



RINA

GOLD STANDARD VERIFICATION/CERTIFICATION REPORT

Final

“Killik Wind Power Plant”
in
Turkey

Monitoring period: 13/10/2011 to 31/12/2013

Report N° 2014-TQ-20-MD

Revision N° 1.2 Aa

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Project Title: Killik Wind Power Plant	Country: Turkey	Estimated VERs (tCO₂e): 111,809								
GS Registration Reference N°: 947	Monitoring period: 13/10/2011 to 31/12/2013	Certified VERs (tCO₂e): 136,356								
Client: Tokat Enerji A.S.	Client contact: Mustafa YUCEL									
Report No.: 2014-TQ-20-MD	Revision: 1.2 Aa	Date of this report: 10/07/2014								
Approved by (Final Report – Authorized officer signing for the DOE):  Laura Severino		Date of approval: 11/07/2014								
Methodology										
Number: ACM0002	Version: 12.1.0 of 26/11/2010	Title: Consolidated baseline methodology for grid-connected electricity from renewable sources								
		Scale Large								
		SS(s): 1								
RINA Services S.p.A. (RINA), commissioned by Tokat Enerji A.S., has verified the greenhouse gas emission reductions reported for the project activity "Killik Wind Power Plant" in Turkey, GS Registration Reference N° 947, for the period 13/10/2011 to 31/12/2013, with regard to the relevant requirements for GS activities. The verification shall ensure that reported emission reductions are complete and accurate in accordance with applicable GS VER requirements, which refer to CDM rules, in order to be certified. The project was validated by Bureau Veritas (validation report N° TURKEY-VAL/CER.1926.10.C45/2011, version 02 issued on 29/05/2012) and it was registered under the GS registration reference N° 947. The GHG emission reductions were calculated on the basis of the approved methodology ACM0002, version 12.1, "Consolidated baseline methodology for grid-connected electricity from renewable sources" of 26/11/2010 and the monitoring plan included in the registered Project Design Document, version 05 of 24/04/2012. In conclusion, it is RINA's opinion that the project activity "Killik Wind Power Plant", in "Turkey", as described in the Monitoring Report version 4 of 09/07/2014, meets all relevant requirements for GS and CDM activities and all relevant host Party criteria and correctly applies the baseline and monitoring methodology "ACM0002", "Consolidated baseline methodology for grid-connected electricity from renewable sources", version 12.1.0 of 26/11/2010. Hence, RINA is able to certify that the emission reductions from the project during the monitoring period 13/10/2011 to 31/12/2013 amount to 136,356 tCO₂e. <table> <tr> <td>Baseline Emissions</td> <td>136,356 tCO₂e</td> </tr> <tr> <td>Project Emissions</td> <td>0 tCO₂e</td> </tr> <tr> <td>Leakage</td> <td>0 tCO₂e</td> </tr> <tr> <td>Net GHG emission reductions/removal</td> <td>136,356 tCO₂e</td> </tr> </table>			Baseline Emissions	136,356 tCO ₂ e	Project Emissions	0 tCO ₂ e	Leakage	0 tCO ₂ e	Net GHG emission reductions/removal	136,356 tCO ₂ e
Baseline Emissions	136,356 tCO ₂ e									
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Net GHG emission reductions/removal	136,356 tCO ₂ e									

Work carried out by: Tugce KIRATLI	☒ No distribution without permission from the Client or organizational unit responsible ☐ Strictly confidential ☐ Unrestricted distribution
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Work verified by (Final Report)  Rita Valoroso	Keywords: Climate Change, Kyoto Protocol, Verification, Gold Standard
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Abbreviations

BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CDM-PCP	Clean Development Mechanism Project Cycle Procedure
CDM-PS	Clean Development Mechanism Project Standard
CDM-VVS	Clean Development Mechanism Validation and Verification Standard
CER(s)	Certified Emission Reduction (s)
CH ₄	Methane
CR	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
ER	Emission Reductions
GHG(s)	Greenhouse gas(es)
GS	Gold Standard
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LSC	Large scale
MoV	Means of Verification
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
OSOS	Otomatik Sayac Okuma Sistemi (Automatic Meter Reading System)
PDD	Project Design Document
PE	Project Emission
PMUM	Market Financial Conciliation Center (Piyasa Mali Uzlastirma Merkezi)
PP(s)	Project Participant(s)
Ref.	Document Reference
RINA	RINA Services Spa
SDI	Sustainable Development Indicator
SS(s)	Sectoral Scope(s)
SSC	Small Scale
TEIAS	Turkish Electricity Transmission Company (Türkiye Elektrik İletim A.Ş.)
UNFCCC	United Nations Framework Convention on Climate Change
VERs	Verified Emission Reduction(s)

