>	/MR/ /SR/ /gs/	<p>The verification team has checked the MR and confirms by means of comparison with the information displayed on the GS website that the information provided is complete and correct with regards to the following: <input checked="" type="checkbox"/> Start date of the crediting period.</p>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		<input checked="" type="checkbox"/> Type and length of the crediting period In this context no findings have been identified: N/A		
A.6. Publication of the Verification Work Plan and monitoring report	/gs/	The verification Work Plan, MR and SR have been submitted.	OK	OK
B. Implementation of project activity				
B.1. Description of implemented registered project activity Check if the MR correctly describes / includes the following: <ul style="list-style-type: none"> - Implementation status of the PA - Detailed description of installed technology(ies) / technical processes and equipment applied 	/SR/ /MR/ /PDD/ /GSP/ /IM01/	The verification team has checked the MR and confirms by means of comparison with the information given in the PDD and the GS Passport ^(GSP) , the project standard and information gathered during the site visit that: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the description of the implementation status of the PA is in line with the applicable provisions of the Gold Standard Requirements and Toolkit <input checked="" type="checkbox"/> an appropriate description of the installed technology(ies), technical process and equipment has been included In this context no findings have been identified:	OK	OK
B.1.1. Initial project implementation Assess whether the project has been implemented and operated as per the registered PDD and are all physical features of the project in place? Further focus on the potential phase wise implementation and check the reporting on the	/MR/ /SR/ /PDD/ /IM01/	The verification team has checked the implemented project activity and the MR and confirms by means of comparison with the information given in the PDD, the applicable Gold Standard Requirements and Toolkit and information gathered during the site visit that: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the project has been implemented and operated as per the registered PDD and the GS Passport and all physical 	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p><i>corresponding status and starting dates accordingly.</i></p> <p><i>Check if the project is still in compliance with the applicability conditions of the methodology.</i></p>		<p>features of the project are in place</p> <p><input checked="" type="checkbox"/> the project has been implemented phase wise and corresponding evidence has been provided</p> <p><input checked="" type="checkbox"/> the project is still in compliance with the applied methodology</p> <p>In this context no findings have been identified:</p>		
<p>B.1.2. Technical equipment changes</p> <p><i>Check if relevant technical equipment of the project activity has been exchanged or modified during the monitoring period. Further ensure that consistent notations of key equipment (meters etc.) in PDD, MR and calculation spreadsheet are applied.</i></p> <p><i>Consider e.g. interviews with operational personnel, QMS records, maintenance records, instrument specifications.</i></p> <p><i>In case of changes, check whether the project is still in line with the registered PDD and assure that these changes have been considered in the monitoring report and the emission reduction calculation.</i></p>	<p>/MR/ /SR/ /PDD/ /ERC/ /IM01/</p>	<p>The verification team has checked the implemented project activity and the MR and confirms by means of comparison with the information given in the PDD, the applicable Gold Standard Requirements and Toolkit and information gathered during the site visit and interviews that:</p> <p><input checked="" type="checkbox"/> no technical equipment has been exchanged or modified during the monitoring period</p> <p><input checked="" type="checkbox"/> the notations of key equipment are consistently applied in the project documentation</p> <p>In this context no findings have been identified:</p>	OK	OK
<p>B.1.3. Operation of the project activity</p> <p><i>Check if relevant operation modes of the project activity have been exchanged or modified during the monitoring period.</i></p> <p><i>Consider e.g. interviews with operational personnel, operation log sheets, data management system</i></p>	<p>/MR/ /IM01/ /PDD/ /SR/</p>	<p>The verification team has checked the implemented project activity and the MR and confirms by means of comparison with the information given in the PDD, the applicable Gold Standard Requirements and Toolkit and information gathered during the site visit and interviews that:</p> <p><input checked="" type="checkbox"/> no relevant operation modes of the project activity have been exchanged or modified during the monitoring period</p>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p><i>records.</i></p> <p><i>In case of changes, check whether the project is still in line with the registered PDD and assure that these changes have been considered in the monitoring report and the emission reduction calculation.</i></p>		<p><input type="checkbox"/> the following changes have been adopted during the monitoring period, however the project is still in line with the registered PDD: N/A</p>		
<p>B.1.4. Incidents</p> <p><i>Identify if there have been any significant incidents, deviant operation modes and / or downtimes of the equipment?</i></p> <p><i>Consider e.g. interviews with operational personnel, operational log sheets, analysis of performance data.</i></p>	/IM01/ /SR/	<p>The verification team has checked the implemented project activity and the MR and confirms by means of comparison with the information given in the PDD, the applicable Gold Standard Requirements and Toolkit and information gathered during the site visit and interviews that:</p> <p><input checked="" type="checkbox"/> no significant incidents, deviant operation modes and / or downtimes of the equipment happened during the monitoring period</p> <p><input type="checkbox"/> the following incidents, deviant operation modes and / or downtimes of the equipment happened during the monitoring period:</p>	OK	OK
<p>B.1.5. Legislation</p> <p><i>Find out – esp. in the context of methodological requirements - whether relevant legislation with effect on the project activity in the host country has been changed.</i></p> <p><i>Assess, in case of changes, whether consequences for the PA with regard to relevant GS requirements have been accounted for.</i></p> <p><i>In case of changes data sources shall be referenced.</i></p>	/MR/ /SR/ /IM01/	<p>The verification team has checked the host country legislation and confirms by means of comparison with the implemented project that:</p> <p><input checked="" type="checkbox"/> no relevant legislation with effect on the project activity in the host country has been changed</p> <p>In this context no findings have been identified. N/A</p>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>B.1.6. Open issues from GS validation <i>Check (esp. in case of 1st periodic verification) whether there are any open issues indicated in the validation report (e.g. FAR)?</i></p>	/VAL/	<input checked="" type="checkbox"/> There were no open issues addressed in the validation report <input type="checkbox"/> All open issues from the validation have been appropriately addressed. <input type="checkbox"/> The following issues related to the validation have not yet been appropriately addressed:	OK	OK
