



GOLD STANDARD RETROACTIVE-CDM VERIFICATION REPORT

CONSORCIO EÓLICO AMAYO S.A.

AMAYO 40 MW WIND POWER PROJECT - NICARAGUA

Monitoring Period: 2009-04-12 to 2009-09-30
(incl. both days)

Report No: OS 7619 - 10/458

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Verification Report:	Report No.	Rev. No.	Date of issue:	Date of this rev.
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Project:	Title:		UNFCCC Registration date:	Gold Standard Registration date:
	Amayo 40 MW Wind Power Project-Nicaragua		2009-04-12	2010-08-27
Project Participant(s):	Host party:		Other involved parties:	
	Nicaragua		United Kingdom of Great Britain and Northern Ireland	
Applied methodology/ies:	Title:		No.:	Scope:
	Grid-connected electricity generation from renewable sources		ACM0002 ver. 07	1
Monitoring:	Monitoring period (MP):		No. of days:	MP No.
	2009-04-12 to 2009-09-30 - both days included		172	1
Carbon Monitoring report:	Title:		Draft version:	Final version:
	Amayo 40 MW Wind Power Project-Nicaragua		2009/10/15	2009/12/10
Sustainability Monitoring Report:	Title:		Draft version:	Final version:
	Amayo 40 MW Wind Power Project-Nicaragua		2010/10/15	2011/02/08
Verification team / Technical Review and Final Approval	Verification Team:		Technical review:	Final approval::
	Jochen Schubert	Abraham Garza A.	Ingo Klein	Martin Saalmann
	Gilberto Andrade		Alexandra Nebel	
	Raul Gonzalez Mitre			
Emission reductions: [t CO_{2e}]	Verified amount		As per draft MR:	
	42,871		42,871 t	
Summary of Verification Opinion:	Consorcio Eólico Amayo S.A. has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Gold Standard retroactive verification of the project: "Amayo 40 MW Wind Power Project - Nicaragua", with regard to the relevant Gold Standard (GS) requirements for CDM project activities. The project reduces GHG emissions by displacement of conventional generated electricity in the Nicaraguan interconnected grid by renewable power from a wind power farm. This retroactive verification covers the period from 2009-04-12 to 2009-09-30 (including both days). In the course of the verification 4 Clarification Requests (CL) and 1 Corrective Action Requests (CAR) were raised and successfully closed. In this verification no Forward Action Request (FAR) was raised to be checked in the next periodic verification. The verification is based on the draft monitoring report, revised monitoring report (Carbon and Sustainability), the monitoring plan as set out in the registered PDD, the GS PDD Annex, the validation report, the additional annexes to the PDD for GS retroactive validation, the retroactive GS validation report, the CDM verification report for this project and supporting documents made available to the TÜV NORD JI/CDM CP by the project participants. 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 and GS additional annexes to the PDD. - the monitoring reports are in accordance with the relevant GS requirements. - the monitoring plans as set out in the validated PDD and the validated additional annexes to the PDD has been followed. - the project contributes to sustainability development - the monitoring system is in place and functional. The project has generated GHG emission reductions. As the result of the GS retroactive verification, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions, which could be labelled Gold Standard in the above mentioned reporting period as follows: Emission reductions: 42,871 t CO_{2e}			
Document	Filename:			Num. of pages:



information:	2011-06-17 2011_02_23_FVerR_AMAYO_GS_Retro_1MP_sa	93
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Abbreviations:

AMELEC	<i>“Asesoría y Materiales Electricos”</i> Company authorized by the CNDC to perform audits to the Commercial Measurement System (SIMEC)
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CEA	Consorcio Eólico Amayo, S.A.
CER	Certified Emission Reduction
CDM	Clean Development Mechanism
CIRA-UNAN	Nicaraguan Aquatic Resources Research Center <i>“Centro para la Investigación en Recursos Acuáticos de Nicaragua”</i> of Nicaraguan National Autonomic University <i>“Universidad Nacional Autónoma de Nicaragua”</i> . This research center counts with certified laboratories for the performance of water quality analysis based on the procedure Standard Methods 2000
CNDC	National Dispatch Center <i>“Centro Nacional de Despacho de Carga”</i>
CO ₂	Carbon dioxide
CO _{2eq}	Carbon dioxide equivalent
CL	Clarification Request
ENATREL	National Company of Transmission of Electricity <i>“Empresa Nacional de Transmisión eléctrica”</i>
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GS	The Gold Standard
INE	Nicaraguan Institute of Energy
MARENA	Ministry for the Environmental <i>“Ministerio del Ambiente y los Recursos Naturales”</i> (DNA)
MEDLAB	Diagnostic Center and Medical Specialties (<i>“Centro Diagnóstico y Especialidades Médicas”</i>), medical entity contracted for the performance of Amayo’s workers hearing level studies.
MP	Monitoring Plan
MR	Monitoring Report
NIS	National Interconnected System
PDD	Project Design Document
PP	Project Participant
RfDev	Requests for deviations from the applied methodology



RfRevMP	Requests for revisions of the monitoring plan
SC- Commander	Software used for service operation and remote control on Suzion SCS turbines
SCADA	Supervisory Control and Data Acquisition
SIMEC	Commercial Measurement System
QA/QC	Quality Assurance / Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
XLS	Emission Reduction Calculation Spread Sheet

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1. INTRODUCTION

Consortio Eólico Amayo S.A. has commissioned the TÜV NORD JI/CDM Certification Program (CP) to carry out the Retroactive Gold Standard (GS) verification of the project

“Amayo 40 MW Wind Power Project - Nicaragua”

with regard to the relevant requirements for Gold Standard CDM project activities. The ‘Amayo 40 MW Wind Power Project - Nicaragua’ is a registered CDM project since 2009/04/12 (project number 2315)¹. On 2010/08/27 it was registered as a Gold Standard CDM project. According to the Gold Standard 1.0 requirements, emission reductions of projects under the retroactive project cycle which occurred prior to GS registration may be eligible for retroactive crediting for up to a maximum period of two years prior to the date of Gold Standard registration. The verification covers the monitoring period 2009-04-12 to 2009-09-30. Part of the emission reductions occurred in the considered monitoring period claim for retroactive crediting. (i.e. those before 2010/08/27)

The retroactive GS monitoring period is identical with the 1th monitoring period under CDM, which was also conducted by TÜV NORD JI/CDM CP. The request for issuance has been submitted to UNFCCC on 2009/12/15. CERs for 1th periodic verification have been issued on 2010/03/11. The GS verification is to be seen in conjunction with the results of the 1th periodic CDM verification.

GHG data was verified in detailed manner applying the set of requirements, audit practices and principles as required under the Validation and Verification Manual ^{IVVM/} of the UNFCCC.

This report summarizes the findings and conclusions of this Gold Standard verification of the above mentioned GS registered CDM 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,
- compliance of the actual monitoring systems 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 reports 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 <http://cdm.unfccc.int/Projects/DB/SGS-UKL1227712726.26/view>

1.2. Scope

The verification of this GS registered CDM project is based on the validated project design document ^{/PDD/}, the validated additional annexes to the PDD for retroactive GS registration ^{/PDD A/}, the carbon monitoring report ^{/MR/}, the 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 17/CP.7 ^{/MA/}, and subsequent decisions made by the Executive Board and COP/MOP,
- Gold Standard Version 1.0 ^{/GS/}
- the simplified modalities and procedures for small scale CDM project activities of annex II to decision 21/CP.8 ^{/SMP/}
- other relevant rules, including the host country legislation,
- CDM Validation and Verification Manual ^{/VVM/}
- monitoring plan as given in the registered PDD ^{/PDD/}
- Gold Standard Monitoring matrix as given in the registered additional annexes to the PDD for retroactive GS registration ^{/PDD A/}
- Approved CDM Methodology ACM0002 ver. 7: Grid-connected electricity generation from renewable sources ^{/ACM0002/}

2. GHG PROJECT DESCRIPTION

2.1. Project Characteristics

Essential data of the project is presented in the following Table 2-1.

Table 2-1: Project Characteristics

Item	Data		
Project title	Amayo 40 MW Wind Power Project - Nicaragua		
Project size	☒ Large Scale ☐ Small Scale		
Project Scope (according to UNFCCC sectoral scope numbers for CDM)	☒	1	Energy Industries (renewable- /non-renewable sources)
	☐	2	Energy distribution
	☐	3	Energy demand
	☐	4	Manufacturing industries
	☐	5	Chemical industry
	☐	6	Construction
	☐	7	Transport
	☐	8	Mining/Mineral production
	☐	9	Metal production

Item	Data
	☐ 10 Fugitive emissions from fuels (solid, oil and gas) ☐ 11 Fugitive emissions from production and consumption of halocarbons and hexafluoride ☐ 12 Solvents use ☐ 13 Waste handling and disposal ☐ 14 Afforestation and Reforestation ☐ 15 Agriculture
Applied Methodology	ACM0002 ver.07: Grid-connected electricity generation from renewable sources.
Technical Area(s)	T: Renewable – Wind
CDM registration No.	2315
GS registration No.	GS 567
Crediting period	☒ Renewable Crediting Period (7 y) ☐ Fixed Crediting Period (10 y)

2.2. Project Verification History

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

Table 2-2: Project verification history

#	Item	Time	Status
1	Date of registration	2009-04-12	-
2	Start of crediting period	2009-04-12	-
3	Date of GS registration	2010-08-27	-
4	1 st CDM monitoring period	2009-04-12 to 2009-09-30	Issued
5	1 st Retroactive Gold Standard monitoring period	2009-04-12 to 2009-09-30	Issuance requested

2.3. Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity (Table 2-3).

Table 2-3: Project Parties and project participants

Characteristic	Party	Project Participant
Host party	Nicaragua	Consorcio Eólico Amayo S.A.

2.4 Project Location

The details of the project location are given in table 2-4:

Table 2-4: Project Location

No.	Project Location
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No.	Project Location
Host Country	Nicaragua
Region:	Rivas
Project location address:	129 Km south of Managua, south west coast of Lake Nicaragua
Latitude:	11° 19' 32" N
Longitude:	85° 43' 05" W

2.5 Technical Project Description

The Project is a 39.9 MW wind power project, expected to produce 169.51 GWh per year. The minimum expected operational lifetime is 20 years. The project consists in the installation of 19 turbines provided by SUZLON. Those turbines are a three-bladed rotor machine with a single fed induction generator. The line to be connected to the INE transformer will be a 230 kV, running from the wind farm control house to the INE transformer. The Project is located in the province of Rivas, approximately 129 km south of Managua, Nicaragua.

The key parameters for the project are given in table 2-5:

Table 2-5: Technical data of the plant

Parameter	Unit	Value
Total Power	MW	39.9 MW
No. of turbines	-	19
Rated Power per wind-generator	MW	2.1
Number of blades		3
Rotor conus angle	°	5.0
Swept area	m ²	6,082
Tip speed (at rated power)	m/s	72.0
Rotor diameter	m	88
Rotational speed	rpm	15.0-17.6

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
- A desk review of the carbon monitoring report including the claimed emission reductions and the sustainability monitoring report submitted by the client and additional supporting documents
- Verification planning
- On-Site assessment
- Background investigation and follow-up interviews with personnel of the project proponent and its contractors
- Draft verification reporting
- Resolution of corrective actions (if any)
- Final verification reporting
- Technical review
- Final approval of the verification.

The sequence of the verification is given in the table 3-1 below:

Table 3-1: Verification sequence

Topic	Time
Assignment of verification	2010-07-21
On-site visit	2010-10-18 to 2010-10-22
Draft reporting finalised	2010-10-22
Final reporting finalised	2011-02-23
Technical review finalised	2011-06-24

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, consistent of one team leader and 2 additional team members, was appointed. Furthermore also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table (3-2) below.