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Appendix A: Gold Standard Verification Protocol

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1 INTRODUCTION

Tokat Enerji A.S. has commissioned RINA to carry out the verification and certification of emission reductions reported for the registered “Killik Wind Power Plant” project in Turkey, GS Registration Reference N°947, for the period 13/10/2011 to 31/12/2013.

This report summarizes the findings of the verification of the project, performed on the basis of GS VER requirements, which refer to CDM rules, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

The objective of the verification is to have an independent review ex post determination by a Designated Operational Entity (DOE) of the monitored reductions in GHG emissions that have occurred as a result of the registered GS project activity during a defined monitoring period and to monitor the impact of project activity on sustainable development, throughout the monitoring of the non-neutral Sustainable Development Indicators and moreover to monitor all the mitigation and compensation measures put in place. Certification is the written assurance by the DOE that, during a specific time period, a proposed GS project activity achieved the reductions in anthropogenic emissions by sources of GHGs as verified and that all the defined Sustainable Development Indicators to be monitored have been monitored according to the sustainability monitoring plan and that all the mitigation measures forecast have been correctly and effectively implemented.

The objective of this verification/certification was to verify and certify emission reductions and effective implementation of the monitoring of sustainable development indicators and mitigation measures, reported for the “Killik Wind Power Plant” project in Turkey for the period 13/10/2011 to 31/12/2013.

1.2 Scope

The verification scope is:

- to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan;
- to evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement;
- to verify that reported GHG emission data is sufficiently supported by evidence;
- to evaluate whether all the mitigation measures have been effectively put in place according to the monitoring plan and that all the sustainable development indicators have been correctly monitored.

Verification shall ensure that reported emission reductions are complete and accurate in accordance with applicable GS VER requirements which refer to CDM rules, in order to be certified.

UNFCCC criteria for CDM refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, and the subsequent decisions by the CDM Executive Board.

The GS criteria refer to GS requirements, GS Toolkit and supporting annexes.

Verification is not meant to provide any consultancy towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

2 METHODOLOGY

Verification was conducted using RINA procedures in line with the requirements specified in the GS Requirements, CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques.

The verification consisted of the following three phases:

- Desk review;
- On-site assessment;

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- The resolution of outstanding issues and the issuance of the final verification report and certification.

The following sections outline each step in more detail.

2.1 Desk Review

The monitoring report version 4 of 09/07/2014 and previous versions [/3/](#), the emission reduction calculations provided in the form of a spreadsheet “Killik_Verification_v3.xlsx” version 03 of 30/05/2014 and previous versions [/9/](#), the approved baseline and monitoring methodology ACM0002 version 12.1 of 26/11/2010 [/7/](#) and all the documentation provided to support the monitoring period [/1 – 57/](#) were assessed as part of the verification. In addition, the Project Design Document (PDD) [/1/](#), in particular as regards the baseline estimations and the monitoring plan, the Passport submitted on 01/04/2014 [/2/](#) and the validation report revision 02 of 29/05/2012 [/8/](#) for the project, were reviewed.

The following table lists the documentation that was reviewed during the verification.