<p>B.1.7. Open issues from previous verification <i>Check in case of further periodic verifications whether there are any open issues indicated in previous verification reports (FAR).</i></p>		<input type="checkbox"/> There were no open issues addressed in the previous verification report <input type="checkbox"/> All open issues from the previous verification have been appropriately addressed. <input type="checkbox"/> The following issues related to the previous verification have not yet been appropriately addressed:	N/A	N/A
<p>C. Description of monitoring system</p>				
<p>C.1. Monitoring Plan – PDD and GS Passport Compliance <i>Check if the monitoring plan is in accordance with the monitoring plan contained in the registered GS PDD (or any accepted revised MP). Please check esp. if</i></p> <ul style="list-style-type: none"> - all parameters stated in the MP of the registered PDD have been monitored and updated as applicable - the monitoring equipment has been controlled and calibrated as per the MP 	/MR/ /PDD/ /GSP/ /SR/	By means of comparison of the MR with the registered GS PDD (or any revisions thereof) the verification team has checked whether the MP is in compliance with the registered GS PDD and GS Passport. The outcome is as follows: <input checked="" type="checkbox"/> The MP is completely in accordance with the last registered/approved version of the PDD / MP / GS Passport. The EF _{grid,CM,y} parameter included in the SD-MR is not included in the GS-Passport. In this context no findings have been identified: CAR C1. The inclusion of the EF parameter in the SR is not in line with the GS Passport and the GS-Annex I.	GAR-G+	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.																				
<ul style="list-style-type: none"> - the monitoring results are consistently recorded as per the approved frequency - QA/QC procedures have been applied in accordance with the MP 																								
<p>C.2. Monitoring Plan – Meth Compliance</p> <p>Check if the monitoring plan is in accordance with the applied methodology.</p> <p>In case the methodology references applicable tools it has to be ensured that the MP is also compliant with those tools.</p> <p>Also please specify if monitoring aspects have been identified that are not specified in the methodology but may enhance the level of accuracy and completeness of the monitoring plan – this esp. applies for SSC PAs.</p>	/MR/ /PDD/ /GST/ /VER- CDM/	<p>By means of comparison of the MR with the applied CDM methodology and related tools the verification team has checked whether the MP is in compliance with the MP related requirements of the applied methodology. The outcome is as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;"><input checked="" type="checkbox"/></td> <td>The MP is completely in accordance with the approved methodology applied by the CDM project (last registered/approved version of the PDD)</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>The MP is completely in accordance with the applied tools which the methodology references. A breakdown of the referenced tools is as follows:</td> </tr> <tr> <td style="text-align: center;">1</td> <td> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Title (of the tool)</td> <td>Tool to calculate the emission factor for an electricity system</td> </tr> <tr> <td>Version</td> <td>02.2.1</td> </tr> <tr> <td>MP compliance</td> <td> <input checked="" type="checkbox"/> full compliance <input type="checkbox"/> findings have been raised <input type="checkbox"/> N/A (for MP) </td> </tr> </table> </td> </tr> <tr> <td style="text-align: center;">2</td> <td> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Title (of the tool)</td> <td>-</td> </tr> <tr> <td>Version</td> <td>-</td> </tr> <tr> <td>MP compliance</td> <td> <input type="checkbox"/> full compliance </td> </tr> </table> </td> </tr> </table>	<input checked="" type="checkbox"/>	The MP is completely in accordance with the approved methodology applied by the CDM project (last registered/approved version of the PDD)	<input checked="" type="checkbox"/>	The MP is completely in accordance with the applied tools which the methodology references. A breakdown of the referenced tools is as follows:	1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Title (of the tool)</td> <td>Tool to calculate the emission factor for an electricity system</td> </tr> <tr> <td>Version</td> <td>02.2.1</td> </tr> <tr> <td>MP compliance</td> <td> <input checked="" type="checkbox"/> full compliance <input type="checkbox"/> findings have been raised <input type="checkbox"/> N/A (for MP) </td> </tr> </table>	Title (of the tool)	Tool to calculate the emission factor for an electricity system	Version	02.2.1	MP compliance	<input checked="" type="checkbox"/> full compliance <input type="checkbox"/> findings have been raised <input type="checkbox"/> N/A (for MP)	2	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Title (of the tool)</td> <td>-</td> </tr> <tr> <td>Version</td> <td>-</td> </tr> <tr> <td>MP compliance</td> <td> <input type="checkbox"/> full compliance </td> </tr> </table>	Title (of the tool)	-	Version	-	MP compliance	<input type="checkbox"/> full compliance	OK	OK
<input checked="" type="checkbox"/>	The MP is completely in accordance with the approved methodology applied by the CDM project (last registered/approved version of the PDD)																							
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		<table border="1"> <tr> <td></td> <td><input type="checkbox"/> findings have been raised <input checked="" type="checkbox"/> N/A (for MP)</td> </tr> <tr> <td>3</td> <td>Title (of the tool) Version MP compliance</td> </tr> <tr> <td></td> <td><input type="checkbox"/> full compliance <input type="checkbox"/> findings have been raised <input checked="" type="checkbox"/> N/A (for MP)</td> </tr> </table> <p>In this context the following findings have been identified: N/A</p>		<input type="checkbox"/> findings have been raised <input checked="" type="checkbox"/> N/A (for MP)	3	Title (of the tool) Version MP compliance		<input type="checkbox"/> full compliance <input type="checkbox"/> findings have been raised <input checked="" type="checkbox"/> N/A (for MP)		
	<input type="checkbox"/> findings have been raised <input checked="" type="checkbox"/> N/A (for MP)									
3	Title (of the tool) Version MP compliance									
	<input type="checkbox"/> full compliance <input type="checkbox"/> findings have been raised <input checked="" type="checkbox"/> N/A (for MP)									
<p>C.3. Management System Check if the GHG data monitoring system can be assessed as appropriate. In case reference is made to a (certified) company quality management system, check if all GHG related monitoring procedures have been fully integrated in the project participant's quality management system. In case of a stand-alone system, check how the GHG management system has been implemented and effectiveness is ensured.</p>	/MR/ /GSP/ /PDD/	<p><i>Description:</i> The project activity has implemented a management system including operational procedures. Responsibilities and procedures for data collection, calculation, reporting, and archiving are defined in the MR and in operational procedures. <i>Verifier's action:</i> Operational and Monitoring procedures were checked. Interviews were also performed. <i>Conclusion:</i> All GHG monitoring system is included and integrated in the management system of the project activity and it could be evidenced and confirmed during site visit that GHG management system is completely implemented.</p>	OK	OK						
<p>C.4. Roles and Responsibilities Check if all roles and positions of each person in the GHG data management process are clearly defined</p>	/MR/	<p><i>Description:</i> All responsibilities and roles are clearly defined in Monitoring Report and operational procedures. <i>Verifier's action:</i> Operational and Monitoring procedures were</p>	OK	OK						