Table 3-2: Involved Personnel

	Name	Company	Function ¹⁾	Qualification Status ²⁾	Sectoral competence	Technical competence ⁴⁾	Host country Competence	Team leading competence
☒ Mr. ☐ Ms.	Jochen Schubert	TÜV NORD CERT, Germany	TL	A	☒	T	☐	☒
☒ Mr. ☐ Ms.	Gilberto Andrade	BRTÜV (TUV NORD Brazil), São Paulo	TM	E	☒	T	☒	☐
☒ Mr. ☐ Ms.	Gonzalez Mitre, Raul	TÜV NORD CERT, Mexico	TM	E	☒	-	☒	☐
☒ Mr. ☐ Ms.	Garza Alvarez, Abraham	TÜV NORD CERT, Mexico	-	T	☒	T	☒	☐
☐ Mr. ☒ Ms.	Alexandra Nebel	TÜV NORD CERT, Germany	TR ³⁾	A	☒	-	☐	☒
☒ Mr. ☐ Ms.	Ingo Klein	TÜV NORD CERT, Germany	TR ³⁾	A	☒	T	☐	☒
☒ Mr. ☐ Ms.	Martin Saalman	TÜV NORD CERT, Germany	FA	SA	☒	-	☐	☒

¹⁾ TL: Team Leader; TM: Team Member, TR: Technical review; FA: Final approval

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

³⁾ No team member

⁴⁾ As per S01-MU03 or S01-VA070 A2 (such as A, B, C.....)

3.4. Publication of the Monitoring Report

The draft Gold Standard Sustainability Monitoring Report^{/SR/}, as received from the project participants, has not been made publicly available neither on the dedicated UNFCCC CDM or the Gold Standard website. Since this report covers only the monitoring of the project sustainability indicators which are only evaluated under the Gold Standard rules, it is not required to publish the sustainability monitoring report.

However, in the CDM Verification Report^{/VerR/} it has been assessed the publication of the CDM monitoring report for the corresponding monitoring period.

3.5. 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 3-3 below.

Table 3-3: 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</i>	<i>Despite the measures implemented in order to reduce the occurrence probability the following residual risks remain and</i>	<i>The additional verification testing performed is described. Testing may include:</i> - Sample cross checking of manual transfers of data - Recalculation	<i>Having investigated the residual risks, the conclusions should be noted here. Errors and uncertainties are highlighted.</i>

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>minimize the corresponding risks.</i> <i>The following measures are implemented:</i>	<i>have to be addressed in the course of every verification.</i>	- Spreadsheet 'walk throughs' to check links and equations - Inspection of calibration and maintenance records for key equipment - Check sampling analysis results - Discussions with process engineers who have detailed knowledge of process uncertainty/error bands.	

The completed table A-1 is enclosed in the 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 verification protocol is 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 CDM 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 GS verification is described in table 3-4.

Table 3-4: Structure of the project specific GS retroactive 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 GS 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 clarification 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 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 the annex (table A-2) to this report.

3.6. 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 last revision of the carbon monitoring report, including the claimed emission reductions for the project^{/MR/},
- the last revision of the sustainability monitoring report^{/SR/}
- the registered version of the PDD and attached documents, including the monitoring plan^{/PDD/},
- the additional annexes to the PDD for retroactive GS registration including the GS monitoring matrix^{/PDD A/}
- the registered GS validation report^{/VAL/},
- the emission reduction calculation spreadsheet (if applicable)

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

3.7. 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.

Keeping in mind the principles of materiality and quality of evidence, typical activities on-site 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 operator has provided evidence that all metering equipment was duly calibrated.
- The monitoring processes, routines and documentations were audited to check their proper application.
- The monitoring data were checked completely.
- The data aggregation trails were checked via spot sample down to the level of the meter recordings.

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 Consorcio Eolico Amayo S.A., including the operational staff of Suzlon was interviewed. The main topics of the interviews are summarised in Table 3-5.

Table 3-5 Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
1. Project & Operations Personnel, Consorcio Eolico Amayo S.A. 2. Project & Operations Personnel, Suzlon	- General aspects of the project - Technical equipment and operation - Changes since last verification - Monitoring and measurement equipment - Calibration procedures - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan

Interviewed Persons / Entities	Interview topics
	- Monitoring data management - Data uncertainty and residual risks - Procedural aspects of the verification - Maintenance - Environmental aspects - Sustainability indicators

3.8. 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 along 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.

3.9. 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.

3.10. 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.

3.11. 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 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.

3.12. 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 sustainability report^{/SR/}, the PDD^{/PDD/} and additional annexes for GS registration^{/PDD A/}, the GS 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 CR	No. of FAR
H - Project history	0	0	0
U - Update on Changes and Incidents	0	0	0
R - Monitoring Reports – General	1	0	0
P - Monitoring Parameters	0	4	0
C - Emission Reduction Calculation	0	0	0
Q - Quality Management	0	0	0
SUM	1	4	0

The following tables include all raised CARs, CLs and FARs and the assessments of the same by the verification team. For an in depth evaluation of all verification items it should be referred to the verification protocols (see Annex).

Finding:	CAR R1		
Classification	☒ CAR	☐ CL	☐ FAR

Finding:	CAR R1
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Additional information is required in the MR: • Please include the SD assessment matrix with current scoring. Changes in scoring (if any) need to be justified. • Please include the implementation status of mitigations measures as described in the sustainable indicators monitoring plan (p. 23 – 30). These are amongst others mitigation measures during construction phase, installation of sonic deterrents, distance to households... • Please clarify also the status of the Educational Centre and whether the DNA will operate as broker for the period reviewed (referring to GS report, 26/05/2010) and add respective information in the MR.
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	• The SD assessment matrix with current scoring has been included in the monitoring report as annex A. There have not been any changes in the scoring of the parameters since the same conditions have prevailed. Please refer to Section A of the Monitoring Report to see the implementation status of the monitoring of each parameter of the SD Matrix as stated on table 8 (List of parameters to be monitored, page 27 of GS Annex).. • The implementation status of mitigation measures as described in the sustainable indicators monitoring plan have been included in Section A.9 of the monitoring report. • The following information has been included in Section A.9 of the monitoring report: • Besides the information regarding the mitigation measures mentioned, the GS Annex mentions an educational center and the participation of the DNA operating as a broker for the CERs sale (as an option). Regarding the first item, the educational center refers to the use of an area inside the offices and control building, and not to the construction of another building as educational center. For instance, the area designated for educational purposes has been the meeting room at the office and control building. There, the students and visitors in general receive the information regarding the park and wind energy through talks and ppt presentations given by the plant staff. After the talks and presentation, the visitors receive as well a visit all around the wind farm. • Regarding the second item, the DNA did not operate as a broker for the period reviewed since according to the cooperation agreement that was signed by the DNA and the project it is not a requirement that the DNA will act as a broker, and for instance it is up to the project to decide if the DNA will operate as a broker or not. This cooperation agreement also states that the DNA will receive a monetary contribution (percentage of the incomes of the sales) only if they act as a broker. As of today the DNA has not been involved in the sales of the project's CERs.

Finding:	CAR R1
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	MR version 02 provided by the PP has been reviewed: - Annex A of the MR includes the SD Assessment Matrix with the current scoring as stated in the PDD GS Annex^{/PDD A/}. During the site visit the verification team observed that no major changes in the operational conditions of the project have occurred. Hence, no change in scoring is required. Also the project EIA study^{/EIA/} was checked to verify the current scoring of the SD components, No discrepancies were detected. - Section A.9 of the MR is including a general explanation of the additional mitigation actions performed by the PP during the project construction phase. During site visit the verification team made a walk through the project activity facilities (wind turbines, control area, offices, substation, etc.) and it was confirmed that all mitigation activities were performed as stated in the PDD GS Annex^{/PDD A/}. Also the project EIA study^{/EIA/} was checked to verify the fulfilment of the environmental and mitigation requirements defined by the local authority. No discrepancies were detected. - The PP has included an explanation of the Educational Centre status, which consists in the utilization of one of the project area for educational purposes. Regarding the situation of the DNA operation as a broker, the PP has explained in the MR that the DNA could operate as broker only in the cases when the PP requests it. The DNA did not operated as a broker for this monitoring period. In order to assess the Educational Centre status the verification team has reviewed the Gold Standard Report^{/GSRep/} which states that <i>"the Educational Centre consists of the utilization of an area within the command building for didactic proposes and not the construction of a separate building per se"</i> also the attendance lists^{/Tech/} of visits performed to the project activity were checked. Finally, regarding the DNA role as a broker the Cooperation Agreement^{/ACM/} signed between MARENA and CEA was reviewed, also the ERPA signed between CEA and CF Carbon Fund Limited has been checked. This documentation justifies that the DNA has not operated as a broker for this monitoring period. All documentation reviewed by the verification team was identified correct and consistent with the corrections performed in the MR. No discrepancies have been detected. The carbon and sustainability monitoring report is complete and all relevant issues have been addressed. CAR R1 is closed
Conclusion <i>Tick the appropriate checkbox</i>	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

Finding:	CL P1		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section A.1/Number of trees planted during reforestation/afforestation: Please provide information on the timeline of planned reforestation/afforestation activities.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The information regarding the timeline of planned reforestation activities has been included in section A.1. The project has planned to plant trees approximately in July 2010. It can be checked in further verification.		
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The PP has included a brief explanation of when the activities regarding the plantation of trees are expected to take place. The Monitoring Report was revised accordingly.		
Conclusion <i>Tick the appropriate checkbox</i>	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

Finding:	CL P2		
Classification	☐ CAR	☒ CL	☐ FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section A.1/Number and description of maintenance activities: Please clarify when the annual report for 2009 will be prepared and add respective information in the MR.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Since the planting of trees is planned for approximately July 2010, the annual report will be prepared on August 2010. It can be checked on further verifications. Information regarding the timeline for the preparation on the annual report has been included in section A.1.		
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The PP has included a brief explanation of when the reforestation report is expected to be prepared. The Monitoring Report was revised accordingly.		
Conclusion <i>Tick the appropriate checkbox</i>	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements		

Finding:	CL P3		
Classification	☐ CAR	☒ CL	☐ FAR

Finding:	CL P3
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section A.3: Please include the results of the measurements for each parameter separately.
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The results of the measurements have been included separately for each parameter in Annex B of the Monitoring Report.
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The PP has included Annex B in the MR to show the detailed results from the lake and river water, and water and sludge of the wastewater system analysis. The verification team has crosschecked Annex B data against the results obtained from the analyses^{/Water/}. Also, the letter from the CIRA-UNAN^{/Com_CIRA/} so as the official letter from the MARENA^{/Com_Mar/} were checked. CIRA-UNAN letter states that at the time of the analysis it was not able to perform the waste water studies because it was not possible to take a sample. The MARENA letter declares that the project does not need to perform the sludge analysis. Finally, the verification reviewed another letter from the MARENA regarding the fulfilment of the EIA^{/EIA_Com/} and confirming that the results obtained from the lake and river water, and water of the wastewater system analyses are within the normal levels. All data included in the monitoring report is found correct and no discrepancies were identified. The Monitoring Report was revised accordingly.
Conclusion <i>Tick the appropriate checkbox</i>	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

Finding:	CL P4
Classification	☐ CAR ☒ CL ☐ FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section A.5: Please include the results of the measurements (workers hearing level, project noise level).
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	A summary of the results of the workers hearing level have been included in Section A.5. For details on the diagnosis of each workers please refer to the individual audiometric evaluation performed given to the DOE as an evidence.
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-2. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The PP has included the general results from the workers hearing level and project noise level. The verification team has reviewed the hearing level test results^{/Workers/}. Also, the Environmental Noise Analysis^{/Noise/} was checked. Based on the evidences provided the verification team concludes that all project workers do not have any audition disorder and that the project noise levels are in compliance with international standards. The Monitoring Report was revised accordingly. No discrepancies were detected.



