Validation Report

CDM PoA Validation Report

SMALL HYDROPOWER PROGRAMME OF ACTIVITIES IN ALBANIA AND SERBIA

GLC Report No: 267, Rev. 06

Germanischer Lloyd Certification GmbH • Brooktorkai 18 • 20457 Hamburg • Germany
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Validation Report

GLC Report No. 267, Rev. 06

Organisational Unit Germanischer Lloyd Certification GmbH (GLC), Greenhouse Gas Services	
Client "Energy Changes Projektentwicklung GmbH"	Client reference person Mr. Clemens Plöchl

Summary:

		Involvement of Party as PP:	
PoA-DD:	Small Hydropower Programme of Activities in Albania and Serbia		
Project's Host Country(ies):	Albania	☐ Yes	☒ No
Annex I Country(ies):	Austria	☐ Yes	☒ No
Coordinating / Managing Entity (CME):	enso hydro GmbH		
Other Project Participants (PP)	Energy Changes Projektentwicklung GmbH, denkstatt GmbH		
Sectoral Scope(s), Technical Area(s)	CDM Sectoral Scope 1, Technical Area 1.2		
Methodology(ies) / Version(s):	AMS-I.D / version 17		
Project Size:	☐ Large scale	☒ Small scale	
ER Estimation of 1st CPA:	63,909 t CO_{2eq} total	9,130 t CO_{2eq} per year	
GSC date of the PoA:	2012-05-16		
Start date of the PoA crediting period	2013-02-01 (or on the date of registration, whichever is later)		
CPA Crediting Period:	☐ Fixed (10 years)	☒ Renewable (7years)	
PoA Duration:	28 years		
Validation opinion:	☒ Positive ☐ Negative		

Project Assessment Team:	**Technical Review Team:**	**Approval by:**
Jose-Emilio Moreno Alfred Bundo	Karunakar Avuram Markus Weber	Markus Weber
Date of this revision:	Revision No.	Number of pages
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01	2012-10-07	Jmor	Assessment team leader	Draft Reporting
02	2012-11-09	Kav	Reviewer	Review of the draft report with comments
03	2012-12-21	Jmor	Assessment team leader	Changes to address TR comments and new PDDs version
04	2012-12-24	Kav	Reviewer	Review of the revised report
05	2012-12-31	Jmor	Assessment team leader	Changes to address TR comments
06	2012-12-31	MWeb	Fianl Reviewer/approver	Final Review and approval

Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM-EB	CDM Executive Board (the board)
CER	Certified Emission Reduction
CH_4	Methane
CL	Clarification request
CME	Coordinating / Managing Entity
CMP	Meeting of the Parties to the Kyoto Protocol
CO_2	Carbon dioxide
CO_2eq	Carbon dioxide equivalent
COP/MOP	The Conference of the Parties to the United Nations Framework Convention on Climate Change serving as the Meeting of the Parties to the Kyoto Protocol
DNA	Designated National Authority
DOE	Designated Operation Entity
EC	Eligibility Criteria
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GSC	Global Stakeholder Consultation
GHG	Greenhouse gas
GLC	Germanischer Lloyd Certification GmbH
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standard Organisation
LoA	Letter of Approval
NGO	Non-governmental Organisation
ODA	Official development assistance
O&M	Operation and maintenance
PDD	Project Design Document
PP	Project Participant (s)
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

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1 INTRODUCTION

"Energy Changes Projektentwicklung GmbH" has commissioned Germanischer Lloyd Certification GmbH (GLC) to perform the validation of the PoA "Small Hydropower Programme of Activities in Albania and Serbia" (hereafter called "the PoA"). This validation report summarizes the findings of the validation of the PoA, performed on the basis of UNFCCC criteria for the CDM and PoA, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and the subsequent decisions made by COP/MOP and the CDM Executive Board.

1.1 Objective

The purpose of a validation is to have an independent third party assessment of the project activity and its documentation. In particular, the project's baseline, monitoring plan, and the project's compliance with relevant UNFCCC and host Party criteria are validated by a Designated Operational Entity (DOE) in order to confirm that the project design. The project information is described in the following documents:

- The Clean Development Mechanism (CDM) Programme of Activities (PoA) Design Document Form (the "PoA-DD");
- A Component Project Activity Design Document Form (CPA-DD) which is to be based on the application of the PoA to a real case CPA (the "real case CPA-DD")[1], and
- Relevant supporting documents.

The DOE confirms that the project activity meets the identified CDM criteria. Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs). The executing DOE can only provide a validation/inclusion opinion but the ultimate decision whether a PoA is registered or not rests with the CDM Executive Board (CDM-EB).

1.2 Scope and Criteria

The validation scope is defined as an independent and objective review of the PoA-DD and the real case CPA-DD (together hereafter referred to as "PDDs") and supporting documentation. This validation report covers only the PoA-DD as for the real case CPA-DD a separated validation report is complied.

The PDDs and supporting documentation are reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords and the relevant decisions by the CDM Executive Board, including the approved consolidated baseline and monitoring methodology, AMS-I.D/3/ version 17. The validation was based on the requirements and guidance of the Validation and Verification Standard /1/ and all PoA related CDM requirements/2/.

[1] A separate validation report is provided for the inclusion of the real case CPA to the PoA.

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2 VALIDATION TEAM

2.1 Assessment Team

A competent team with relevant knowledge and experience in the specific sectoral scopes and project activity was appointed by GLC. Furthermore the appointment of the team takes into account the required knowledge of the host country and general project activity knowledge requirements for validating the PoA design and the relevant CERs will be achieved by the CPA(s) under the PoA. The assessment team can be composed of an Assessment Team Leader (ATL), auditors (A) and host country or technical expert (E). Table 1 below shows the composition of the assessment team, the qualification of the team members and their functions.

Table 1: Validation team

Name	Function [1)]	Sectoral scope specific knowledge	Technical area specific knowledge	Local knowledge	Type of involvement				
					Desk review	On-site visit / interviews	Reporting	Supervision of work	Expert input
Jose-Emilio Moreno	ATL/TE	X	X		X	X	X	X	X
Alfred Bundo	LE			X	X	X			X

1)

A	Auditor	FE	Financial expert	T-ATL	Trainee ATL
ATL	Assessment team leader	LE	Local expert	T-A	Trainee auditor
				TE	Technical expert

2.2 Technical Review Team and Approval

Before submission of the final validation report to the CDM EB of the UNFCCC, a technical review of the whole validation and the draft report was carried out by an appointed technical review (TR) team. The TR team is composed of persons competent to the technical area and project activity this PoA falls under. Each person involved in the reviewer is independent to the validation assessment.

The complete assessment prepared by the validation team is checked, if required adjusted and finally confirmed by the TR process.

The TR team and the person responsible for approval of the report are found in the table 2 below:

Table 2: Technical review team and approval

Name	Function 2)	Technical area specific knowledge	Sectoral scope specific knowledge	Supervision of work
Karunakar Avuram	R/TE	X	X	
Markus Weber	FR/AP	X	X	X

2)

AP	Approver	TE	Technical expert
FR	Final reviewer	T-R	Trainee reviewer
		R	Reviewer

3 METHODOLOGY

The validation consists of the following phases:

I Desk review of the PoA-DD[/8/] and real case CPA-DD documentation[/9/] and supporting documents. This includes the preliminary compliance check of the PoA design against the applicability conditions and with regard to baseline identification and eligible project measures, monitoring of emission reductions, as well as completeness and sufficiency the Eligibility Criteria (EC) designed for CPA Inclusions.

II On-site assessment and follow-up interviews (through email communications, telephone calls, etc.) with project stakeholders

III Resolution of outstanding issues and the issuance of the draft validation report and opinion

IV Technical review of the draft validation report and other supporting documentation in order to ensure the correctness, completeness and comprehensiveness of the reporting.

V Finally the report and supporting documentation has to be approved by a competent person before they are submitted to UNFCCC website for inclusion under the PoA.

This final validation report summarizes the assessment after all phases of the validation. The following sections outline each step.

3.1 Desk Review of the PDDs and Supporting Documents

The initial version of the PDDs[/8/9/] as well as supporting documents are assessed in the context of a desk review in order to verify the correctness, credibility and interpretation of the presented information. A further crosscheck of the information provided was done with information from other sources as available.

The desk review is based on the first versions of the PDDs which were uploaded for Global Stakeholder Consultation (GSC).

A list of documentation reviewed during the complete validation is presented in section 6.

3.2 On-Site Assessment and Follow-Up Interviews with Project Stakeholders

From 2nd July 2012 to 6th July 2012, Mr. Moreno and Mr. Bundo from GLC's validation team conducted out on-site visits to the following site(s):

- Site where the first CPA will be located (powerhouse location and Intake location) close to the village of Petran (Permet district, Gjirokastra county) in Albania
- Local office of Lengarica & Energy sh.p.k. / enso hydro GmbH in Tirana, Albania
- Office of the Ministry of Environment, Forests and Administration of Waters of Albania
- Office of the Albania DNA

In the context of such on-site visits, GLC performed visual inspection to the CPA site; assessment of the CPA related documents provided by the project participants. The members of the validation team also conducted interviews with representative stakeholders in order to confirm selected information and to resolve issues earlier identified during the desk review of documents. The interviewed persons are summarized in the Table 3-1, the main topics of the interviews were:

- *PoA design and adopted technology*
- *Demonstration of additionality (including prior CDM consideration)*
- *GHG emission reduction calculations*
- *Application of the monitoring methodology as well as expected design and application of the monitoring plan*
- *Assessment of environmental impacts, environmental licensing and legal compliance*
- *Stakeholder consultation process*
- *Programme overview, and detailed explanation about the CPA's relevant technical aspects*
- *First CPA implementation schedule*
- *Assessment of environmental impacts, environmental licensing and legal compliance of the CPAs under the PoA and baseline scenario with applicable regional and national legislation.*
- *Status of the development of the Environmental Impact Assessment (EIA) for the proposed first CPA*
- *Letter of Approval for the PoA*

Table 3-1: Interviewed Persons

Name	Organization/Function
Oliver Percl	Energy Changes Projectentwicklung GmbH/ CDM Consultant
Jürgen Gaisberger	Enso GmbH / Project manager
Georg Schweighofer	Enso GmbH / Project manager
Sokol Abazaj	Enso GmbH / Local representative in Albania
Christian Praher	denkstatt GmbH CDM Consultant
Redi Baduni	Ministry of Environment, Forests and Administration of Waters of Albania / Director of Environmental protection
Jakup Slejmani Vasic Shkurta	Villagers / landowners affected by the project
Mrs. Bajame Sefa	International Finance Corporation (World Bank)

Niko Shupuli	Mayor of Petran community
Agustin Cara	Organiser of LSC
Mrs. Loureta Dibra	Ministry of Environment-Albania, Climate Change Unit/ Representative of Albania DNA

3.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation was to resolve any outstanding issues which needed to be clarified prior to GLC's positive conclusion on the PoA and CPA design as described in the PDDs and supporting documentation. In order to ensure transparency, a validation questionnaire was customised for the PoA, according to the latest Validation and Verification Standard (VVS)/1/ and all PoA related CDM requirements/2/. This questionnaire shows in transparent manner VVS and PoA requirements, source, means and findings of validation as well as the results from validating the identified criteria. The validation questionnaire serves the following purposes:

- It organises, details and clarifies the requirements a PoA is expected to meet;
- It ensures a transparent validation process where the validators will document how a particular requirement has been validated and the result of validation.

The validation questionnaire consists of one table with sub-sections. These sections are related to the different topics which have to be validated and checked with respect to the VVS and PoA requirements. The completed validation questionnaire for the PoA is enclosed in Annex A to this report. The different columns of this questionnaire are explained in Table 3-2.

Findings established during the validation can either be seen as a non-fulfilment of criteria of the applicable CDM baseline and monitoring methodology, and/or applicable criteria of the CDM or where a risk to the fulfilment of PoA objectives is identified.

Corrective action requests (CAR) are issued, where:

i) the project participants have made mistakes that will influence the ability of the PoA to achieve real, measurable additional emission reductions; or

ii) applicable baseline and monitoring methodology, and/or applicable criteria of the CDM have not been met; or

iii) there is a risk that emission reductions cannot be monitored or calculated or that the PoA would not be accepted as CDM project activity

A request for clarification (CL) may be used provided information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met or where additional information is needed to fully clarify a particular issue.

The validation questionnaire consists of individual frames for each Corrective action requests (CAR) and request for clarification (CL) raised. The content of each frame is described in the figure below. To guarantee the transparency of the validation process, the concerns raised by GLC and the responses provided by the project participants are fully documented in Annex A of this report.

Forward Action Requests (FARs) are issued during validation to highlight issues related to PoA implementation that require review/assessment during the subsequent verification of the PoA. FARs are not related to the CDM requirements for registration.

The findings are separately presented in a findings list table which is also attached in Annex A. The different columns of this list are explained in Table 3-3.

The resolution of all raised CAR and CL for the PoA is enclosed in Annex A of this Validation Report.