/1/	GAIA CF: GS-PDD for “Killik Wind Power Plant” in Turkey, version 5 of 24/04/2012
/2/	GAIA CF: GS-Passport for “Killik Wind Power Plant” in Turkey, submitted on 01/04/2014
/3/	GAIA CF: Monitoring Report for “Killik Wind Power Plant” in Turkey, version 4 of 09/07/2014 GAIA CF: Monitoring Report for “Killik Wind Power Plant” in Turkey, version 3 of 04/06/2014 GAIA CF: Monitoring Report for “Killik Wind Power Plant” in Turkey, version 2 of 27/05/2014 GAIA CF: Monitoring Report for “Killik Wind Power Plant” in Turkey, version 1 of 01/04/2014
/4/	Gold Standard Foundation: Gold Standard Requirements, version 2.1 of 01/07/2009
/5/	Gold Standard Foundation: Gold Standard Toolkit, version 2.1 of 01/07/2009
/6/	CDM Executive Board: Clean Development Mechanism Validation and Verification Standard, version 05.0 of 04/10/2013
/7/	CDM Executive Board: Baseline and monitoring methodology “ACM0002”, “Consolidated baseline methodology for grid-connected electricity from renewable sources”, version 12.1.0 of 26/11/2010
/8/	Bureau Veritas: Validation Report for “Killik Wind Power Plant” No. TURKEY-VAL/CER.1926.10.C45/2011, revision 02 of 29/05/2012
/9/	GAIA CF: Emission Reduction Calculation Spreadsheet “Killik_Verification_v3.xlsx” version 03 of 30/05/2014 GAIA CF: Emission Reduction Calculation Spreadsheet “ Killik_Verification_v2.xlsx” version 01 of 29/05/2014 GAIA CF: Emission Reduction Calculation Spreadsheet “Killik_Verification_v1.xlsx” version 01 of 01/04/2014
/10/	CDM Executive Board: Guideline for Completing the Monitoring Report Form, version 04.0 of 04/10/2013
/11/	CDM Executive Board: Methodological Tool “Tool to calculate the emission factor for an electricity system”, version 02.0.0 of 16/10/2009
/12/	CDM Executive Board: Monitoring Report Form (F-CDM-MR), version 03.2 of 05/11/2013
/13/	CDM Executive Board: Methodological Tool “Tool for the demonstration and assessment of additionality”, version 05.2 of 26/08/2008
/14/	Market Financial Conciliation Center (PMUM): All Monthly Electricity Records within the Monitoring Period (from 13/10/2011 to 31/12/2013)
/15/	Turkish Electricity Transmission Company (TEIAS): Counter Balancing Unit Evaluation Forms (OSF Forms) for Monthly Meter Readings within the Monitoring Period (from 13/10/2011 to 31/12/2013)
/16/	Energy Market Regulatory Authority: Communiqué for Measurement Devices used in the Electricity Market of 22/03/2003

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/17/	The Ministry of Trade and Industry: Regulation of Metering and Testing of Metering Systems of 24/07/1994
/18/	TEIAS: First Index Protocol for the Electricity Meters with a serial no: 424798 and 424799 of 11/08/2011
/19/	Prof. Dr. Levent Turan: Ornithology Report of Killik WPP of 22/02/2010
/20/	General Directorate of Nature Conservation and National Parks: Cover Letter of the Ornithology Report of 03/10/2010
/21/	Yeni Asya: Invoice of Pine Tree, No: 106661 of 13/12/2012
/22/	General Directorate of Energy Affairs: Sanctions Related to Tree Cutting of 25/01/2011
/23/	National Waste Transportation Form: Waste Oil Invoice, No:0569680 of 29/11/2012 National Waste Transportation Form: Contaminated and Packaging Waste Invoice, No:0569681 of 29/11/2012 National Waste Transportation Form: Contaminated Waste Invoice, No:0569679 of 29/11/2012
/24/	The Ministry of Energy and Natural Resources: Temporary Acceptance Protocol of 13/10/2011 (for 8 Turbines) The Ministry of Energy and Natural Resources: Temporary Acceptance Protocol of 01/12/2011 (for 6 turbines) The Ministry of Energy and Natural Resources: Temporary Acceptance Protocol of 17/12/2011 (for 2 Turbines)
/25/	Tokat Directorate of Sanitation: Article related to Wastes of 28/08/2012
/26/	Picture of the Septic Tank, submitted on 01/04/2014
/27/	Dokuz Eylul University: Waste Oil Analysis Report of 04/11/2009
/28/	Tokat Governor's Public Health Directorate: Drinking Water Analysis of 08/11/2012
/29/	Tokat Municipality: Invoice of Sewage Truck, No: 122936 of 31/08/2012
/30/	Social Insurance Institution: Registration Document for all the Employees, submitted on 01/04/2014
/31/	Ersoy Gulmez: Deed of Real Estate of 11/11/2010
/32/	The Gold Standard Foundation: Killik 41.4 MW Wind Power Plant Project (GS947) 8-week Issuance Review Period Document of 01/08/2013
/33/	Deed of Real Estate of Killik Wind Power Plant of 09/12/2011
/34/	Map of the Purchased Parcels, submitted on 01/04/2014
/35/	Trade Registry Gazette: Changing of Title for PEM Enerji A.S. to Tokat Enerji A.S., No: 8230 of 07/01/2013
/36/	CDM Gold Standard: Correspondance for the Registration date of 27/09/2013
/37/	Turkish Summary of Killik Wind Power Plant prepared for Stakeholder Feedback Round Period, submitted on 15/04/2014
/38/	Energy Market Regulatory Authority: Generation License numbered EU/1690-4/1226 of 24/07/2008
/39/	Tokat Governorship Environment and Urbanization Directorate: EIA Not Required Certificate of 28/12/2009
/40/	D-8 Fidancılık: Invoice of the New Seedlings, No: 020497, of 10/06/2013 (total number of 34) D-8 Fidancılık: Invoice of the New Seedlings, No: 020500, of 24/06/2013 (total number of 11)
/41/	Photos of the Killik Wind Power Plant, submitted on 14/04/2014
/42/	Tokat Directorate of Roads and Transportation Services: Damage Investigation Report of the Roads of 15/10/2012
/43/	Lahmayer International: Wind Data Analysis and Energy Generation Report of 27/10/2010