Finding:	CL P4
Conclusion <i>Tick the appropriate checkbox</i>	☐ To be checked during the next periodic verification ☒ Appropriate action was taken ☒ Project documentation was corrected correspondingly ☐ Additional action should be taken ☐ The project complies with the requirements

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. Implementation of the project

During the verification a site visit was carried out. 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 equipments, as well as the monitoring and metering equipment, the project has been implemented and operated as described in the registered PDD.

By means of document review and the on-site visit it was verified, that the project activity involves the installation of 19 wind turbines with a capacity of 2.1 MW each, totalling 39.9 MW as per registered PDD, even if the “title” of the project refers to 40 MW.

It could be verified during the site visit that the PP has already installed another wind farm (Amayo Phase II Wind Power Project) with 11 turbines and 23 MW of total capacity next to Amayo Wind Power Project. Both wind farms share the same substation so as the main and back-up power meters that measure the electricity generated. The interaction between Amayo 40 MW Wind Power Project – Nicaragua and this new wind farm should be assessed in order to evaluate the impact on the power generation monitoring; this issue has been addressed in the CDM Verification Report. This additional wind farm (Amayo Phase II Wind Power Project) started operation on 2010/02/09; hence, the monitoring period (2009-04-12 to 2009-09-30) under verification is not affected.

5.2. Project history

During the GS validation process the validating DOE might have raised issues that could not be closed or resolved during the validation stage. For this purpose FARs might have been raised.

No FAR has been raised by the DOE who has performed the GS validation of the project activity. Nevertheless the Gold Standard^{/GSRep/} has raised a FAR in the 6-week review report as of 2010/08/27. This FAR requests the DOE to check during the verification the status of the Educational Centre and whether the DNA will operate as broker for the period reviewed. The FAR raised by the Gold Standard was taken into account in respective processes. Applying relevant means of verification and with special regard to accurate investigations on-site the DOE confirmed that the Educational Centre is operational and visitors have been received in the verification

period, and for the corresponding verification period the DNA has not operated as broker.

Regarding the 1st periodic CDM verification, all FARs and CLs have been successfully closed. The request for issuance has been submitted to UNFCCC on 2009/12/15 and the corresponding CERs have been issued on 2010/03/11. For further information please refer also to CDM verification report^{/VerR/}.

5.3. Special events

On 2009/04/29 the main power meter had failed. The PP informed to the CNDC about this situation, a new power meter was installed and all the required corrective actions were performed. For further information please refer also to CDM verification report^{/VerR/}.

5.4. Compliance with the monitoring plan

The monitoring system and all applied procedures are completely in compliance to the registered monitoring plan.

The information given in the monitoring report and the information obtained on site are comprehensive and in sufficient detail in order to conclude that the monitoring procedures are implemented in accordance with the monitoring plan and methodological requirements. Furthermore the project implementation complies with the GS matrix and all relevant SD parameters were appropriately monitored.

The reporting procedures reflect the requirements of the monitoring plan. All relevant data is collected continuously and stored during the whole monitoring period.

5.5. Compliance with the monitoring methodology

The monitoring system is in compliance with the applied monitoring methodology (ACM0002, version 7).

GS requirements are the monitoring of social-environmental contributions, which are described in the monitoring matrix. Corresponding evidences were available to verification team.

5.6. Monitoring parameters

The monitoring parameters described in the monitoring plan and GS monitoring matrix are:

GHG emission parameters:

- Amayo electricity generation

Sustainability indicators:

- Actions to promote sustainable use of land;
- Number of trees planted during reforestation / afforestation;
- Number and description of maintenance activities undertaken by project members to the reforestation;
- Number of birds collision;
- Water quality and quantity (Lake water, river water, project's waste water & sludge from project's waste water);
- Carbon monoxide (CO);
- Workers auditive level;
- Project noise level;
- Access to energy services;
- Value of fossil fuel avoided by the project;
- Number and description of events related to technology transfer activities undertaken by project members.

During the verification all relevant monitoring parameters have been verified with regard to appropriateness of the applied measurement / determination method, the accuracy, the applied QA/QC measures as well as the correctness of the values applied for ER calculation. The results as well as the verification procedure are described parameter-wise in the project specific GS verification checklist. 4 CL's were raised related to monitoring parameters.

After appropriate corrections were carried out by the project participant 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.

5.7. Monitoring report

A draft Gold Standard Sustainability Monitoring Report^{/SR/} was submitted to the verification team by the project participants.

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

5.8. ER Calculation

The verification and evaluation of the ER calculation for this period has been assessed in the CDM Verification Report^{VerR/}.

5.9. Contribution to sustainable development

It was evidenced that the project contributes to reforestation/recuperation of the area/soil, employs local population, conserves the local biodiversity, improve access to energy services through the reduction of fossil fuel consumption in power generation, and contributes to human and institutional capacity.

For all the sustainability indicators it can be confirmed that there were no changes occurred with negative impact on sustainable development of the project.

For a detailed assessment of the sustainability indicators please refer also to the project specific GS verification checklist.

5.10. 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 CDM/GS 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.

5.11. 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.

The verification team got access to all relevant documentation regarding the monitoring of the sustainable development indicators, like:

- Waste water and sludge quality tests
- Project noise reports and workers audiometry evaluations
- Birds collision records
- Beach clean ups reports
- Trees donation receipts
- External visits attendance lists

All these documentation were checked and found to be consistent and of high quality.

Access was granted to all installations of the plant 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 not compliant with the GS requirements, the UNFCCC criteria and relevant guidance provided by the COP/CMP and the CDM EB (clarifications and/or guidance).

5.12. Hints for next periodic Verification

In the course of this GS verification no FARs have been raised.

6. VERIFICATION OPINION

Consorcio Eólico Amayo S.A. has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Retroactive Gold Standard (GS) verification of the project: "Amayo 40 MW Wind Power Project - Nicaragua", with regard to the relevant Gold Standard (GS) requirements for CDM project activities. The project reduces GHG emissions by displacement of conventional generated electricity in the Nicaraguan interconnected grid by renewable power from a wind power farm. This retroactive GS verification covers the period from 2009-04-12 to 2009-09-30 (including both days).

In the course of the verification 4 Clarification Requests (CL) and 1 Correction Action Request (CAR) were raised and successfully closed. Also, in this verification no Forward Action Request (FAR) was raised. The verification is based on the draft monitoring report, the revised monitoring report (Carbon and Sustainability), the revised monitoring reports, the monitoring plan as set out in the validated PDD, the validation report, the additional annexes to the PDD for GS retroactive validation, the retroactive GS validation report, the CDM verification report for this project and supporting documents made available to the TÜV NORD JI/CDM CP by the project participants.

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

- all operations of the project are implemented and installed as planned and described in the validated project design document and GS additional annexes to the PDD.
- the monitoring reports are in accordance with the relevant GS requirements.
- the monitoring plans as set out in the validated PDD and the validated additional annexes to the PDD has been followed.
- the project contributes to sustainability development
- the monitoring system is in place and functional. The project has generated GHG emission reductions.

As the result of the retroactive GS verification, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions which could be labeled Gold Standard in the above mentioned reporting period as follows:

Emission reductions: **42,871** t CO_{2e}

Essen, 2011-06-24



Jochen Schubert

TÜV NORD JI/CDM Certification
Program

Verification Team Leader

Essen, 2011-06-24



Martin Saalman

TÜV NORD JI/CDM Certification
Program

Senior Assessor

7. REFERENCES

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

Reference	Document
/ACM/	<u>MARENA Cooperation Agreement (Acuerdo de Cooperación MARENA)</u> (Evidence of the agreement established between MARENA and CEA for promoting the sale of the project CERS signed on 2008/05/08).
/Beach/	Report on the International Beaches Cleaning 2009 issued by Amayo on September 2009. Evidence of the beaches cleaning support provided by Amayo on 2009/09/19.
/Birds/	<u>Birds collision Monitoring</u> • Bird's collision monitoring report issued on April 2009 • Bird's collision monitoring report issued on May 2009 • Bird's collision monitoring report issued on June 2009 • Bird's collision monitoring report issued on July 2009 • Bird's collision monitoring report issued on August 2009 • Bird's collision monitoring report issued on September 2009 • Procedure for the birds collision monitoring by CEA, Version 03 issued on April 2010
/Com_CIRA/	Letter issued by the CIRA-UNAN on 2010/09/06 justifying that at the time of the sampling for the waste water analysis, no water flow was found in the absorption well of the waste water system output.
/Com_Mar/	Evidence letter issued by the MARENA on 2009/07/09 justifying that Amayo wind farm project does not requires performing the following tests: • Quality analysis of the sludge from the waste water treatment system. • CO emissions analysis
/EIA/	Environmental Impact Study, issued by the consultancy company Fiallos & Asociados S.A. on November 2006.
/EIA_Com/	Letter issued by the MARENA on 2009/12/11 confirming that the environmental monitoring reports corresponding to the construction phase and the operational period from February 2009 to June 2009 have been delivered to the authority and that the results of these reports are within the normal levels.
/EL/	• Environmental License – “<i>Permiso ambiental</i>” – number 01-2007, issued

Reference	Document
	on 2007/01/08 (without expiration date). • Document part of the Environmental License – “<i>Resolución Administrativa</i>” – number 08-99, issued on 1999/05/18. • Letter stamped and signed by MARENA on 2008/10/21 (Evidence that the Environmental License is still valid).
/ERPA/	Emission Reduction Purchase Agreement signed between CF Carbon Fund II Limited and Consorcio Eolico Amayo, 2010/10/15. (corresponding to the 1 st MP).
/Fuel/	<u>Energy Services and Balance of Payments</u> Excel spreadsheet “Monitoring fossil fuel and prices” issued by Amayo. This document includes the following data: • Calculation of the amount and value of fossil fuel avoided • Analysis of spot price energy and Amayo price
/IMI/	Installation Manual – S88-2.1 MW – Suzlon Windkraft GmbH, Doberaner Str. 115, 18057 Rostock Germany.
/logbook/	Logbook of Operations Amayo (covering the monitoring period).
/MCL/	Turbine logbook: • Turbine specific data; • Maintenance Check List - S88-2.1 MW; • Service works & • Repairs
/MEP/	Monitoring Environmental Plan 2009 “ <i>Plan de Monitoreo Ambiental</i> ” (bird impact monitoring, water quality monitoring, residual domestic water quality monitoring, sludge quality monitoring of the water treatment system, air quality monitoring, noise and hearing monitoring).
/MR/	Carbon Monitoring Report (Version 04, December 10th 2009)
/Mtto/	Maintenance Forecast Program Amayo I by Suzlon for the period 2010 - 2012.
/Noise/	<u>Environmental Noise Analysis</u> • Environmental Noise Monitoring Report issued by Amayo on 2009/08/05
/O&M/	Technical documentation - Maintenance Manual - S88-2.1 MW, number WD00114, issued on 2008/04/07.
/OPI/	AMAYO Operational Procedures (relevant for the project activity):