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>and implemented as stated in the monitoring plan. Please consider the complete data trail from raw data generation to submission of the final data.</p> <p>In case of changes, assure that the implemented monitoring procedures have not been affected.</p>		<p>checked.</p> <p>Conclusion: It was verified by the verification team that only duly qualified personnel is involved in the monitoring procedures.</p>		
<p>C.5. Emergency procedures for the monitoring system</p> <p>Check, as appropriate, whether relevant emergency procedures for the monitoring system have been included in the MR and assess whether these procedures have been implemented, when required</p>	/MR/ /IM01/	<p>Description: Emergency procedures are described in the Operational Procedures from the manufacturer.</p> <p>Verifier's action: The Operational Procedures was checked.</p> <p>Conclusion: The Operational Procedures include emergency and troubleshooting procedures.</p>	OK	OK
<p>C.6. Data archive and data protection</p> <p>Check whether all records of monitoring parameters are archived according to the monitoring plan.</p> <p>Assess further whether appropriate measures have been taken in order to avoid unintended or intended manipulation or loss of the measured data.</p>	/MR/ /PDD/ /IM01/	<p>Description: Operational and measurement equipment on-line with the SCADA system is operating.</p> <p>The SCADA system is used by the project activity to monitor the operation of the project activity. A robust system of alarms and reports is managed using SCADA. There are servers to keep data from the SCADA system.</p> <p>The data is archived in electronic way. Archived data is kept during the crediting period and two years later.</p> <p>The both meters are in protected cabinets located in a locked room. Both meters transmit information on-line (every 15 minutes). ICE is connected in real time to the meters.</p> <p>Appropriate measures have been taken to avoid unintended or intended manipulation of the measured data.</p> <p>Verifier's action: Interview was performed with the personnel of Operations of the project.</p>	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		<p>It was checked during site visit that the meters are in protected cabinets. Interviews were performed to confirm data protection methods.</p> <p><i>Conclusion:</i>All records of monitoring parameters are archived according to the monitoring plan. No discrepancies were identified. Energy data are protected and information could be obtained from different sources to avoid manipulation. Data protection methods are accepted by the verification team.</p>		
D. Data and parameters				
D.1. Data and Parameters fixed ex ante and ex post				
D.1.1. Compliance with registered PDD and the applied methodology (ex ante) <i>Check whether the value applied is in compliance with the registered PDD and the applied methodology or any other tool.</i>	/MR/ /PDD/	<p>By means of comparison of the MR with the registered PDD (or any revisions thereof) the verification team confirms that:</p> <p><input checked="" type="checkbox"/> all ex ante data and parameters are in compliance with the registered PDD and the applied methodology or any other tool.</p> <p>In this context the following findings have been identified: N/A</p>	OK	OK
D.1.2. Compliance with registered PDD and the applied methodology (ex post) <i>Check whether the value applied is in compliance with the registered PDD and the applied methodology or any other tool.</i>	/MR/ /PDD/	<p>By means of comparison of the MR with the registered PDD (or any revisions thereof) the verification team confirms that:</p> <p><input checked="" type="checkbox"/> all ex post and parameters are in compliance with the registered PDD and the applied methodology or any other tool.</p> <p>In this context the following findings have been identified:</p>	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		N/A		
D.2. Sustainable Monitored Data and Parameters				
D.2.1. Solid/liquid wastes from the operation of the wind power plant.				
<p>a) Measurement / Determination method</p> <p>Describe how the monitoring parameter was measured / determined.</p> <p>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.</p> <p>Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	<p>/MR/ /SR/ /GSP/ /NAL-GS/ /Employment/</p>	<p>Description: The parameter is measured by the amount of solid and liquid waste generated by the wind farm.</p> <p>Verifier's action: Information from the EIA, environmental reports and waste log books were reviewed and confirmed by interviews of plant personnel.</p> <p>Conclusion: The monitored parameter has been performed in line with the Sustainable Monitoring Plan included in the Passport.</p>	OK	OK
<p>b) Accuracy and QA/QC Procedure</p> <p>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</p> <p>Describe whether all applicable QA/QC procedures</p>		<p>Description: The waste amount is registered in a log book to have control of the final disposal.</p> <p>Verifier's action: The VT checked the log book against the amount reported in the SR.</p> <p>Conclusion: The registry done by the PP is in line with the monitoring plan and is in compliance with the environmental regulation.</p>	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</p> <p>c) Correctness Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner. In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given. In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</p>	/MR/ /GSP/ /SR/ /Employment/	<p><input checked="" type="checkbox"/> Correct <input type="checkbox"/> Not correct (initial assessment)</p> <p><i>Description:</i> The information given in the MR is in line with the waste reports <i>Verifier's action:</i> The Sustainability MR^{SR/} was checked against the waste reports. <i>Conclusion:</i> The information reported in the MR is correct.</p>	OK	OK
D.2.2. Noise (from the WTG)				
<p>a) Measurement / Determination method Describe how the monitoring parameter was measured / determined. Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	/MR/ /SR/ /GSP/ /VAL-GS/ /Employment/	<p><i>Description:</i> The noise study is performed by the PP twice a year. <i>Verifier's action:</i> Results of noise studies were review and the values compared with the limit values as per regulation in Costa Rica. <i>Conclusion:</i> The monitored parameter has been performed in line with the MR included in the Passport.</p>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>b) Accuracy and QA/QC Procedure</p> <p>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</p> <p>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</p>	/CC/ /SR/ /GSP/	<p><i>Description:</i> The parameter is measured by a sonometer owned and maintained by the project operator. The manufacturer does not specify a calibration frequency nonetheless the PP did a calibration on August 14, 2015.. The calibration was done outside the MP nonetheless the calibration result shows that the meter is working properly.</p> <p><i>Verifier's action:</i> Results of noise studies were review and the values compared with the limit values as per regulation in Costa Rica. It was confirmed that the calibration was done by an accredited laboratory.</p> <p><i>Conclusion:</i> The monitored parameter has been performed in line with the MP included in the Passport.</p>	OK	OK
<p>c) Correctness</p> <p>Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner.</p> <p>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</p> <p>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</p>	/SR/ /PDD/ /SR/ /Employment/	<p><input checked="" type="checkbox"/> Correct <input type="checkbox"/> Not correct (initial assessment)</p> <p><i>Description:</i> The information given in the MR is in line with the noise reports.</p> <p><i>Verifier's action:</i> The Sustainability MR^(SR) was checked against the noise studies.</p> <p><i>Conclusion:</i> The information reported in the MR is correct.</p>	OK	OK
D.2.3. Roads condition				
<p>a) Measurement / Determination method</p> <p>Describe how the monitoring parameter was</p>	/EM/	<p><i>Description:</i> The roads could be damaged by the pass of vehicles so these are inspected by the project operator to</p>	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>measured / determined.</p> <p>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.</p> <p>Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	/SR/ /GSP/ /Soil/	<p>ensure that they are always in good conditions.</p> <p><i>Verifier's action:</i> The VT verify visually the roads and also the maintenance reports where reparation is registered.</p> <p><i>Conclusion:</i> The monitored parameter has been performed in line with the MR included in the Passport.</p>		
<p>b) Accuracy and QA/QC Procedure</p> <p>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</p> <p>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</p>	/EM/ /SR/ /GSP/ /Soil/	<p><i>Description:</i> It is evidenced by the the PP that the roads are inspected visually to confirm that they are maintained in good conditions.</p> <p><i>Verifier's action:</i> The VT team did some visual inspections during the site visit and also confirm by revision of the maintenance reports.</p> <p><i>Conclusion:</i> The monitoring of the parameter is accurate and in line with the MP described in the GSP..</p>	OK	OK
<p>c) Correctness</p> <p>Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner.</p> <p>In case of conservative approaches used in lieu of the</p>	/SR/ /GSP/ /EM/ /Soil/	<p><input checked="" type="checkbox"/> Correct <input type="checkbox"/> Not correct (initial assessment)</p> <p><i>Description:</i> The information given in the MR is in line with the maintenance reports.</p> <p><i>Verifier's action:</i> The Sustainability MR^{SR/} was checked against</p>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p><i>monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</i></p> <p><i>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i></p>		<p>the noise studies.</p> <p><i>Conclusion:</i> The information reported in the MIR is correct.</p>		
<p>D.2.4. Bird mortality rate in the area of the project activity</p> <p>a) Measurement / Determination method Describe how the monitoring parameter was measured / determined. Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	<p>/SR/ /GSP/ /IM01/ /EM/</p>	<p><i>Description:</i> The parameter is measured by the periodic monitoring (every two weeks) in all project sites according to a standardized procedure. Furthermore the mitigation measures such as no lights and no food around the WTG have been implemented by the PP. <i>Verifier's action:</i> Documents related to the periodic monitoring have been reviewed and interviews with the personnel have been performed. <i>Conclusion:</i> The parameter has been monitored as per the sustainable MP included in the GS Passport.</p>	OK	OK
<p>b) Accuracy and QA/QC Procedure In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have</p>	<p>/SR/ /GSP/ /IM01/ /EM/</p>	<p><i>Description:</i> It is evidenced by the the PP that the bird mortality is inspected visually by the PP and registered in reports and environmental reports. <i>Verifier's action:</i> The VT reviewed the reports. For a period of 3 year 7 cases were identified and for this monitoring period 2 cases were reported. <i>Conclusion:</i> The values of the monitoring parameter are</p>	N/A	N/A