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/44/	Halic Cevre Analizleri Laboratuvarı: Noise Measurement Report of 20/12/2011
/45/	Yapi Kredi: Receipt of the Amount Paid to the Provincial Administration for the Way Restoration, No: 1630411 of 09/05/2013
/46/	Tokat Enerji: The Correspondence for the Permission to Plant Pine Sapling from Provincial Directorate of Food, Agriculture and Livestock of 05/05/2014
/47/	Social Insurance Institution: Registration Document for 11 Employees for Tokat Enerji, submitted on 21/04/2014 Social Insurance Institution: Registration Document for 2 Employees for Tokat Enerji, submitted on 30/05/2014 Social Insurance Institution: Registration Document for 5 Employees for Akdeniz Security, submitted on 21/04/2014
/48/	Social Security Institution: Payroll Sheets of all Employees of 12/2013
/49/	ILDA Is Sagligi ve Guvenligi, Danismanlik, Egitim Ltd. Sti.:Health and Safety Training for 1 Employee of 08/11/2012
/50/	Detam: Attendance Certificate for OHSAS 18001 of 04/11/2013 (1 employee)
/51/	TROWIND: Theoretical and Practical Safety Instruction Certificate of 05/06/2013 (1 employee)
/52/	Tokat Enerji A.S.: Attendance List for Safety Electrical Work of 07/11/2012 (9 employees)
/53/	Tokat Enerji A.S.: Attendance List for Health and Safety Training of 23/05/2012 (12 employees)
/54/	Tokat Enerji A.S.: Attendance List for Basic Health and Safety Training of 07/11/2012 (9 employees)
/55/	Tokat Enerji A.S.: Attendance List for Tick-Combat Training of 02/07/2012 (17 employees)
/56/	Yanki Egitim Danismanlik Hizmetleri: Log Out-Tag Out Training Certificate of 21/12/2012 (1 employee)
/57/	Tokat Enerji A.S.: Attendance List for Fire Drills and Training of 26/09/2013 (18 employees)

2.2 On-site assessment

On 15/04/2014, RINA visited in the northeast of Turkey, in borders of central district of Tokat. During the on-site assessment of the project, RINA assessed the implementation and operation of the proposed project activity, reviewed the information flows for generating, aggregating and reporting the monitoring parameters, interviewed key personnel of the plant to confirm the operational and data collection procedures, cross-checked between information provided in the monitoring report and data plant, checked the monitoring equipment including calibration performance, reviewed calculations and assumptions made in determining the GHG data and emission reductions, checked the quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters, checked the correct and effective implementation of the mitigation measures foreseen in the sustainability monitoring plan, to prevent violation or the risk of violating a safeguarding principle of the “Do No Harm” Assessment or to “neutralize” a Sustainable Development Indicator.

The project area was visited on 15/04/2014. The project employee were interviewed about the implementation status of the project, monitoring equipment and operation, generated electricity, Waste Oil and Domestic Waste and Disposal of Wastewater, Expropriation, Road Condition, Tree Plantation and Health and Safety Trainings of the project activity.