Reference	Document
	• Procedure for discharge the SCADA files of energy generation (AMY-P014). • Procedure to up load data to the CNDC web page (AMY-P006).
/OPL/	Operational Procedures List.
/ORI/	Operational Regulation # 26-2000 " <i>Normativa de Operación</i> ", issued on November 2000 by INE.
/PCC/	Procedures for carbon credits (procedures for monitoring parameters, troubleshooting procedures, and data management).
/Ref_Af/	<u>Reforestation/Afforestation activities</u> • Draft Proposed Tree Planting Map issued by Amayo on 2010/06/30 • Trees Planting Report issued by Amayo on 2010/08/27. Evidence of the 400 trees planted by Amayo in one of the project site roads on July 2010.
/SC/	SC-Comander User Manual, date 2008/06/19
/SCS/	Functional description SC-SCADA Reporting – Suzlon Energy A/S - issued on 2009/04/01 Revision 00.
/SR/	Draft Sustainability monitoring report "Amayo 40 MW Wind Power Project – Nicaragua", version 01, 2010/10/15. FINAL Sustainability monitoring report "Amayo 40 MW Wind Power Project – Nicaragua", version 02, 2011/02/08.
/TE/	<u>Training Evidence</u> • Suzlon training participation certificate – SC (Suzlon Control System) - commander - issued on 2009/05/20. • Suzlon training participation certificate – Suzlon 88 Turbine Training - issued on 2009/06/18. • Suzlon training participation certificate – Scada System Training -issued on 2009/06/19.
/Tech/	<u>Technology Transfer activities:</u> • Attendance list of the Esteli Multidisciplinary Regional Faculty "<i>Facultad Regional Multidisciplinaria de Esteli</i>" students that visited Amayo wind farm project on 2009/04/22. Feedback from the participants is included • Attendance list of the Regional Technological Institute "<i>Instituto Tecnológico Regional</i>" students that visited Amayo wind farm project on 2009/06/04. Feedback from the participants is included. • Attendance list of the Esteli Multidisciplinary Regional Faculty "<i>Facultad</i>

Reference	Document
	<i>Regional Multidisciplinaria de Esteli</i>” students that visited Amayo wind farm project on 2009/06/06. Feedback from the participants is included. • Attendance list of the Engineering National University “<i>Universidad Nacional de Ingeniería</i>” students that visited Amayo wind farm project on 2009/06/11. Feedback from the participants is included • Attendance list of the Engineering National University “<i>Universidad Nacional de Ingeniería</i>” students that visited Amayo wind farm project on 2009/06/11. Feedback from the participants is included • Attendance list of the National Technical Institute “<i>Instituto Tecnológico Nacional</i>” students that visited Amayo wind farm project on 2009/06/12. Feedback from the participants is included • Attendance list of the Engineering National University “<i>Universidad Nacional de Ingeniería</i>” students that visited Amayo wind farm project on 2009/06/30. Feedback from the participants is included • Attendance list of the Esteli Multidisciplinary Regional Faculty “<i>Facultad Regional Multidisciplinaria de Esteli</i>” students that visited Amayo wind farm project on 2009/07/04. Feedback from the participants is included. • Attendance list of the Centroamerican University “<i>Universidad Centroamericana</i>” students that visited Amayo wind farm project on 2009/08/19. Feedback from the participants is included • Attendance list of the Engineering National University “<i>Universidad Nacional de Ingeniería</i>” students that visited Amayo wind farm project on 2009/09/28. Feedback from the participants is included
/Trees/	Confirmation Letter evidence signed by Leocadio Cerda issued on 2009/07/21 for the purchase of 10,000 trees.
/TSPI/	Alarm Description & Trouble Shooting S88 CSM88L28021, Version 01, issued on 2008/09/30 by Suzlon.
/Water/	Evidence of lake and river water, and project waste water quality analysis: • Tisla river water analysis for pH, temperature, dissolved oxygen and BOD made by CIRA-UNAN on 2009/07/10 • Lake Cocibolca water analysis for pH, temperature, dissolved oxygen and BOD made by CIRA-UNAN on 2009/07/10 • San Luis river water analysis for pH, temperature, dissolved oxygen and BOD made by CIRA-UNAN on 2009/07/10 • Waste water analysis for coliforms content and temperature made by CIRA-UNAN on 2009/07/09 • Waste water quality analysis for the following parameters: pH, temperature, total sedimentable solids (TSS), total suspended solids, oils and grease, BOD, COD, methylene blue active substances and phosphorus level performed by CIRA-UNAN on 2009/07/10.
/Workers/	<u>Audiometric Exams General Summary</u>

Reference	Document
	Audiometric Exams perform by MEDLAB for Amayo workers on June and July 2009.
/45-94/	Environmental Impact Assessment Regulation number 45-94 " <i>Reglamento de Permiso y Evaluación de Impacto Ambiental</i> ", issued on 1994/10/31. (Regulation that requires an EIA for any project implemented in Nicaragua)

Table 7-2: Background investigation and assessment documents

Reference	Document
/ACM0002/	Consolidated baseline methodology for grid-connected electricity generation from renewable sources ACM0002, version 07.
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
/GS/	Gold Standard Version 1.0
/GSRep/	<u>Gold Standard 6-week Review Report</u> Gold Standard 6-week review report of the comments and requests for clarification/corrective action received for Amayo 40 MW Wind Power Project – Nicaragua (GS567), issued by GS on 2010/08/27.
/IPPC/	1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book
/KPI/	Kyoto Protocol (1997)
/MA/	Decision 3/CMP. 1 (Marrakesh – Accords)
/PDD/	Project Design Document for CDM project: " <i>Amayo 40 MW Wind Power Project - Nicaragua</i> " version 3, dated 2008/10/31
/PDD A/	Additional PDD Annex " <i>Amayo 40 MW Wind Power Project - Nicaragua</i> " as required for Gold Standard validation issued on August 2010, Version 07.
/VAL/	Gold Standard Validation Report for CDM project " <i>Amayo 40 MW Wind Power Project - Nicaragua</i> " version 02, dated 2010/03/26
/VerR/	CDM Verification Report 1 st Monitoring period version 0 issued on 2009/12/15

Reference	Document
/VVM/	UNFCCC Validation and Verification Manual (Version 1.2, Annex 1; EB 55)
/Water_Std/	American Public Health Association (APHA) (2005). <i>Standard Methods for the Examination of Water and Wastewater</i> . Ed. Washinton: APHA

Table 7-3: Websites used

Reference	Link	Organisation
/cndc/	www.cndc.org.ni	Dispatch National Center web site: "Centro Nacional de Despecho de Carga - Nicaragua"
/dna-HP/	www.marena.gob.ni	DNA of Nicaragua
/GSI/	http://www.cdmgoldstandard.org/	The Gold Standard
/INE/	http://ine.gob.ni	INE, Nicaraguan Institute of Energy "Instituto Nicaragüense de Energía" home site
	http://ine.gob.ni/DGE/estadisticas/2009/anual/Resumen_2009_02.pdf	INE, Nicaraguan Institute of Energy "Instituto Nicaragüense de Energía" Fuel Consumption data
	http://ine.gob.ni/DGE/estadisticas/2009/anual/Generacion_Neta_2009_2.pdf	INE, Nicaraguan Institute of Energy "Instituto Nicaragüense de Energía" Generation Statistics
/ipcc/	www.ipcc-nggip.iges.or.jp	IPCC publications
/unfccc/	http://cdm.unfccc.int	UNFCCC
/US_EIA/	http://www.eia.gov/	U.S. Energy Information Administration home site
	http://tonto.eia.doe.gov/dnav/pet/pet_pri_spt_s1_a.htm	U.S. Energy Information Administration Fuels Spot Prices

Table 7-4: Interviewed Persons

Reference	Mol ¹		Name	Organisation / Function
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Reference	Moi ¹		Name	Organisation / Function
//IM01/	V	☒ Mr. ☐ Ms.	Manuel Cajellas M.	Plant Manager – Amayo
//IM01/	V	☐ Mr. ☒ Ms.	Mariana Barrios S.	Environmental Coordinator – Amayo
//IM01/	V	☒ Mr. ☐ Ms.	Nestor Gómez	Operation Chief - Amayo
//IM01/	V	☒ Mr. ☐ Ms.	Carlos Jose Tapia	Operator – Amayo
//IM01/	V	☒ Mr. ☐ Ms.	Ervin Ramón Perez	Field Supervisor – Amayo
//IM02/	V	☒ Mr. ☐ Ms.	Alcro Fco. Galeano	O&M Manager - Suzlon

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

ANNEX

- A1:** Verification Protocol
- A2:** Appointment / Authorisation statements

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 <i>Forward Action Requests</i>)
Raw data generation				
• 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	• Installation of modern and state of the art equipment • Process control 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	• 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 • Insufficient accuracy	• Site – visit (maintenance dept., gas supplier) • 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	• 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 <i>Forward Action Requests</i>)
technology • Accuracy of values supplied by Third Parties	organized • Training • Internal audit procedures • Internal check of QA/QC measures of involved Third Parties	• Inappropriate QA/QC measures of Third Parties	• Check of CDM related procedures • 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				
• Wrong data transfer from raw data to daily and monthly aggregated reporting forms • IT Systems • Spread sheet programming • Manual data transmission	• Cross-check of data • Plausibility checks of various parameters. • Appropriate archiving system • Clear allocation of responsibilities • Application of CDM Management system procedures	• 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	• 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	• 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 <i>Forward Action Requests</i>)
- Data protection - Responsibilities	- Usage of standard software solutions (Spreadsheets) - Limited access to IT systems - Data protection procedures	- Manual data transfer mistakes - Unintended change of spread sheet programming or data base entries - Problems caused by updating/upgrading or change of applied software	- Check of data archiving system - Check of application of Management system procedures	
Other calculation parameters				
Emission factors, oxidation factors, coefficients	The values and data sources applied are defined in the PDD and monitoring plan	- 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)	- Update-check of regulatory framework - Countercheck of the applied MP in the MR against the methodology and the PDD	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 <i>Forward Action Requests</i>)
- Applied formulae - Miscalculation - Mistakes in spread-sheet calculation	- 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	The danger of miscalculation can only be minimized.	- Countercheck on the basis of own calculation. - Spread sheet walk-through. - Plausibility checks - Check of plots	See Table A-2
Monitoring reporting				
- Data transfer to the author of the monitoring report - Data transfer to the monitoring report - Unintended use of outdated versions	- An experienced CDM consultant is responsible for monitoring reporting. - CDM QMS procedures are defined	- The danger of data transfer mistakes can only be minimized - Inappropriate application of QMS procedures	- Counter check with evidences provided. - Audit of procedure application	See Table A-2

