




**Verification and certification report form for
CDM project activities
(Version 03.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title and UNFCCC reference number of the project activity	Assisted Natural Regeneration of Degraded Lands in Albania Reference number: 2714
Scale of the project activity	<input checked="" type="checkbox"/> Large-scale <input type="checkbox"/> Small-scale
Version number of the verification and certification report	2
Completion date of the verification and certification report	26/05/2020
Monitoring period number and duration of this monitoring period	Second monitoring period: 01/07/2012 – 15/02/2019
Version number of the monitoring report to which this report applies	3
Crediting period of the project activity corresponding to this monitoring period	20/12/2004-19/04/2024
Project participants	<p>Ministry of Environment, Forests and Water Administration Government of Italy - Ministry for the Environment, Land and Sea</p> <p>Kingdom of Spain - Ministry for the Ecological Transition and Environment and Ministry of Economy and Business</p> <p>Idemitsu Kosan Co. Ltd.; The Okinawa Electric Power Co., Inc.; Suntory Holdings Limited; Tokyo Electric Power Company Holdings, Inc.; Sumitomo Joint Electric Power Co., Ltd.; Japan Iron and Steel Federation (JISF); Japan Petroleum Exploration Co.,Ltd. (JAPEX); Sumitomo Chemical</p> <p>Eco-Carbone S.A.S.</p> <p>Government of Luxembourg - Ministry of the Environment, Climate and Sustainable Development</p> <p>International Bank for Reconstruction and Development (IBRD) as Trustee of the BioCarbon Fund (BioCF)</p>
Host Party	Albania

Applied methodologies and standardized baselines	AR-AM0003 version 04
Mandatory sectoral scopes	14
Conditional sectoral scopes, if applicable	-
Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD	330,478 tCO ₂ -e
Certified amount of GHG emission reductions or GHG removals for this monitoring period	187,883 tCO ₂ e
Name and UNFCCC reference number of the DOE	AENOR INTERNACIONAL S.A.U Reference number: E-0021
Name, position and signature of the approver of the verification and certification report	 Jose Magro Environmental Manager

SECTION A. Executive summary

AENOR Internacional S.A.U (hereinafter AENOR) has performed the verification of the net anthropogenic GHG removals reported for the “Assisted Natural Regeneration of Degraded Lands in Albania” (UNFCCC Registration Ref. No. 2714) for the period 01/07/2012 – 15/02/2019.

Land degradation caused by anthropogenic exploitation has been considered a critical issue in Albania. It is closely linked with soil loss of productivity and is mainly caused by the human activity. It consists of vegetation loss; soil productivity decreases; erosion and lower water supply and quality. The project purpose was to reforest degraded lands by assisting natural regeneration; improving soil properties and promoting biodiversity values.

The assisted natural regeneration activities of the project fall under the reforestation definition of the Marrakesh Accords.

The project area at the initial phase was 6,272.36 ha , but decreased by 1,493.36 ha as some areas were not suitable for the project implementation. From the remaining area of 4,779 ha, the project was implemented on 3,990.45 ha during the second monitoring period, as well as in the first monitoring period. The project was not yet implemented on the remaining 788.55 hectares. The total GHG removals by sinks during the second monitoring period amounted to 187,883 tCO₂e.

Since temporary CERs (tCERs) have been issued based on the previous verification and certification, the tCERs need to be estimated from the beginning of the project until the end of the monitoring period that is subjected to verification. AENOR confirms that the current verification and certification is for the first time in the current commitment period.

Likewise, AENOR confirms that for tCERs, for any issuance, all net anthropogenic GHG removals achieved since the start of the project activity have been allocated to the commitment period in which the monitoring period ends.

The scope of the Verification

The verification, as an independent and objective review, shall assess and verify that the implementation of the project activity and the steps taken to report emission reductions comply with the CDM criteria and relevant guidance provided by the CMP and the CDM Executive Board.

The verification shall:

1. Ensure that the project activity has been implemented and operated as per the registered PDD /1/ and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place. It is, therefore, necessary to:

- Interview relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan /2/.
- Check the monitoring equipment, including calibration performance and observations of monitoring practices, against the requirements of the registered PDD and the selected methodology.
- Check that the manual operating provisions are duly followed (processes, routines, instructions, forms and the like).

2. Ensure that the monitoring report /4/ and other supporting documents such as spreadsheet calculation for the ERs /5/, GIS package /6/ provided are complete and verifiable and in accordance with applicable CDM requirements. It is, therefore, necessary to:

- Review relevant documentation and conduct an on-site visit.
- Review data and information presented to verify their completeness.
- Review indicators that must be addressed in the monitoring plan.

- Review the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures.

3. Ensure that actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology, carrying out:

- A review of information flows for generating, aggregating and reporting the monitoring parameters.
- A cross-check between information provided in the monitoring report and data from other sources such inventories, purchase records or similar data sources.
- A review of calculations /5/ and assumptions made in determining GHG data and emission reductions.
- A review of the project documentation provided by the project participant to check that it is based upon both quantitative and qualitative information on emission reductions. Quantitative information comprises the reported numbers in the monitoring report submitted to the DOE. Qualitative information comprises information on internal management controls, calculation procedures, and procedures for transfer of data, frequency of emissions reports, and review and internal audit of calculations.

4. Evaluate the data recorded and stored as per the monitoring methodology, carrying out:

- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

5. Identify and inform the project participant of any concerns related to the project's activity and operation conformance with the registered project design document. The project participant shall address the concerns and supply additional relevant information.

6. Provide a verification report to the project participant, the Parties involved and the CDM Executive Board. The report shall be made publicly available.

The verification is not meant to provide any consultancy services to the client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the monitoring report.

AENOR, based on the Specific Instruction for the Validation, verification and certification of clean development mechanism (CDM) project activities (IE/DTC/039)/7/, which is in turn based on the CDM Validation and Verification Standard for project activities version 02.0 (VVS) /8/, has used a risk-based approach to the verification, focusing on the identification of significant risks for the generation of CERs and verifying the mitigation measures for these issues.

Verification Process and Conclusion

The verification was performed through means of the requirements of validation and verification standard for project activities Version 02.0, the applied methodology /9/, and relevant CDM rules /10-12/. The process of the verification includes:

- I. A desk review of the monitoring report and all support documents.
- II. Follow-up interviews and site inspection.
- III. The resolution of outstanding issues and the issuance of the verification report and statement.

The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project. These include:

- The emission reduction calculations and the relevant data records.

- The calibration/maintenance records for the monitoring equipment.
- The management systems to support the project operation and monitoring.

The audit team took into consideration the registered PDD and verified that it has been adequately considered during this verification. Moreover, AENOR also checked during the verification activities the final monitoring report for the first verification event /3/ in order to verify the consistency in the implementation of the project. After checking the documents provided by PP, AENOR deems that the monitoring system is in place and the emission reductions are calculated without material misstatements.

The quality assurance of the data used in the calculation of the emission reduction was verified during the on-site visit. The implementation of the project was also verified and the proper use of the measuring tapes and procedure controls were tested.

Maintenance records of monitoring equipment allowed the AENOR team to verify that equipment worked correctly during the monitoring period.

The GHG emission reductions were thus calculated correctly based on the approved methodology AR-AM0003 version 04 and associated tools, the final version of the monitoring report and formulas given in the registered PDD and the monitoring plan. Therefore, in AENOR's opinion, the GHG emissions reductions reported for the project in the latest version of the monitoring report are correct.

All Corrective Action Requests (CAR) and Clarification Actions (CL) for the current monitoring period have been checked by the verification team and have been adequately resolved. This is the second verification event and there are no FARs pending from the previous verification period.

AENOR confirms that:

- the project is implemented in accordance with the registered Project Design Document. Furthermore, the monitoring system is in place and the emission reductions are calculated without material misstatements.
- only verification activities undertaken after the publication of the monitoring report on the UNFCCC CDM website have been used as a basis for AENOR to conclude its verification and submit a request for issuance of CERs to the Board.

In opinion of the verification team, the net anthropogenic GHG removals reported for the project are fairly stated and they are calculated correctly on the basis of the approved monitoring methodology AR-AM0003 version 04 and the monitoring plan contained in the registered PDD.

AENOR Internacional S.A.U is able to certify that the net anthropogenic GHG removals by sinks from the "Assisted Natural Regeneration of Degraded Lands in Albania" during the period 1 July 2012 to 15 February 2019 amount to 187,883 tCO₂eq.

SECTION B. Verification team, technical reviewer and approver**B.1. Verification team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader, verifier and technical expert	IR	Fuentes	José Luis	AENOR	Yes	Yes	Yes	Yes
2.	Verifier	IR	Llorente	Elena	AENOR	Yes	Yes	Yes	Yes
3.	Trainee Verifier	IR	Gómez	Juan Carlos	AENOR	Yes			Yes

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Arribas	Luis Javier	AENOR
2.	Technical expert	IR	Torres	Asier	AENOR
3	Approver	IR	Magro	José	AENOR

SECTION C. Application of materiality

AENOR verification team has considered the CDM requirements on materiality concept according to:

- Decision 9/CMP.7 Materiality standard under the clean development mechanism.
- CDM Validation and Verification Standard (VVS) for project activities version 02.0
- Guideline: Application of materiality in verifications version 02.0 /18/

“Assisted Natural Regeneration of Degraded Lands in Albania” is a large A/R CDM project activity achieving total emission reductions of 187,883 tCO₂eq for the whole monitoring period, i.e, 1 July 2012 to 15 February 2019, which means less than a total emission reduction or removal of 300,000 tonnes of carbon dioxide equivalent per year, therefore a 2 per cent of materiality threshold is applied for this verification as per VVS.