In addition, the mukhtar and his son who is working for the project activity was visited in Tekneli Village. They were interviewed about the benefit of the project to the village, noise emissions, bird death, road condition and local employment of the project activity. Also, the mukhtar of Killik Village and Ersoy Gulmez who has the only land purchased for the location of the 8th turbine was interviewed by phone. The feedbacks are explained below.

During on site visit, it was confirmed that the roads were not repaired after the construction of the project activity. The mukhtar of the Tekneli Village was visited and the mukhtar of Killik village was interviewed by phone about the road condition. They stated that although the project owner has promised, he did not fix the roads.

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The mukhtar of the Tekneli Village was justified that no death bird was observed and no negative feedback was received about noise and dust emission.

As per the phone interview with Ersoy Gulmez, he justified that there is no expropriation. He is no longer living in Tokat; therefore, his land was purchased voluntarily.

The key personnel interviewed and the main topics of the interviews are summarized in the table below.

	Date	Name and Role	Organization	Topic
/a/	15/04/2014	Fulya EKINCI <i>The Consultant</i>	GAIA CF	Implementation status of the project Monitoring equipments and operation
/b/	15/04/2014	Abdulhadi CIFTCI <i>Electrical Engineer</i>	Tokat Enerji	Generated Electricity Monitoring of Gold Standard Parameters
/c/	15/04/2014	Mustafa YUCEL <i>Civil Engineer</i>	Tokat Enerji	Waste Oil and Domestic Waste and Disposal of Wastewater
/d/	15/04/2014	Omur GUVEN <i>Electrical Engineer</i>	Tokat Enerji	Expropriation Road Condition
/e/	15/04/2014	Riza SANVER <i>Electrical Technician</i>	Tokat Enerji	Tree Plantation
/f/	15/04/2014	Husamettin KOTEN <i>The Mukhtar</i>	Tekneli Village	Benefit of the project to the village Noise and Dust Emissions
/g/	15/04/2014	Ibrahim KOTEN <i>The Stakeholder</i>	Tekneli Village	Bird Death Road Condition Local Employment
/h/	15/04/2014	Ersoy GULMEZ <i>The land owner</i>	Killik Village	(Interviewed by Phone) Benefit of the project to the village
/i/	15/04/2014	Ali YILDIZ <i>The Mukhtar</i>	Killik Village	Expropriation Bird Death Food Aid

2.3 Resolution of outstanding issues

The objective of this phase of the verification is to resolve any outstanding issues which need to be clarified for RINA's positive conclusion on the monitoring report and emission reductions.

To guarantee transparency a verification protocol has been customized for the project. The protocol shows in a transparent manner the requirements, means of verification and the results from verifying the identified criteria. The verification protocol consists of three tables; the different columns in these tables are described in the figure below (see Figure 1). The completed verification protocol is enclosed in Appendix A to this report.

A corrective action request (CAR) is raised if one of the following occurs:

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

A clarification request (CR) is raised if information is insufficient or not clear enough to determine whether the applicable GS VER requirements, which refer to CDM rules, have been met.

CARs, CRs identified are included in the verification protocol in Appendix A of this report.

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Figure 1 Gold Standard Verification protocol tables

Verification Protocol, Table 1 - Requirement checklist				
Checklist Question	Ref.	MoV	Comments	Conclusion
Checklist questions organized in five different sections.	Makes reference to documents where the answer to the checklist question or item is found.	Explain how conformance with the checklist question is investigated. Examples are document review (DR), interview or any other follow-up actions (I), cross checking (CC) with available information relating to projects, (N/A) means not applicable.	The discussion on how the conclusion is arrived at and the conclusion on the compliance with checklist question so far.	For CAR and CR see the definitions above. OK is used if the information and evidence provided is adequate to demonstrate compliance with GS VER/CDM requirements which refer to CDM rules.

Verification Protocol, Table 2: Resolution of Corrective Action Requests and Clarification			
Corrective action requests and/or clarification requests	Reference to Table 1	Response by project participants	Verification Conclusion
The CAR and/or CRs raised in table 1 are repeated here.	Reference to the checklist question number in Table 1 where the CAR or CR is explained.	The responses given by the project participants to address the CARs and/or CRs.	The verification team's assessment and final conclusion of the CARs and/or CRs.