Table 3-2: Structure of the Validation Questionnaire

CHECKLIST QUESTION / VVS and PoA REQUIREMENTS	*SOURCE*	*MEANS AND FINDINGS OF VALIDATION*	*ASSESSMENT*	*FINAL CONCLUSION*
Lists CDM requirements which the PoA should meet. The checklist is organised in several different sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	Gives reference to documents where the checklist question or item is from.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR), Clarification request (CL), or Forward Action Request (FAR).	This is either: OK, when the Draft Conclusion is OK or raised CAR/CLs have been successfully closed out; OK, with only FAR remaining; Or: CAR/CLs

Table 3-3: Structure of the Findings' List – Resolution of Corrective Action and Clarification Requests

Description of Finding (CAR, CL, FAR)	Project Participants Response	GLC Assessment	Final Conclusion (OK or OPEN)
In this column a finding is described in a clear and transparent manner. It also shall be described which further information is needed or which correction must be applied. The date of issue is also indicated.	In this column the PP shall provide a clear statement how to close the finding. This statement shall be sustained with suitable arguments and evidence. The date of issue and the number rounds is also indicated.	In this column GLC provides the conclusion of the assessment. The finding can be close here or if the argumentation and/or evidence are not suitable a new line below with the continuation of the finding will be opened. The date of issue and the number rounds is also indicated.	GLC indicates whether the issue raised has been resolved or not by indicating OK for closed out or Open for not closed out.

4 VALIDATION REPORTING

4.1 Participants' and Parties' Approval

A first Host country Approval[/26/] for this PoA has been issued on 2012-12-24 by the Ministry of Environment, Forestry and Water Administration of the Republic of Albania, which is confirmed as Albania's DNA. The PoA complies with the permission requirements and assists the host country in achieving sustainable development. The approval also confirms the authorization to the CME (Coordinating / Managing Entity) "enso hydro GmbH" for the coordination of the PoA.

Annex-I country Approval for this PoA has been issued on 2012-09-12[/24/] by the "Federal Ministry for Agriculture, Forestry, Environment and Water Management", which is confirmed as Austria's DNA. The approval also confirms the participation of "enso hydro GmbH" and "Energy Changes Projektentwicklung GmbH" and "denkstatt GmbH" to this PoA.

Besides, the letters also indicated the exact PoA title and that each of the participating Party is a Party to the Kyoto Protocol, and that the participation in this PoA is voluntary. Based on the information given in these letters, GLC considers the approval and the participation of each of the parties as complete and unconditional.

GLC received these letters from the project participants directly and after double checking, considers the provided letters to be authentic according to VVS § 49(c).

The requirements of the VVS 45-48 are therefore considered to be complied with.

No entities other than those approved as project participants are included in these sections of the PoA-DD.

Modalities of communication statement

The modalities of communication (MoC) statement[/3/] has been received from the project participant with whom the DOE has a contractual agreement.

The MoC statement[/20/] uses the latest F-CMD-MOC form (version 2.1); the information required as per the form, including its annex 1, is correctly completed and the project participant's authorized signatories signing the MoC correspond to the project participant's authorized signatories included in MoC, annex 1.

Regarding the requirements of the VVS[/1/] paragraph 53, GLC has validated the corporate identity of the Project Participant "Energy Changes Projektentwicklung GmbH" as well as the identity, specimen signatories and employment status of the authorised signatories mentioned in the MoC via checking the Registry of the company[/21/] and the personal identities of the authorised signatories. GLC has also validated the corporate identity of the Project Participant "enso hydro GmbH" as well as the identity, specimen signatories and employment status of the authorised signatories mentioned in the MoC via checking the Registry of the company[/22/] and the personal identities of the authorised signatories. GLC has validated as well the corporate identity of the Project Participant "denkstatt GmbH" as well as the identity, specimen signatories and employment status of the authorised signatories mentioned in the MoC via checking the Registry of the company[/23/] and the personal identities of the authorised signatories.

Therefore GLC confirms that the MoC statement complies with all relevant forms and requirements established in the Validation and Verification Standard[/1/], specially paragraph 59, and also confirms that it has performed due diligence on the MoC statement in accordance with the requirements established in the Validation and Verification Standard[/1/] paragraph 53.

4.2 Project Design Documents

The PoA-DD is using CDM-SSC-PoA-DD template version 02.0. GLC can confirm that the PoA-DD and real case CPA-DD have been completed in accordance with relevant form and guidance as provided by UNFCCC.

4.3 Project Description

The purpose of the PoA is to generate electricity through the utilization of the hydro power potential in Albania. A typical CPA under the program will install new renewable power plants (small hydro power plants - SHPP) at locations where no renewable power plants were in operation prior to the implementation of the project activity (greenfield projects), the power plant will deliver the produced electricity to the Albanian electricity grid.

The program will include both run-of-river projects as well as hydro projects with reservoirs.

The description of the PoA given in the Poa-DD is complete, accurate and in compliance with CDM requirements. Besides, the technology employed is confirmed as environmentally safe and sound.

The value of installed power of every CPA proposed under this PoA will be no more than 15MW, therefore, the proposed PoA is a small scale PoA. The first proposed CPA is estimated to have 8.96 MW of installed power that is less than 15MW.

4.4 Operational and management arrangements for the PoA

The management plan is defined in Section C of the PoA-DD and is assessed to be appropriate for the purpose of the projects implementation. The overall responsibility for the implementation will be held by the CME “enso hydro GmbH“. The CME will be in charge of coordinating the project participants, collecting the monitoring data and communicating with DOEs and CDM Executive Board.

The CME will build appropriate in-house CDM capacity for PoA management and CPA inclusions and it will ensure proper capacity building for CPA implementers, too. Emission reduction calculation will be based on data collected and installed under supervision of the CME.

During the on-site visit different interviews with responsible personnel of the CME were carried out, in addition the CME manual[/29/] has been reviewed together with the PoA Database[/30/] and the documentation corresponding to the inclusion of the first CPA[/30/] in the PoA. As a conclusion, in can be confirmed by the audit team that the management system developed by the CME is implemented and complies with the requirements of the PoA standard[/2/] para. 19. It can also be confirmed that the CME

has the competencies to check potential CPAs and ensure that they comply with the Eligibility criteria before including them in the PoA.

4.5 Eligibility criteria for CPAs

The Coordinating and Managing Entity (CME) has designed clear and unambiguous eligibility criteria (EC) for the inclusion of a CPA under this PoA.

The eligibility criteria as listed in PoA-DD section B.2 have been validated by GLC in accordance with the applicability of the applied methodology AMS-I.D version 17[/3/] and the published "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" version 02.1[/2/] and therefore is in accordance with the Validation and Verification Standard[/1/] paragraph 196.

The eligibility criteria have been demonstrated to be verifiable, and to be sufficiently objective and comprehensive to properly assess the inclusions of CPAs in the PoA.

Correctness and completeness of the EC was assessed and documented through the questionnaire (section 2.2) included in Annex A.

The conclusion of the audit team is that the eligibility criteria are therefore in line with the requirements of the PoA Standard[/2/] section 3.2.1.

4.6 Baseline and Monitoring Methodology

4.6.1 Applicability of the Selected Methodology to a typical CPA

GLC has checked the compliance with each applicability criterion as listed in the applied baseline and monitoring methodology AMS-I.D version 17[/1/] and can confirm that all applicability criteria have been fulfilled. The version of this CDM methodology approved by EB is valid during submission for registration.

The assessment was carried out for each applicability criterion and included, among others, the compliance check of the local project setting with the applicability conditions with regard to baseline setting and eligible project measures. This assessment also included the review of other sources not provided by PPs, and these sources could confirm that applicability conditions are complied with. Assessment has been documented through the questionnaire (Part II, section 8.2) included in Annex A.

Furthermore, all applicability conditions of the applied methodology have been met and the PoA design is in line with all requirements and stipulations mentioned in all sections of the applied methodology. Besides, the PoA design is not expected to result in significant emissions related both to project and leakage, other than those listed in the methodology.

GLC has also confirmed that there are no emission sources, which are not addressed by the applied methodology, and are expected to contribute more than 1% of the overall expected annual average emission reductions.

This project therefore fulfils all the applicability criteria of the applied methodology and the tools therein.

4.6.2 PoA and CPA Boundary

4.6.2.1 PoA Boundary

The boundary of the project of activities is identified as the physical boundaries of the Republic of Albania.

Through document review it is verified that the identified project boundary is in compliance with the methodology and is sufficiently justified.

4.6.2.2 CPA boundary and included sources and greenhouse gases

As per AMS-I.D (version 17), the boundary of a typical CPA of this PoA includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to. The information has been also correctly given in section B.3 of the PoA-DD Part II.

The physical delineation of the CPA under the PoA and the description of the emission sources and GHGs that are included in the CPA boundary are appropriate for the purpose of calculating project and baseline emissions for each CPA.

The methodology indicates the CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity as the GHG sources to be included in the boundary; GLC confirms that the justification by the PP is reasonable and evidenced. Besides, there are no other sources which are impacted by the project and not addressed by the applied methodology.

4.6.3 Baseline Identification of a typical CPA

The procedure to identify the most plausible baseline scenario derived from the applied methodology has been applied correctly and is transparently and sufficiently documented in the PoA-DD.

The baseline scenario is correctly defined as: *"…the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources"* (as per AMS.I.D, Version 17 paragraph 10).

Baseline emissions of a CPA are calculated using the grid emission factor that reflects the existing power plants' consumption of fossil fuels and expected electricity generation of the power plants implemented by the CPA.

Through document review and based on interview with the CME it has been verified that the baseline scenario is identified according to the methodology; and in regard to item 88 of VVS. GLC hereby confirms the following:

a) All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;

b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD;

c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;

d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD;

e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM project activity.

4.6.4 Algorithms and Formulae used to Determine Emission Reductions

The PoA-DD applies steps and equations to calculate project emissions, baseline emissions and leakage as well as the overall emission reductions as per the requirements of the applied methodology.

Detailed information on the validation of the parameters used in the equations can be found in Annex A (validation questionnaire Part II, Section 8.6). The algorithms for the determination of the baseline, project, and leakage emissions are discussed below in subsequent sections of this report.

Baseline Emission of a typical CPA:

The main sources of baseline emissions as per the methodology are the product of electrical energy baseline $EG_{BL,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor, and the baseline emissions are calculated as follows:

$$BE_y = EG_{BL,y} * EF_{CO2,grid,y}$$

Where

BE_y = Baseline emissions in year *y* (tCO_2e)

$EG_{BL,y}$ = Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year *y* (MWh)

$EF_{CO2,grid,y}$ = CO_2 emission factor of the grid in year *y* (tCO_2/MWh)

The quantity of net electricity supplied to the grid ($EG_{BL,y}$) will be calculated according to the on-site measurements as the difference between the total electricity generation of the project (gross electricity generation - $EG_{gross,y}$) and the electricity consumption of the project activity (EC_y) as per the following equation:

$EG_{BL,y} = EG_{gross,y} - EC_y$

Where

$EG_{BL,y}$ = Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year *y* (MWh)

$EG_{gross,y}$ = Quantity of gross electricity generation of the project activity in the year *y* (MWh)

EC_y = Quantity of electricity consumption of the project activity in the year *y* (MWh)

The grid emission factor $EF_{CO2,grid,y}$ of the Albanian grid has been listed in Section B.6.2 of the PoA-DD Part II and are fixed ex-ante for the first crediting period of the PoA. In case one CPA is connected to the Albanian grid and the CPA will be included within the first crediting period of the PoA, this grid emission factors listed in the section B.6.2 shall be used.

During renewal of the crediting period of the PoA, the Grid Emission factor calculation will be revised as per the latest data available in accordance with the latest tools/procedured/guidance. All CPAs exporting electricity to the Albanian grid included or renewing their crediting period within the second crediting period of the PoA, shall apply the value given in the corresponding PoA-DD.

GLC identified that determining the grid emission factor on PoA level (valid for the first crediting period of the PoA) is in accordance with the requirements set by the UNFCCC. In accordance with paragraph 24 of the "procedures for the registration of a programme of activities as a single CDM project activity and issuance of CERs for a PoA" (EB 55 Annex 38)/4/, the "Procedures for Renewal of a Crediting Period of a Registered CDM project activity" (EB 63 Annex 29)/5/ shall be applied to the PoA every seven years. According to the "Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period" (EB 63 Annex 20)/6/ in the "Procedures for Renewal of a Crediting Period of a Registered CDM project activity" (EB 63 Annex 29)/5/ data and parameters that were only determined at the start of the crediting period and not monitored during the crediting period will have to be updated. Hence, updating the grid emission factor at the renewal of the PoA is in accordance with the above stated requirements.

Moreover by means of assessing the registered PoA reference number 2535/10/ "CUIDEMOS Mexico (Campana De Uso Intelegente De Energia Mexico) - Smart Use of Energy Mexico" GLC identified that a request for review has been sent by the CDM-EB as follows:

"The PDD and the VR should reflect that the ex-ante grid emission factor will be revised at the point of renewal of the crediting period of the PoA as it could be interpreted at present that it is intended that the emission factor will be fixed for the lifetime of the PoA."

Thus GLC identified that the approach by the PP is acceptable: the grid emission factor for Albanian grid can be fixed ex-ante for the first crediting period of the PoA.

Grid Emission Factor (GEF) calculation

The grid emission factor ($EF_{CO2,grid,y}$) of the Albanian grid has been calculated using the "Tool to calculate the emission factor for an electricity system"/27/ (GEF Tool) version 2.1.0 (this version was valid at the time of starting of the PoA's Global Stakeholder Consultation).

The appendix 4 of the PoA-DD/8/ contains a detailed explanation on how the GEF has been calculated following the steps indicated in the GEF Tool/27/, in addition a spreadsheet file/28/ with the details of the calculations has bee provided to the Audit team for validation of the GEF. The following paragraphs give a summary on how the calculation of the GEF has been validated.