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>been made for calculating ERs.</p> <p>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</p>		<p>consistent as no extraordinary number of cases were identified.</p>		
<p>c) Correctness</p> <p>Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner.</p> <p>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</p> <p>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</p>	<p>/SR/ /GSP/ /EM/</p>	<p><input checked="" type="checkbox"/> Correct <input type="checkbox"/> Not correct (initial assessment)</p> <p>Description: Conclusion: The SR does not include the actual bird mortality rate monitored during the MP. CAR D3. The actual bird mortality rate monitored during the MP is missing in the MR.</p>	CAR-D3	OK
D.2.5. Reforestation and vegetation				
<p>a) Measurement / Determination method</p> <p>Describe how the monitoring parameter was measured / determined.</p> <p>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.</p> <p>Assess whether the measurement / determination</p>	<p>/SR/ /GSP/ /Soil/</p>	<p>Description: After construction reforestation and grass planting activities were performed to leave the project site as it was before the project. Twice a year the PP review the in case of needed further grass other trees are planted. Maintenance personnel is contracted who are responsible for the green areas. Verifier's action: The VT verifies visually the project area and also the maintenance reports where the activities are registered.</p>	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p><i>method is in line with the registered monitoring plan and the applied methodology.</i></p> <p>b) Accuracy and QA/QC Procedure <i>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i> <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</i></p>	/SR/ /GSP/ /Soil/	<p><i>Conclusion: The monitored parameter has been performed in line with the MIR included in the Passport.</i></p> <p><i>Description: It is evidenced by the PP that reforestation and vegetation has been performed in order to leave project area as it was before the project. It is inspected visually by the PP and registered in maintenance reports and environmental reports.</i> <i>Verifier's action: The VT reviewed the maintenance reports and invoices and furthermore visual inspection was done during the site visit.</i> <i>Conclusion: The reforestation and vegetation has been performed as planned in the GSP.</i></p>	OK	OK
<p>c) Correctness <i>Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner.</i> <i>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</i> <i>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i></p>	/PDD/ /SR/ /Soil/	<p><input checked="" type="checkbox"/> Correct <input type="checkbox"/> Not correct (initial assessment)</p> <p><i>Description: The information given in the SR is in line with the maintenance reports.</i> <i>Verifier's action: The Sustainability SR was checked against the maintenance reports.</i> <i>Conclusion: The information reported in the SR is correct.</i></p>	OK	OK
D.2.6. Training of Staff				