Verification Protocol, Table 3 - Forward Action Requests		
Forward action request	Reference to Table 1	Response by project participants Verification Conclusion
The FAR raised in table 1 is repeated here.	Reference to the checklist question number in Table 1 where the FAR is explained.	Response by the project participants on how forward action request will be addressed.

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2.4 Internal quality control

All the revisions of the verification report, before being submitted to the client, were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent RINA instructions.

The technical review was performed by a technical reviewer(s) qualified in accordance with RINA's qualification scheme for CDM/GS validation and verification.

2.5 Verification team and the technical reviewer(s)

The verification team and the technical reviewers consist of the following personnel:

Role/Qualification	Last Name	First Name	Type of involvement*					
			DR	SV	REP	TE	TR	TER
Team Leader	Kiratli	Tugce	X	X	X	X	-	-
GS Verifier	Kiratli	Tugce	X	X	X	X	-	-
Technical Expert (TA 1.2)	Kiratli	Tugce	X	X	X	X	-	-
Technical Reviewer	Timuroglu	Isil	-	-	-	-	X	X
Technical Expert for Technical Review (TA 1.2)	Timuroglu	Isil	-	-	-	-	X	X

* DR: Document Review; SV: Site Visit/Interview; REP: Reporting; TE: Technical Expert in Technical Area; TR: Technical Review; TER: Technical Expert in Technical Area for Technical Review.

3 VERIFICATION FINDINGS

The findings of the verification related to the monitoring period from 13/10/2011 to 31/12/2013 as documented and described in the monitoring report version 4 of 09/07/2014 and previous versions [/3/](#) are stated in the following sections.

The verification requirements, the means of verification and the results from verifying the identified criteria are documented in more detail in the verification protocol in Appendix A.

3.1 Description of the project activity

The main information of the project is summarized in the table below.

Project Participant(s)	Tokat Enerji A.S.		
Project Title	Killik Wind Power Plant		
Location of the project	Killik Village, Tokat Province		
Methodology(ies)	ACM0002, "Consolidated baseline methodology for grid-connected electricity from renewable sources", version 12.1 of 26/11/2010 /7/		
Sectoral Scope(s)	1	RINA's Technical Area(s)	1.2
Registered PDD	Revision 05 of 24/04/2012		
Date of registration	14/09/2012	GS Registration Reference N°	947
Starting date of the crediting period	13/10/2011 as confirmed through the Temporary Acceptance Protocol /24/		
Project's crediting period	13/10/2011 to 12/10/2018		
Monitoring period	13/10/2011 to 31/12/2013		
Project documentation link	http://mer.markit.com/br-reg/public/index.jsp?q=killik&s=cp		

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The project activity is a wind power plant consists of 16 Nordex N100 wind turbines each capacity are 2.5 MWe making the total installed capacity of 40 MWe as confirmed through the Generation License /38/. The generated electricity is fed to the national grid. The estimated net electricity production is 85,657.50 MWh and the annual emission reductions are estimated to be 52,087 tCO₂e per year as confirmed through the validation report /8/.

The project activity aims to reduce the greenhouse gas emissions in Turkey by replacing fossil fuel power generation and contribute to the development of the wind energy sector in Turkey, as well as aims to support the local economy by creating local employment and providing equipment locally.

3.2 Remaining issues (FARs) from previous validation or verification

Based on the review of the validation report /8/ and GS Foundation 8-week issuance review period document /32/, one FARs was raised by DOE and one FAR was raised by GS addressing the 1st verification period.

FAR#1 – DOE: *Before the start of the project activity, an Ornithology Report was prepared. The assessment of the project activity was based on the assumptions that 54 turbines each with installed capacity of 0.75 MWe would be erected. The three major suggestions could be summarizes as;*

- *The reduction in the number of turbines*
- *The design and location of the turbines*
- *The illumination and coloring of turbines*

During the verification stage “Impact on migration of birds” should be check regarding to three major suggestions by DOE. (Validation Report)

During on site visit, reduction of the number of the turbines was confirmed. The project activity has 16 wind turbines each have 2.5 MWe capacities making the total capacity of 40 MWe. So, there is also a reduction about the total capacity of the project activity. Therefore, EIA Not Required Certificate was prepared by Tokat Governorship Environment and Urbanization Directorate of 28/12/2009 /39/. The turbine coordinates was crosschecked with the old ones given in the Generation License /38/ and they are within the limits of the project area. Reduction in number of the turbines has a positive effect in terms of bird mortality. More turbine blades may cause more shock and injury. During on site visit, such as death of a bird was not observed. In addition, as per the interview with the mukhtar, he stated that the stakeholders did not coincide with the death birds up to this time. Also, the turbines were painted with an inverted color to with the aim to prevent bird damage as confirmed through the pictures of the turbines /41/.