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Human errors in the data collection and data aggregation	Low	The potential risk of data collection and aggregation has been identified in the course of monitoring system implementation. However the following measures were taken in order to minimize the risks:	The additional verification testing performed is described. Testing may include: Check of data aggregation steps <ul style="list-style-type: none"> • Counter-calculation • Data integrity checks by means of graphical data

			<ul style="list-style-type: none"> • Cross-check of data • Plausibility checks of various parameters. • Appropriate archiving system • Clear allocation of responsibilities • Application of CDM Management system procedures. • Usage of standard software solutions (Spreadsheets) • Limited access to IT systems • Data protection procedures 	<p>analysis and calculation of specific performance figures</p> <ul style="list-style-type: none"> • Check of management system certification • Check of data archiving system • Check of application of Management system procedures. <p>The conclusions should be noted in the verification protocol where errors and uncertainties are highlighted.</p>
2	Errors in the raw data generation/calculation methods	Low	<p>The potential risk of raw data generation and calculation methods was identified in the course of verification event. However the following measures were taken in order to minimize the risks:</p> <ul style="list-style-type: none"> • State of the art equipment • Process control automation • Internal data review • Regular visual inspections of monitoring equipment • Only skilled and trained personnel operates the relevant equipment • Daily raw data checks • Immediate exchange of dysfunctional equipment • Stand-by duties is organized. • Training • Internal audit procedures • Internal check of QA/QC measures of involved Third Parties • Advanced calculation and reporting tools. • A complete structure for CDM coordination is defined for CDM related calculations. • Usage of tested / counterchecked Excel spreadsheets • Involvement of external consultants 	<p>The additional verification testing performed is described. Testing may include:</p> <ul style="list-style-type: none"> • Sample cross checking of manual transfers of data. • Recalculation • Spreadsheet to check links and equations • Inspection of calibration and maintenance records for key equipment, if applicable • Check sampling analysis results • Discussions with monitoring crews who have detailed knowledge of process uncertainty/error bands. • Site visit and checks of plots, equipment, technical data sheets, counter-check of raw data and commercial data, CDM management system, CDM related procedures • Application of CDM management system procedures • Check of trainings • Check of responsibilities • Check of QA/QC documentation / evidence of involved Third Parties • Countercheck on the basis of own calculation. • Plausibility checks

C.2. Consideration of materiality in conducting the verification

The verification has been performed through a desk review and on-site inspection including interviews with relevant personnel.

The verification activities in which risks were assessed are, the evaluations of:

- Monitoring system including calibration/maintenance of equipment.
- Calculation spreadsheets.
- Quality of raw data and procedures for its collection.
- Data flow.
- Data control procedures.

The risks identified were mitigated through the assessment of all sets of documents and calculation spreadsheets and the review of samplings of data collected. The verification plan was designed to take into account the risks from the activities detailed in the table above. Accordingly, testings above were carried out.

Some mistakes were identified and subsequently corrected. These findings are detailed in Appendix 4 and they were successfully closed. Therefore, related identified mistakes as listed in findings in Appendix 4 to this report have been determined to be immaterial. All identified inconsistencies and clarification requests have been successfully closed.

Based on the assessment carried out, AENOR confirms with a reasonable level of assurance that the claimed emission reductions are free from material errors, omissions or misstatements.

SECTION D. Means of verification

D.1. Desk/document review

The desk review involved a review of:

- Project documentation: registered PDD /1/, final monitoring report for the first verification event /3/
- CDM project standard version for project activities 02.0 and CDM project cycle procedure for project activities version 02.0. /19/
- CDM Monitoring report form and the instruction for filling out the MR v 07 ./20/
- Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board.
- The monitoring plan and the applied monitoring methodology /2/, paying close attention to the sampling practices carried out by the PP and the quality assurance and quality control procedures.
- The data and information presented to verify their completeness, including the monitoring report and the measuring records of the different monitored parameters.
- The influence of data management and the quality assurance and quality control system on the generation and reporting of emission reductions.
- A comparison of the actual CERs claimed in the monitoring period with the estimate in the PDD, and explanation of any significant increase.

A complete list of all documents reviewed is attached in Appendix 3 of this report.

D.2. On-site inspection

Duration of on-site inspection: 10/07/2019 to 11/07/2019				
No.	Activity performed on-site	Site location	Date	Team member
1.	Confirmation of the on-site visit planning. Technical description of the project activity and GIS package. Clarifications related to monitoring procedures. Implementation schedule of project	Environment, Forests and Water Administration FARMS	10/07/2019	Jose Luis Fuentes/Elena Llorente Pérez

	<p>activity. Status of project implementation and changes in the project implementation or operation in relation to the registered PDD;</p> <p>Confirmation of the control of the project boundary.</p> <p>Organizational structure.</p>			
2.	<p>A review of information flows for generating, aggregating and reporting the monitoring parameters; Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the registered PDD;</p> <p>A cross check between information provided in the monitoring report and logbooks, inventories, purchase records or similar data sources;</p> <p>A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of monitoring plan.</p> <p>Monitoring of forest establishment and forest management: standard operating procedures in place, information flows from data collection to archiving and QA/QC measures;</p> <p>Monitoring of carbon stocks: stratification, foreseen sampling plan, standard operating procedures in place, information flows from data collection to archiving and QA/QC measures;</p> <p>The assumptions used for determining the net anthropogenic GHG removals by sinks; Confirmation that the quality control and quality assurance procedures were in Place.</p> <p>The verification team visited 6 plots to check that the operational and data collection procedures were implemented in accordance with the monitoring plan of the registered PDD and verified the information flows for generating, aggregating and reporting the monitoring parameters. Furthermore, the monitoring equipment was checked in order to confirm that the monitoring practices followed the requirements of the registered PDD and the applicable methodology. Furthermore, AENOR performed a consistency check in order to verify the consistency of the previous measurement and the re-measurement, and to verify the correctness of the reported stand growth.</p>	Environment, Forests and Water Administration FARMS	11/07/2019	Jose Luis Fuentes/ Elena Llorente Pérez

	Final meeting: Summary of main issues detected			
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D.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Istrefi	Erion	Project Coordinator	10/07/2019 11/07/2019	Status of project implementation Monitoring of forest, equations and Sampling plots A cross check between information provided in the monitoring report and logbooks, inventories, purchase records or similar data sources.	Jose Luis Fuentes/Elena Llorente Pérez
2.	Blujdea	Viorel	Independent Consultant	10/07/2019 11/07/2019	A cross check between information provided in the monitoring report and calculations with CDM requirements. Monitoring of forest and Sampling plots. A check of the monitoring equipment including maintenance performance and observations of monitoring practices against the requirements of monitoring plan.	Jose Luis Fuentes/Elena Llorente Pérez

D.4. Sampling approach

Appendix 3 states the main documents checked during the verification process.

AENOR paid close attention to the review of the final version of the monitoring report for the present verification event, the calculation of the net anthropogenic GHG removals, the forest inventory raw data, the implementation of the procedures for carrying out the forest inventory, the

registered PDD, the validation report and the applicable approved methodology AR-AM0003 version 04 .

AENOR also assessed other documentation related to the project design the forest establishment and the forest management. AENOR verified a complete GIS package in order to confirm the project implementation and project boundary.

During the desk review, AENOR verified all parameters in section D of the monitoring report and reproduced all calculations of the spreadsheet calculation. AENOR verified equations and values fixed ex ante. Likewise, AENOR verified the correctness of equations defined in the spreadsheet calculation and for the above ground biomass and below ground biomass and their correct application in calculations in the spreadsheet calculations.

Regarding data collected during the forest inventory and applied in calculations for this verification event, AENOR performed a consistency check in order to verify the consistency of the previous measurement and the re-measurement of data collected during the inventories in the visited plots to verify the correctness of the reported stand growth.

Moreover, AENOR verified that the operational and data collection procedures were implemented in accordance with the monitoring plan of the registered PDD and verified the information flows for generating, aggregating and reporting the monitoring parameters. Furthermore, the monitoring equipment were checked in order to confirm that the monitoring practices followed the requirements of the registered PDD and the applicable methodology. Quality assurance and quality control procedures have been applied in accordance with the registered monitoring plan.

Regarding the sampling approaches during the on-site visit, the verification team followed the Programme for the Endorsement of the Pan European Forest Certification standard on sampling, which determines the number of plots to be verified considering the formula $x = 0.6 * (y)^{1/2}$

Where:

x=sample size for verification

y= total no. of sample plots of the project

By applying the above formula the sample size for the site visit is: $6 = 0.6 * (95)^{1/2}$.

A sample of 6 plots have been selected during the site visit by AENOR. In the field, re-measurements were undertaken. The verification team observed the field team in measuring DBH and the use of GPS. Further, tree species determination was checked. The measurements were all within an acceptable margin considering human error. The verification team can conclude that measurements followed best forest practice.

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form		CAR n° 1	
Compliance of the project implementation and operation with the registered PDD	CL n° 1		
Post-registration changes	CL n° 2	CAR n° 2	
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines			
Compliance of monitoring activities with the registered monitoring plan			
Compliance with the calibration frequency requirements for measuring instruments	CL n° 4		
Assessment of data and calculation of emission reductions or net removals	CL n° 3		

Assessment of reported sustainable development co-benefits			
Global stakeholder consultation			
Others (please specify)			
Total	4	2	

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	The compliance of the monitoring report with the monitoring report form has been verified through desk-review of last version of monitoring report, last version of applicable monitoring report form and CDM rules.
Findings	CAR 1-The monitoring report form for CDM project activity shall be updated to the latest version in accordance with UNFCCC website.
Conclusion	The CAR 1 was closed since the PPs reviewed the M.R to comply with instructions for filling it. AENOR verification team confirms that the final version of the monitoring report was completed using the last version of the applicable monitoring report form and has followed the instructions for filling it attached at the end of the form.