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>a) Measurement / Determination method Describe how the monitoring parameter was measured/determined. Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	<p>/SR/ /GSP/ /IM01/ /PTR/</p>	<p>Description: The parameter is measured by the periodic training of the staff on health, safety and technical topics. Verifier's action: Documents related to training have been reviewed. Also personnel from the PA was interviewed. Conclusion: The parameter has been monitored as per GSP during the MP.</p>	<p>OK</p>	<p>OK</p>
<p>b) Accuracy and QA/QC Procedure In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs. Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</p>		<p>Not applicable</p>	<p>N/A</p>	<p>N/A</p>
<p>c) Correctness Determine whether the value given in the</p>	<p>/SR/ /PDD/</p>	<p><input type="checkbox"/> Correct <input checked="" type="checkbox"/> Not correct (initial assessment)</p>	<p>GAR-D2</p>	<p>OK</p>

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>sustainability monitoring report is correct or determined in a conservative manner.</p> <p>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</p> <p>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</p>	/SR/ /PTR/	<p>Description: The information given in the SR is not enough for the evaluation as no training either working condition MP have been reported.</p> <p>Verifier's action: The Sustainability MR^{/SR/} was checked accordingly.</p> <p>Conclusion: The parameter has been monitored during the MP, nonetheless the SR does not contain the number and type of training either the monitored working conditions.</p> <p>CAR D2. The SR does not contain the actual number and type of training either the monitored working conditions.</p>		
D.2.7. Occupational health and safety				
<p>a) Measurement / Determination method</p> <p>Describe how the monitoring parameter was measured / determined.</p> <p>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.</p> <p>Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	/SR/ /GSP/ /IM01/ /PTR/	<p>Description: The parameter is measured by the periodic training of the staff on health, safety and also by the accounting of accidents and implemented Safety procedures.</p> <p>Verifier's action: Documents related to training and safety procedures have been reviewed. Also personnel from the PA was interviewed.</p> <p>Conclusion: The parameter has been monitored as per GSP during the MP.</p>	OK	OK
<p>b) Accuracy and QA/QC Procedure</p> <p>In case of measured (or estimated) values, check whether the accuracy of equipment used for</p>		Not applicable	N/A	N/A