Hence, this FAR is closed.

FAR#1 – GS: *The verification DOE shall please check the newly opened access roads and the other transport roads in the project vicinity with respect to the project impact and provide opinion if those are opened in a controlled and optimum way or not. Please support with evidences and also seek feedbacks from the locals. (GS Review)*

During on site visit, it was confirmed that the roads were not repaired after the construction of the project activity. The mukhtar of the Tekneli Village was visited and the mukhtar of Killik village was interviewed by phone about the road condition. They stated that although the project owner has promised, he did not fix the roads. However, the project owner submitted the supporting document such as Damage Investigation Report /42/ and Receipt of the Amount Paid to the Provincial Administration for the Way Restoration /45/. As per the report and the receipt, it could be confirmed that the project owner have paid the amount on the roads need to be repaired and for the next, Special Provincial Administration is responsible to repair the damage of the roads.

Hence, this FAR is closed.

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3.3 Monitoring Report

The Monitoring Report for the project activity "Killik Wind Power Plant", in "Turkey", version 4 of 09/07/2014 and previous versions submitted by the Tokat Enerji A.S. have been the basis for the verification process.

The main changes between the MR version 1 of 01/04/2014 at the starting date of the verification activity and the MR version 4 of 09/07/2014 submitted for registration are the following:

Section of the MR	Description and reason for changing the information in that section
First Page	The date of the registration is corrected. The actual and the estimated emission reduction of this monitoring period were revised.
A.1. Purpose and general description of project activity	Turbine specifications were discussed.
A.5. Crediting period of project activity	The date of the crediting period was revised as 13/10/2011 to 12/10/2018.
B.1. Description of implemented registered project activity	The format of the dates are revised as DD/MM/YYYY. The date of the validation report is revised as 29/05/2012.
B.2. Post Registration Changes	The two post registration changes about the controlling the electricity measurements with the authorized person from Camlibel EDAS and the right emission factor are expalined.
C. Description of monitoring system	It is clearly defined that monthly meter readings are the main data source and PMUM records have been used to cross-check.
D.1. Data and parameters fixed ex ante or at renewal of crediting period	The name and the description of the parameter is revised.
D.2. Data and parameters monitored	The description value and measuring, reading, recording frequency are revised for the parameter of $EG_{facility,y}$ as per the methodology. The column of "How", "When", "By Who" were added for all the sustainable GS parameters. The number of the employees and the locals are revised.
SECTION E. Calculation of emission reductions or GHG removals by sinks	The necessary corrections were made for all the values to be in line with the calculation excel sheet with the correct emission factor.

RINA confirms that the above MR is based on the currently valid MR template [/12/](#) and is completed in accordance with the applicable guidance document [/10/](#).

3.4 Project implementation

Actual implementation of the registered project activity

It was verified during the site visit that the proposed project activity has been implemented and it is in operation in accordance with the project activity described in the registered PDD [/1/](#). The starting date of operation and crediting period is 13/10/2011. The turbines have been commissioned in three phases. The first commissioning phase covers 8 turbines which were commissioned on 13/10/2011, the second commissioning phase covers 6 turbines which were commissioned on 01/12/2011 and the third commissioning phase covers 2 turbines which were commissioned on 17/12/2011 as confirmed through the Temporary Acceptance Protocol [/24/](#).

The starting date of operation and first crediting period is 13/10/2011 with 20 MW as confirmed through the Temporary Acceptance Protocols [/24/](#). The project activity consists of 16 Nordex N100 wind

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turbines each capacity are 2.5 MWe making the total installed capacity of 40 MWe as confirmed through the Generation License /38/. It is confirmed during the site visit that all the installed turbines are Nordex N100 turbine. The project boundary in the registered PDD /1/ is in line with the actual project boundary. The generated electricity is supplied to the National Electricity Transmission Grid of Turkey via 15 km transmission line to the 154 kV Tokat OSB Transformer Station as confirmed through the Generation License /38/.