E.2. Remaining forward action requests from validation and/or previous verifications

There are no FARs opened from the previous verification.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	<p>This is the second verification event.</p> <p>The compliance of the project implementation with the registered project design document was verified through the on-site visit and desk-review of documents provided by the project participants (All revised documents are listed in Appendix 3). The audit team reviewed the main technical features of the project activity, including all species to be planted, the densities of plantation, the project boundaries, the management activities. Site visits to the selected plots and interviews with monitoring crew also allowed AENOR to confirm the information in the M.R and PDD.</p> <p>The protection of project sites from grazing pressure and silvicultural activities promoted natural regeneration and enhanced biomass productivity through assisted natural regeneration over entire project area of 3,990.45 ha, including protection from heavy grazing and facilitation of natural regeneration through physical and social fencing measures; protection from grazing and facilitation of natural regeneration</p> <p>The project area at the initial phase was 6,272.36 ha, in the registered PDD but decreased by 1,493.36 ha as some areas were not suitable for the project implementation. From the remaining area of 4,779 ha, the project was implemented on 3,990.45 ha during the first monitoring period and this second monitoring period. The project was not yet implemented on the remaining 788.55 hectares.</p> <p>AENOR verified that project participant keeps the control over all project area (3,990.45 ha). The project is implemented according to the description presented in the registered PDD and the MP, although one specified changes for A/R projects occurred in this monitoring period to better reflect the current situation of the operation and implementation of the project.</p> <p>The host country of the project is Albania.</p> <p>AENOR did not find any misstatement and confirmed that information regarding</p>
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	<p>operation and implementation of the project monitoring is correct. This includes the exclusive right to perform the A/R activity with the aim of achieving net anthropogenic GHG removals acceptable under the legal system of the host country; and that the boundary of the A/R project activity geographically delineates exclusively the afforestation or reforestation project activity under the control of the project participants as required by the VVS.</p> <p>AENOR is able to confirm that the project implementation is in accordance with the project description contained in the approved PDD /1/ and that specified changes for A/R occurred during this monitoring period fulfil with the CDM project standard for project activities v 02 and they have addressed correctly in the PRC.</p> <p>The boundary as defined in the field was found to be consistent with the indications in the registered PDD as well as the GIS package. The most relevant documents assessed in order to confirm the project boundary were the followings:</p> <ul style="list-style-type: none"> • Overview maps of the location of the project area and boundaries were checked during the verification process • Digital boundary files in a Geographic Information System (GIS) <p>AENOR confirms that the identified boundaries as documented in the registered PDD and attached documents are adequately defined for the project activity.</p>
Findings	CL 1- Documented evidence should be provided for the area of the project activity, and the different strata, ecozone 1,2,3,4.
Conclusion	<p>This CL 1 was closed. The PP provided the documentation to assess the area of the project activity.</p> <p>AENOR verification team confirms that:</p> <p>The implementation status and technology of the project are consistent with the registered PDD and information in the M.R. As commented above some specified changes for A/R project occurred during the monitoring period to reflect in a more accurate way the current situation of the project. They are correctly addressed in the M.R and validation assessment by AENOR.</p> <p>No revised PDD is necessary to address these specified changes for A/R projects based on communication from UNFCCC. Therefore, AENOR confirms the actual operation of the project is in compliance with information provided by PP.</p>

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines

AENOR confirms that a temporary deviation is requested for this monitoring period and it is submitted along with this request for issuance. This temporary deviation was also submitted during the first monitoring period and approved in the PRC-2714-001 on 12 November 2012.

CAR 2 was opened for this temporary deviation as explained in the PRC validation report submitted along with this issuance request. CAR 2 was closed once the information of the temporary deviation was submitted.

The validation report including the assessment for this post-registration changes is version 02 with a completion date on 26 May2020.

E.4.2. Corrections

No Corrections have been approved for this monitoring period or to be submitted with the request for issuance.

E.4.3. Change to the start date of the crediting period of the project activity

No changes to the start date of the crediting period have been notified for the monitoring period.

E.4.4. Inclusion of a monitoring plan

No inclusion of a monitoring plan has been approved for this monitoring period.

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other applied standards or tools

No Permanent changes have been approved for this monitoring period or to be submitted with the request for issuance.

E.4.6. Changes to the project design

No changes to the PDD have been approved for this monitoring period or to be submitted with the request for issuance.

E.4.7. Changes specific to afforestation and reforestation project activities

AENOR confirms that there are not specific changes to A/R project activities in this second monitoring period.

The first Monitoring Report and PRC-2714-002 was accepted by the Executive Board on 23/07/2013 through the request of issuance process of the first monitoring period (monitoring report, version 05 of 25/02/2013 and verification report nº 8000389372 – 10/492 dated on 21/05/2013).

CL 2 was opened regarding these type of A/R changes as explained in the PRC validation report submitted along with this issuance request. CL 2 was closed once the information for the project activity was provided.

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	<p>AENOR is able to confirm that the monitoring plan is in accordance with the approved methodology, AR-AM0003 version 04, applied by the project activity.</p> <p>AENOR performed a detailed comparison of data/variables of each parameter included in the monitoring plan required for the estimation of the net anthropogenic GHG removals by sinks.</p> <p>The compliance of monitoring plan with the monitoring methodology was verified by reviewing whether the CDM project activity was in accordance with the applied methodology and if any other monitoring aspect of the project activity that is not specified in the methodology was established. During the on-site visit, the audit team was able to review different records (all documents reviewed are detailed in appendix 3 below) and whether the monitoring methodology has been adequately considered and documented.</p> <p>The project participant is recording the data and parameters following the monitoring methodology applied.</p> <p>The verification team reviewed:</p> <ul style="list-style-type: none"> • The emission reductions resulting from the CDM project and if they were achieved from a project implementation which was in accordance with the Monitoring Plan. • The monitoring plan, the applied methodology have been properly implemented and followed by the project participant. • All parameters stated in the monitoring plan, the applied methodology, tools and relevant CDM EB decisions have been sufficiently monitored and updated.
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	<ul style="list-style-type: none"> The responsibilities and authorities for monitoring and reporting were in accordance with the responsibilities and authorities stated in the monitoring plan. <p>The audit team has verified that the monitoring of reductions in GHG emissions to result from the proposed CDM project activity is implemented in accordance with the monitoring methodology and tools.</p>
Findings	No findings detected in this regard.
Conclusion	The audit team confirms that the monitoring plan is in accordance with the approved methodology applied by the CDM project activity, including applicable tools and other regulatory documents.

E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	<p>Data and parameters fixed ex ante were verified through desk-review of final version of monitoring report and the registered PDD.</p> <p>The fixed parameters used for calculating the removals have been indicated and verified as follows:</p> <ul style="list-style-type: none"> C_{BSL}: Baseline net greenhouse gas removals by sinks in tonnes of CO₂e/year for year t. The values applied are the following: 2015- 2019: 4,512.54 t CO₂ e These data were fixed at the registered PDD and they are correct as AENOR verified. R_j: Root-shoot ratio for species j. The source of data is the table 3A.1.8, GPG LULUCF IPCC (2003). The value applied is 0.35. This data was fixed at the registered PDD and it is correct as AENOR verified. CF_j, Carbon fraction for species j. The value applied is 0.50 tC (t d.m.)⁻¹. This data is a default value from IPCC 2003 and it is correct. P: Desired level of precision, The unit applied is percent 20%. This data is not monitored, as stated above, a request for deviation to use 20% precision is requested along with this issuance request. Therefore, this parameter is revised to 20% Confidence level: The unit applied is percent, 90%, according to the PRC. $f_j(DBH, H)$: Allometric equation for species j linking aboveground tree biomass (kg tree⁻¹) to diameter at breast height (DBH) and possibly tree height (H) measured in plots for stratum i, species j, time t n_i, Sample size for stratum i. The unit is Dimensionless. Valued applied: 72, in accordance with the PRC. , AENOR verified the value and it is ok. XF: Plot expansion factor from per plot values to per hectare values. The unit is Dimensionless .The value applied is 50. $za/2$. Value of the statistic z (normal probability density function), for $\alpha = 0.1$ (implying a 90% confidence level). This value, as a PRC is applied for this monitoring period, is not applied for this monitoring period. <p>The value for the fixed parameters has been correctly used in calculation and reporting of emissions reductions for the monitoring period verified.</p>
Findings	No findings detected in this regard.
Conclusion	All data sources and assumptions are appropriate, and calculations are correct as applicable to the proposed CDM project activity.

E.6.2. Data and parameters monitored

Means of verification	<p>AENOR has verified that the project monitoring has been implemented; it has been carried out in accordance with the monitoring plan of the registered PDD and addressing the specified changes for A/R projects occurred during the monitoring period.</p> <p>Following the structure of the monitoring plan of an A/R project activity, AENOR has verified the implementation of the monitoring of the project boundary; the monitoring of the forest establishment and management; the implementation of the sampling and stratification provisions; and the implementation of the monitoring of</p>
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the actual net GHG removals by sinks.

It is worth noting that following the provisions of 'Guidelines on application of specified versions of AR CDM methodologies in verification of registered AR CDM project activities' (version 01.1) /16/ the project participant is required to monitor only data and parameters obtained from field measurement, and not being required to monitor data, parameters, or variables appearing used as intermediate values in calculation steps and those taken from existing sources (e.g. published literature). Therefore, AENOR includes only a description of parameters which are monitored through field measurement. Taking into account this provision, AENOR verified that the list of parameters in section D.2 of the monitoring report is in compliance with the monitoring plan of the registered PDD.

The audit team carried out a review of information flow for generating, aggregating and reporting the monitoring parameters to assess a completeness of monitoring in line with the monitoring plan and the applied methodology, including:

- The measurement/determination method used.
- The parameters values in the monitoring report. In this regard, only the values for some monitored parameters are detailed in this verification report since most of them have multiple values in several sheets.
- Relevant monitoring equipment, their features and the control and calibration/maintenance procedures.
- Significant inaccuracies occurred in case of measured or estimated values of some parameters.
- Measuring, reading and/or recording frequency.
- QA/QC procedures applied to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

Data and monitored parameters were verified through the on-site visit and desk-review. The monitoring system and all applied procedures are in compliance with the monitoring plan and the applied methodology and associated tools based on the information included in the final monitoring report.

AENOR confirmed that the monitoring of the forest establishment and management has been carried out in accordance with the monitoring plan, formula contained in the registered PDD.

The list of all parameters monitored, and the means of verification used are detailed as follows:

- **t ID:** Age of plantation (1, 2, 3,... years), the unit is year. This data is not monitored.
- **A_j = A_{jkt}**: Area of stratum. The stratum area is calculated as the sum of the planting areas allocated to the stratum, and individual planting areas are calculated by the GIS software. The audit team assessed the GIS shape files provided and verified the boundaries of the project area by using GPS devices. The data obtained in the field have been compared with the data provided by the client and no inconsistencies were detected. The recording frequency is at each monitoring event. No inconsistencies were detected between data sources, M.R and calculations.