Table A-2: (Project specific) Retroactive GS Verification Checklist

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
1. Project history				
1.1 Open issues from GS validation (EB 55 Annex 1, §§ 181-183, 188c, 190c) Check (esp. in case of 1 st periodic verification) whether there are any open issues indicated in the validation report (e.g. FAR)?	/VAL/ /GSRep/ /ACM/ /ERPA/ /SR/	<i>Description:</i> No FAR has been raised by the DOE who has performed the GS validation of the project activity. Nevertheless the Gold Standard has raised a FAR: <i>“The DOE shall check during verification that status of Educational Centre and whether the DNA will operates as broker for the period reviewed”;</i> <i>Justification of evidences:</i> The GS Validation Report^{/VAL/} has been checked. Furthermore the Gold Standard Report^{/GSRep/} performed by the GS was also checked. <i>Conclusion:</i> According to the Gold Standard Report^{/GSRep/}, <i>“the Educational Centre consists of the utilization of an area within the command building for didactic proposes and not the construction of a separate building per se”.</i> There is meeting room located in the command building of Amayo used for didactic proposes. Visitors are received in this meeting room. Moreover presentations are given and talks are also taken place inside this room. Furthermore tours are given through the wind park facilities. According to the Cooperation Agreement^{/ACM/} signed between	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		MARENA and CEA, a contribution in the form of a share of the income from CERs will be made in case MARENA place the CER's generated by the project activity. At the time of site visit the CER's of the 1st monitoring period have been sold to CF Carbon Fund Limited^{/ERPA/}. The ERPA signed between CEA and CF Carbon Fund Limited has been checked. Therefore no contribution is required to be given to MARENA. The verification team concludes that the FAR is now closed.		
1.2 Open issues from previous verification (EB 55 Annex 1, § 193) Check in case of further periodic verifications whether there are any open issues indicated in previous verification (FAR)?		As this is the first periodic verification, no previous verification has been carried out. Therefore this item is not applicable.	n.a.	n.a.
1.3 Requests for Deviations / Revisions of MP (EB 55 Annex 1, §§ 201, 203, 212, 219) Check if there have been any requests for deviations from the registered monitoring plan or requests for revisions of the monitoring plan. If any, make sure that the monitoring report reflects the application of the approved guidance from the CDM EB regarding the Rfdev. and that those issues are subject to verification?	/unfccc/ /NAL/	<i>Description:</i> No RfDev or RfRevMP have been published before the start of the verification. <i>Justification of evidences:</i> The published project related documentation was checked. <i>Conclusion:</i> No RfDev or RfRevMP have been published before the start of the verification.	OK	OK
1.4 Initial verification In case an initial verification has been carried out, check if all FARs, recommendations etc. have been addressed appropriately.		As this is the first periodic verification, no previous verification has been carried out. Therefore this item is 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.
1.5 Initial project implementation (EB 55 Annex 1, §§ 182, 195-201) <i>In case of first periodic verification: 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 report on the corresponding statuses and starting dates accordingly.</i> <i>Also, discuss – if applicable – any approvals of the necessary request of notification or request for approval of changes from the project activity as described in the registered PDD (EB 48 Annex 66/67).</i> <i>In case of further periodic verifications: Go to next chapter</i>	/PDD/	<i>Description:</i> The project has been implemented and operated as per registered PDD and all physical features of project are in place. <i>Justification of evidences:</i> PDD has been checked. <i>Conclusion:</i> The project is implemented as stated in the registered PDD.	OK	OK
2. Update on Changes and Incidents (during the Monitoring Period)				
2.1 Technical equipment (EB 55 Annex 1, § 187) <i>Check if relevant technical equipment of the project activity has been exchanged or modified during the monitoring period. Further ensure that consistent designations of key equipment (meters etc.) in PDD, MR and calculation spreadsheet are applied</i> <i>Check whether any changes occurred that may have impact on the GS qualification of the project, in</i>	/IM01/ /PDD/ /SR/ /MR/ /VerR/ /logbook/	<i>Description:</i> As this is the first verification, it was evidenced during the site visit that the equipment is in line with the registered PDD. There are 19 turbines in the wind park, each one of 2.1 MW, totalizing 39.9 MW. Technical specifications of the turbines and the installation manual of the turbines supplier (SUZLON) were checked. On 2009/04/29 the main power meter had failed. The PP informed to the CNDC about this situation, a new power meter	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>particular with reference to any potential changes in key parameters leading to an overall impact on sustainable development of the project.</i> <i>Consider e.g. interviews with operational personnel, QMS records, maintenance records, instrument specifications.</i> <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, the emission reduction calculation and/or the scoring of the sustainability indicators</i> <i>Also, discuss –if applicable- any approvals of the necessary request of notification or request for approval of changes from the project activity as described in the registered PDD (EB 48 Annex 66/67).</i>		was installed and all the required corrective actions were performed. This has been already addressed and solved in the CDM verification. Please refer to the CDM Verification Report 1st Monitoring^{/VerR/}. <i>Justification of evidences:</i> Operation documents^{/logbook/}, the CDM Verification Report^{/VerR/} and the CDM Monitoring Report^{/MR/} were checked. Also interviews were performed on site. <i>Conclusion:</i> No discrepancies were identified between the information source. Even though a failure in the main power meter was detected, the PP performed the adequate corrective actions required by informing the national grid authority and replacing the equipment. All this situation has been already assessed and solved in the CDM Verification Report^{/VerR/}. Since this change did not represented any major impact to the project activity it can be confirmed that is still in line with the registered PDD. Also, considering that this change is related only to the monitoring equipment for project power generation there is no impact on the GS qualification of the project.		
2.2 Operation modes (EB 55 Annex 1, § 195) <i>Check if relevant operation modes of the project activity have been exchanged or modified during the monitoring period.</i>	/IM01/ /MR/ /PDD/ /PDD A/ /logbook/	<i>Description:</i> No operation modes have been changed or modified since project implementation. <i>Justification of evidences:</i> By means of interviews with the operational personnel it was	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>Consider e.g. interviews with operational personnel, operation log sheets, data management system records.</i> <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, the emission reduction calculation and/or the scoring of the sustainability indicators</i> <i>Also, discuss – if applicable – any approvals of the necessary request of notification or request for approval of changes from the project activity as described in the registered PDD (EB 48 Annex 66/67).</i>		evidenced, that the operation modes were not changed or modified since project implementation. <i>Conclusion:</i> The verification team confirms that the project is in line with the registered PDD and sustainability annex^{/PDD A/}.		
2.3 Incidents (EB 55 Annex 1, § 187, 208a) <i>Identify if there have been any significant incidents, deviant operation modes and / or downtimes of the equipment?</i> <i>Consider e.g. interviews with operational personnel, operational log sheets, analysis of performance data.</i>	/IM01/ /logbook/ /SR/ /MR/ /VerR/	<i>Description:</i> On 2009/04/29 the main meter had failed. The meter was repaired. This has been already addressed and solved in the CDM verification. Please refer to the CDM Verification Report 1st Monitoring^{/VerR/}. <i>Justification of evidences:</i> Operation documents^{/logbook/} were checked and interviews were performed on site. CDM Verification Report 1st Monitoring^{/VerR/} was also checked. <i>Conclusion:</i> Although the main meter has failed during this monitoring period, this issue has been already addressed and solved in the CDM verification.	OK	OK
2.4 Personnel <i>Find out, if relevant personnel w.r.t. monitoring has</i>	/IM01/ /IM02/	<i>Description:</i> Personnel from CEA were not exchanged.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>been exchanged?</i> <i>In case of changes, assure that the implemented monitoring procedures have not been affected.</i>		<i>Justification of evidences:</i> Interviews were performed with personnel from the wind park. <i>Conclusion:</i> Relevant persons have not been exchanged during the monitoring period.		
2.5 Legislation Find out whether relevant legislation with effect on the project activity in the host country has been changed. In any case data source shall be referenced.	/IM01/ /SR/ /EIA/ /MEP/ /45-94/ /EL/	<i>Description:</i> The approved Environmental Impact Study^{/EIA/} of the project activity establishes that the PP has to provide reports regarding the following subjects: • Study of birds collision • Water quality analysis in lakes and rivers • CO emissions monitoring • Domestic waste water • Sludge from domestic waste water treatment system • Environmental Noise • Audiometric exams The EIA defines that these reports have to be delivered and prepared at the moment that the authority request them. However, the PP has voluntarily prepared these reports annually. Up to date two packages of Environmental reports have been sent to the authority, one covering the period of February 2009 – June 2009 and a second one for the period of July 2009 – June 2010. A monitoring Environmental Plan^{/MEP/} is done annually to control the fulfilment of those requirements stated in the (EIA). Records	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		of the fulfilment were checked. The environmental legislation applicable to the project activity is the Decree No. 45-94^{/45-94/} of 1994-10-31. Currently this legislation has been changed on December 2006, but since the approved EIA is dated on November 2006 the project activity is ruled by the Decree No. 45-94^{/45-94/}. The environmental^{/EL/} license is still valid at the time of the site visit. <i>Justification of evidences:</i> The PP had provided annually reports to the environmental authority. The environmental license, approved EIA, Environmental Plan 2009 and Environmental Plan 2010 have been reviewed. <i>Conclusion:</i> Relevant legislation was considered, no relevant changes since the implementation of the project activity were identified.		
3. Monitoring Report – General				
3.1 Monitoring period Check if the monitoring period is in line with a) the crediting period and/or b) previous monitoring periods?	/unfccc/ SR/	<i>Description:</i> The monitoring period lasts from 2009-04-12 to 2009-09-30. Both days are included. The start day of the crediting period according to UNFCCC regulations started 2009-04-12 therefore the monitoring period is in line with the crediting period. <i>Justification of evidences:</i> The UNFCCC and GS web site were checked. <i>Conclusion:</i> According to the Gold Standard 1.0 requirements, emission reductions of projects under the retroactive project cycle which occurred prior to GS registration may be eligible for retroactive	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		crediting for up to a maximum period of two years prior to the date of Gold Standard registration. The project activity was registered as a Gold Standard CDM project on 2010/08/27 and the verification covers the monitoring period 2009-04-12 to 2009-09-30. Also, according to the UNFCCC web site, the crediting period established is from 2009-04-12 to 2016-04-11. Therefore the monitoring period is in line with the GS requirements and the CDM crediting period.		
3.2 Publication of the Monitoring Report <i>Check if the monitoring report has been made publicly available on the UNFCCC website before the verification commenced.</i>	/GS/	<i>Description:</i> The draft Gold Standard Sustainability Monitoring Report^{SR/}, as received from the project participants, has not been made publicly available neither on the dedicated UNFCCC CDM or the Gold Standard website. Since this report covers only the monitoring of the project sustainability indicators which are only evaluated under the Gold Standard rules, it is not required to publish the sustainability monitoring report. However, in the CDM Verification Report^{VerR/} it has been assessed the publication of the CDM monitoring report for the corresponding monitoring period. <i>Justification of evidences:</i> Gold Standard Version 1.0^{/GS/} <i>Conclusion:</i> Since this verification covers solely the evaluation of the sustainability indicators (GS part) of the monitoring period only the GS requirements are applicable. Hence, it is not required to make publicly available the Sustainability Monitoring Report^{SR/}.	OK	OK
3.3 References	/SR/	<i>Description:</i>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>Check if the carbon monitoring report and sustainability monitoring report provides the correct references.</i>		All references are correct given in the monitoring report. <i>Justification of evidences:</i> The draft monitoring report provided by the PP was checked. <i>Conclusion:</i> All references provided are correct.		
3.4 Completeness (EB 55 Annex 1, §§ 182, 195, 202, 206) <i>Assess if the carbon monitoring report and sustainability monitoring report are complete, i.e. have all relevant issues been addressed? The MR shall include: (i) The implementation status of the project during the monitoring period (ii) Monitoring systems and procedures incl. QA/QC system employed (iii) all parameters to be monitored and reported at the intervals required by the MP and the Meth (iv) information on calibration of monitoring instruments (v) Emission factors, IPCC default values etc. (vi) reference to any deviation request approved by the EB, (vii) calculation of ER including reference to formulae and methods used (viii) comparison of the actual ER claimed in the MP with the estimate in the registered PDD and explanation in case of significant increase.</i>	/SR/	Yes all relevant issues are covered; in detail: ☐ (i) Implementation status ☒ (ii) Monitoring systems and procedures (esp. QA/QC) ☒ (iii) All parameters and corresponding intervals ☒ (iv) Information on calibration of monitoring instruments ☒ (v) Emission factors, IPCC default values etc. ☒ (vi) Reference to deviations, if applicable ☒ (vii) Calculation of emission reductions ☒ (viii) Comparison of ER with PDD estimation (CAR R1) Additional information is required in the MR: • Please include the SD assessment matrix with current scoring. Changes in scoring (if any) need to be justified. • Please include the implementation status of mitigations measures as described in the sustainable indicators monitoring plan (p. 23 – 30). These are amongst others mitigation measures during construction phase, installation of sonic deterrents, distance to households... • Please clarify also the status of the Educational Centre and whether the DNA will operate as broker for the	CAR R1	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		period reviewed (referring to GS report, 26/05/2010) and add respective information in the MR.		