As per GEF Tool Step 1, the electricity system applicable to the PoA is correctly identified as the national grid of Albania. This electricity system is interconnected with the neighbour countries, following the GEF Tool for the electricity imports from both Annex-I and non-Annex-I countries are considered to have an emission factor of **0** tCO_2/MWh. The electricity exports are not subtracted from energy generation for the purpose of calculating the Combined Margin.

In the Step 2 of the GEF Tool, the project participants have chosen to include off-grid power plants in the calculation of both Build Margin (BM) an Operating Margin (OM). The off-grid power plans have been classified as per guidance of the annex 2 of the GEF Tool and in total 23 UNFCCC classes were identified during the survey to determine the off-grid generation.

In the Step 3 of the GEF Tool the option of "Average OM" (option 'd') is chosen to calculate the Operating Margin. Regarding the data vintage the *ex-ante* option is chosen with the most recent data available by the time of starting the GSC being the years 2009 to 2011.

As per the indications of Step 4 of the GEF Tool the PPs apply the procedure given to calculate the Average OM (that follows the same procedure as the Simple OM but including the low cost/must run power plants). Since for the power units no accurate data on fuel consumption and electricity generation is available the emission factor $EF_{EL,m,y}$ was determined following the option A2 given in the GEF Tool.

After applying the calculations the Average OM results in a value of 0.0453 tCO_2/MWh.

In the Step 5 of the GEF Tool the power plants to calculate the Build Margin (BM) are chosen and in the Step 6 the Building Margin is calculated. The assumptions taken by the PPs can be considered conservative and the methodological choices are in line with the requirements of the GEF Tool/27/.

After applying the Step 5 and Step 6 the Build Margin (BM) results in a value of 0.5218 tCO_2/MWh.

Finally in the Step 7 of the GEF Tool the Combined Margin (CM) is calculated by applying the corresponding weight factors to the Build Margin (BM) and the Operative Margin (OM). For this PoA the weight factors are chosen as 0.5 for both BM and OM as per the GEF Tool.

As a result we obtain a ex-ante Combined Margin (CM) resulting in a value of 0.2836 tCO_2/MWh.

In general the opinion of the audit team is that the calculation of the Combined Margin (CM) follows the provisions given in the GEF Tool/27/, the methodological choices are correctly applied, the data used is confirmed comes from reliable sources and the calculations are correct, reproducible and transparent.

Project Emission of a typical CPA:

According to the methodology AMS-I.D, version 17 (para. 20) project emissions have to be considered following the procedure described in the most recent version of ACM0002, therefore in our case the version 12.3.0 of the ACM0002 is applicable to calculate project emissions for the CPAs under the PoA.

The main sources of project emissions for the CPAs included in this PoA as per the methodology are *"emissions from water reservoirs of hydro power plants*", (in case of hydropower plants with reservoir and power density greater than 4 W/m^2 and less than 10 W/m^2)

The project emissions are then calculated as follows:

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$$

Where

PE_y = Project emissions in the year *y* (tCO_2e)

$PE_{FF,y}$ = Project emissions from fossil fuel consumption in the year *y* (tCO_2e)

$PE_{GP,y}$ = Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year *y* (tCO_2e)

$PE_{HP,y}$ = Project emissions from water reservoirs of hydro power plants in year *y* (tCO_2e)

For the proposed PoA only project emissions from water reservoirs ($PE_{HP,y}$) are relevant.

Further explanation on the calculation of $PE_{HP,y}$ are included in the PoA-DD part II Section B.6.1, all the equations, methodological choices and calculation rationale are in line with the methodology ACM0002 version 12.3.0.

Leakage of a typical CPA:

As per the methodology no leakage is to be considered since all the CPAs under the proposed PoA will be a greenfield projects and no generating equipment is transferred from another activity.

Emission Reductions of a typical CPA:

The emission reduction is calculated as baseline emission deducted by project emission and leakage.

$$ER_y = BE_y - PE_y - LE_y$$

Where

ER_y = Emission reductions in year *y* (tCO_2e)

BE_y = Baseline emissions in year *y* (tCO_2e)

PE_y = Project emissions in the year *y* (tCO_2e)

LE_y = Leakage emissions in the year *y* (tCO_2e, leakage is zero in all CPAs under the PoA)

For the data and parameters not to be monitored throughout the crediting period (i.e. they are determined only once and thus remain fixed throughout the crediting period), it is assessed that all data sources, assumptions and calculations are correct, applicable to the project and contribute to a conservative estimate of the emission reductions. For the data and parameters subject to monitoring, it is confirmed that the ex-ante estimated values for the monitoring parameters are plausible, and the emission reduction estimates provided in the PoA-DD are reasonable and conservative.

In conclusion, all values used in the PoA-DD and CPA-DD to calculate emission reductions are considered reasonable in the context of the proposed SSC-PoA project activity and calculation approach is correct.

4.7 Additionality of the PoA and a typical CPA

Additionality of the PoA is demonstrated through the additionality of each CPA (as per Eligibility Criteria no. 6), this is in line with the PoA Standard/2/ paragraph 7.

Since this PoA consists of small-scale CPA projects, additionality is demonstrated via compliance with the relevant requirements of the "Guidelines on the demonstration of additionality of small-scale project activities" /11/ as indicated in the Eligibility Criteria no. 6.

The PoA Eligibility Criteria have also provisions to apply the "Guidelines for demonstrating additionality of microscale project activities"/12/ for additionality demonstration in case of micro-scale CPA projects.

The following sections 4.7.2 to 4.7.6 are not applicable at PoA level since the additionality of the PoA is demonstrated via the additionality of each individual CPA. A separate CPA-validation report contains the explanation on how the first CPA included in the PoA has demonstrated additionality.

4.7.1 Prior Consideration of the CDM

The start date of the PoA is determined as the date of publication of the PoA-DD for GSC (2012-05-16) since there has been no previous notification of the intention to seek the CDM status; this is in line with the para. 159 of the CDM Project Standard/19/.The first CPA starting date (estimated as 2013-01-01) is defined as per glossary of CDM term/25/, and is later than the start date of the PoA, thus as per paragraph 7(d) of PoA Procedures (version 03.1, EB55 Annex 38) and paragraph 2 of "Guidelines on the Demonstration and Assessment of Prior Consideration of the CDM"/16/, the DOE has determined that the CDM was seriously considered in the decision to implement the project activity.

4.7.2 Identification of Alternatives

(Not applicable)

4.7.3 Investment Analysis

(Not applicable)

4.7.4 Barrier Analysis

(Not applicable)

4.7.5 Microscale CPA Additionality Demonstration

(Not applicable)

4.7.6 Common Practice Analysis

This criterion is not applicable since the PoA includes only small-scale CPAs.

4.8 PoA and CPA Monitoring Plan

4.8.1 PoA Monitoring Plan

The CME is responsible for the monitoring of the PoA. The CMA will maintain a database (Record Keeping System – RKS) where specific information about each of the CPAs and the operational performance are stored.

This database will keep records about the following information per CPA:

- Serial number of the CPA

- Name of the CPA implementer, address, contacts

- Exact CPA Location: City/State/Province, GPS coordinate/s of the turbine/s

- Commissioning date of the small hydro power plant and of each turbine and generator

- Start date and end date of each crediting period

- Technical specification of each SHPP (type, make, model, installed capacity, year, etc.)

- End dates of operation permits, if applicable

- Monitored parameters

- Verification status

Main responsible for collection of the data will be the CDM Project Manager at the CME but also each CPA implementer will monitor and record the plant data in coordination with the CDM Project Manager.

GLC can therefore confirm that the CME, with the structure in place, will be able to manage and coordinate the monitoring of the PoA as described in the PoA-DD according to the requirements of Validation and Verification Standard, paragraph 198/1/, since the structure of the CME is sufficient to ensure the proper control of all records and information related to the implementation and operation of each of the individual CPAs.

4.8.2 Monitoring Plan of a typical CPA

All parameters to be monitored for each CPA as detailed in section B.7.1 of PoA-DD Part II will be monitored according to the CPA Monitoring Plan outlined in B.7.2. of PoA-DD Part II.

Primary data will be collected by CPA implementers and stored according to the procedures defined in section B.7.1. of the PoA-DD Part II. This will include the monitoring of the following parameters:

	Data or Parameter to be monitored	Procedure or means of measurement
1	Quantity of net electricity supplied to the grid as result of the implementation of the CDM project activity in the year y (**$EG_{BL,y}$** in MWh/y)	• Calculated from the on-site measurements by electricity meter(s) at the point of feeding to the grid. • The measurements will be continuous, with at least monthly recording and annual summarization. The data will be archived electronically for 2 years following the end of the last crediting period. • Measured data used to calculate the net electricity supplied to the grid will be cross-checked with electricity purchase and the invoices for consumed electricity from the grid operator
2	Quantity of the total gross electricity generated and supplied by the project activity SHPP to the grid in the year y (**$EG_{gross,y}$** in MWh/y)	• Measured by electricity meter(s) installed at the point of feed into the grid. • The measurements will be continuous, with at least monthly recording and annual summarization. The data will be archived electronically for 2 years following the end of the last crediting period. • The accuracy of the meter is not lower than requirements of national standards. • Calibration should be in line with requirements of the "General Guidelines to SSC CDM Methodologies"/17/ and the requirements of the Project Standard/19/ • Measured data used to calculate the net electricity supplied to the grid will be cross-checked with electricity purchase and the invoices for consumed electricity from the grid operator.
3	Quantity of the electricity consumption by the project activity SHPP in the year y (**EC_y** in MWh/y)	• Measured by electricity meter(s) at the point of feed into the grid. • The measurements will be continuous, with at least monthly recording and annual summarization. The data will be archived electronically for 2 years following the end of the last crediting period. • The accuracy of the meter(s) will be in accordance with the national/international industry standards or grid operator's requirements. • The metering equipment will be properly calibrated in accordance with the instructions

		(schedules, procedures) for quality assurance from the technology provider and according to the relevant national calibration standard.
4	Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full. (A_{PJ} in m^2)	• Measured or calculated annually from topographical surveys, maps, satellite pictures, etc. • This parameter is required to be monitored only for hydro power projects with reservoirs.

In case of hydroprojects with reservoirs it may be necessary to calculate project emissions due to the reservoirs as per the Methodology ACM0002/7/, in that case the equations require the parameter TEG_y to calculate the project emissions. However "TEG_y" is not a new parameter to be measured but is the same as $EG_{gross,y}$ (quantity of the total gross electricity generated and supplied by the project activity to the grid in the year y).

The monitoring of a typical CPA is in compliance with methodology/3/ and the requirements of the VVS/1/ paragraph 131.

4.8.3 Applied Sampling Method

No sampling approach will be used for this PoA.

4.9 Stakeholder Consultation

4.9.1 Local Stakeholder Consultation

The PP followed the invitation procedure for stakeholder comments on the CPA level for the first CPA in line with PoA and relevant requirements.

Based on the on-site validation investigation, all relevant local stakeholders have been invited to comment on the first CPA, and a summary of comments is available in section C.2 of the real case CPA-DD. The comments have been addressed by the PPs as explained in section C.3 of the real-case CPA-DD.

The opinion of the validation team is that the local stakeholder consultation for the first CPA has been carried out in an appropriate way and in line with CDM requirements. For more details please refer to the first CPA validation report Section 4.9

4.9.2 Global Stakeholder Consultation

GLC published the project documents on UNFCCC's website (https://cdm.unfccc.int/ProgrammeOfActivities/Validation/gotoProj?id=WZ82P6CHV8127G6TPKP7Q29RJ67UG0) on 2012-05-16 and invited comments within the period from 2012-05-16 to 2012-06-14 by Parties, stakeholders and non-governmental organisations. No comments were received.

4.10 Environmental Impacts

Environmental Analysis is chosen to be done at CPA level.

EIA requirements for the first CPA are in compliance with CDM requirements as well as host country regulations. For more details please refer to the first CPA validation report Section 4.10.

5 VALIDATION OPINION

Germanischer Lloyd Certification GmbH has performed a validation of Small Hydropower Programme of Activities in Albania and Serbia. The validation was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria given to provide consistent project operations, monitoring and reporting.

In detail the conclusions can be summarised as follows:

- The PoA is inline with all relevant host country criteria and all relevant UNFCCC requirements for CDM. The LoAs are real and sufficient.
- The eligibility criteria established for CPA inclusion are deemed appropriate and sufficient.
- The baseline has been appropriately identified as per the applied methodology.
- The PoA and the CPA additionality are sufficiently justified.
- The ex-ante estimation of emission reductions for the 1st CPA are real, measurable and give long-term benefits to the mitigation of climate change.
- The calculation of the emission factors and the CPA ex-ante estimation of emission reductions is carried out in a transparent and conservative manner.
- The monitoring plan is transparent and adequate.
- Information on the local stakeholder consultation prior to submitting the PoA for validation is sufficiently.
- No relevant negative environmental impacts are expected from the implementation of the PoA.
- A typical CPA is likely to be implemented as designed in the PoA-DD and to achieve the estimated amount of emission reductions.

The review of the project design documentation and the subsequent follow-up interviews have provided Germanischer Lloyd Certification GmbH with sufficient evidence to determine the fulfilment of the CDM criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The PoA is hence recommended by Germanischer Lloyd Certification GmbH for registration.