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p><i>monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i></p> <p><i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</i></p>				
<p>c) Correctness</p> <p><i>Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner.</i></p> <p><i>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</i></p> <p><i>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i></p>	<p>/SR/ /PDD/ /SR/ /PTR/</p>	<p><input type="checkbox"/> Correct <input checked="" type="checkbox"/> Not correct (initial assessment)</p> <p><i>Description:</i> The information given in the SR is not enough for the evaluation as no training either working condition MP have been reported.</p> <p><i>Verifier's action:</i> The Sustainability MR^{/SR/} was checked accordingly.</p> <p><i>Conclusion:</i> The parameter has been monitored during the MP, nonetheless the SR does not contain the number and type of training either the monitored working conditions.</p> <p>Refer to CAR D2.</p>	CAR-D2	OK
D.2.8. Plant Load Factor				
<p>a) Measurement / Determination method</p> <p><i>Describe how the monitoring parameter was measured / determined.</i></p> <p><i>Check if relevant equipment has been exchanged</i></p>	<p>/SR/ /GSP/ /IMO1/ /PTR/</p>	<p><i>Description:</i> The parameter is estimated based on the actual generation during the monitoring period.</p> <p><i>Verifier's action:</i> The actual electricity generation registered in the SR was compared with the energy registered in the MR and XLS calculation.</p>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.</p> <p>Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	/MR/ /VER- CDM/	<p>Conclusion: The parameter has been monitored as per GSP during the MP.</p>		
<p>b) Accuracy and QA/QC Procedure</p> <p>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</p> <p>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out by competent personnel.</p>	/SR/ /GSP/ /IM01/ /PTR/ /MR/ /VER- CDM/	<p>Description: The parameter is calculated base on the actual energy generation. The ER calculation sheet was reviewed in the verification of the CDM project. The energy data used for the ER calculation was cross checked against the data registered by the energy meters. For further information please refer to CDM verification report of the 1st MP.</p> <p>Verifier's action: As per CDM verification report the parameter was reviewed a verified.</p> <p>Conclusion: The monitored parameter is correct and it has been performed in line with the MP included in the Passport.</p>	N/A	N/A
<p>c) Correctness</p> <p>Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner.</p> <p>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should</p>	/MR/ /PDD/ /SR/ /PTR/ /XLS/ /VER-	<p><input checked="" type="checkbox"/> Correct <input type="checkbox"/> Not correct (initial assessment)</p> <p>Description: The energy data given in the SR is in line with the data verified in the CDM verification.</p> <p>Verifier's action: The Sustainability SR was checked against the data verified in the CDM verification.</p> <p>Conclusion: The reported parameter in the SR is correct as it is</p>	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>be given.</p> <p><i>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i></p>	CDM/	in line with the GSP and the CDM verification report..		
<p>D.2.9. Number of contracts</p> <p>a) Measurement / Determination method Describe how the monitoring parameter was measured / determined. Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. Assess whether the measurement / determination method is in line with the registered monitoring plan and the applied methodology.</p>	/SR/ /PDD/ /VAL-GS/ /Employment/ /GSP/	<p>Description: The parameter is measured by the number of direct employees, other not full time employees and contractors for maintenance and security services. Furthermore the salaries of personnel including contractors have to be at least the official minimum salary.</p> <p>Verifier's action: Employees and contractors salaries have been reviewed against the salaries published in official sources. Also personnel form the PA was interviewed.</p> <p>Conclusion: The monitored parameter has been performed as per monitoring plan of the SR.</p>	OK	OK
<p>b) Accuracy and QA/QC Procedure In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs. Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the</p>		Not applicable	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>monitoring equipment has been carried out by competent personnel.</p> <p>c) Correctness Determine whether the value given in the sustainability monitoring report is correct or determined in a conservative manner. In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given. In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</p>	/MR/ /PDD/ /SR/ /Employment/	<p><input type="checkbox"/> Correct <input checked="" type="checkbox"/> Not correct (initial assessment)</p> <p><i>Description:</i> The information given in the SR is not enough for the evaluation as no employees number either minimum salary for the MP have been reported. <i>Verifier's action:</i> The Sustainability MR^{SR/} was checked accordingly. <i>Conclusion:</i> The information reported in the SR do not include the actual numbers for the MP. CAR D1. The actual number of employees and minimum salaries in the MP are missing in the SR.</p>	CAR-D1	OK
D.3. Sampling				
<p>a) Implementation of sampling plan Check whether the PP has applied a sampling approach to determine the monitored values (as per section D.2 above). If this is the case, please provide an assessment whether the PPs have correctly and sufficiently described the implemented sampling plan including</p> <ul style="list-style-type: none"> - Description of the implemented sampling design 		<p><input type="checkbox"/> A sampling approach has been taken by the PP Not applicable</p>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<ul style="list-style-type: none"> - Collected data - Analysis of collected data - Demonstration on whether the required confidence/precision has been met. 				