The values reported for the present monitoring period are the following:

Strata 1	Area, ha
Ecozone 1	756.44
Ecozone 2	1,218.43
Ecozone 3	1,698.48
Ecozone 4	317.10

Total

3,990.45

- **A:** Total size of all strata (A), e.g. the total project area. The unit measure is Hectares. The value reported for this monitoring period is: 3,990.45 ha. The monitoring frequency is at the start of the project and at monitoring intervals prior to each verification. The calculation method for the total project area is using the ArcGIS software, and the equipment used for the measurement is the Garmin Etrex-30 GIS. AENOR checked this data with the GIS package and during the on site visit and did not detect inconsistencies between the data, the Excel and the MR.
- **AP:** Sample plot area. The value reported for this monitored period is 200 m^2 . This parameter is measured. Plot location and area checked and verified during monitoring period. The monitoring frequency is 5-year. A Vertex, CE-2-5308 (with slope correction) and a tape was used for the measurement of the sample plot area.
AENOR measured this value during the on site visit, in the 6 sample plots selected and did not detect inconsistencies between calculations and M.R.
- **Latitude/longitude of sample plot location:** Sample plot locations are checked and verified using GPS coordinates and GIS Shapefiles. A Garmin Etrex-30 GIS or/and GPS Serial number: 2DV041055 were used to check the locations of the sample plots. This parameter is measured. The monitoring frequency is 5-year. AENOR measured this value during the on site visit, in the 6 sample plots selected and did not detect inconsistencies between calculations and M.R.
- **Diameter at breast height (DBH):** DBH of all trees within the sample plots were measured during the monitoring event. The values of these parameters are stated in the ER calculation spreadsheet. During the on site visit, AENOR could check the DBH data of 6 plots that were randomly selected. These data were measured with a Calliper Nestle and mini-calliper UIK. During the on site visit, AENOR could verify that monitoring equipment for DBH measures and the measurements of the plots were correct according to data gathered on site along with monitoring crew. The monitoring frequency is 5-year. AENOR verified the measurement results presented in the ER calculation spreadsheet. During site visit, the equipment was shown to AENOR, and AENOR verified its correct operation.
- **Tree species:** Scientific names of tree species, 52 species, for more details see the MR section D.2. The implementation of forest plan was checked right after planting and three years after planting. AENOR checked the implementation of forest plan during the on site visit and verified its correct operation.
- **Total number of sample plots:** Allocation of sample plots to strata according to their location within the project area. Further details about the stratification of the project area are provided in section D.3. of the monitoring report. 4 strata were determined and 95 plots measured. These data are calculated and the frequency of measuring is every 5 years. These data are calculated using the tool "Sample plots" (EB31 R15/EB46 R19). The equipment used to calculate the number of sample plot is the Garmin Etrex-30 GIS. During site visit, AENOR verified data from the monitoring activities carried out by PPs as well as a sample of plots used to gather data. AENOR verified this data against the excel "Albania Sample Plot calculation" and no inconsistencies were found with the MR and the excel calculation.
- **Number of trees in the sample plot:** The trees are measured in every sample plot. Number of trees and other variables are remeasured as part of the 10 per cent of the sample plots which are randomly selected and re-measured independently, for more details see the MR section D.2. The monitoring frequency is every 5 years. AENOR checked the number of trees in the sample plots that were selected during the on site visit and with the field sheets plot

measurements of the PP. No inconsistencies were found and the data is considered correct with the MR and the Excel spreadsheet.

- **$A_{B,ikt}$** : Area of wildfire / natural fire in stratum i , species j , at time t . There is no slash and burn practiced in the project. The area affected by the natural fire is monitored. The monitored value for this parameter is 19.65 ha area affected by the wildfire. Besides, no living biomass was affected, only ground litter was burning. The value is measured with GIS or/and GPS at the start of project and annually. AENOR checked the area of wildfire during the on site visit and with the field sheets plot measurements of the PP. No inconsistencies were found and the data is considered correct with the MR and the Excel spreadsheet.
- **B_{ijt}** : Average above-ground biomass burnt in wildfire / natural fire for stratum i , species j , time t . The monitored value is: 8.75 t dm/ha (average stock for project strata 3). This project specific amount of biomass is estimated from direct measurement in accordance with Project implementation records and IPCC (2003) Good Practice Guidance for LULUCF as follows: combustion factor from Table 3A.1.12 and emission factors from Table 3A.1.16 AENOR checked the calculated value from spreadsheet calculation of the PP in strata 3. No inconsistencies were found and the data is considered correct with the MR and the Excel spreadsheet.

AENOR confirmed that plot locations in the final MR are correct and consistent with GIS package. No inconsistencies were found between data sources, M.R and calculations.

The GIS package was provided to AENOR showing values applied to the monitoring report for the present monitoring period. AENOR confirmed during the site visit through direct supervision, interviews with the GIS expert and through review of relevant documentation that the monitoring procedure for this parameter is in place. In addition, AENOR conducted the following actions: visited 6 randomly selected plots, confirmed the accurate delineation of the planted area and the soundness of the polygon classification, crosschecked the gathered information with the GIS package and confirmed that they were consistent.

No inconsistencies were found between data sources and M.R and calculations. Values are correct as AENOR verified reproducing the monitoring activities with the monitoring crew.

AENOR held an interview with the GIS expert during the site visit where the most important values of parameters were checked. Likewise, the procedure and information flow were checked. The field monitoring crews are in charge of measuring areas with GPS, after the information is managed with a GIS and remote sensing package.

AENOR confirmed that the reported values in the final MR and in the spreadsheet, calculation are consistent with the values compiled in the GIS package. No inconsistencies were detected between data sources and information in the final version of the monitoring report.

AENOR confirmed during the site visit through direct supervision, interviews with the project entity and through review of relevant documentation that the monitoring procedure is in place and it is in compliance with the monitoring plan.

AENOR checked the values reported in the monitoring report and supporting documents (GIS package) and confirmed that they were consistent with Field sheets plot measurements checked on site /23/. No inconsistencies were detected.

Definitively, all data and supporting evidences were verified, which include:

- Registered PDD
- Monitoring plan
- Final version of Monitoring Report
- Spreadsheet calculations

	<ul style="list-style-type: none"> • Quality control of equipment • GIS package • Field records and others
Findings	No findings detected in this regard
Conclusion	<p>AENOR deems that the registered monitoring plan has been properly implemented and followed by the PP. The list of parameters above is consistent with the parameters in the monitoring plan and 'Guidelines on application of specified versions of AR CDM methodologies in verification of registered AR CDM project activities' (version 01.1).</p> <p>AENOR verification team confirms that the monitoring for the verified period has been carried out in accordance with the monitoring plan in the registered PDD. The applied methodology has been properly implemented and followed by the PP and all management and operational system parameters have been sufficiently monitored and updated.</p> <p>All parameters required by the monitoring plan have been measured / determined without material misstatements and in line with all applicable standards and relevant requirements.</p>

E.6.3. Implementation of sampling plan

Means of verification	<p>A temporary deviation for this monitoring period is requested regarding the sampling plan, see section E.4.1 of this verification report.</p> <p>During the first monitoring event the same temporary deviation was requested regarding the sampling design. The temporary deviation was approved by the Board on 12/11/2012 (PRC-2714-001).</p> <p>Ex post-stratification in four strata was implemented during the first monitoring period and presented in the first monitoring period versus one stratum ex-ante stratification anticipated in the PDD. The stratification in the second monitoring period is fully consistent with the stratification procedures followed in the first monitoring period, and accepted by the board.</p> <p>As carbon storage significantly varies in different ecozones, they were used as basis for the ex-post stratification of the project. Four strata with different area and carbon content were identified; Ecozone 1; 2; 3 and 4. The Table 5 shows that the total number of sample plots laid out in the project in four ecozones is 95, which conform to an allowable error of $\pm 20\%$ of the mean at 90% confidence level.</p> <p>See the strata and number of sample plots laid out in the project area:</p> <table border="1"> <thead> <tr> <th>Strata</th><th>No plots</th></tr> </thead> <tbody> <tr> <td>Ecozone 1</td><td>19</td></tr> <tr> <td>Ecozone 2</td><td>28</td></tr> <tr> <td>Ecozone 3</td><td>43</td></tr> <tr> <td>Ecozone 4</td><td>5</td></tr> <tr> <td>Total</td><td>95</td></tr> </tbody> </table> <p>Calculation of number of sample plots for monitoring and measurement was done the following way. The methodology AR AM0003 version 04 presents equations to assess the number of sample plots required for monitoring to keep a maximum permissible error of $\pm 10\%$ of the mean, at a 95% confidence level. Subsequently "Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities" (Version 01.0) required the use of were approved, which require the sample size to meet the permissible error of</p>	Strata	No plots	Ecozone 1	19	Ecozone 2	28	Ecozone 3	43	Ecozone 4	5	Total	95
Strata	No plots												
Ecozone 1	19												
Ecozone 2	28												
Ecozone 3	43												
Ecozone 4	5												
Total	95												

$\pm 10\%$ of the mean, at a 90% confidence level.

Considering the large number of sample plots required to meet 10%, the guidelines of the paragraph 11 of the AR WG 28 (paragraph 37, EB55) were applied to meet the required permissible error of $\pm 20\%$ of the mean and a 90% confidence level for the calculation of the number of sample plots required for monitoring of the project.

The number of sample plots required to meet 10% were estimated at 286. Considering the high cost of establishing and measuring 286 plots, the number of sample plots to meet the 20% precision and 90% confidence interval was adopted per the paragraph 11 of the AR WG 28 (paragraph 37, EB55). A request for a temporary deviation for this second monitoring period is being submitted to the UNFCCC Secretariat to apply 20% precision level and 90% confidence interval as part of a PRC. As a follow up to the approval of this post registration change, the sample size of 72 sample plots are adopted to meet the precision and confidence interval requirements for the project.

Considering the number of sample plots established in each stratum is greater than those required meet the 20% precision, the number of sample plots laid out in the project is adequate as shown in the table below:

Strata	Sample plots required to meet 10% precision and 90% confidence interval	Sample plots required to meet 20% precision and 90% confidence interval	Sample plots established in the project strata
Ecozone 1	50	13	19
Ecozone 2	100	25	28
Ecozone 3	128	32	43
Ecozone 4	8	2	5
Total	286	72	95

Circular sample plots of 200 m² were located and plot centres were recorded using GPS. The geographical position, administrative location, stratum number of each plot was recorded and archived physically and electronically.