Hamburg, 2012-12-31

Germanischer Lloyd
Certification

Markus Weber

6 REFERENCES

The following table outlines the documentation reviewed during the validation:

/#/	Author: Title, version,	date of issue (yyyy/mm/dd)
/1/	CDM-EB: Clean Development Mechanism Validation and Verification Standard - version 3.0	EB 70 Annex 3
/2/	CDM-EB: Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities – version 2.1. Also referred as "PoA Standard"	EB 70 Annex 5
/3/	CDM-EB: AMS-I.D. "Grid connected renewable electricity generation" - Version 17.0	EB 61 Annex 17
/4/	CDM-EB: "Procedures for the registration of a programme of activities as a single CDM project activity and issuance of CERs for a PoA"	EB 55 Annex 38
/5/	CDM-EB: "Procedures for Renewal of a Crediting Period of a Registered CDM project activity"	EB 63 Annex 29
/6/	CDM-EB: "Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period"	EB 63 Annex 20
/7/	CDM-EB: ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" - Version 13.0.0	EB 67 Annex 13
/8/	Energy Changes Projektentwicklung GmbH: PoA-DD for "Small Hydropower Programme of Activities in Albania and Serbia" version 01 dated 2012-05-03 (GSC version) Energy Changes Projektentwicklung GmbH: PoA-DD "Small Hydropower Programme of Activities in Albania and Serbia" version 05 dated 2012-12-17 (final version)	
/9/	Energy Changes Projektentwicklung GmbH: CPA-DD for "Small Hydropower PoA in Albania and Serbia- Lengarica Hydropower Project" version 01 dated 2012-05-03 (GSC version) Energy Changes Projektentwicklung GmbH: CPA-DD for "Small Hydropower PoA in Albania and Serbia- Lengarica Hydropower Project" version 05 dated 2012-12-17 (final version)	
/10/	Registered project No. 2535 "CUIDEMOS Mexico (Campana De Uso Intelegente De Energia Mexico) - Smart Use of Energy Mexico"	
/11/	CDM-EB: "Guidelines on the demonstration of additionality of small-scale project activities" version 09.0	EB68 Annex 27
/12/	CDM-EB: "Guidelines for demonstrating additionality of microscale project activities" version 04.0	EB68 Annex 26
/13/	CDM-EB: "Guidelines for completing the programme design document form for small-scale CDM programmes of activities" version 02.0	EB67 Annex 30
/14/	CDM-EB: "Guidelines for completing the component project activity design document form for small-scale component project activities" version 01.0	EB66 Annex 17

/15/	CDM-EB: "Guidelines on assessment of de-bundling for SSC project activities" version 03.0	EB 54 Annex 13
/16/	CDM-EB: "Guidelines on the Demonstration and Assessment of Prior Consideration of the CDM" version 04.0	EB62 Annex13
/17/	CDM-EB: "General guidelines for SSC CDM methodologies" version 19.0	EB69 Annex 27
/18/	CDM-EB: "Simplified modalities and procedures for small-scale CDM project activities"	decision 4/CMP.1,Annex II
/19/	CDM-EB: "Clean development mechanism project standard" version 02.1	EB70 Annex 2
/20/	enso hydro GmbH, Energy Changes Projektentwicklung GmbH, denkstatt GmbH: Modalities of Communication Statement	n.a.
/21/	Austrian Commercial Register (*Firmenbuch*): Extract of the registry of the company "Energy Changes Projektentwicklung GmbH"	2012-03-07
/22/	Austrian Commercial Register (*Firmenbuch*): Extract of the registry of the company "enso hydro GmbH"	2012-09-13
/23/	Austrian Commercial Register (*Firmenbuch*): Extract of the registry of the company "denkstatt GmbH"	2012-11-05
/24/	Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management: Letter of Approval for the CDM Project Activity "Small Hydropower Programme of Activities in Albania and Serbia"; and Letter of Authorisation	2012-09-12
/25/	CDM-EB: "Glossary of CDM terms", version 07.0	EB 70 Annex 07
/26/	Republic of Albania – Ministry of Environment, Forestry and Water Administration: *"Letter of Approval for the CDM Programme of Activities (PoA) "Small Hydropower Programme of Activities in Albania and Serbia", and Letter of Authorization for the coordinating/managing entity"*	2012-12-24
/27/	"Tool to calculate the emission factor for an electricity system" version 2.1.0	EB 60 Annex 08
/28/	denkstatt GmbH: Excel sheet with the calculation of the Grid Emission Factor for the national Grid of Albania, File named *"20121120_GEF_off_grid_2009_2011_(Tool 02.1.0)"*	2012-11-20
/29/	enso Hydro GmbH: Coordinating/Managing Entity manual, version 01	
/30/	enso Hydro GmbH: • Protocol on the evaluation of the CPA "Lengarica HPP" to be included under the CPA (evaluation of Eligibility Criteria) • Technical Review of the 1st CPA inclusion "Lengarica SHPP" • CME database for the PoA	2012-04-30 2012-05-15

ANNEX A: VALIDATION QUESTIONNAIRE AND RESOLUTION OF CORRECTIVE ACTION AND CLARIFICATION REQUESTS (LIST OG FINDINGS)

TABLE 1: VALIDATION QUESTIONAIRE OF POA-DD

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
PART I. PROGRAMME OF ACTIVITIES (POA)				
1 GENERAL DESCRIPTION OF PROGRAMME OF ACTIVITIES (POA)				
1.1 Title of the Programme of Activities (PoA)				
1.1.1 Has the following information been given in section A.1 of the PoA-DD: a) The title of the proposed PoA; b) The current version number of the PoA-DD; c) The date the PoA-DD was completed (DD/MM/YYYY)?	PoA-DD EB 67 Annex 28&30	The information has been provided in section A.1 of the PoA-DD GSC version as follows: a) PoA title: "Small Hydropower Programme of Activities in Albania and Serbia" b) Current version number: 01 c) Date of completion: 03/05/2012 Nevertheless, the validation team notices that the version number and the date of completion will be updated before uploading for requesting for registration in the course of closing all findings.	OK	OK
1.2 Purpose and general description of the PoA				
1.2.1 Has the section A.2 of the PoA-DD included following descriptions: (a) Policy/measure or stated goal that the PoA seeks to promote; (b) Framework for the implementation of the proposed PoA. E.g.,	EB 67 Annex 28&30	The section A.2 includes information confirming that the PoA is a voluntary action, a clear goal is mentioned and a framework for implementation is included.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
the roles, functions and interrelations of CME, CPA implementer, project owner, end users and any other PPs or third parties directly involved in the operation or implementation of the PoA and CPAs, etc. (c) a confirmation that the PoA is a voluntary action by the CME?				
1.2.2 Has a brief description of how the proposed PoA contributes to sustainable development (not more than one page) been included in section A.2 of the PoA-DD?	EB 67 Annex 28&30 EB 65 Annex 5, §31(g)	Yes, a description about how the PoA contributes to sustainable development (via economical / social benefits and promotion of clean energies) is provided in section A.2	OK	OK
1.3 CMEs and participants of PoA				
1.3.1 Has section A.3 of the PoA-DD Included the followings: (a) Identity of the CME of the proposed PoA, as the entity which communicates with the Board; (b) Project participants to the PoA (project participants may or may not be involved in one of the component project activities (CPAs) related to the PoA)?	EB 67 Annex 28&30	Section A.3 of the PoA-DD indentifies the CME as "enso hydro GmbH", however project participants are not mentioned therefore a CL was issued.	PoA-CL2	OK
1.4 Party(ies)				
1.4.1 Are the CMEs/PPs and Party(ies) involved in the	EB41	Yes, CME and project participants are correctly mentioned in the table of	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
proposed PoA correctly listed in a tabular form in section A.4 of the PoA-DD?	Annex 12 EB 67 Annex 28&30	section A.4		
1.4.2 Is the listed information in the table consistent with the contact details provided in Appendix 1 of the PoA-DD?	EB 67 Annex 28&30 EB33 Annex 34	Yes, information contained in the table of section A.4 is consistent with Appendix 1 of the PoA-DD	OK	OK
1.5 Physical/ Geographical boundary of the PoA				
1.5.1 Has section A.5 provided details of the defined boundary of the proposed PoA in terms of a geographical area (e.g. municipality, region within a country, country or several countries) within which all CPAs to be included in the PoA will be implemented?	EB 65 Annex 3 § 14(a) EB 67 Annex 28&30	Section A.5 contains enough information to identify the boundary of the PoA,	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
1.6 Technologies / measures				
1.6.1 Has a clear, accurate and complete description of the technologies and/or measures to be employed and/or implemented by the CPAs in the PoA been provided in section A.6 of the PoA-DD? Note: Do not provide information that is not essential to understanding the purpose of the PoA and how it reduces GHG emissions. Information related to equipment, systems and measures that are auxiliary to the main scope of the CPAs in the PoA and do not affect directly or indirectly GHG emissions and/or mass and energy balances of the processes related to the CPAs in the PoA should not be included.	EB 67 Annex 28&30	Technology/measures to be implemented by the CPAs are clearly mentioned in section A.6 of the PoA-DD. Description is sufficient.	OK	OK
1.6.2 Has the full description of the technology of the **baseline scenario** been provided in section A.6 of the PoA-DD?	EB 67 Annex 28&30	Description provided in section A.6 includes provisions for applicability of the methodology.	OK	OK
1.6.3 For small-scale CPAs, if a CPA involves more than one component, has the CME indicated in section A.6 of the PoA-DD, that ex ante calculations of baseline, project and leakage GHG emissions as well as GHG emission reductions for each year of the crediting period and for each component separately?	EB65 Annex 5, §90	This PoA considers CPAs with only one component.	OK	OK
1.6.4 For small-scale CPAs, to determine the performance of equipment used in the CPA, has the CME indicated in	EB65 Annex 5,	For the project activity the performance of the equipment can be easily be determined since it is electric equipment (generator plate).	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
section A.6 of the PoA-DD, that appropriate values will be used as per the following requirements? (a) The appropriate value specified in the selected methodology; (b) The national standard for the performance of the equipment type (project participants shall identify the standard used) if the value specified in subparagraph (a) is not available; (c) An international standard for the performance of the equipment type, such as International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) standards (project participants shall identify the standard used) if the value specified in subparagraph (b) is not available; (d) The manufacturer's specifications, provided that they are tested and certified by national or international certifiers, if the value specified in subparagraph (c) is not available; (e) Performance data from test results conducted by an independent entity for equipment installed under the project activity if the value specified in subparagraph (d) is not available.	§91			
1.6.5 For small-scale CPAs, where leakage is to be considered, has the CME indicated in section A.6 of the PoA-DD, that the leakage will be considered only within the boundaries of non-Annex I Parties?	EB65 Annex 5, §92	The PoA considers only new equipment; therefore no leakage is to be considered according to the methodology.	OK	OK
1.6.6 For small-scale CPAs, in case of replacement of existing equipments, has the CME estimated in section A.6 of the PoA-DD, the point in time where the existing equipments would be replaced in the absence of the proposed small-scale CPA in accordance with the 'Tool to determine the remaining lifetime of equipment'?	EB65 Annex 5, §93-94	The PoA considers only new equipment; therefore no replacement is to be considered.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
Note: For household devices/appliances, project participants may disregard the remaining lifetime.				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
1.6.7 For small-scale CPAs, has the CME indicated in section A.6 of the PoA-DD, that norms, specifications, standards and test procedures cited in the selected methodology refer to the latest version of the documentation available at the time of submission of the CPA-DD to the DOE for validation?	EB65 Annex 5, §95	This is correctly considered in the PDD and supporting documentation	Ok	OK
1.7 Public funding of PoA				
1.7.1 Is it indicated in section A.7 of the PoA-DD whether the PoA receives public funding from Annex I Parties? If so, check whether: (a) Information on Parties providing public funding has been provided in section A.7 of the PoA-DD; (b)An affirmation obtained from such Parties has been attached in Appendix 2, stating that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties.	EB 67 Annex 28&30 EB65 Annex 5, §34	Section A.7 clearly indicates that no public funding from Annex I countries	OK	OK
1.7.2 Has it been confirmed whether there are any bilateral or multilateral fund project participants involved in the PoA? If yes, the following information shall be provided to the DOE: • Full official name of the entity fund; • Name of company managing the fund; • Party(ies) authorizing participation of the Fund; • DNA approval of voluntary participation in the PoA and confirmation that it has ratified the Kyoto Protocol; • DNA authorization of the fund to the project	Glossary of CDM terms PoA RfReg. Upload step 3	N.A.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
participant (can be combined with the approval document)				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESSMENT	FINAL CON.
2 DEMONSTRATION OF ADDITIONALITY AND DEVELOPMENT OF ELIGIBILITY CRITERIA				
2.1 Demonstration of additionality for PoA				
2.1.1 How has it been demonstrated in section B.1 of the PoA-DD, that in the absence of CDM, none of the implemented CPAs would occur?	EB 67 Annex 28&30	The PoA is a voluntary action and each of the CPA has to demonstrate additionality. Enough description is provided Section B.1.	OK	OK
2.2 Eligibility criteria for inclusion of a CPA in the PoA				
2.2.1 The geographical boundary of the CPA including any time-induced boundary shall be consistent with the geographical boundary set in the PoA. Is this criteria included in the list of eligibility criteria?	EB 65 Annex 3 § 14(a)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.2 Have Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)been described in the eligibility criteria for inclusion of a CPA under the PoA? Note: Assess how CME procedures can avoid the case of including a new CPA that has been already registered either as CDM project activity or as a CPA of another PoA, as well as internal double counting within all CPAs of this PoA.	EB 65 Annex 3 § 14(b)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.3 Have provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA been included in the eligibility criteria for inclusion of a CPA under the PoA?	EB 65 Annex 3 § 14(b)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
2.2.4 Have specifications of technology/measure incl. level and type of service, performance specifications including compliance with testing/certifications been included in the eligibility criteria for inclusion of a CPA under the PoA?	EB 65 Annex 3 § 14(c)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.5 Have conditions to check the CPA start date through documentary evidence been described in the eligibility criteria for inclusion of a CPA under the PoA? Note: CPA start date shall not be before PoA GSC date.	EB 65 Annex 3 § 14(d)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.6 Have conditions that ensure compliance with applicability and other requirements of single or multiple methodology(ies) and tools applied by CPAs been described in the eligibility criteria for inclusion of a CPA under the PoA?	EB 65 Annex 3 § 14(e)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.7 Have conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality been included in the eligibility criteria for inclusion of a CPA under the PoA as per PoA Standards §§7-12?	EB 65 Annex 3 § 14(f)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.8 Have Local stakeholder consultation prior to inclusion of the CPA been included in the eligibility criteria for inclusion of a CPA under the PoA?	EB 65 Annex 3 § 14(g)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.9 Have Environmental analysis requirement of the CPA been included in the eligibility criteria for inclusion of a CPA under the PoA?	EB 65 Annex 3 § 14(g)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
2.2.10 Have Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance been included in the eligibility criteria for inclusion of a CPA?	EB 65 Annex 3 § 14(h)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.11 If applicable, has a target group (e.g. domestic/ commercial/ industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation) been defined in the eligibility criteria?	EB 65 Annex 3 § 14(i)	This is not applicable for this PoA.	PoA-CAR3	OK
2.2.12 If applicable, have the conditions related to sampling requirements for a PoA in accordance with the approved guidelines /standard from the Board pertaining to sampling and surveys been included in the eligibility criteria for inclusion of a CPA?	EB 65 Annex 3 § 14(j)	This is not applicable for this PoA.	PoA-CAR3	OK
2.2.13 If applicable, have the conditions that ensure that CPA in aggregate meets the small-scale or micro-scale threshold criteria and remain within those thresholds throughout the crediting period of the CPA?	EB 65 Annex 3 § 14(k)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.14 If applicable, have the requirements for the debundling check for small-scale or micro-scale CPA been included in the eligibility criteria for inclusion of a CPA under the PoA as per latest 'Guidelines on assessment of debundling for SSC project activities'?	EB 65 Annex 3 § 14(l)	This is considered in the eligibility criteria, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.15 Has it been included that the CPA shall be approved by the coordinating entity in the eligibility criteria for inclusion of a CPA under the PoA?	EB 65 Annex 3 § 17	The CME manual has provisions ffor the approval of the CPA before inclusion in the PoA.	PoA-CAR3	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
2.2.16 Are the eligibility criteria specified in the PoA-DD sufficiently objective and comprehensive to ensure that all CPAs would comply with the CDM requirements applicable to the PoA? Note: If more requirements are necessary to be included in the eligibility criteria but not covered by the abovementioned questions, please describe.	EB 65 Annex 3 § 16	Yes, the eligibility criteria are ojective and comprehensive to comply with the CDM requirements.	PoA-CAR3	OK
2.2.17 Are all listed eligibility criteria verifiable?	EB 65 Annex 3 § 15	Yes, all criteria are verifiable, however a CAR was raised since more clarity has to be provided in the description of the eligibility criterion/inclusion of CPA.	PoA-CAR3	OK
2.2.18 Please provide an assessment on the eligibility criteria as listed in the **latest version** of the PoA-DD		The following table shows the final eligibility criteria together with the DOE assessment on the compliance with the requirements of PoA-Standard (EB 70 Annex 5) **No.** / **Eligibility criterion as per PoA-DD** / **DOE Asessment** 1 / Only a CPA installed within the boundaries of Republic of Albania as they may exist at the time of CPA shall be eligible for inclusion under the PoA. / This EC covers the requirements of PoA Standard para. 16 (a) 2 / Only a CPA uniquely identified and defined in an unambiguous manner shall be eligible for inclusion under the PoA. There must be no other CDM project activity registered with the same identification data. / This EC covers the requirements of PoA Standard para. 16 (b) 3 / Only a CPA that employs a hydro power technology with total installed capacity equal or below 15 MW throughout the whole crediting period shall be eligible for inclusion under the PoA. / This EC covers the requirements of PoA Standard para. 16 (c) and 16 (k)	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)			ASSESSMENT	FINAL CON.
			CPAs included in this PoA shall be a small scale project activity (5 to 15 MW) or a microscale project activity (up to 5 MW). Only a CPA that employs a hydro power technology with total installed capacity equal or below 5 MW shall be eligible for application of micro-scale approach under the UNFCCC.			
		4	Only a CPA with the starting date on the day or later of the start of validation of the PoA (uploading for global stakeholders comments on the UNFCCC web site) shall be eligible for inclusion under the PoA.	This EC covers the requirements of PoA Standard para. 16 (d)		
		5	Only a CPA complying with the applicability criteria of the methodology AMS-I.D., Version 17 (EB 61) shall be eligible for inclusion under the PoA. Criteria as per the methodology AMS-I.D., Version 17 (EB 61): 2. Only a CPA connected to the Albanian electricity grid shall be eligible for inclusion under the PoA 3. If the CPA is a small hydro power plant with reservoir: Only the CPA fulfilling one of the following conditions shall be eligible for inclusion under the PoA: 3.1. The project activity is implemented in an existing reservoir with no change in the volume of the reservoir; 3.2. The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section of the applied methodology, is greater than 4 W/m^2; 3.3. The project activity is implementing new reservoir and the power density of the	This EC covers the requirements of PoA Standard para. 16 (e)		