<p>b) Sampling during verification</p> <p>In case the VT has applied a sampling approach in the course of the verification the approach shall be described for each parameter.</p>		<input type="checkbox"/> A sampling approach has been applied by the VT Not applicable	OK	OK
E. Calculation of Emission reductions				
<p>E.1. Traceability</p> <p>Assess if the calculation is fully traceable. In case of complex calculations an Excel calculation spreadsheet shall be used. All applied formulae must be visible.</p>	/MR/ /VER- CDM/ /XLS/	<p>Description: It was already verified (as CDM project) by TÜV NORD, according to verification report^{/Ver-CDM/}.</p> <p>Verifier's action: The CDM Verification Report was checked. The verification team has checked the emission reduction calculation and confirms that:</p> <p><input type="checkbox"/> the calculation is fully traceable <input checked="" type="checkbox"/> all applied formulae are visible</p> <p>Conclusion: please refer to CAR C1</p>	CAR-C1	OK
<p>E.2. Parameter consistency</p> <p>Assess whether all internal and external parameters and data used for calculation are applied consistently in the monitoring report and the calculation spreadsheet?</p>	/MR/ /VER- CDM/ /XLS/	<p>Description: It was already verified (as CDM project) by TÜV NORD, according to verification report^{/Ver-CDM/}.</p> <p>Verifier's action: The CDM Verification Report was checked. The verification team has checked the emission reduction calculation and the MR and confirms that:</p>	CAR-C1	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>Consider only the correct data exchange between the monitoring report and the calculation spreadsheet (if any). Further ensure the consistency of notations for all parameters in the PDD, MR and calculation spreadsheet.</p>		<p><input type="checkbox"/> all parameter notations are consistent in the project documentation</p> <p><input type="checkbox"/> all internal and external parameters and data used for calculation are consistently applied</p> <p><i>Conclusion:</i> please refer to CAR C1</p>		
<p>E.3. Correctness of calculation</p> <p>Check if the applied formulae and methods for calculating baseline emissions, project emissions and leakage are in accordance with the monitoring plan and / or the approved methodology.</p> <p>Assess whether the provided calculations are complete and reflect all requirements of the monitoring plan.</p> <p>Check especially that no standard or old values have been used for calculation where calculations based on up-to-date data is required.</p>	/MR/ /VER- CDM/ /XLS/	<p><i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report^{/Ver CDM/}.</p> <p><i>Verifier's action:</i> The CDM Verification Report was checked. The verification team has checked the emission reduction calculation and the MR and confirms that:</p> <p><input checked="" type="checkbox"/> all applied formulae for calculating baseline emissions, project emissions and leakage are in accordance with the monitoring plan</p> <p><input type="checkbox"/> the provided calculations are complete</p> <p><i>Conclusion:</i> please refer to CAR C1</p>	CAR-C1	OK
<p>E.4. Emission reductions table</p> <p>Check if the MR includes a summary table of the emission reductions calculation specifying separately</p> <ul style="list-style-type: none"> - Total baseline emissions - Total project emissions: - Total leakage - Total emission reductions. 	/MR/ /VER- CDM/	<p><i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report^{/Ver CDM/}.</p> <p><i>Verifier's action:</i> The CDM Verification Report was checked.</p> <p><input checked="" type="checkbox"/> The MR includes a summary table of the emission reductions calculation.</p> <p><input checked="" type="checkbox"/> The summary table specified the total baseline, project and leakage emissions as well as the total emission</p>	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<p>Assess whether the values are correct or need to be revised as a consequence of issues identified above.</p>		<p>reductions separately.</p> <p><input checked="" type="checkbox"/> The values as specified in the ER summary table are correct; no issues have been identified during the verification which require changes in the ER calculation.</p> <p><input checked="" type="checkbox"/> During the verification issues with impact on the ER calculation have been identified. Thus subject to the closure of above listed findings the summary needs to be revised.</p> <p><i>Conclusion:</i> No discrepancies were identified.</p>		
<p>E.5. Comparison with ex-ante determined emission reductions</p> <p>Check if the MR includes a comparison of actual values of the monitoring period with the estimations in the registered PDD.</p> <p>Check further whether in case of an increase an appropriate explanation is included in the MR.</p> <p>Assess in case of a significant increase whether this is due to technical or organisational changes within or outside the control of the PP which might require a notification / approval of changes.</p>	<p>/MR/ /VER- CDM/</p>	<p><i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report ^{Ver CDM/}.</p> <p><i>Verifier's action:</i> The CDM Verification Report was checked.</p> <p>The verification team has checked the MR and confirms that:</p> <p><input checked="" type="checkbox"/> the MR includes a comparison of actual emission reductions with the estimations of the registered PDD</p> <p><input checked="" type="checkbox"/> the increase has been appropriately explained</p> <p><i>Conclusion:</i> No discrepancies were identified.</p>	<p>OK</p>	<p>OK</p>