3.5 Comparison of estimated and actual ER (EB 55 Annex 1, § 198c) <i>Have differences between the monitored ER and the ex-ante ER been reported and appropriately justified? Please assess potential impacts on baseline and additionality.</i>	/SR/ /PDD/ /VerR/	Description: The annual estimation of emission reduction according to the registered PDD is 120,811 ton CO ₂ /year. The monitoring period lasts from 2009-04-12 to 2009-09-30. The estimation of emission reduction of 6 months corresponds to 60,405 ton CO ₂ /year. During this monitoring period the project activity has reduced 42,871 ton CO ₂ which is less than the estimation. Justification of evidences: The Verification Report ^{VerR/} and registered PDD were checked. Conclusion: No impacts on baseline and additionality have been identified.	OK	OK
3.6 Transparency <i>Assess if the carbon monitoring report and sustainability monitoring report are transparent, i.e. clear and unequivocal in all respect?</i>	/SR/	Description: The monitoring report is free of unequivocal and unclear issues. Justification of evidences: The draft monitoring report provided by the PP was checked. Conclusion: The monitoring report can be assessed to be transparent. No ambiguous statements have been identified	OK	OK
3.7 Misstatements on general issues <i>Assess whether the carbon monitoring report and sustainability monitoring report are free of material</i>	/SR/	Description: The monitoring report is free of misstatements on general issues.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>misstatements regarding issues other than the monitoring parameters.</i> <i>Discuss the monitoring parameters in detail in chapter "Monitoring Parameters".</i>		<i>Justification of evidences:</i> The draft monitoring report provided by the PP was checked. <i>Conclusion:</i> The monitoring report can be assessed to be free of material misstatements. No mistakes have been identified		
3.8 Deviations from the validated monitoring plan and GS monitoring matrix (EB 55 Annex 1, §§ 196-197, 204-206, 211-212) <i>Assess whether the carbon monitoring report and sustainability monitoring report are in line with the validated monitoring plan and the GS monitoring matrix?</i>	/SR/ /PDD A/	<i>Description:</i> The monitoring report is in line with the validated monitoring plan and the GS monitoring matrix. <i>Justification of evidences:</i> The draft monitoring report^{/SR/} provided by the PP was crosschecked with the revised monitoring plan and the GS monitoring matrix^{/PDD A/}. <i>Conclusion:</i> No deviations from the validated monitoring plan and GS monitoring matrix have been identified.	OK	OK
3.9 Deviations from the approved methodology (EB 55 Annex 1, §§ 200, 201, 203) <i>Assess whether the MR in line with the applied monitoring methodology?</i>	/SR/ /PDD A/ /ACM000 2/	<i>Description:</i> The monitoring reports were assessed against the requirements of the GS. No deviations were identified. <i>Justification of evidences:</i> The draft monitoring report^{/SR/} provided by the PP was crosschecked with the applied methodology. <i>Conclusion:</i> No deviations from the requirements of the GS have been identified.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
4. Monitoring Parameters				
4.1. EG_y		Description: Electricity supplied by the project activity to the grid.		
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/VerR/	Description: It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . Justification of evidences: The CDM Verification Report was checked. Conclusion: No discrepancies were identified.	OK	OK
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value given in the carbon monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/VerR/	☒ Correct ☐ Not correct Description: It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . Justification of evidences: The CDM Verification Report was checked. Conclusion: No discrepancies were identified.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>	/VerR/	<i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . <i>Justification of evidences:</i> The CDM Verification Report was checked. <i>Conclusion:</i> No discrepancies were identified.	OK	OK
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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>	/VerR/	<i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . <i>Justification of evidences:</i> The CDM Verification Report was checked. <i>Conclusion:</i> No discrepancies were identified.	OK	OK
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be</i>	/VerR/	<i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . <i>Justification of evidences:</i> The CDM Verification Report was checked. <i>Conclusion:</i> No discrepancies were identified.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>				
Sustainability indicators				
4.2. Actions to promote sustainable use of land				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/IM01/ /Trees/ /Beach/ /PDD A/ /GSRep/	<i>Description:</i> This parameter is measured thorough the realization of the following activities: • Beach clean ups: clean of beaches is coordinated by AMAYO inviting voluntaries from towns located around the project activity. Equipment, transportation and food has been given by Amayo to the voluntaries. Signs were also installed at the beaches, roads or towns to promote environmental protection. This parameter is measured annually. A Monitoring Report^{/Beach/} including all actions performed regarding this indicator, budgets and photos were available to the verification team. Donation of trees: this parameter is measured through actions performed regarding trees donation. This parameter is measured annually. Purchase records^{/Trees/} of trees were available to the verification team. During this verification period corresponding to the Pre-CDM period 10,000 trees were donated.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		• Contributions to local nurseries: this parameter will be measured through contributions to local nurseries such as donations of money, equipment or materials. Records of contribution will be available to the verification team. The monitoring frequency is annual. During this retroactive verification period no contributions were given to local nurseries. This is explained because the GS registration was on 2010/08/27, date when this commitment has been acquired. <i>Justification of evidences:</i> Interviews were performed during on site visit. Purchase records^{/Trees/} of trees were also available to the verification team. The additional PDD Annex^{/PDD A/} and the GS Six Weeks Review Report^{/GSRep/} were checked. <i>Conclusion:</i> The measurement method is in line with the additional PDD Annex^{/PDD A/}.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is consistent with the sources given by the PP. <i>Justification of evidences:</i> The Sustainability MR^{/SR/} was checked accordingly. <i>Conclusion:</i> The information complies with the description given in the	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		monitoring reports.		
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy EB 55 Annex 1, §§ 205c, 206a) <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>		It is not applicable.	n.a.	n.a.
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be</i>	/IM01/ /SR/ /PDD A/ /Beach/ /Trees/	Description: The verification team has checked the evidence provided by the PP. Justification of evidences: Purchase records ^{/Trees/} of trees and the beach cleaning Monitoring Report ^{/Beach/} were checked. Conclusion: The determination method is in line with the requirements described in the Sustainable Development (SD) Matrix. All	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period. .</i>		required evidence was provided by the PP. Information given in the monitoring report is consistent with the sources given.		
4.3. Number of trees planted during reforestation / afforestation				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/IM01/ /SR/ /PDD A/ /Ref_Af/	<i>Description:</i> This parameter is measured through the number of trees planted. According to the Annex to the PDD ^{/PDD A/} the monitoring frequency is only once. A map ^{/Ref_Af/} has been elaborated to monitor the reforestation works. During this retroactive verification period no trees were planted. This is explained because the GS registration was on 2010/08/27, date when this commitment has been acquired. <i>Justification of evidences:</i> Interviews were performed during on site visit. The additional PDD Annex ^{/PDD A/} and the GS Six Weeks Review Report ^{/GSRep/} was checked. <i>Conclusion:</i> The measurement method is in line with the additional PDD Annex ^{/PDD A/} .	OK	OK
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e)	/SR/	☒ Correct ☐ Not correct <i>Description:</i>	CLP1	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>		The information included in the Sustainability MR^{/SR/} corresponds to this verification period. However, more information is required on the future activities to be performed. <i>Justification of evidences:</i> The Sustainability MR^{/SR/} was checked accordingly. <i>Conclusion:</i> No discrepancies were identified between information stated in the Sustainability MR^{/SR/} and the real situation. Nevertheless, further information is required regarding the future activities to be performed. CL P1 was raised. (CL P1) Section A.1/Number of trees planted during reforestation/afforestation: • Please provide information on the timeline of planned reforestation/afforestation activities.		
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy EB 55 Annex 1, §§ 205c, 206a) <i>In case of measured (or estimated) values, check</i>		It is 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.
<i>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>				
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>	/IM01/ /SR/ /PDD A/ /Ref_Af/	Description: The verification team has checked the evidence provided by the PP. Furthermore interviews on site were also performed. Justification of evidences: The reforestation map ^{/Ref_Af/} has been checked. Conclusion: The determination method is in line with the requirements described in the SD Matrix. All required evidence were provided by the PP.	OK	OK
4.4 Number and description of maintenance activities undertaken by project members to the reforestation				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was</i>	/IM01/ /SR/ /PDD A/	Description: The following will be the main activities that the PP will perform in order to maintain the reforestation activities:	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/GSRep/	1. Protection against weed and 2. Irrigation A person designed by the PP will be responsible to perform such maintenance activities. The Environmental Coordinator or the Field Supervisor will monitor and control the execution of the maintenance activities. An annual report will be prepared including all maintenance activities undertaken and monitoring of such activities. As the first reforestation activity was performed on July 2010 and this period corresponds to the 1st Monitoring Period (2010/04/12 to 2009/09/30) no maintenance can be performed and therefore this parameter cannot be measured. <i>Justification of evidences:</i> Interviews were performed during on site visit. The additional PDD Annex^{/PDD A/} and the GS Six Weeks Review Report^{/GSRep/} was checked. <i>Conclusion:</i> The measurement method is in line with the additional PDD Annex^{/PDD A/}. At the time of site visit, the parameter cannot be measured by the PP.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i>	/SR/	☒ Correct ☐ Not correct <i>Description:</i> The information included in the Sustainability MR^{/SR/} is correct. However, further information is required regarding the future	CLP2	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>		activities to be performed. <i>Justification of evidences:</i> The Sustainability MR^{/SR/} was checked accordingly. <i>Conclusion:</i> No discrepancies were identified between information stated in the Sustainability MR^{/SR/} and the real situation. Nevertheless, further information is required regarding the future activities to be performed. CL P2 was raised. (CL P2) Section A.1/Number and description of maintenance activities: • Please clarify when the annual report for 2009 will be prepared and add respective information in the MR.		
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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</i>		It is 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.
<i>occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i>				
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>	/IM01/ /SR/ /PDD A/ /Ref_Af/	Description: The verification team has performed interviews during on site visit. Maintenance activities can be performed after reforestation was finished. According to the evidence ^{/Ref_Af/} provided, reforestation was initiated on July 2010. Therefore this parameter can be monitoring after such date. Justification of evidences: Interviews were performed during on site visit. The additional PDD Annex ^{/PDD A/} and the GS Six Weeks Review Report ^{/GSRep/} was checked. Conclusion: The measurement method is in line with the additional PDD Annex ^{/PDD A/} . At the time of site visit, the parameter cannot be measured by the PP.	OK	OK
4.5 Number of birds collision				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and</i>	/IM01/ /Birds/	Description: This parameter is measured thorough visual inspections taken place twice per week by the Field Supervisor. Events are registered in a Report since start of operation. Furthermore bird collisions alarms are installed in the wind park.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>		<i>Justification of evidences:</i> Interview with the Field Supervisor were performed and Monitoring Reports^{/Birds/} were checked. <i>Conclusion:</i> No bird's collisions have been registered in the Monitoring Reports.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/IM01/ /Birds/ /SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is correct. <i>Justification of evidences:</i> The Sustainability MR^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the monitoring reports.	OK	OK
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <i>In case of measured (or estimated) values, check</i>		It is 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.
<i>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>				
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period. .</i>	/IM01/ /Birds/ /SR/	Description: The verification team has checked the monitoring report of bird's collision. No bird's collisions have been registered in the Monitoring Report. Moreover a writing procedure is available which describes the monitoring method to be followed. Furthermore during the walkthrough on the project site, the verification team could verify the operation of the bird collisions alarms installed in the wind park. All alarms operate correctly. Interviews with employees and review of documentation were performed by the verification team. Justification of evidences: Interview with the Field Supervisor were performed and Monitoring Reports ^{/Birds/} and procedures were checked. Conclusion: The determination method is in line with the requirements described in the SD Matrix. All required evidence were provided by the PP.	OK	OK
4.6 Water quality and quantity (Lake water, river water, project's waste water & sludge from project's waste water)				