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)			ASSESSMENT	FINAL CON.
			power plant, as per definitions given in the project emissions section of the applied methodology, is greater than 4 W/m².			
		6	1. Only a CPA that clearly demonstrates its additionality shall be eligible for inclusion under the PoA. 2.1. If the CPA is a micro scale project activity, the "Guidelines for demonstrating additionality of microscale project activities" shall be applied. 2.2. If the CPA is a small scale project activity, the "Guidelines on the demonstration of additionality of small scale project activities" shall be applied.	This EC covers the requirements of PoA Standard para. 16 (f)		
		7	1. Only a CPA that undertakes the environmental analysis as per requirements of the CDM modalities and procedures shall be eligible for inclusion under the PoA. Only a CPA that performs the environmental impact analysis (EIA) in accordance with the Albanian laws/regulations if it is required shall be eligible for inclusion under the PoA. 2. Only a CPA that has conducted the stakeholder involvement process and that has taken into the due account all the concerns raised during the process shall be eligible for inclusion under the PoA. 3. Only a CPA that installs new power generation equipment in the small hydropower plants shall be eligible under the PoA. No power generation equipment may be transferred from other existing facilities.	This EC covers the requirements of PoA Standard para. 16 (g)		
		8	Only a CPA that has not/will not receive any public funding from Annex I country or the funding is not a diversion from the Official Development Aid (ODA) shall be eligible for inclusion under the PoA.	This EC covers the requirements of PoA Standard para. 16 (h)		

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)				ASSESS MENT	FINAL CON.
		9	1. For small scale CPAs: only a CPA which consists of (a) single small project activity(ies) and is not a debundled component of a large scale project activity shall be eligible for inclusion under the proposed PoA. 2. For micro scale CPAs: only a CPA which consists of (a) single micro scale project activity(ies) and is not a debundled component of a small scale project activity shall be eligible for inclusion under the proposed.	This EC covers the requirements of PoA Standard para. 16 (l)			
				The requirements of PoA Standard as per para. 16 (i) and 16(j) are not applicable to this PoA			

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
2.3 Application of methodologies				
2.3.1 Have the technology/measures and the methodology chosen been indicated in section B.3 of the PoA-DD? Note: In cases where multiple technologies/measures or multiple methodologies are being applied, all the combinations of technologies/measures and methodologies that will be used in the PoA shall be listed.	EB 67 Annex 28&30	Methodology has been correctly mentioned in section B.3 of the PoA-DD however technology/measure is missing and therefore a CL was issued.	PoA-CL3	OK
2.3.2 If applicable, has a description of the sampling plan and demonstrate how it meets applicable provisions in the "Standard for sampling and surveys for CDM project activities and programme of activities" been provided in section B.3 of the PoA-DD?	EB 67 Annex 28&30 EB65 Annex 2	This PoA does not apply sampling.	OK	OK
3 MANAGEMENT SYSTEM				
3.1.1 Has a management system been described in section C of the PoA-DD as per PoA Standards §17? Note: following elements shall be included in the management system: (a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies; (b) Records of arrangements for training and capacity	EB65 Annex 3 §17	The management system contains the elements required as per PoA Standards §17, however more clarity is needed in the description and additional information is needed to check fully compliance and therefore a CL was issued.	PoA-CL1	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
development for personnel; (c) Procedures for technical review of inclusion of CPAs; (d) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA); (e) Records and documentation control process for each CPA under the PoA; (f) Measures for continuous improvements of the PoA management system; (g) Any other relevant elements.				
3.1.2 How has the CME demonstrated that it has the competencies to check the features of potential CPAs and ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA?	EB65 Annex 3 §17	This was demonstrated during site visits. After interviews and checking company structure and other evidences it can be concluded	OK	OK
4 DURATION OF POA				
4.1 Start date of PoA				
4.1.1 How was the PoA start date determined in section D.1 of the PoA-DD? NOTE: PoA request for registration uploading step 4 specifies the following requirement: • Life time of the PoA starts on the date specified in the PoA-DD section D.1 or on the date of registration, whichever is later.	PoA RfReg. upload step 4 EB 67 Annex	Start date of PoA is in compliance with requirements.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESSMENT	FINAL CON.
• For small-scale PoA, the PoA lifetime start date must be at least 4 weeks after the estimated submission date; for large-scale PoA, the start date must be at least 8 weeks after the submission date. • The crediting period of the POA should be renewed every seven years (every 20 years for A/R project activities) from the start date of the lifetime of the POA.	28&30			
4.2 Length of the PoA				
4.2.1 Is the length of the proposed PoA stated in section D.2 of the PoA-DD in years? Note: the length of a PoA shall not exceed 28 years (60 years for A/R).	EB 67 Annex 28&30 EB65 Annex 5 §197	Length of the PoA is indicated as 28 years on section D.2	OK	OK
5 ENVIRONMENTAL IMPACTS				
5.1 Level at which environmental analysis is undertaken				
5.1.1 Is it indicated in section E.1 of the PoA-DD whether the analysis of environmental impacts is performed at the PoA and/or the CPA level?	EB65 Annex 5 §165	Environmental impacts at CPA level is indicated in section E.1	OK	OK
5.1.2 Has it been justified the choice of level at which the analysis is undertaken in section E.1 of the PoA-	EB65 Annex 5	Yes, the choice is reasonable to be in compliance with legal requirements of each CPA.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
DD?	§165			
5.2 Analysis of the environmental impact				
5.2.1 Has a summary of analysis of the environmental impacts of the PoA, including transboundary impacts and reference to all related documentation, been described in the PoA-DD section E.2?	EB65 Annex5 §63	Environmental impacts analysis will be done at CPA level.	OK	OK
5.2.2 If the CME or the host Party(ies) consider the environmental impacts of the proposed PoA significant, has CME carried out an environmental impact assessment in accordance with the host Party's procedures? All conclusions and references to all related documentation shall be provided by CME.	EB65 Annex5 §64	N.A.	OK	OK
6 LOCAL STAKEHOLDER COMMENTS				
6.1 **Solicitation of comments from local stakeholders**				
6.1.1 Is it indicated in section F.1 of the PoA-DD whether the Local Stakeholder Consultation process will be performed at PoA and/or CPA level?	EB65 Annex5 §166	Local Stakeholder Consultation process will be performed at CPA level	OK	OK
6.1.2 Has any justification been provided in section F.1 of the PoA-DD for the choice of the level of Local Stakeholder Consultation being undertaken?	EB65 Annex5 §166	Yes, the justification to do Local Stakeholder Consultation process at CPA level is reasonable.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
6.1.3 Has the process by which comments from local stakeholders were invited and compiled been described in section F.1 of the PoA-DD?	EB65 Annex5 §166	Not applicable, since the local stakeholder consultation will be done at CPA level.	OK	OK
6.1.4 Has the local stakeholder consultation been completed before submission of the PoA for validation?	EB65 Annex5 §167	Not applicable, since the local stakeholder consultation will be done at CPA level.	OK	OK
6.2 **Summary of comments received**				
6.2.1 Has CME Identified stakeholders that have made comments and provided a summary of these comments in section F.2 of the PoA-DD?	EB 67 Annex 28&30	Not applicable, since the local stakeholder consultation will be done at CPA level.	OK	OK
6.3 Report on consideration of comments received				
6.3.1 Provide information demonstrating that all comments received have been considered.	EB 67 Annex 28&30	Not applicable, since the local stakeholder consultation will be done at CPA level.	OK	OK
7 APPROVAL AND AUTHORIZATION				
7.1.1 Is/are the letter(s) of approval from Party(ies) which wishes to be involved in the PoA available at the time of submitting the PoA-DD for validation?	EB 67 Annex 28&30	No approval letters were available at the time of the site visit, therefore a CAR was issued.	PoA-CAR1	OK
7.1.2 Has the participation of each PP been approved by at least one party involved, either in a letter of approval or	EB65 Annex 5	No approval letters were available at the time of the site visit, therefore a	PoA-	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
in a separate letter?	§45	CAR was issued.	CAR1	
7.1.3 Does each of the written approval obtained by the CME from the DNA of each Party involved in the PoA confirm the following information: (1) that the party is a Party to the Kyoto Protocol; (2) that the participation is voluntary; (3) in the case of host Party, the project contributes to the sustainable development of the country; (4) that the project participant's information is exactly the same as in the PoA-DD; (5) that the PoA title referred in the approvals is consistent with the one in the POA-DD submitted for registration, or is there an additional specification of the PoA, e.g. POADD version number; (6) that the CME is authorized for its coordination and implementation of the PoA from each Host arty (only for host country approval(s)); (7) that the approvals are unconditional w.r.t. the above points? NOTE: CME's coordination of the PoA can be authorized in the letters of approval from each Host Party or in a separate confirmation letter from each Host Party.	EB65 Annex 5 §45 EB65 Annex 5 §168-172	No approval letters were available at the time of the site visit, therefore a CAR was issued.	PoA-CAR1	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
PART II. GENERIC COMPONENT PROJECT ACTIVITY (CPA) **NOTE: This section of the PoA-DD is to demonstrate the application of the PoA framework to implement generic CPA-DD and to demonstrate that each type of CPA meets the requirements. Where multiple technologies/measures and/or multiple methodologies are being applied, the demonstration of the application of the PoA framework to implement generic CPAs must be done for each of the combinations of technologies/measures and/or multiple methodologies.** **Therefore, repeat this table Part II when necessary to assess each scenario of the combination of technologies/measures and/or multiple methodologies described in Part II of the PoA-DD.**				
General description of a generic CPA				
7.2 Purpose and general description of generic CPAs				
7.2.1 Where multiple technologies/measures and/or multiple methodologies are being applied by the PoA, the demonstration of the application of the PoA framework to implement generic CPAs must be done for each of the combinations of technologies/measures and/or multiple methodologies. Have all of Part II guidelines for each of the combination of technologies/ measures and/or methodologies been repeated and followed in Part II of the PoA-DD?	EB 67 Annex 28&30	Only one technology and one methodology is used in this PoA.	OK	OK
7.2.2 Has a description of each generic CPA scenario within the PoA been provided in section A.1 of Part II of the PoA-DD, including clear, accurate and complete information on which technology or measures are to be employed by a typical CPA?	EB 67 Annex 28&30	Description provided in section A.1 of Part II of the PoA-DD of the generic CPA scenario is complete and accurate enough.	Ok	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8 Application of a baseline and monitoring methodology				
8.1 Reference of the approved baseline and monitoring methodology(ies) selected				
8.1.1 Does section B.1 of the PoA-DD Part II indicate exact reference (number, title, version) of the selected methodology (e.g. AMS-I.A. "Electricity generation by the user" (Version 14.0)) or multiple methodologies (see "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities")? Note: Confirm that the selected methodology(ies) is(are) approved for application to CPAs under PoAs by the Board, and refer to the UNFCCC CDM website for the exact reference of approved baseline and monitoring methodologies	EB 61 Annex 21 § 11a) EB 67 Annex 28&30	Yes, methodology is correctly mentioned in section provided in section B.1 of Part II of the PoA-DD	OK	OK
8.1.2 Does section B.1 of the PoA-DD Part II indicate any tools and other methodologies to which the selected methodology refers (e.g. "Tool to calculate the emission factor for an electricity system" (Version 02.2.1))? Note: Refer to the UNFCCC CDM website for the exact reference of the tools.	EB 67 Annex 28&30	Yes, other tools used in conjunction with the methodology are correctly mentioned in section B.1 of Part II of the PoA-DD	OK	OK
8.2 Application of methodology(ies)				
8.2.1 Has **<u>each applicability condition</u> of the methodology(ies)** been sufficiently justified by each generic CPA? Have the justifications refer to corresponding eligibility criteria for	EB 65 Annex 3 § 14(e);	Yes, all and each applicability criterion step is sufficiently justified. Detailed explanation is given in the following table	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
inclusion of a CPA under the PoA? Note: Describe for each applicability criterion listed in the selected approved methodology the steps taken to assess the information contained in the POA-DD.	EB 67 Annex 28&30			