The allocation of plots is provided in the monitoring report and the procedure for their distribution has been also provided to AENOR. AENOR, during the site visit, collected the location of the sample plots and confirmed the correctness of data.

In opinion of the AENOR verification team the sampling has been carried out in line with forestry guidelines and as per best forest practice.

The monitoring data are based on the record of field measurements at each monitoring interval as per the monitoring frequency adopted for the pool.

The PP applied its internal quality control procedures and re-measured a sample of plots. Re-measurement of at least one (randomly selected) plot per every 10 plots by another field crew, and comparison of the measurements to check for possible errors; any errors found in the data were recorded, double checked and corrected.

After the crosschecking of the data, it could be concluded that the measurements by the monitoring team were performed correctly and the monitoring data do not present measurement errors which would lead to an overestimation of the biomass. Data were provided to AENOR. AENOR deems that quality assurance and quality control procedures have been applied in accordance with the registered monitoring plan.

Findings	No findings were raised
Conclusion	<p>The first Monitoring Report was accepted by the Executive Board on 23/07/2013 through the request of issuance process of the first monitoring period (monitoring report, version 05 of 25/02/2013 and verification report nº 8000389372 – 10/492 dated on 21/05/2013).</p> <p>After checking the formula applied to calculate the sampling plots for the present verification period and crosschecked with the monitoring plan in the approved PDD and the applicable methodology, AENOR deems that sampling efforts and surveys are in compliance with the validated sampling plan and monitoring plan in the approved PDD on 23 July 2013.</p>

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	<p>During the site visit, AENOR checked that all instruments used for the whole monitoring period were appropriately checked in compliance with instructions in the monitoring report.</p> <p>Since the measuring instruments are elementary, they are replaced by new ones when they do not work appropriately.</p> <p>The main equipments used during the monitoring activities were the following:</p> <p>The height of five trees close to the centre of a sample plot is measured with <u>Vertex</u> Ultrasound Instrument. Calibration of vertex was conducted prior to the plot and tree height measurements on each sample plot. The Vertex instrument is calibrated every day before doing height measurements by field crews to ensure accurate results. When calibrating, the instrument was allowed time to stabilize at ambient temperature. Calibration was done in the field before the measurements started, therefore prior to conducting height measurement to ensure accurate measurement, the instrument should have time to stabilize at ambient temperature.</p> <p>The Vertex was checked in order to confirm that the monitoring practices followed the requirements of the monitoring report and registered PDD and the applicable methodology and tools.</p> <p>Furthermore, AENOR performed a complete check in order to verify the consistency of the previous measurement and the re-measurement to verify the correctness of the reported height of the trees.</p> <p>Tape (producer: Talmeter). Calibrated by the producer. Preparation for measurements by the field teams.</p> <p>The tape was checked in order to confirm that the monitoring practices followed the requirements of the monitoring report and registered PDD and the applicable methodology and tools.</p> <p>Furthermore, AENOR performed a complete check in order to verify the consistency of the previous measurement and the re-measurement to verify the correctness of the reported stand growth.</p> <p>The tree diameter is measured with <u>calliper</u> instruments which are used to measure DBH at 1.3 m, one member responsible for Dbh measurements marked this value (1.3 m from the ground) on his breast by a coloured strip to measure accurately the tree Dbh. The calibration of caliper instruments was checked and confirmed per the steps of the user manual prior to start of measurements.</p> <p>The calliper was checked in order to confirm that the monitoring practices followed the requirements of the monitoring report and registered PDD and the applicable methodology and tools.</p> <p>Furthermore, AENOR performed a complete check in order to verify the</p>
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	<p>consistency of the previous measurement and the re-measurement to verify the correctness of the reported stand growth.</p> <p>GPS MAP 64 used with a built-in national base map with shaded relief to navigate with ease. Calibration was made with incorporated function. An alternative method to Compass and Vertex is to find the exact centre of sample plots at a fixed distance of 8 m from the centre.</p> <p>AENOR considers that GPS equipment were checked in accordance with the internal quality assurance procedures shown during the site visit and the measuring.</p> <p>Besides, field crews were trained in the procedures for calibration prior to start of the field measurements in first week of December 2018. .</p> <p>Furthermore, AENOR performed a complete check in order to verify the consistency of the previous measurement and the re-measurement, and to verify the correctness of the reported stand growth.</p> <p>For the present verification event, the PP provided the manufacturer specifications for the GPS and during site visit AENOR verified how monitoring crews apply the protocols for measurements .</p> <p>AENOR considers that GPS equipment were checked in accordance with the internal quality control and quality assurance procedures shown during the site visit and the measuring.</p>
Findings	CL 4- Evidence of calibration/verification certificates shall be provided for the monitoring equipment used as stated in section C of the MR.
Conclusion	<p>This CL4 was closed since the PP provided records of maintenance of measuring equipments.</p> <p>AENOR verified that the equipment used for the monitoring parameters detailed in section D.2 of the monitoring report are correctly detailed and they have been checked in compliance with the statements in the monitoring report, according to the quality control procedures. The checks carried out to the measuring instruments were at the frequency established in their records covering the whole monitoring period.</p>

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	<p>According to the information in the registered PDD, the baseline net greenhouse gas removals by sinks were determined ex ante and remains fixed for the whole first crediting period. Baseline removals are 4,512.54 t CO₂e. This data is correct and consistent with the registered PDD.</p> <p>AENOR verified that approaches and assumptions to estimate baseline emissions for the monitoring period are consistent with the applicable methodology, associated tools and the registered PDD.</p>
Findings	No findings raised
Conclusion	<p>AENOR verification team confirms that:</p> <ul style="list-style-type: none"> • A complete set of data/information for the monitoring period is available. • Information on the baseline GHG emission calculation provided in the monitoring report has been cross-checked with other sources. • Calculations of baseline emissions have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology. • Operational data collection and processing obligations from the operator follows the internal procedures. • There are no assumptions in emission calculations. <p>No errors, miscalculations, omissions, misstatements or incomplete information has</p>

been identified.

E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	<p><u>Methodology used for calculation of biomass and carbon stock change</u></p> <p>"Allometric equation" method (page 57 in AR-AM0003v.04) is used to calculate the carbon stock in standing living biomass in four "stand model" for 2019. The aboveground biomass is estimated for every individual tree based on DBH measured in the sampling plot.</p> <p>The area of sampling plot is 200 m², therefore the resulted change in C stock of aboveground biomass at plot level is multiplied by 50 to obtain the aboveground biomass of forest stand per 1 hectare.</p> <p>From the aboveground biomass of stand, total C stock in living biomass pool is calculated using the parameters on "root-to-shoot" ratio, and carbon fraction (CF) from IPCC 2006 Guidelines. Besides, the differences of C stocks in 2019 are pooled together for each of the four project strata in order to obtain the average C stock change per strata.</p> <p>This is multiplied with the area of the project activity. Finally, C stock change on entire project area is converted to CO₂eq (by multiplication with 44/12). Eventually it can be annualized if total estimate is divided by no. of years within the current verification period.</p> <p>Adequacy of various allometric equations, published in peer reviewed journals, to the edapho-climatic conditions corresponding to Albania were assessed. The "site equivalence" is established using height/diameter relationships of species, which meet the edapho-climatic criteria and applicability criteria of the A/R Methodological AENOR verified that the Tool: Demonstrating appropriateness of allometric equations for estimation of aboveground tree biomass in A/R CDM project activities (Version 01.0.0) was correctly applied.</p> <p>The most widely used allometric equation for biomass, a power function, with DBH as the single independent variable was applied.</p> <p>DW = a * DBH^a b</p> <p>where:</p> <p>DW - dry-weight of above-ground biomass in kg; a - scale parameter; DBH - Diameter at breast-height, 1.3 m above-ground; b - shape parameter, usually between 2 and 3.</p>
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Parameters of allometric equations used in biomass assessment

Species	Origin and source	DBH range* (in cm)	a	b	Correction factor	Sample tree number	R ²
<i>Quercus</i>	NE-Spain /28/	5-24	0.2208	2.217	1.0	69	0.908
<i>Fraxinus</i>	Italy /29/	5-30	0.17	2.46	1.0	40	0.97
<i>Castanea</i>	Mediterranean /30/	1-35	0.08	2.421	1.0	49	0.916
<i>Pinus</i>	Southern France /31/	2-44	0.134	2.214	1.0	56	0.99
<i>Robinia</i>	Romania /32/	2-16	0.1211	2.0594	1.0806	36	0.9272
Generic equation for all juvenile trees	n.a. /30/	2-16	0.1944	2.08	1.0	63	0.88

The verifiable changes in carbon stock represent the carbon stock changes in above-ground biomass and below-ground biomass within the project boundary, estimated using the equations:

$\Delta C_{P,LB}$ Sum of the changes in living biomass carbon stocks (above- and below-ground)
 $\Delta C_{P,ikt}$ Annual carbon stock change in living biomass for stratum i , stand model k ,
₁

i 1, 2, 3, ... S_{ps} strata of the project activity ($i=1$),

k 1, 2, 3, ... K stand models ($k=4$),

t 1, 2, 3, ... t^* years elapsed since the start of the A/R project activity (15 calendar years beginning of the project until the end of current verification in 15.02.2019)

$$\Delta C_{P,LB_T} = \sum_{t=1}^{t^*} \sum_{i=1}^{m_{ps}} \sum_{k=1}^K \Delta C_{P,ikt}$$

(Equation 60 of the methodology)

where:

$$\Delta C_{P,ikt} = (\Delta C_{AB,ikt} + \Delta C_{BB,ikt}) \cdot \frac{44}{12}$$

(Equation 61 of the methodology)

where:

$\Delta C_{P,ikt}$ Annual carbon stock change in living biomass for stratum i , stand model k , time t ; t CO₂-e. yr⁻¹

$\Delta C_{AB,ikt}$ Annual carbon stock change in above-ground biomass for stratum i , stand model k , time t ; t C yr⁻¹

$\Delta C_{BB,ikt}$ Annual carbon stock change in below-ground biomass for stratum i , stand model k , time t ; t C yr⁻¹

The mean change in carbon stocks in above-ground biomass and below-ground biomass per unit area are based on the measurements of sample plots.