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/IM01/ /Water/ /EIA/ /Com_ Mar/	<i>Description:</i> This parameter is measured through laboratories analysis performed by a water laboratory which is hired by the PP. The laboratory analysis shall include the following: 1. Water pH in lake and river waters; 2. Water temperature in lake and river waters; 3. Water BOD in lake and river waters; 4. Dissolved oxygen level in lake and river waters; 5. Water pH in project's waste waters; 6. Water temperature in project's waste waters; 7. Total Sedimentable solids (TSS) in project's waste waters; 8. Water BOD in project's waste waters; 9. Water COD in project's waste waters; 10. Grease and oil in project's waste waters 11. Phosphorus level in project waste waters; 12. Fecal coliforms and total coliforms in project waste waters; 13. Methylene blue active substances in project's waste waters; 14. Humidity in sludge from project's waste water treatment system; 15. Nutrients in sludge from project's waste water treatment system and 16. Organic matter in sludge from project's waste water treatment system These analyses shall be performed annually to comply with the requirements stated in the EIA. The analysis was performed in	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		June 2009. It is MARENA role to identify when a parameter is out of limit and to request correction actions when would be necessary. Furthermore the PP has asked to the Environmental Authority not to measure the parameter <i>“organic matter in sludge from project's waste water treatment system”</i> because a septic tank is installed at the project facilities and therefore no monitoring of such parameter is necessary. The authority has complied with such justification and has provided approval^{/Com_Mar/} on 2009/07/09. <i>Justification of evidences:</i> Laboratory analysis^{/Water/} were provided by the PP. The EIA and its approval was checked. Official letter^{/Com_Mar/} issued by the authority was also checked. <i>Conclusion:</i> The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP. Finally the PP will not measure anymore the parameter <i>“organic matter in sludge from project's waste water treatment system”</i> as a result of the approval^{/Com_Mar/} given by the authority.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and</i>	/IM01/ /SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is correct. However, detailed information about the results obtained from the water quality analyses is required. <i>Justification of evidences:</i>	GLP3	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>descriptions of the CARs raised.</i>		The Sustainability MR^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the monitoring reports. Nevertheless, the MR requires further information about the results obtained. CL P3 was raised. (CL P3) Section A.3: • Please include the results of the measurements for each parameter separately.		
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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>		It is 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.
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>	/IM01/ /Water/ /Com_Mar/	Description: Interviews were performed on site and Laboratory analysis ^{/Water/} were checked accordingly. All parameters were measured accordingly. The Letter ^{/Com_Mar/} from MARENA dated on 2009/07/09 which accepts and approves that the PP will not measure anymore the parameter “organic matter in sludge from project's waste water treatment system” was also checked. Justification of evidences: Laboratory analysis ^{/Water/} and Letter ^{/Com_Mar/} from MARENA were provided to the verification team. Conclusion: The determination method is in line with the requirements described in the SD development Matrix. All required evidence was provided by the PP. The PP will not measure anymore the parameter “organic matter in sludge from project's waste water treatment system” as a result of the consent ^{/Com_Mar/} given by the authority.	OK	OK
4.7 Carbon Monoxide (CO)				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination</i>	/IM01/ /Com_Mar/	Description: The PP has asked the Environmental Authority not to measure this parameter because no carbon monoxide emission is related to the project activity and therefore no monitoring of such parameter is necessary. The authority has complied with such justification and has provided approval ^{/Com_Mar/} on 2009/07/09. Justification of evidences:	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>		Official letter^{/Com_Mar/} issued by the authority was also checked. <i>Conclusion:</i> The PP will not measure anymore this parameter as a result of the approval^{/Com_Mar/} given by the authority.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/IM01/ /SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is correct. <i>Justification of evidences:</i> The Sustainability MR^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the monitoring reports.	OK	OK
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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</i>		It is 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.
<i>occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i>				
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>	/IM01/ /Com_Mar/	Description: The Letter ^{/Com_Mar/} from MARENA dated on 2009/07/09 which accepts and approves that the PP will not measure anymore the parameter Carbon Monoxide was also checked. Justification of evidences: Letter ^{/Com_Mar/} from MARENA were provided to the verification team. Conclusion: The PP will not measure anymore the parameter Carbon Monoxide as a result of the consent ^{/Com_Mar/} given by the authority. This approach is accepted by the verification team.	OK	OK
4.8 Workers auditive level				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination</i>	/Workers/ /EIA/ /IM01/	Description: This parameter is measured through an audiometry test performed by an external laboratory which is hired by the PP. The test is performed to all workers who work at the wind farm. This parameter is measured annually. The results of the tests are given to the workers. This analysis shall be performed annually to comply with the requirements stated in the EIA. The analysis was performed in	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>		June 2009 and then in July 2009. It is MARENA role to identify when a parameter is out of limit and to request correction actions when would be necessary. <i>Justification of evidences:</i> Audiometry tests ^{/Workers/} were provided by the PP. The EIA and its approval were checked. <i>Conclusion:</i> The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/IM01/ /SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is correct. However, detailed information about the results obtained from the audiometry tests is required. <i>Justification of evidences:</i> The Sustainability MR^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the monitoring reports. Nevertheless, the MR requires further information about the results obtained. CL P4 was raised. (CL P4) Section A.5: • Please include the results of the measurements (workers	CL P4	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		hearing level, project noise level).		
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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>		It is not applicable.	n.a.	n.a.
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be</i>	/Workers/ /EIA/ /IM01/	Description: Interviews were performed on site. Audiometry tests ^{/Workers/} were also checked. Results of the audiometry tests ^{/Workers/} were checked. No several disorders with relation to the wind turbines noise have been registered in the results. Justification of evidences: Audiometry tests ^{/Workers/} were checked. Conclusion:	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>		The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP. Interviews were also performed on site.		
4.9 Project Noise level (db)				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/Noise/ /EIA/ /IM01/	Description: This parameter is measured through an Environmental Noise Analysis performed by an external laboratory which is hired by the PP. This analysis shall be performed annually to comply with the requirements stated in the EIA. The analysis was performed in August 2009. It is MARENA role to identify when a parameter is out of limit and to request correction actions when would be necessary. Justification of evidences: Environmental Noise Analysis ^{/Noise/} was provided by the PP. The EIA and its approval was checked. Conclusion: The determination method is in line with the requirements described in the SD development Matrix. All required evidence was provided by the PP.	OK	OK
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i>	/IM01/ /SR/	☒ Correct ☐ Not correct Description: The information given in the monitoring report is correct. However, detailed information about the results obtained from	CLP4	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>		the Environmental Noise Analysis ^{/Noise/} is required. <i>Justification of evidences:</i> The Sustainability MR ^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the monitoring reports. Nevertheless, the MR requires further information about the results obtained. CL P4 was raised, please refer to it.		
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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>		It is not applicable.	n.a.	n.a.
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205,	/Noise/ /EIA/	<i>Description:</i> Interviews were performed on site. Environmental Noise	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>	/IM01/	Analysis ^{/Noise/} was also checked. <i>Justification of evidences:</i> Environmental Noise Analysis ^{/Noise/} was checked. <i>Conclusion:</i> The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP. Interviews were also performed on site.		
4.10 Access to energy services				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/PDD A/ /Fuel/ /IM01/	<i>Description:</i> This indicator is measured annually thorough the monitoring of the following parameters: Amount of fossil fuels consumption avoided by the project: this parameter will be calculated^{/Fuel/} in order to get an estimation of the amount of barrels of each fuel (fuel oil and diesel) that the project contributed to avoid. The calculation is done using the average of fossil fuels consumption per megawatt hour for the three most recent years. The resulting value (which is the fossil fuel efficiency of the Nicaraguan grid) will be multiplied by the project activity annual generation. This parameter will be monitored annually.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		• Differences between spot price for energy (short-run marginal costs) and the price Amayo receives: this parameter will be obtained through calculation^{/Fuel/} of the difference between the spot price of energy and the prices which is received by Amayo. This parameter will be monitored annually. <i>Justification of evidences:</i> Interviews were performed during on site visit. The excel spread sheet^{/Fuel/} where calculations will be performed was also checked. The additional PDD Annex^{/PDD A/} and the GS Six Weeks Review Report^{/GSRep/} was checked. <i>Conclusion:</i> The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP. As this parameter shall be measured annually and the GS registration was on 2010/08/27, this parameter is not required to be measured at this time.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/IM01/ /SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is correct. <i>Justification of evidences:</i> The Sustainability MR^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the	OK	OK



Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		monitoring reports.		
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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>		It is not applicable.	n.a.	n.a.
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be</i>	/PDD A/ /Fuel/ /IM01/	Description: The verification team has checked the method stated in the additional PDD Annex ^{/PDD A/} . Justification of evidences: The additional PDD Annex ^{/PDD A/} and the Sustainability MR ^{/SR/} were checked. Conclusion: The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>		by the PP. Interviews were also performed on site. For this verification period no analysis was required to be done.		
4.11 Value of fossil fuel avoided by the project				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>	/PDD A/ /Fuel/ /IM01/	<i>Description:</i> This parameter will be calculated^{/Fuel/} annually in order to get the value of fossil fuel avoided by the project activity taking into consideration the energy generated by Amayo. This parameter is calculated using the same information obtained as a result of the calculation of the parameter "Amount of fossil fuels consumption avoided by the project". Additional the price per volume unit of fossil fuel is used to get the final value of the parameter. <i>Justification of evidences:</i> Interviews were performed during on site visit. The excel spread sheet^{/Fuel/} where calculations will be performed was also checked. The additional PDD Annex^{/PDD A/} and the GS Six Weeks Review Report^{/GSRep/} was checked. <i>Conclusion:</i> The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP. As this parameter shall be measured annually and the GS registration was on 2010/08/27, this parameter is not	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		required to be measured at this time.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/IM01/ /SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is correct. <i>Justification of evidences:</i> The Sustainability MR ^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the monitoring reports.	OK	OK
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <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>		It is 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.
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>	/PDD A/ /Fuel/ /IM01/	<i>Description:</i> The verification team has checked the method stated in the additional PDD Annex ^{/PDD A/} . <i>Justification of evidences:</i> The additional PDD Annex ^{/PDD A/} and the Sustainability MR ^{/SR/} were checked. <i>Conclusion:</i> The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP. Interviews were also performed on site. For this verification period no analysis was required to be done.	OK	OK
4.12 Number and description of events related to technology transfer activities undertaken by project members				
a) Measurement / Determination method (EB 55 Annex 1, §§ 184-185, 202-203) <i>Describe how the monitoring parameter was measured / determined.</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i>	/IM01/ /SR/ /Tech/	<i>Description:</i> This parameter is measured through the number and description of events related to technology transfer activities such as visits to the wind park or visits to universities by employees from Amayo to give some talks or presentation of the wind park. This parameter is measured annually. Furthermore feedback sheets from the visitors are also available. <i>Justification of evidences:</i>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.		Attendance registers ^{/Tech/} of the visits to the wind park were checked. <i>Conclusion:</i> The determination method is in line with the requirements described in the SD Matrix. All required evidence was provided by the PP.		
b) Correctness (EB 55 Annex 1, §§ 202, 206, 221e) <i>Determine whether the value or information given in the sustainability monitoring report is correct.</i> <i>In case of mistakes pl. provide details and descriptions of the CARs raised.</i>	/IM01/ /SR/	☒ Correct ☐ Not correct <i>Description:</i> The information given in the monitoring report is correct. <i>Justification of evidences:</i> The Sustainability MR ^{/SR/} was checked. <i>Conclusion:</i> The information complies with the description given in the monitoring reports.	OK	OK
c) QA/QC Procedure (EB 55 Annex 1, §§ 184b (vii), 205c, 206) <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration and maintenance of the monitoring equipment has been carried out by competent personnel.</i>		It is not applicable.	n.a.	n.a.
d) Accuracy (EB 55 Annex 1, §§ 205c, 206a) <i>In case of measured (or estimated) values, check whether the accuracy of equipment used for</i>		It is 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.
<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>				
e) Verification (EB 55 Annex 1, §§ 184a, 184b, 186, 203, 205, 206b) <i>Describe how the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the value was verified. Consider the measurement / determination procedure, accuracies, QA/QC procedures. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences (external / internal, oral or documented). Further whether sufficient evidence is available, both in terms of frequency (time period between evidence) and in covering the full monitoring period.</i>	/PDD A/ /Tech/ /IM01/	Description: The verification team has checked several attendance registers ^{/Tech/} which provided evidence of the visits to the wind park. Justification of evidences: The attendance registers ^{/Tech/} and the Sustainability MR ^{/SR/} were checked. Conclusion: The determination method is in line with the requirements described in the SD Matrix. Attendance registers of all visits to the wind park during the verification period were checked. No discrepancies were identified between the information stated in the Sustainability MR ^{/SR/} and the data source provided by the PP.	OK	OK
5. ER Calculation				
5.1 Traceability (EB 55 Annex 1, § 182) <i>Assess if the calculation is fully traceable. In case of complex calculations an Excel calculation spreadsheet shall be used. All applied formulae must be</i>	/Ver/	Description: It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . Justification of evidences: The CDM Verification Report was checked.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>visible.</i>		<i>Conclusion:</i> No discrepancies were identified.		
5.2 Parameter consistency (EB 55 Annex 1, § 186) <i>Assess whether all internal and external parameters and data used for calculation are applied consistently in the monitoring report and the calculation spreadsheet?</i> <i>Consider only the correct data exchange between the monitoring report and the calculation spreadsheet (if any). Further ensure that consistent designations for parameters in PDD, MR, calculation spreadsheet are applied. The evaluation of the correctness of the parameter values itself should be discussed in the chapter "Monitoring Parameters".</i>	/VerR/	<i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . <i>Justification of evidences:</i> The CDM Verification Report was checked. <i>Conclusion:</i> No discrepancies were identified.	OK	OK
5.3 Applied formulae (EB 55 Annex 1, §§ 204-206) <i>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.</i>	/VerR/	<i>Description:</i> It was already verified (as CDM project) by TÜV NORD, according to verification report ^{/VerR/} . <i>Justification of evidences:</i> The CDM Verification Report was checked. <i>Conclusion:</i> No discrepancies were identified.	OK	OK
5.4 Completeness of calculation (EB 55 Annex 1, § 205a)	/VerR/	<i>Description:</i> It was already verified (as CDM project) by TÜV NORD,	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
Assess whether the provided calculations are complete and reflect all requirements of the monitoring plan. Check especially that no standard or old values have been used for calculation where calculations based on up-to-date data is required.		according to verification report ^{/VerR/} . <i>Justification of evidences:</i> The CDM Verification Report was checked. <i>Conclusion:</i> No discrepancies were identified.		
6. Quality Management; defined organisational structure, responsibilities and competencies Internal QA/QC and document control				
6.1 Management System (EB 55 Annex 1, § 184 a (iii)) Check if the GHG data monitoring system is embedded in a (certified) company quality management system, if so, check if all CDM monitoring procedures been fully integrated in the project participant's quality management system. If not how the GHG management system has been implemented.	/IM01/ /IM02/ /OP/ /OPL/ /O&M/ /PCC/ /IM/ /SC/ /SCS/	<i>Description:</i> The PP has no certified quality management system. Amayo has developed and implemented operational procedures including procedures for extract data from the meters. There are procedures for operation and maintenance ^{/IM/;/SC/;/SCS/;/O&M/} issued by Suzlon, which is the supplier of the wind turbines. There are also procedures for carbon credits developed by the PP and the consultancy firm which describe the responsibilities and procedures for data collection, calculation, reporting, and archiving. Procedures for carbon credits ^{/PCC/} include the data management, QA/QC procedures, troubleshooting procedures (according to the applicable legislation) and calibration frequency. <i>Justification of evidences:</i> Last versions of the Operational Procedures ^{/OP/; /OPL/} and the carbon credits procedure were checked. <i>Conclusion:</i>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		All GHG monitoring system is included and integrated in the management system of the wind farm and it could be evidenced and confirmed during site visit that GHG management system is completely implemented in the wind farm.		
6.2 Roles and Positions <i>Check if all roles and positions of each person in the GHG data management process are clearly defined and implemented, from raw data generation to submission of the final data.</i> <i>Check further if only duly qualified personnel is involved in the monitoring procedures.</i>	/IM01/ /PCC/ /TE/	<i>Description:</i> All responsibilities and roles are clearly defined in the Procedures for carbon credits^{/PCC/}. The main responsibilities are listed below: • Emanuel Callejas is the plant manager and he is responsible to ensure calibrations and data quality. • Mariana Barrios is the Environmental Coordinator and she is responsible for input of raw data in the spread sheets and cross check data and corrects any discrepancies. • Nestor Gomez is the Operation Chief and he is responsible for report data gaps and errors and archiving data. It was verify by the verification team that only duly qualified personnel^{/TE/} is involved in the monitoring procedures. For this monitoring period no changes have been made in the responsibilities and roles of each person in the GHG data management process. <i>Justification of evidences:</i> Last version of the Procedures for carbon credits^{/PCC/} was checked. <i>Conclusion:</i> It was verified by the verification team that only duly qualified personnel is involved in the monitoring procedures. Training evidence of all personnel involved in the project was checked.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
6.3 Trainings <i>Check if initial trainings have been carried out, in case deemed necessary.</i>	/IM01/ /IM02/ /TE/	<i>Description:</i> Suzlon (supplier of the turbines) has regularly provided operation and maintenance training to the operational staff. Training was also given by Suzlon during the installation and beginning of operation of the wind farm. Only additional security training sessions have been performed. The operational personnel has been the same since the start-up of the project activity and no relevant changes have been performed in the project operation. Hence, no additional technical training activities have been required. <i>Justification of evidences:</i> Initial training evidences/^{TE/} were provided by the PP and checked by the verification team. The personnel list was reviewed too. <i>Conclusion:</i> The PP had provided initial training to all personnel in the wind farm.	OK	OK
6.4 Troubleshooting procedures <i>Describe relevant troubleshooting measures and assess whether these troubleshooting procedures have been implemented.</i>	/IM02/ /TSP/	<i>Description:</i> Troubleshooting procedures are described in the Alarm Description & Trouble Shooting Manual/^{TSP/} property of Suzlon. <i>Justification of evidences:</i> The Alarm Description & Trouble Shooting Manual was checked accordingly. <i>Conclusion:</i> The Operational Procedures includes Troubleshooting procedures based in the Alarm Description & Trouble Shooting Manual property of Suzlon. No discrepancies were identified.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
6.5 Maintenance procedures Are appropriate maintenance procedures in place?	/IM02/ /O&M/ /MCL/ /Mtto/	<i>Description:</i> Yes, the Operation & Maintenance Manual^{/O&M/} describes the maintenance procedures. An initial maintenance at 500 hours has to be done. Then semesterly and annual maintenance need to be performed. All records of maintenance, service works and repairs are included in the turbine logbook^{/MCL/} located in every wind tower, which is locked. SUZLON is responsible for the operation and maintenances of the wind park. <i>Justification of evidences:</i> Registers of maintenance were provided to the verification team. Also, the maintenance program^{/Mtto/} was checked. <i>Conclusion:</i> PP has implemented appropriate maintenance procedures in place.	OK	OK
6.6 Internal QA/QC <i>Assess whether there are any procedures in place on when, where and how checks and reviews of relevant monitoring parameters as well as further processing of the same are to be carried out. Please determine the evidences to be documented. (This might include spot checks by a second person not performing the calculations over manual data transfers, changes in assumptions and the overall reliability of the calculation processes.)</i>	/IM01/ /IM02/ /OPL/ /OP/ /PCC/ /OR/	<i>Description:</i> Suzlon and Amayo have procedures which describe in detail the operation and maintenance of the wind farm. The procedures for carbon credits^{/PCC/} describe also procedures, methods and responsibilities of the registered CDM project. Extraordinary audits (including calibration) are possible if CNDC or Amayo detect any failure in the measurement (/OR/ Annex III, section 7.1/d). Audits shall be performed by an auditor certified by CNDC. <i>Justification of evidences:</i> The Operational Procedures^{/OP/ & /OPL/} were reviewed. During site	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		visit it was possible to check the meters of the project activity. <i>Conclusion:</i> The PP has procedures in place to check data and to assure that the net energy generation does not have any discrepancies between all information sources. The information has been accepted by the verification team.		
6.7 Data archive Check whether all records of monitoring parameters are archived according to the monitoring plan.	/IM01/ /SC/ /SCS/	<i>Description:</i> The turbines are interconnected with optical fiber to an Optical Fiber Center (central PLC) located in the wind farm. The Optical Fiber Center (central PLC) transmits to a VPN (Virtual Private Network) the information in real time (without any interval of time). A SCADA system (SC-Commander system) is implemented to control, collect, store, analyze and distribute all available data. The SC-SCADA Reporting server is a central Suzlon database where wind power project plant data is hosted for reporting. The SC-SCADA Reporting server is located in a central location (Houston, USA) and is operated and maintained by Suzlon. The data is archived in electronic way. Archived data is kept during the crediting period and two years later. <i>Justification of evidences:</i> The SCADA system manuals and procedures^{/SC/ & /SCS/} were reviewed. Amayo Substation where the meters are located was also visited. Interview was performed with the Operation Chief. <i>Conclusion:</i> All records of monitoring parameters are archived according to	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		the monitoring plan. No discrepancies were identified.		
6.8 Data protection Assess whether appropriate measures have been taken in order to avoid unintended or intended manipulation of the measured data.	/IM01/ /SC/	<i>Description:</i> All meters were sealed. CNDC is connected to the main meter (via modem) with 1 dedicated channel which transmits the information in real time (without any interval of time). Amayo downloads daily the data from the main and back-up meters. Every day (after 00:00 hrs.) Amayo uploads the data extracted directly from the main and back up meters, to the dispatch web site^{/DWS/}. Furthermore, the PP backs up monthly the data from the meters. There is also measurement equipment for each wind-generator on-line in the SCADA system^{/SC/}. <i>Justification of evidences:</i> It was checked during site visit that the meters are located in the Protection, Control and Monitoring (PCYM) room of Amayo Substation. Interviews were performed to confirm data protection methods. <i>Conclusion:</i> Energy data are protected and information could be obtained from different sources to avoid manipulation. Data protection methods are accepted by the verification team.	OK	OK



ANNEX 2: STATEMENTS OF COMPETENCE OF TEAM MEMBERS