Applicability condition of AMS-I.D.	Justification in PoA-DD & DOE assessment
1. & 2. This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass: *(a) supplying electricity to a national or a regional grid; or* *(b) supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling."*	The proposed CPAs will install a renewable energy generation units – small hydro power plants. The electricity generated by the CPA SHPP plants will be supplied into the electricity grid of Albania. **DOE conclusion:** CPAs will be revewable projects connected to the Albania national Grid. The applicability condition of the methodology is complied with.
3. This methodology is applicable to project activities that: *(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant);* *(b) Involve a capacity addition;* *(c) Involve a retrofit of (an) existing plant(s); or* *(d) Involve a replacement of (an) existing plant(s).*	The CPAs under this PoA will install SHPPs (a) at sites where there was no renewable energy power plant operating before (greenfield plants) **DOE conclusion:** The CPAs will be Greenfield projects exclusively. The applicability condition of the methodology is complied with.
4. Hydro power plants with reservoirs that satisfy at least one of the listed conditions are eligible to apply this methodology: *(a) The project activity is implemented in an existing reservoir with no change in the volume of reservoir;* *(b) The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project*	The CPAs under this PoA will install SHPPs either run-of-river type or the type with reservoir. In case of run-of-river hydropower plants, this condition is not applicable. In case of hydropower plants with reservoir, the individual CPAs will comply with the conditions indicated in the methodology in order to be eligible under the proposed programme of activities:

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)		ASSESSMENT	FINAL CON.
		activity, as per definitions given in the Project Emissions section, is greater than 4 W/m²; *(c) The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m²*	(a) Will be implemented in an existing reservoir with no change in the volume of the reservoir; or (b) Will be implemented in an existing reservoir and the change in the power density is over 4W/m²; or (c) Will result in a new reservoir with power density over 4W/m². **DOE conclusion:** The CPAs will be run-of-river or hydro projects with reservoirs complying with conditions (a), (b) or (c). The applicability condition of the methodology is complied with.		
		5. If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	The CPAs of the proposed PoA will have only a renewable component and it is within the 15 MW limit for a small-scale CDM project activity. **DOE conclusion:** The CPAs will be projects with less than 15MW of installed power. The applicability condition of the methodology is complied with.		
		6. Combined heat and power (co-generation) systems are not eligible under this category.	Not relevant: the CPAs included under the proposed PoA project activity are not co-generation systems. **DOE conclusion:** This PoA is only intended for Hydro projects. The applicability condition of the methodology is not applicable to this PoA.		
		7. In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.	Not relevant: all the CPAs will be greenfield power plants. **DOE conclusion:** This PoA is only intended for Greenfield projects only. The applicability condition of the methodology is not applicable to this PoA.		
		8. In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.	Not relevant: none of the CPA included under the proposed PoA will be retrofit or a replacement project.		

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)		ASSESS MENT	FINAL CON.
			DOE conclusion: This PoA is only intended for Greenfield projects only. The applicability condition of the methodology is not applicable to this PoA.		

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.2.2 Has **each applicability condition of the applied tool(s)** been sufficiently justified by each generic CPA? Have the justifications refer to corresponding eligibility criteria for inclusion of a CPA under the PoA? Note: Describe for each applicability criterion listed in the referred tool(s) the steps taken to assess the information contained in the POA-DD.	EB 65 Annex 3 § 14(e); EB 67 Annex 28&30	The applied tools (GEF Tool) do not have applicability conditions	OK	OK
8.2.3 If applicable, has a general description of the sampling plan been provided in section B.2 of the PoA-DD Part II as per EB65 Annex 2?	EB 67 Annex 28&30	N.A. This PoA does not apply sampling	OK	OK
8.2.4 For small-scale CPAs, has CME indicated and demonstrated that the CPA will qualify the type defined in Project Standards §81 as follows? (a) Type I: Renewable energy project activities with a maximum output capacity of 15 MW (or an appropriate equivalent); (b) Type II: Energy efficiency improvement project activities that reduce energy consumption, on the supply and/or demand side, with a maximum output of 60 GWh per year (or an appropriate equivalent) in any year of the crediting period; or (c) Type III: Other project activities not included in Type I or Type II that result in GHG emission reductions not exceeding 60 ktCO2e per year in any year of the crediting period.	EB65 Annex 5 §81, 89	All CPAs will qualify for Type I (<15MW) as required by eligibility criteria.	OK	OK
8.2.5 For small-scale CPAs, in connection with Type I defined above w.r.t. the scope of the maximum output capacity of 15	EB65 Annex 5,	The eligibility criteria clearly mention the 15MW as installed power, this can be easily determined for small hydro power plants.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
MW, has the CME considered the following? (a) Regarding "maximum output", "output" is the installed/rated capacity as indicated by the manufacturer of the equipment or plant, irrespective of the actual load factor of the plant. The installed/rated capacity for renewable electricity generating units that involve turbine-generator systems shall be based on the installed/rated capacity of the generator; (b) Regarding the "appropriate equivalent" of 15 MW, decision 17/CP.7, paragraph 6(c)(i), refers to MW, but project participants may refer to MW(p), MW(e) or MW(th). As MW(e) is the most common denomination, MW is defined as MW(e), and otherwise an appropriate conversion factor is to be applied (For solar photovoltaic applications, 15 MW(p) may be defined by manufacturers. specifications under testing conditions of 1000 W/m2 and 25 deg C or 600 W/m2 and 35 deg C.) (c) For biomass, biofuel and biogas project activities, the maximal limit of 15 MW(e) is equivalent to a 45 MW thermal output of the equipment or the plant (e.g. boilers). For thermal applications of biomass, biofuels or biogas (e.g. cook stoves), the limit of 45 MWth is the installed/rated capacity of the thermal application equipment or device(s) (e.g. biogas stoves). For electrical or mechanical applications, the limit of a 15 MW installed/rated output shall be used. In the case of co-firing renewable and fossil fuels, the rated capacity of the system when using fossil fuel shall apply;	§82			

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
(d) For thermal applications of solar energy projects (This conversion is not applicable for solar thermal parabolic and trough type collectors used for high grade solar thermal energy applications), "maximum output" shall be calculated using a conversion factor of 700 Wth/m2 of aperture area of glazed flat plate or evacuated tubular collector, i.e. the eligibility limit in terms of aperture area is 64,000 m2 of the collector. Project participants may also use other conversion factors determined as per the requirements in paragraph 91 of the PoA Standards (EB65 Annex 5), but shall then justify why the chosen conversion factor is more appropriate to the project activity.				
8.2.6 For small-scale CPAs, has CME ensured, that each proposed CPA will remain, for every year during the crediting period, within the limits of the type of project activity defined above. If during its implementation and monitoring the CPA goes beyond the limit of its type in any year of the crediting period, the GHG emission reductions that can be claimed during this particular year shall be capped at the maximum GHG emission reductions estimated in the registered CPA-DD for that year during the crediting period?	EB65 Annex 5, §81, 83	Since the PoA includes only Type I CPAs it can assured that the CPA won't exceed the limits of Type I projects eligibility once included in the PoA	OK	OK
8.2.7 For small-scale CPAs, has the CME considered the following? (a) The three types of small-scale CPA defined above are mutually exclusive. In a small-scale CPA with more than one component following the CDM SSC M&Ps, each component shall meet the threshold criterion of each applicable type;	EB65 Annex 5, §81, 84	This PoA includes only one type of small-scale CPA.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
(b) The sum of the components size of a small-scale CPA belonging to the same type shall not exceed the limits of this type.				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.2.8 For small-scale CPAs, has CME demonstrated that the CPA will not be a debundled component of a large-scale project activity or CPA, following the applicable provisions in the latest "Guidelines on assessment of debundling for SSC project activities"?	EB65 Annex 5, §87, 88 EB66 Annex 22	The latest "Guidelines on assessment of debundling for SSC project activities" are included in the eligibility criteria and therefore it can assured that any CPA included in the PoA not be a debundled component of a large-scale project activity.	OK	OK
8.2.9 Has Explanations on documentation that has been used as a basis of justification been provided in section B.2 of the PoA-DD Part II? Note: References or documentation shall be included in Appendix 3 of the PoA-DD.	EB 67 Annex 28&30	Yes, explanations for the CPAs included in the PoA are provided.	OK	OK
8.3 Sources and GHGs				
8.3.1 Are all sources and GHGs within each generic CPA boundary described and justified in a table in section B.3 of the PoA-DD Part II in accordance with the applied methodology(ies), for the purpose of calculating project emissions and baseline emissions?	EB 67 Annex 28&30 EB65 Annex 5 §§82-87	Yes, all sources and GHGs are properly mentioned in section B.3 of the PoA-DD.	OK	OK
8.3.2 Where possible, has a flow diagram physically delineating each generic CPAs, based on the descriptions provided in section A.6 "Technologies/measures" of PoA-DD Part I been presented in section B.3 of the PoA-DD Part II?	EB 67 Annex 28&30 EB65	Descriptions provided in section B.3 of the PoA-DD are clear enough.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
Note: The flow diagram shall include all the equipment, systems and flows of mass and energy described in that section. In particular, the diagram shall indicate the emissions sources and GHGs included in the project boundary and the data and parameters to be monitored.	Annex 5 §§82-87			