As per the Annex 27, EB63, paragraph 3(p), allometric equation is used to calculate the carbon stock change of the project.

The steps of the methodology relevant to the allometric equation method are applied to calculate the carbon stock change in the project.

$$TB_{ABj} = f_j(DBH) \quad \text{(Equation 68 of the methodology)}$$

where:

TB_{ABj} Above-ground biomass of a tree; kg tree⁻¹

$f_j(DBH)$ An allometric equation for species j linking above-ground tree biomass (kg tree⁻¹) to diameter at breast height (DBH) measured in plots for stratum i , species j , time t . Despite available for some 10% of the trees in the plots, tree heights (H) were not used for estimation.

The carbon stock in above-ground biomass per tree is calculated by applying the allometric equation to the tree measurements.

$$TC_{ABj} = TB_{ABj} \cdot CF_j \quad \text{(Equation 69 of the methodology)}$$

where:

TC_{AB} Carbon stock in above-ground biomass per tree; kg C tree⁻¹

TB_{ABj} Above-ground biomass of a tree of species j ; kg tree⁻¹

CF Carbon fraction (IPCC default value = 0.5); t C (t d.m.)⁻¹

The *increment of above-ground biomass carbon accumulation* is assessed by subtracting the biomass carbon at time 2 from the biomass carbon at time 1.

$$\Delta TC_{ABjT} = TC_{ABj,t2} - TC_{ABj,t1} \quad \text{(Equation 70 of the methodology)}$$

where:

ΔTC_{ABjT} Carbon stock change in above-ground biomass per tree of species j between two monitoring events; kg C tree⁻¹

$\Delta TC_{ABj,t2}$ Carbon stock change in above-ground biomass per tree of species j at monitoring event t_2 ; kg C tree⁻¹

$\Delta TC_{ABj,t1}$ Carbon stock change in above-ground biomass per tree of species j at monitoring event t_1 ; kg C tree⁻¹

The change in biomass carbon per tree within each plot is calculated by multiplying with plot expansion factor which is proportional to the area of the measurement plot.

$$\Delta PC_{ABikT} = \frac{XF \cdot \sum_{tr=1}^{TR} \Delta TC_{ABjT,tr}}{1000} \quad \text{(Equation 71 of the methodology)}$$

$$XF = \frac{10,000}{AP} \quad \text{(Equation 72 of the methodology)}$$

where:

$\Delta PC_{AB,ijT}$	Plot level carbon stock change in above ground biomass in stratum i , between two monitoring events; t C ha ⁻¹
ΔTC_{ABjT}	Carbon stock change in above-ground biomass per tree of species j between two monitoring events; kg C tree ⁻¹
XF	Plot expansion factor from per plot values to per hectare values
AP	Plot area; m ²
tr	Tree (TR = total number of trees in the plot)

The *mean carbon stock change within each stratum* is calculated by averaging across plots in a stratum.

$$\Delta MC_{ABikT} = \frac{\sum_{pl=1}^{PL_{ik}} \sum_j^J \Delta PC_{ABikT,pl}}{PL_{ik}} \quad \text{(Equation 73 of the methodology)}$$

where:

ΔMC_{ABikT}	Mean carbon stock change in above-ground biomass in stratum i , stand model k , between two monitoring events; t C ha ⁻¹ .
ΔPC_{ABijT}	Plot level mean carbon stock change in above-ground biomass in stratum i , species j , between two monitoring events; t C ha ⁻¹ .
pl	Plot number in stratum i , species j ; dimensionless
PL_{ik}	Total number of plots in stratum i , stand model k ; dimensionless
j	Species j (J = total number of species)

The *carbon stock in below-ground biomass* is estimated by applying the root-shoot ratio to the above-ground carbon stock.

$$TC_{BBj} = TC_{ABj} \cdot R_j \quad \text{(Equation 74 of the methodology)}$$

$$\Delta TC_{BBjT} = TC_{BBj,t2} - TC_{BBj,t1} \quad \text{(Equation 75 of the methodology)}$$

$$\Delta PC_{BB,ikT} = \frac{XF \cdot \sum_{tr=1}^{TR} \Delta TC_{BBjT}}{1000} \quad \text{(Equation 76 of the methodology)}$$

$$\Delta MC_{BB,ikT} = \frac{\sum_{pl=1}^{PL_{ik}} \Delta PC_{BBikT,pl}}{PL_{ik}} \quad \text{(Equation 77 of the methodology)}$$

where:

TC_{BBj}	Carbon stock in below-ground biomass per tree of species j ; kg C tree ⁻¹
TC_{ABj}	Carbon stock in above-ground biomass per tree of species j as calculated in Step 1; kg C tree ⁻¹
R_j	Root-shoot ratio appropriate to increments for species j (as of 2006 IPCC Guidelines); dimensionless
ΔTC_{BBjT}	Carbon stock change in below-ground biomass per tree of species j between two monitoring events; kg C tree ⁻¹

$\Delta PC_{BB, ijT}$	Plot level carbon stock change in below-ground biomass of species j between two monitoring events; t C ha ⁻¹
XF	Plot expansion factor from per plot values to per hectare values (see equation 80); dimensionless
tr	Tree (TR = total number of trees in the plot)
ΔMC_{BBikT}	Mean carbon stock change in below-ground biomass for stratum i , stand model k , between two monitoring events; t C ha ⁻¹
ΔPC_{BBikT}	Plot level carbon stock change in below-ground biomass for stratum i , stand model k , between two monitoring events; t C ha ⁻¹ pl = plot number in stratum i , stand model k ; dimensionless
PL_{ik}	Total number of plots in stratum i , stand model k ; dimensionless

The *annual carbon stock change* is calculated by dividing the carbon changes between two monitoring events by the number of years between monitoring events.

$$\Delta MC_{ABikT} = \frac{\Delta MC_{ABikT}}{T} \quad \text{(Equation 78 of the methodology)}$$

$$\Delta MC_{BBikT} = \frac{\Delta MC_{BBikT}}{T} \quad \text{(Equation 79 of the methodology)}$$

where:

$\Delta MC_{AB,ikt}$	Annual mean carbon stock change in above-ground biomass for stratum i , stand model k , at year t ; t C ha ⁻¹ yr ⁻¹
$\Delta MC_{BB,ikt}$	Annual mean carbon stock change in below-ground biomass for stratum i , stand model k , at year t ; t C ha ⁻¹ yr ⁻¹
ΔMC_{ABikT}	Mean carbon stock change in above-ground biomass for stratum i , stand model k , between two monitoring events; t C ha ⁻¹ yr ⁻¹
ΔMC_{BBikT}	Mean carbon stock change in below-ground biomass for stratum i , stand model k , between two monitoring events; t C ha ⁻¹ yr ⁻¹
T	Number of years between two monitoring events

As the project implementation focuses on assisted natural regeneration, there is no site preparation. Therefore, there is an assumption there are no GHG emissions from soil disturbance.

The biomass burning is not practiced in project implementation; therefore, emissions from biomass burning are non-existent. However, the occurrence of wildfires was monitored. As per the Fire Management Plan report natural fire incidents occurred in 19.65 hectare located in the forest parcel 12 7a in Qafe-Mali Administrative Unit (village Orosh, Fushe-Arrez Municipality) during the monitoring period.

Equations 84 - 87 of the methodology were applied to estimate GHG emissions from biomass burnt, as follows:

$L_{BiomassBurn} = L_{BiomassBurn, CO2} + L_{BiomassBurn, N2O} + L_{BiomassBurn, CH4}$ (Eq. 84 of methodology).

Thus, the total amount of GHG emissions from wildfire is 132.75 tCO₂eq. for 01.07.2012-15.02. 2019.

Per AR-AM0003-v.04 methodology, accounting for increases in emissions by sources is only required if significant (>2 per cent of the actual net GHG removals

	<p>by sinks). In addition, per the Tool for testing significance of GHG emissions in A/R CDM project activities" (Version 01) (EB31, Annex 16), the emissions of the biomass burning from these natural fires are insignificant (less than 5% of net anthropogenic removals by sinks) and are considered zero.</p> <p>There is a small amount of emissions from fossil fuel use by forest guard personnel, as reported in the monitoring forms. The total amount of emissions is 25.97 tCO₂ eq. over 01.07.2012-15.02.2019. Calculation assumed passenger car, rural, Euro 3 from "Table 3.2.5 emission factors for European gasoline and diesel vehicles (mg/km), COPERT IV model" of Volume 2: Energy of 2006 IPCC Guidelines.</p> <p>There is no fertilizer application in the project. Therefore, there are no emissions associated with them. Moreover, as per annex 26, EB63, emissions from use of fertilizer use are not needed to be considered. Therefore, no project emissions occurred as a consequence of the project implementation and are reported as zero.</p> <p>AENOR verified these equations were determined in compliance with the methodology AR-AM0003v.04</p> <p>Considering all values of the parameters as assessed in sections above and that there are no GHG emissions as a result of the implementation of the project activity, AENOR is able to confirm that the actual project GHG emissions by sinks achieved for the monitoring period are 192,396 tCO₂e.</p> <p>AENOR verified that equations applied are those defined in the monitoring report and registered PDD. AENOR verified that equations used are consistent with sources provided to define them, the spreadsheet calculations, the applicability conditions of the methodology, associated tools and monitoring plan.</p> <p>AENOR validated the consistency and correctness of each formula cross-checking equations used in the spreadsheets with equations/formulas detailed in the monitoring report and registered PDD.</p> <p>AENOR checked the calculations and confirmed that these are accurate and correct.</p>
Findings	<p>CL 3- Regarding Calculations the following issues shall be clarified:</p> <ul style="list-style-type: none"> • Clarify the Biomass expansion factor, sheet "standard values". • For the calculation of Actual Anthropogenic GHG removals by sink, clarify why the GHG removals by sinks from the first monitoring period are not discount for the calculation, since the ERs were already issued. Sheet "net GHG removal by sinks", table "year-wise GHG removal sheet by sinks". The increment of biomass carbon accumulation should be by subtracting the biomass carbon at time 2 from biomass carbon at time 1. • Clarify why the allometric equations for <i>Quercus</i> are used for the following species, <i>Carpinus betulus</i>, <i>Carpinus orientalis</i>, <i>Carpinus sp</i>, <i>Ostrya sp</i>. • Please provide documented evidence for the allometric equations from section E.2 and clarify the use of the oak allometric equation, since there is not oak, hornbeam and ash in the project.
Conclusion	<p>This CL3 was closed. The Excel spreadsheet was provided with the issues correctly and clarifications from the PP were provided.</p> <p>Equations in the monitoring report are consistent with the spreadsheet calculations and data between different sheets in the spreadsheet calculations are consistent. Sources of the equations are provided and evidence submitted to AENOR.</p>