TÜV NORD JI/CDM Certification Program

R-No: 10917-14/090

ANNEX 2: CALIBRATION DATES AND VALIDITY OF INSTALLED MONITORING EQUIPMENT

Monitoring equipment	Related monitoring parameter as per applicable registered monitoring plan	Serial number	Type	Accuracy or accuracy class	Previous calibration (last calibration before start of this monitoring period)	Calibration date(s) during this monitoring period	Validity of calibration(s)	Delay in calibration: yes/no	Period of delayed calibration
Sonometer	Environmental noise	Z199615	HD600	0.1 dB	Not available	Not available for this MP. Calibration was done on August 14, 2015	No defined	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	From: 01/07/2013 To: 30/06/2014



ANNEX 3: STATEMENTS OF COMPETENCE OF INVOLVED PERSONNEL

TUV NORD
Certification

Statement of Competence
Approved and valid only according to the conditions of the TÜV NORD JI/CDM Certification Program

Mr. Raul Gonzalez Mitre

SCHEME	STATUS	VALID UNTIL
CDM	Senior Advisor (Technical Reviewer)	2016-05-31
VSD ISO 14001-2	Senior Advisor (Technical Reviewer)	2016-05-31

Authorization valid for technical areas with relevant scope:

CODE	TECHNICAL AREA
1.2	Environmental
1.3	Social issues and stakeholder

093 - Rev. 7, Date: 2015-07-10

981-00007-01-14/090-006

TUV NORD
Certification

Statement of Competence
Approved and valid only according to the conditions of the TÜV NORD JI/CDM Certification Program

Mr. Oliver Quireza Campos

SCHEME	STATUS	VALID UNTIL
CDM	Analyst (Technical Reviewer)	07-02-2017
VSD ISO 14001-2	Analyst (Technical Reviewer)	07-02-2017

Authorization valid for technical areas with relevant scope:

CODE	TECHNICAL AREA
1.2	Environmental
1.3.1	Water-Handling and Disposal
1.3.2	Animal Welfare Management

397 - Rev. 2, Date: 2014-07-08

981-00007-01-14/090-006

TUV NORD
Certification

Statement of Competence
Approved and valid only according to the conditions of the TÜV NORD JI/CDM Certification Program

Mr. Yongjun Li

SCHEME	STATUS	VALID UNTIL
CDM	Lead Advisor (Technical Reviewer)	2016-06-30
VSD ISO 14001-2	Lead Advisor (Technical Reviewer)	2016-06-30

Authorization valid for technical areas with relevant scope:

CODE	TECHNICAL AREA
1.2	Environmental
1.3	Stakeholder

093 - Rev. 3, Date: 2015-01-06

981-00007-01-14/090-006

TUV NORD
Certification

Statement of Competence
Approved and valid only according to the conditions of the TÜV NORD JI/CDM Certification Program

Mr. Martin Saalman

SCHEME	STATUS	VALID UNTIL
CDM	Senior Advisor (Technical Reviewer)	2016-11-10
J	Senior Advisor (Technical Reviewer)	2016-11-10
VSD ISO 14001-2	Senior Advisor (Technical Reviewer)	2016-11-10

Authorization valid for technical areas with relevant scope:

CODE	TECHNICAL AREA
1.2	Environmental
1.3.1	Social issues and stakeholder

092 - Rev. 6, Date: 2015-11-11

981-00007-01-14/090-006