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.3.3 Should the DOE identify emission sources that will be affected by the implementation of the proposed CPA and which are expected to contribute more than 1% of the overall expected average annual emissions reductions, and are not addressed by the selected approved methodology, has the DOE requested clarification of, revision to, or deviation from the methodology, as appropriate?	EB65 Annex 5 §§87	Not such cases have been identified during assessment of the project.	OK	OK
8.4 Description of baseline scenario				
8.4.1 It is described in section B.4 of the PoA-DD Part II, how the baseline scenario is identified for each generic CPA? Note: The full description of the technology of the baseline scenario shall be provided in section A.6 of Part I of the PoA-DD.	EB 67 Annex 28&30	Yes, description on the identification of baseline scenario is clear and properly described.	OK	OK
8.4.2 Where the procedure in the selected methodology(ies) involves several steps, is it described in section B.4 of the PoA-DD Part II how each step is applied and transparently documented the outcome of each step? Note: Following information shall be provided in section B.4 of the PoA-DD Part II: • Explanation and justification of key assumptions and rationales shall be provided. • Explanation on all data used to establish the baseline scenario (variables, parameters, data sources, etc.). • All relevant documentation and/or references.	EB 67 Annex 28&30 EB65 Annex 5 §§41	Methodology does not include steps to identify baseline scenario.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.4.3 When establishing the baseline scenario, and where "future anthropogenic emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party", has the CME followed the latest "Guidelines on the consideration of suppressed demand in CDM methodologies"?	EB65 Annex 5 §§42	N.A. This is not the case for this PoA.	OK	OK
8.4.4 As a general principle, have national and/or sectoral policies and circumstances been taken into account in the establishment of a baseline scenario, without creating perverse incentives that may impact host Parties' contributions to the ultimate objective of the Convention?	EB65 Annex 5 §§43	Yes,	OK	OK
8.4.5 When establishing the baseline scenario, has the CME taken into account the following two types of national and/or sectoral policies? (a) National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels. Such policies, which increase GHG emissions, are called type E+; (b) National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes). Such policies, which decrease GHG emissions, are called type E-. Note: CME shall address the two types of policies described	EB65 Annex 5 §§44-45	Yes, it has been taken into account. No such E+/E- policies exist in the application boundary of the PoA.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
above as follows: (a) Only national and/or sectoral policies or regulations described above that have been implemented before adoption of the Kyoto Protocol by the Conference of the Parties (hereinafter referred to as the COP) (decision 1/CP.3, **11 December 1997**) shall be taken into account when establishing a baseline scenario. If such national and/or sectoral policies were implemented since the adoption of the Kyoto Protocol, the baseline scenario should refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place; (b) National and/or sectoral policies or regulations described in above that have been implemented since the adoption by the COP of the CDM M&P (decision 17/CP.7, **11 November 2001**) need not be taken into account in establishing a baseline scenario (i.e. the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place).				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESSMENT	FINAL CON.
8.4.6 Has a transparent description of the baseline scenario as established above been described in section B.4 of the PoA-DD Part II, including the technology(ies) that would be employed and/or the activities that would take place in the absence of the CPA?	EB 67 Annex 28&30 EB65 Annex 5 §§46	Yes, description of baseline scenario is clear, transparent and complete.	OK	OK
8.5 Demonstration of eligibility for a generic CPA				
8.5.1 Has it been demonstrate in section B.5 of the PoA-DD Part II, how each generic CPA meets the eligibility criteria of the PoA including confirmation of additionality of the generic CPA for its inclusion into the PoA, as per Eligibility Criteria defined in section B1 and B2 of PoA-DD Part I?	EB 67 Annex 28&30 EB65 Annex 3 §19	Demonstration of eligibility for generic CPA is sufficiently demonstrated on section B.5 of the PoA-DD Part II, however since a CAR was issued regarding clarity of the eligibility criteria this point will be rechecked after the CAR is closed.	PoA-CAR3	OK
8.6 Estimation of emission reductions of a generic CPA				
8.6.1 Explanation of methodological choices				
8.6.1.1 Has CME explained correctly in section B.6.1 of the PoA-DD Part II, the methods or methodological steps in the selected methodology, for calculating baseline emissions, project emissions, leakage emissions and emission reductions are applied to each generic CPA? Note: Where the methodology allows for selection between	EB 67 Annex 28&30 EB65 Annex 5	The calculation of Baseline emissions, project emissions, leakage and emission reductions is correctly explained. Methodological choices are properly justified.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
options for equations or parameters, DOE shall assess the correct selection and application of methodological choices. Describe whether proper justification has been provided (based on the choice of the baseline scenario, context of a typical CPA and other evidences provided) and whether the correct equations or parameters have been used in accordance with the methodology selected including applicable tool(s).	§§96-97			

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.6.1.2 Have the correct equations chosen, which will be used in calculating emission reductions, been clearly stated in section B.6.1 of the PoA-DD Part II? Note: **Default values** specified in the methodology(ies) shall be directly used in the equation as values not as parameters.	EB 67 Annex 28&30 EB65 Annex 5 §§96-100	Equations for calculation of emission reductions are clearly stated in section B.6.1 of the PoA-DD Part II, the equation is correctly chosen from the methodology.	OK	OK
8.6.2 Data and parameters that are to be reported ex-ante				
8.6.2.1 Has a compilation of information on all the data and parameters that are not monitored during the crediting period but are determined before the validation and remain fixed throughout the crediting period, been included in section B.6.2 of the PoA-DD Part II? Note: The compilation of information may include data that are measured or sampled, and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature, etc.).	EB 67 Annex 28&30	Section B.6.2 section B.6.2 of the PoA-DD Part II includes 5 parameters that may be fixed ex-ante for the CPA	OK	OK
8.6.2.2 Has it been confirmed that the following data are **NOT** included in section B.6.2 of the PoA-DD Part II? • Data that becomes available only after the registration/ inclusion of the CPAs in the PoA (e.g. measurements after the implementation of the CPAs in the PoA). They shall be included in the table in section B.7.1 of the PoA-DD Part II. • Data that are calculated with equations provided in the	EB 67 Annex 28&30	Yes, it is confirmed that not such a data is included in section B.6.2 of the PoA-DD Part II.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
selected methodology(ies). • Default values specified in the methodology(ies).				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.6.2.3 For each piece of data or parameter, has the table in section B.6.2 of the PoA-DD Part II been completed following these instructions? (a) "Value(s) applied": Provide the value applied. Where a time series of data is used, where several measurements are undertaken or where surveys have been conducted, provide detailed information in Appendix 4 of the PoA-DD. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used; (b) "Choice of data": Indicate and justify the choice of data source. Provide clear and valid references and, where applicable, additional documentation in Appendix 4 of the PoA-DD; (c) "Measurement methods and procedures": Where values are based on measurement, include a description of the measurement methods and procedures applied (e.g. which standards have been used), indicate the responsible person/entity that undertook the measurement, the date of the measurement and the measurement results. More detailed information can be provided in Appendix 4 of the PoA-DD; (d) "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage.	EB 67 Annex 28&30	For the parameters shown on table in section B.6.2 of the PoA-DD Part II information regarding (a) "Value(s) applied", (b) "Choice of data", (c) "Measurement methods and procedures" and (d) "Purpose of data" is complete and consistent.	OK	OK
8.6.3 Ex-ante calculations of emission reductions				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.6.3.1 In section B.6.3 of the PoA-DD Part II, has a transparent ex ante calculation of project emissions, baseline emissions(or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the selected methodology(ies) and tool(s) specified in section B.6.1 of the PoA-DD Part II, been provided?	EB 67 Annex 28&30	Ex-ante emissions are properly calculated in a transparent way.	OK	OK
8.6.3.2 Has it been documented clearly in section B.6.3 of the PoA-DD Part II, how each equation is applied, in a manner that enables the reader to reproduce the calculation? Note: Provide a sample calculation for each equation used, substituting the values used in the equations.	EB 67 Annex 28&30	Calculations are transparent are reproducible (Excel sheet provided).	OK	OK
8.6.3.3 Where relevant, has additional background information and/or data been provided in Appendix 4 of the PoA-DD, including relevant electronic spreadsheets?	EB 67 Annex 28&30	Appendix 4 of the PoA-DD contains exhaustive and complete information on how the Grid Emission factors for Albania ~~and Serbia~~ have been calculated. The calculations are also provided in excel spreadsheets. Evidences supporting the calculations and methodological choices have also been provided to the DOE.	OK	OK
8.6.3.4 For data or parameters available before validation, have values contained in the table in section B.6.2 of the PoA-DD Part II above been consistently used in the calculations?	EB 67 Annex 28&30 EB65	Yes, data of section B.6.2 is consistently used in the ex-ante calculations.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
Note: DOE shall determine whether all data sources and assumptions are appropriate and calculations are correct as applicable to the proposed project activity, and will result in an accurate or otherwise conservative estimate of the emission reductions.	Annex 5 §98			

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.6.3.5 For data/parameters not available before validation and monitored during the crediting period, have estimates for parameters contained in the table in section B.7.1 of the PoA-DD Part II been consistently used in the calculations? Note: DOE shall determine whether the estimates provided for these data and parameters are reasonable.	EB 67 Annex 28&30 EB65 Annex 5 §98	Yes, data estimated as per table in section B.7.1 is consistently used in the ex-ante calculations.	OK	OK
8.6.3.6 If any of the estimates has been determined by a sampling approach, has a description of the sampling efforts in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities" been provided?	EB 67 Annex 28&30 EB65 Annex 2	No sampling approach used.	OK	OK
8.7 Application of the monitoring methodology and description of the monitoring plan				
8.7.1 Data and parameters to be monitored by each generic CPA				
8.7.1.1 Have all data and parameters to be monitored by each generic CPA been included in section B.7.1 of the PoA-DD Part II? Note: Include specific information on how the data and parameters that need to be monitored would actually be collected during monitoring. Include here data that are determined only once for the crediting period but that will become available only after registration/	EB 67 Annex 28&30	Yes, all parameters that will be monitored for each generic CPA, are included in section B.7.1 of the PoA-DD Part II	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
inclusion of the CPAs in the PoA (e.g. measurements after the implementation of the CPAs in the PoA).				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.7.1.2 For each piece of data or parameter, has the table in section B.7.1 of the PoA-DD Part II been completed, following below instructions? (a) "Source of data": Indicate the source(s) of data that will be used for the CPAs in the PoA (e.g. which exact national statistics). Where several sources may be used, justify which data sources should be preferred; (b) "Value(s) applied": The value applied is an estimate of the data/parameter that will be monitored during the crediting period, but is used for the purpose of calculating estimated emission reductions. To report multiple values referring to the same data or parameter, use one table. If necessary, reference(s) to electronic spreadsheets may be used; (c) "Measurement methods and procedures": Where data or parameters are to be monitored, specify the measurement methods and procedures, standards to be applied, accuracy of the measurements, person/entity responsible for the measurements, and, in case of periodic measurements, the measurement intervals; (d) "QA/QC procedures": Describe the Quality Assurance (QA)/Quality Control (QC) procedures to be applied, including the calibration procedures, where applicable; (e) "Purpose of data": Choose one of the following: (i) Calculation of baseline emissions; (ii) Calculation of project emissions; (iii) Calculation of leakage.	EB 67 Annex 28&30	For each of the three parameters mentioned in section B.7.1 of the PoA-DD Part II a table is included. Information of the tables correctly applies the instructions.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.7.1.3 Has any relevant further background documentation on monitoring parameters been included in Appendix 5 of the PoA-DD?	EB 67 Annex 28&30	Monitoring plan is described in the Section B.7. of the PoA-DD part I, therefore no additional information is included in Appendix 5.	OK	OK
8.7.2 Description of the monitoring plan for a generic CPA				
8.7.2.1 Has the monitoring plan for a generic CPA developed in accordance with the approved monitoring methodology(ies) in section B.7.2 of the PoA-DD Part II? Note: For parameters to be measured in accordance with the selected methodology, CME shall include in the monitoring plan the following: (a) The measurement methods and procedures, including accepted industry standards or national or international standards that will be applied; the measuring equipments that will be used; how the measurements will be undertaken; the accuracy of the measurement methods; the measurement intervals and the responsible person/entity who will undertake the measurements; (b) The calibration procedures to be applied and the responsible person/entity who will perform the calibration.	EB 67 Annex 28&30 EB 65 Annex 5 §98	Yes, the monitoring plan is fully in compliance with the methodology. This is properly explained on section B.7.2 of the PoA-DD Part II. The monitoring includes appropriated procedures for measuring and calibration	OK	OK
8.7.2.2 Has the monitoring plan included the following information? (a) The operational and management structure to be put in place to implement the monitoring plan; (b) Provisions to ensure that data monitored and required for verification and issuance be kept and archived electronically for two years after the end of the crediting period or the last issuance	EB 65 Annex 5 §56	The monitoring plan as described in section B.7.2 of the PoA-DD Part II includes management structure and definition of responsibilities, provisions for archiving, QA/QC procedures, methods for measuring and accuracy level of measuring instruments and provisions for calibration.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
of CERs, whichever occurs later; (c) Definition of responsibilities and institutional arrangements for data collection and archiving; (d) Quality assurance and quality control (QA/QC) procedures; (e) Uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables; (f) Specifications of the calibration frequency for the measuring equipments. In cases where neither the selected methodology, nor the Board.s guidance specify any requirements for calibration frequency for measuring equipments, project participants shall ensure that theequipments are calibrated either in accordance with the local/national standards, or as per the manufacturer.s specifications. If local/national standards or the manufacturer's specifications are not available, international standards may be used.				