	<p>The audit team has reproduced the calculation made by the PP in the spreadsheets calculations and the same results have been obtained. Data values were crosschecked with sources and found correctly determined or calculated. Therefore, the calculation is deemed appropriate and consistent with the evidence provided and cross-checked by AENOR.</p> <p>AENOR verified that the allometric equations adopted to the project are in accordance with the A/R Methodological Tool: Demonstrating appropriateness of allometric equations for estimation of aboveground tree biomass in A/R CDM project activities (Version 01.0.0).</p> <p>In AENOR's opinion, monitoring practices are deemed appropriate and consistent with the monitoring plan and the relevant guidance provided by the CDM Executive Board.</p>
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E.8.3. Calculation of leakage GHG emissions

Means of verification	<p>Regarding leakage, it is considered to be zero and does not need monitoring.</p> <p>The only potential source of leakage was expected to be displacement of grazing animals. Leakage is not relevant for 2nd verification period, as there was no record of reducing animal population since the end of previous monitoring period.</p> <p>During site visit, AENOR verified that situation has not changed. The LK=0.</p>
Findings	No findings were raised.
Conclusion	The assumptions considered by the PP for the present monitoring period are in compliance with the registered PDD and the applied methodology and applicable tools and the approach has not changed from the validation.

E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	<p>The net anthropogenic GHG removals by sinks is the actual net GHG removals by sinks minus the baseline net GHG removals by sinks minus leakage, therefore, the following general formula can be used to calculate the net anthropogenic GHG removals by sinks of an A/R CDM project activity (CAR-CDM), in tonnes CO₂-e:</p> <p>CAR-CDM = C ACTUAL – CBSL – LK (Equation 101 ARAM0003-v.04)</p> <p>Where:</p> <p>CAR-CDM Net anthropogenic greenhouse gas removals by sinks; tonnesCO₂-e</p> <p>C ACTUAL Actual net greenhouse gas removals by sinks; tonnes CO₂-e</p> <p>CBSL Baseline net greenhouse gas removals by sinks (as pre-determined in the PDD); tonnes CO₂-e</p> <p>LK Leakage; tonnes CO₂-e</p> <p>Therefore:</p> <p>CAR-CDM=192,396 tCO₂e-4,513 tCO₂e-0=187,883 tCO₂e</p> <p>Thus, the amount of tCERs generated by the project activity since the start date of the project is 187,883 tCO₂e.</p>
Findings	No findings were raised.
Conclusion	<p>AENOR was able to confirm that the calculations are based on reliable data gathered during the monitoring activities. Likewise, AENOR verified that equations used to calculate the biomass of the different species are from reliable sources and consistent with the spreadsheet calculation and in compliance with the registered PDD. Default values used were also crosschecked with data sources detailed in the monitoring report and registered PDD and AENOR deems they are valid and correct. The spreadsheet used to calculate the temporary emission reductions (tCER) calculations and all figures were tracked, checked and found to be consistent. All data and parameters monitored are stored and processed.</p> <p>AENOR validated the consistency and correctness of each formulas cross-checking equations used in the spreadsheets with equations/formulas detailed in the monitoring report and registered PDD.</p> <p>Since temporary CERs (tCERs) have been issued based on the previous verification and certification, AENOR confirms that that all net anthropogenic GHG removals achieved since the start of the project activity are allocated to the commitment period in which the monitoring period ends.</p> <p>AENOR verification team confirms that:</p> <ul style="list-style-type: none"> • A complete set of data for the monitoring period is available. No partial data are

	<p>available.</p> <ul style="list-style-type: none"> Information provided in the monitoring report has been cross-checked with other sources, when possible (e.g. inventories from sampled plots) Calculations of baseline emissions, project activity emissions and leakage, as appropriate, have been carried out in accordance with the formulae and methods described in the monitoring plan, the applied methodology and associated tools. Assumptions used in emission calculations have been justified. Appropriate emission factors, IPCC default values, and other reference values have been correctly applied; The summary table in the MR has been filled correctly and the values are in line with the related emissions reduction calculation spreadsheet. The assumptions in emission calculations were verified by AENOR and they are reasonable. They are correctly justified.
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E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	The actual emission reductions achieved during the current monitoring period are much lower than the emission reductions stated in the registered CDM-PDD.		
	Item	Values estimated in ex ante calculation of registered PDD	Actual values achieved during this monitoring period
	Emission reductions (t CO ₂ e)	330,478 tCO ₂ -e	187,883 tCO ₂ -e
Findings	No findings were raised		
Conclusion	AENOR verification team confirms that a comparison of actual GHG emission reductions or net anthropogenic GHG removal of the project activity achieved during this monitoring period with the estimates in the registered PDD has been provided. The verification team considers the calculation of the comparison is correct.		

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	The claimed GHG removals for the present monitoring period are lower than ex ante estimated in the registered PDD.
Findings	No findings were raised
Conclusion	AENOR confirms that value ex ante in the PDD and value in the present monitoring period are consistent. The ex post value is lower than the ex ante estimated.

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	<p>This monitoring period under verification is the second one, which began on 01/07/2012 – 15/02/2019.</p> <p>The emission reduction during the first commitment period and the period from 01/01/2013 onwards are as follows:</p> <table border="1"> <thead> <tr> <th>GHG emission reductions reported up to 31/12/2012</th><th>GHG emission reductions reported from 01/01/2013 onwards</th></tr> </thead> <tbody> <tr> <td>0</td><td>187,883 tCO₂-e</td></tr> </tbody> </table> <p>This allocation is in compliance with VVS v02.</p>	GHG emission reductions reported up to 31/12/2012	GHG emission reductions reported from 01/01/2013 onwards	0	187,883 tCO ₂ -e
GHG emission reductions reported up to 31/12/2012	GHG emission reductions reported from 01/01/2013 onwards				
0	187,883 tCO ₂ -e				
Findings	No findings were raised				
Conclusion	Since temporary CERs (tCERs) have been issued based on the previous				

	verification and certification, AENOR confirms that that all net anthropogenic GHG removals achieved since the start of the project activity are allocated to the commitment period in which the monitoring period ends.
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E.9. Assessment of reported sustainable development co-benefits

Means of verification	The project participants did not request to AENOR to verify sustainable developments co-benefits.
Findings	No findings were raised
Conclusion	The project participants did not request to AENOR to verify sustainable developments co-benefits.

E.10. Global stakeholder consultation

Means of verification	No comments were received after the publication of the monitoring report.
Findings	No findings were raised.
Conclusion	AENOR confirms that no comments were received during the public comment period.

SECTION F. Internal quality control

Following the completion of the assessment process by the verification team, all documentation undergoes an internal quality control through a technical review before the request for Issuance of CERs is submitted.

The Technical reviewer is a qualified member of AENOR, independent from the team that carried out the verification of the project activity. The technical reviewer or the team appointed for the technical review is qualified in the technical area(s) and sectoral scope(s) of the project activity.

SECTION G. Verification opinion

In AENOR's opinion, the amount of 187,883 tn CO₂e achieved by the project "Assisted Natural Regeneration of Degraded Lands in Albania" for the monitoring period from 1 July 2012 to 15 February 2019 in the final version of the monitoring report are fairly stated. These GHG emissions reductions were calculated correctly on the basis of the approved baseline and monitoring methodology AR-AM0003 version 04, the monitoring plan, formulas provided in the registered PDD and all applicable CDM requirements

SECTION H. Certification statement

Reporting period: from 1 July 2012 to 15 February 2019.

Verified emission reductions in the above reporting period: 187,883 tn CO₂ equivalent.

VERIFICATION AND CERTIFICATION STATEMENT

AENOR has performed the verification of the emission reductions of the CDM Project “Assisted Natural Regeneration of Degraded Lands in Albania” for the monitoring period from 1 July 2012 to 15 February 2019.

Verification is performed in accordance with the Validation and Verification Standard for project activities, version 02.0, and relevant decisions of the CDM EB and COP/MOP.

AENOR planned and performed the verification by obtaining evidence, the information and explanations that AENOR considers necessary to give reasonable assurance that the reported amount of GHG emission reductions for the period is fairly stated.

AENOR conducted the verification having regard to the Monitoring Plan included in the Project Design Document, and the applied baseline as registered for the project. This assessment included:

- Collection of evidence supporting the reported data.
- Checking whether the provisions of the Monitoring Plan, were consistently and appropriately applied.

AENOR has verified whether the information included in the final monitoring report is correct and that the emission reductions achieved have been determined correctly.

In AENOR’s opinion, GHG emissions reported for the project in the final monitoring report are fairly stated.

The GHG emissions reductions were calculated correctly on the basis of the approved methodology AR-AM0003 version 04, and the monitoring plan and formulae provided in the registered PDD.

AENOR is able to certify that the emission reductions for the project in the monitoring period from 1 July 2012 to 15 February 2019 amount to 187,883 tn CO₂e.

Madrid, 26/05/2020



José Luis Fuentes Pérez
Team leader



José Magro
Authorized person

Appendix 1. Abbreviations

Abbreviations	Full texts
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CH ₄	Methane
CL	Clarification request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DBH	Diameter at Breast Height
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GIS	Geographic Information System
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
tCERs	Temporary Certified Emission Reduction
PDD	Project Design Document
PP	Project Participant
PS	CDM Project Standard for Project activities
UNFCCC	United Nations Framework Convention on Climate Change
tCERs	Temporary Certified Emission Reduction
VVS	Validation and Verification Standard for project activities

Appendix 2. Competence of team members and technical reviewers

CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "Assisted Natural Regeneration of Degraded Lands in Albania"

Madrid, 26/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the verification process of the above mentioned project activity:

Name: Jose Luis Fuentes Pérez

CDM Team Leader: Yes

CDM Verifier: Yes

CDM Technical Reviewer: N/A

External Technical Expert: N/A

Technical areas related with the project activity: Yes

TA 14.1. Afforestation/Reforestation



José Magro González
Authorised person

CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "Assisted Natural Regeneration of Degraded Lands in Albania"

Madrid, 26/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the verification process of the above mentioned project activity:

Name: Elena Llorente

CDM Team Leader: No

CDM Verifier: Yes

CDM Technical Reviewer: N/A

External Technical Expert: N/A

Technical areas related with the project activity: Yes

TA 14.1. Afforestation/Reforestation



José Magro González
Authorised person

CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "Assisted Natural Regeneration of Degraded Lands in Albania"

Madrid, 26/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the verification process of the above mentioned project activity:

Name: Luis Javier Arribas

CDM Team Leader: N/A

CDM Verifier: N/A

CDM Technical Reviewer: Yes

External Technical Expert: N/A

Technical areas related with the project activity: No



José Magro González
Authorised person

CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "Assisted Natural Regeneration of Degraded Lands in Albania"

Madrid, 26/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the verification process of the above mentioned project activity:

Name: Asier Torres González

CDM Team Leader: N/A

CDM Verifier: N/A

CDM Technical Reviewer: N/A

External Technical Expert: N/A

Technical areas related with the project activity: Yes

14.1 Afforestation/Reforestation



José Magro González
Authorised person

Appendix 3. Documents reviewed or referenced

1.	Author	Title	References to the document	Provider
1	PP	PDD version 6, 22/06/2009	1.	PP
2.	PP	Monitoring Plan included in the approved PDD	2.	PP
3.	PP	Monitoring report v5 dated 25 February 2013 from the first verification event	3.	PP
4.	PP	Monitoring report v 03 dated 28 February 2020	4.	PP
5.	PP	Spreadsheet calculation	5.	PP
6.	PP	GIS package	6.	PP
7.	AENOR	Instruction for the Validation, Verification and Certification of CDM project activities I/DTC/039	7.	AENOR
8.	CDM-EB	Validation and Verification Standard for project activities v 02.0	8.	CDM-EB
9.	CDM-EB	AR-AM0003 "Afforestation and reforestation of degraded land through tree planting, assisted natural regeneration and control of animal grazing – Version 4"	9.	CDM-EB
10.	CDM-EB	CDM Executive Board: 'Clean Development Mechanism Project Standard' for project activities (version 02.0)	10.	CDM-EB
11.	CDM-EB	Guidance on the application of the definition of project boundary to A/R CDM project activities, Version 01.	11.	CDM-EB
12.	CDM-EB	Guidance on accounting GHG Emissions in A/R CDM Project Activities (paragraph 35 in the report of the EB 42 meeting).	12.	CDM-EB
13.	AENOR	On-site inspection records. Maps, strata checked on site	13.	AENOR
14.	PP	Training Lectures - slide 16 on calibration.pdf;	14.	PP
15.	CDM-EB	Demonstrating appropriateness of allometric equations for estimation of aboveground tree biomass in AR CDM project activities (version 1.0.0), Annex 28, EB65	15.	CDM-EB
16.	CDM-EB	Guidelines on application of specified versions of AR CDM methodologies in verification of registered AR CDM project activities (version 1.1), Annex 26, EB63	16.	CDM-EB
17.	CDM-EB	Guidelines on accounting of specified types of changes in AR CDM project activities from the description in registered PDD (version 02.0), Annex 24, EB66	17.	CDM-EB
18.	CDM-EB	Guideline on application of materiality version 02.0	18.	CDM-EB
19.	CDM-EB	CDM Project Cycle Procedure for project activities version 02.0	19.	CDM-EB
20.	CDM-EB	CDM Monitoring report form and the instruction for filling out the monitoring report. Version 07.	20.	CDM-EB
21.	PP	Forest Inventory Raw Data, logbooks.	21.	PP
22.	PP	Training Participants List on the calibration workshop	22.	PP
23.	PP	Field sheets plot measurements checked on site	23.	PP

24.	PP	Calibration equipment _ALB	24.	PP
25.	CDM	Final verification report for the first monitoring period dated on 2013-05-21.	25.	CDM
26.	IPCC	Good Practice Guidance for Land Use, Land Use Change and Forestry (LULUCF). 2003	26.	IPCC
27.	PP	Technical specifications from manufacturer for forestry equipment (GPSs, diameter tapes, calliper).	27.	IPCC
28.	Autonoma University Barcelona	<i>Biomass Equations for Quercus ilex L. in the Montseny Massif, Northeastern Spain</i> , Forestry, 1988. 61(2).	28.	Autonoma University Barcelona
29.	University of Udine	Alberti, G., P. Candido, A. Peressotti, S. Turco, P. Piuissi, and G. Zerbi, <i>Aboveground biomass relationships for mixed ash (Fraxinus excelsior L. and Ulmus glabra Hudson) stands in Eastern Prealps of Friuli Venezia Giulia (Italy)</i> , Ann. For. Sci., 2005. 62(8): p. 831-836.	29.	University of Udine
30.	European Universities	Leonardi, S., I. Santa Regina, M. Rapp, H. Gallego, and M. Rico, <i>Biomass, litterfall and nutrient content in Castanea sativa coppice stands of southern Europe</i> , Ann. For. Sci., 1996. 53(6): p. 1071-1081.	30.	European Universities
31.	Forest Ecology and Management	Porté, A., P. Trichet, D. Bert, and D. Loustau, <i>Allometric relationships for branch and tree woody biomass of Maritime pine</i> , Forest Ecology and Management, 2002. 158: p. 71-83.	31.	Forest Ecology and Management
32.	Forest Ecology and Management	Blujdea, V.N.B., R. Pilli, I. Dutca, L. Ciuvat, and I.V. Abrudan, <i>Allometric biomass equations for young broadleaved trees in plantations in Romania</i> , Forest Ecology and Management, 2012. 264(0): p. 172-184.	32.	Forest Ecology and Management

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verifications

FAR ID	XX	Section no.	XX	Date: DD/MM/YYYY
Description of FAR				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

Table 2. CL from this verification

CL ID	01	Section no.	E.3	Date:	14/08/2019
Description of CL					
Documented evidence should be provided for the area of the project activity, and the different strata, ecozone 1,2,3,4.					
Project participant response					Date: 23/12/2019
Documentation has been provided.					
File "Project parcel UTM revised 2019.zip"					
DOE assessment					Date: 18/03/2020
The clarification was closed. PP provided the correct documentation and AENOR checked it.					

CL ID	02	Section no.	E.4.7	Date:	14/08/2019
Description of CL					
In accordance with the MR section B.2.5, please clarify which changes are specific for this monitoring period, for instance section a) changes in year-wise areas planted, b) changes in species composition, c) changes in stocking density.					
Project participant response					Date: 23/12/2019
The section has been moved to B.2.7					
Documentation provided by project participant					
DOE assessment					Date: 18/03/2020
The clarification was closed since report was provided and information was consistent with information used in calculations.					

CL ID	03	Section no.	E.8.2	Date:	14/08/2019
Description of CL					
Regarding Calculations the following issues shall be clarified:					
<ul style="list-style-type: none"> Clarify the Biomass expansion factor, sheet "standard values". For the calculation of Actual Anthropogenic GHG removals by sink, clarify why the GHG removals by sinks from the first monitoring period are not discount for the calculation, since the ERs were already issued. Sheet "net GHG removal by sinks", table "year-wise GHG removal sheet by sinks". The increment of biomass carbon accumulation should be by subtracting the biomass carbon at time 2 from biomass carbon at time 1. Clarify why the allometric equations for <i>Quercus</i> are used for the following species, <i>Carpinus betulus</i>, <i>Carpinus orientalis</i>, <i>Carpinus sp</i>, <i>Ostrya sp</i>. Please provide documented evidence for the allometric equations from section E.2 and clarify the use of the oak allometric equation, since there is not oak, hornbeam and ash in the project. 					
Project participant response					Date: 23/12/2019
The correct calculation is provided					
Documentation provided by project participant					

DOE assessment	Date: 18/03/2020
The clarification was closed as PP provided the requested information.	
The spreadsheet has been updated and it is considered correct.	
The allometric equations and the sources provided are considered correct.	

CL ID	04	Section no.	E.7	Date: 14/08/2019
Description of CL				
Evidence of calibration/verification certificates shall be provided for the monitoring equipment used as stated in section C of the MR.				
Project participant response				Date: 23/12/2019
Documented evidence is provided for the calibration of the equipments and explanation is included in the MR.				
Documentation provided by project participant				
MR				
DOE assessment				Date: 18/03/2020
Documented evidence has been provided and it is considered correct. CL is closed.				

Table 3. CAR from this verification

CAR ID	01	Section no.	E.1	Date: 14/08/2019
Description of CAR				
The monitoring report form for CDM project activity shall be updated to the latest version in accordance with UNFCCC website.				
Project participant response				Date: 23/12/2019
The latest Monitoring Report (MR) Form version 07 available at the CDM website has been used to update the MR.				
Documentation provided by project participant				
DOE assessment				Date: 18/03/2020
The CAR is closed. The correct format of the MR has been established.				

CAR ID	02	Section no.	E.4.1	Date: 14/08/2019
Description of CAR				
In accordance with the post registration change report published at UNFCCC website, the temporary deviation adopted to sample size 20% precision, it is only applicable for the first monitoring period until 30/06/2012. The sample size applied for the second monitoring period is not consistent with registered PDD.				
Project participant response				Date: 23/12/2019
A new temporary deviation adopting 20 % precision and 90% confidence interval is requested for the second monitoring period as a post registration change. The DOE is requested to submit the temporary deviation request to the UNFCCC Secretariat.				
Documentation provided by project participant				
Updated M.R				
DOE assessment				Date: 18/03/2020
The CAR is closed. The updated M.R is correct.				

Table 4. FAR from this verification

FAR ID	n/a	Section No.		Date: DD/MM/YYYY
Description of FAR				

Project participant response		Date: DD/MM/YYYY
Documentation provided by project participant		
DOE assessment		Date: DD/MM/YYYY

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none"> Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN); Make structural and editorial improvements.
02.1	11 January 2018	Editorial revision to correct the numbering of appendices in the instructions.
02.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
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