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
8.7.2.3 In developing the monitoring plan for a small-scale CPA, has CME considered the following? (a) Data variables that impact the GHG emission reductions continuously (e.g. quantity of the fuel inputs, amount of heat or electricity produced, gas captured) shall be measured continuously and recorded at appropriate intervals. Data elements that are generally constant (e.g. emission factors, calorific value, system efficiencies) shall be measured or calculated at least once a year, unless other specifications are provided in the selected methodology; (b) Measuring equipments shall be certified to national or IEC standards; (c) The calibration of measuring equipments shall be carried out by an accredited person or institution; (d) Measured data with high levels of uncertainty or without adequate calibration shall be compared with location/national data and commercial data to ensure consistency.	EB 65 Annex 5 §97	Monitoring plan is considering continuous measuring of electricity production, measuring equipments will be certified; calibration will be done by accredited institution. All data that will be collected has low level of uncertainty.	OK	OK
8.7.2.4 If data and parameters monitored in section B.7.1 above are determined by a sampling approach, has a description of the sampling plan in accordance with the recommended outline for a sampling plan in the latest "Standard for sampling and surveys for CDM project activities and programme of activities" been provided?	EB 67 Annex 28&30	No sampling approach is used for parameters monitoring.	OK	OK
8.7.2.5 Has any relevant further background information regarding monitoring plan been provided in Appendix 5 of the PoA-DD?	EB 67 Annex 28&30	No extra information is provided in Appendix 5 of the PoA-DD since the contents of section B.7 are sufficient.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
APPENDIXES				
Appendix 1: Contact information on entity/individual responsible for the PoA				
Ap-1. For each organisation listed in section A.4 of the PoA-DD Part I above, has the table in Appendix 1 of the PoA-DD been completed with the following mandatory fields? • Organization, • Street/P.O. Box, • City, • Postcode, • Country, • Telephone, • Fax and E-mail, and • Name of contact person. Note: Copy and paste the table as needed.	EB 67 Annex 28&30	Information about entities included in the table in Appendix 1 of the PoA-DD is complete and also consistent with the contents of section A.4 of the PoA-DD Part I	OK	OK
Appendix 2: Affirmation regarding public funding				
Ap-2. If applicable, has the affirmation obtained from Parties included in Annex I providing public funding to the PoA been attached to Appendix 2 of the PoA-DD? Note: the affirmation shall confirm that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties.	EB 67 Annex 28&30 EB65 Annex5 §34	Yes, affirmation regarding public funding is included in Appendix 2.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
Appendix 3: Application of methodology(ies)				
Ap-3. Has any further background information on the applicability of the selected methodology(ies) been provided in Appendix 3 of the PoA-DD, and can all information be confirmed as correct and consistent with the description in the PoA-DD?	EB 67 Annex 28&30	No extra information about applicability the methodology is provided in Appendix 3 of the PoA-DD since the contents of section B.3 are sufficient.	OK	OK
Appendix 4: Further background information on ex ante calculation of emission reductions				
Ap-4. Has any further background information on the ex-ante calculation of emission reductions been provided in Appendix 4 of the PoA-DD, and can all information be confirmed as correct and consistent with the description in the PoA-DD? Note: This may include data, measurement results, data sources, etc.	EB 67 Annex 28&30	Yes, Appendix 4 of the PoA-DD contains the complete ex-ante calculations for the Grid emission factor of the Grids of Albania .	OK	OK
Appendix 5: Further background information on the monitoring plan				
Ap-5. Has any further background information used in the development of the monitoring plan been provided in Appendix 5 of the PoA-DD, and can all information be confirmed as correct and consistent with the description in the PoA-DD? Note: This may include tables with time series data, additional documentation of measurement equipment, procedures etc.	EB 67 Annex 28&30	No extra information about the monitoring plan is provided in Appendix 5 of the PoA-DD since the contents of section B.7 are sufficient.	OK	OK

CHECKLIST QUESTION / VVS AND POA REQUIREMENTS	SOURCE	MEANS AND FINDINGS OF VALIDATION (BASED ON GSC VERSION OF THE POA-DD)	ASSESS MENT	FINAL CON.
Appendix 6: Demonstration of additionality of a small scale CPA				
		Additional information has been included in the Appendix 6 for a more detailed explanation on the demonstration of additionality fro the CPAs to be included in the PoA. This additional information is intended to develop the eligibility criteria 6 and give specific guidelines on how to demonstrate additionality at CPA level.		

TABLE 2 RESOLUTION OF CORRECTIVE ACTION REQUESTS (CAR), CLARIFICATION REQUESTS (CR) AND FORWARD ACTION REQUESTS (FAR)

Description of Finding (CAR, CL, FAR) *Describe the finding in a transparent manner i.e. state clearly what is required and why; address the context (e.g. section)*	**Project Participants Response** *This section shall be filled by the PP. The finding shall be addressed with suitable arguments and evidence*	**GLC's Assessment** *The assessment shall include how the finding is closed i.e. how it is found that the response is assessed to be appropriate and meeting the specific requirement of the finding. In case the response is not satisfactory, additional response and DOE assessments (#2, #3, etc.) shall be sought.*	**Final Conclusion (OK or OPEN)**
PoA-CAR 1 (2012-07-20) The letters of approval from each PP have to be provided to the DOE.	2012-08-03 (1st round): All the required documents for approval have been handed over to each DNA. The approval processes for issuance of the LoAs are still in progress. Issuance of the LoAs is envisaged till end of August 2012 at the latest.	2012-08-17 (1st round): Approval letters are awaited. CAR is not closed	OK / Closed
	2012-12-24 (2nd round): LoAs have been provided to the DOE	2012-12-24 (2nd round): The LoAs have been received and are in line qith the requirements.	
PoA-CAR 2 (2012-07-20) The "Modalities of Communication" form has to be provided to the DOE.	2012-08-03 (1st round): Modalities of Communication are currently prepared and are provided to the DoE within the next four weeks.	2012-08-17 (1st round): The MoC is awaited CAR is not closed	OK / Closed
	2012-12-20 (2nd round): Modalities of Communication has been sent to the DoE.	2012-12-20 (2nd round): The Modalities of Communication form has been received and found to be in line with the requirements.	

		Therefore the CAR is closed	
PoA-CAR 3 (2012-07-20) Eligibility criteria. On the Table on section B.2 the criteria to include a CPA in the PoA are not clear. Description should be improved and sections B.2 and B.5 have to be updated accordingly.	2012-08-03 (1st round): The sections B.2 and B.5 of the PoA-DD as well as the corresponding section in the CPA-DD have been revised in the Version 02 of documents and provided to the DOE.	2012-08-17 (1st round): Eligibility Criteria has been revised and is now in line with the requirements. The CAR is closed.	OK / Closed
PoA-CL 1 (2012-07-20) Section C provides an overview on the CME management system and part of the QM documentation has been provided to the DOE, however the PP is requested to provide the full CME Operation Manual including procedures and records of the first CPA implementation.	2012-08-03 (1st round): In addition to the information given under SECTION C: Management system, a CME Operation Manual has been developed and handed over to the DOE for assessment. The management system is in force and all evidence for application of the system for the first CPA have been provided to the DOE.	2012-08-17 (1st round): CME Operation Manual and supporting documentation has been provided to the DOE, the manual is in line with requirements. The CL is closed.	OK / Closed
PoA-CL 2 (2012-07-20) Section A.3 of the PoA-DD Part I mentions the CME but the other project participants are not mentioned.	2012-08-03 (1st round): Section A.3 of Part I of the Version 02 of the PoA-DD “Small Hydropower Programme of Activities in Albania and Serbia” has been revised accordingly.	2012-08-17 (1st round): All project participants are mentioned in Section A.3 of the PoA-DD Part I. The CL is closed.	OK / Closed
PoA-CL 3 (2012-07-20) Section B.3 of the PoA-DD Part I does not mention the technology/measures applied by the PoA.	2012-08-03 (1st round): Section B.3 of Part I of the Version 02 of the PoA-DD “Small Hydropower Programme of Activities in Albania and Serbia” has been revised accordingly.	2012-08-17 (1st round): Technology/ measures are mentioned in Section B.3 of the PoA-DD Part I. The CL is closed.	OK / Closed

ANNEX B: CERTIFICATES OF COMPETENCE

Certificate

Name : Mr. José Emilio Moreno (Dipl.-Ing.)
Certificate No. : 016

This document certifies that Mr. José Emilio Moreno, citizen of Spain, is assigned as CDM assessment team leader, validator/verifier and expert by Germanischer Lloyd Certification GmbH.

Mr. José Emilio Moreno fulfils GLC's competence requirements to validate and verify CDM projects within the following sectoral scopes and technical areas.

CDM Sectoral Scope (SS) and Technical Area (TA)		Validity date:
SS 1:	**Energy Industries (renewable / non-renewable sources)**	
TA 1.1:	Thermal energy generation from fossil fuels and biomass including thermal electricity from solar	2010-09-25
TA 1.2:	Energy generation from renewable energy sources	2010-10-22
SS 2:	**Energy Distribution**	
TA 2.1:	Electricity distribution	
TA 2.2:	Heat distribution	
SS 3:	**Energy Demand**	
TA 3.1:	Energy demand	2011-03-20
SS 7:	**Transport**	
TA 7.1:	Transport	
SS 10:	**Fugitive Emissions from Fuels**	
TA 10.1:	Mining and mineral processes (excluding those included in TA 10.2)	
TA 10.2:	Oil and gas industry, coal mine methane recovery and use	
SS 13:	**Waste Handling and Disposal**	
TA 13.1:	Waste handling and disposal	
TA 13.2:	Animal waste management	

Hamburg 2011-03-20
Date

GLC Management

Germanischer Lloyd Certification
Code: DC-GHG 009_E, Rev. 03
Date: 2011-04-27; Tris

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Certificate

Name : Mr. Karunakar Avuram (B.Eng.)
Certificate No. : 023

This document certifies that Mr. Karunakar Avuram , citizen of India, is assigned as CDM assessment team leader, validator/verifier, reviewer and expert by Germanischer Lloyd Certification GmbH.

Mr. Karunakar Avuram fulfils GLC's competence requirements to validate and verify CDM projects within the following sectoral scopes and technical areas.

CDM Sectoral Scope (SS) and Technical Area (TA)		Validity date:
SS 1:	**Energy Industries (renewable / non-renewable sources)**	
TA 1.1:	Thermal energy generation from fossil fuels and biomass including thermal electricity from solar	
TA 1.2:	Energy generation from renewable energy sources	2012-08-07
SS 2:	**Energy Distribution**	
TA 2.1:	Electricity distribution	
TA 2.2:	Heat distribution	
SS 3:	**Energy Demand**	
TA 3.1:	Energy demand	2011-03-14
SS 4:	**Manufacturing industries**	
TA 4.1:	Cement sector	
TA 4.2:	Aluminium	
TA 4.3:	Iron and steel	
TA 4.4:	Refinery	
SS 5:	**Chemical industry**	
TA 5.1:	Chemical process industries	
SS 7:	**Transport**	
TA 7.1:	Transport	
SS 8:	**Mining/mineral production**	
TA 8.1:	Mining and mineral processes, excluding those included in TA 8.2 below	
TA 8.2:	Oil and gas industry, coal mine methane recovery and use	
SS 10:	**Fugitive Emissions from Fuels**	
TA 10.1:	Mining and mineral processes (excluding those included in TA 10.2)	
TA 10.2:	Oil and gas industry, coal mine methane recovery and use	
SS 13:	**Waste Handling and Disposal**	
TA 13.1:	Waste handling and disposal	
TA 13.2:	Animal waste management	
SS 15:	**Agriculture**	
TA 15.1:	Agriculture	
TA 15.2:	Animal waste management	

Hamburg 2012-09-24
Date

GLC Management

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Certificate

Name : Mr. Markus Weber (Dipl.)
Certificate No. : 001

This document certifies that Mr. Markus Weber, citizen of Germany, is assigned as CDM assessment team leader, validator/verifier and expert by Germanischer Lloyd Certification GmbH.

Mr. Markus Weber fulfils GLC's competence requirements to validate and verify CDM projects within the following sectoral scopes and technical areas.

CDM Sectoral Scope (SS) and Technical Area (TA)		Validity date:
SS 1:	**Energy Industries (renewable / non-renewable sources)**	
	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar	
	TA 1.2: Energy generation from renewable energy sources	2011-09-09
SS 2:	**Energy Distribution**	
	TA 2.1: Electricity distribution	
	TA 2.2: Heat distribution	
SS 3:	**Energy Demand**	
	TA 3.1: Energy demand	
SS 7:	**Transport**	
	TA 7.1: Transport	
SS 10:	**Fugitive Emissions from Fuels**	
	TA 10.1: Mining and mineral processes (excluding those included in TA 10.2)	
	TA 10.2: Oil and gas industry, coal mine methane recovery and use	
SS 13:	**Waste Handling and Disposal**	
	TA 13.1: Waste handling and disposal	2008-12-15
	TA 13.2: Animal waste management	

Hamburg 2011-09-09
Date

GLC Management

Germanischer Lloyd Certification
Code: DC-GHG 009_E, Rev. 03
Date: 2011-04-27; Tris

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