Based on the onsite inspection and checking the above documents, RINA confirms that the project activity has been implemented and it is in operation as described above in accordance with the project activity in the registered PDD /1/.

Post registration changes

During the validation period, the plant manager responsibilities were defined as controlling the electricity measurements with the authorized person from Camlibel EDAS and store the monthly electricity measurement records in the power plant for the calculation of emission reductions at the end of each monitoring period. However, during on site visit it was confirmed that no authorized person from Camlibel EDAS has any responsibilities for the electricity measurements.

During the validation and registration process the different emission factors are calculated and presented as 0.6108 and 0.6107 in the registered PDD and validation report /8/. However, the right emission factor must be 0.6081 and it is corrected in the monitoring report /3/ and the emission reduction calculations excel sheet /9/.

In addition, the title of the project participant is changed from PEM Enerji A.S. to Tokat Enerji A.S. as confirmed through the Trade Registry Gazette /35/.

3.5 Methodology for determining Emission Reductions

According to the applied methodology “ACM0002”, “Consolidated baseline methodology for grid-connected electricity from renewable sources” /7/, the emission reductions have been calculated based on the following formula:

$$ER_y = BE_y - PE_y - L_y$$

Where:

BE_y = Baseline emissions in year y (tCO₂e/yr)

PE_y = Project emissions in year y (tCO₂e/yr)

L_y = Leakage emissions in year y (tCO₂e/yr)

The baseline emissions include the CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity, multiplying the electricity supplied to the grid (MWh) with the combined margin CO₂ emission factor for grid connected power generation in year.

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$$

Where:

$EG_{PJ,y}$ = Net electricity supplied to the grid (MWh)

$EF_{grid,CM,y}$ = Combined margin grid emission factor (tCO₂/MWh)

The project emissions are assumed to be zero as per the ACM0002 /7/ since the project is a renewable energy project as defined in the registered PDD /1/ and validation report /8/. The leakage emissions are assumed to be zero as per the ACM0002 /7/ as defined in the registered PDD /1/. Since the project and leakage emissions are zero, the emission reduction equals to baseline emissions.

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3.5.1 Compliance of the monitoring plan with the monitoring methodology and applicable methodological tools

The registered project activity applies the approved baseline and monitoring methodology ACM0002 version 12.1.0 [/7/](#). RINA confirms that the monitoring plan in the registered PDD [/1/](#) complies with the applied CDM methodology and the sustainability indicators established by the Appendix D of the Gold Standard requirements [/4/](#).

3.5.2 Deviation in GHG emission reduction

Additionality assessment has been performed according to the “Tool for the demonstration and assessment of additionality” approved by UNFCCC in the registered PDD [/1/](#). The baseline scenario selection and the calculation of emission reductions have been carried out in a conservative manner. An approved CDM methodology, ACM0002 version 12.1 has been applied in order to determine the baseline scenario and calculate emission reductions.

3.5.3 Compliance of monitoring with monitoring plan

The monitoring plan presented in the monitoring report version 4 of 09/07/2014 and the previous versions for the period of 13/10/2011 to 31/12/2013 (both days included) [/3/](#) complies with the monitoring plan in the registered PDD [/1/](#).

The only monitoring parameter is “Quantity of net electricity generation supplied by the project plant to the grid in year y ($EG_{\text{facility},y}$)” as per the registered monitoring plan presented in the registered PDD [/1/](#). The parameter is monitored continuously by two electricity meters that are located at the project area. Two electricity meters are installed at the project site, one is the main meter (ELSTER A1500 with serial number 424798) and the other one is the backup meter (ELSTER A1500 with serial number 424799). The accuracy of the meters is 0.5s as confirmed through the first index protocol [/18/](#), performed by TEIAS. The accuracy class of the meters complies with the “Communiqué for Measurement Devices used in the Electricity Market” [/16/](#). The electricity meters are sealed by TEIAS as confirmed during the site visit. TEIAS is responsible for calibration and maintenance of the devices. The project owner has no control on the meters since the meters are sealed by the TEIAS. If any major discrepancy occurs between the two meters, TEIAS performs necessary calibration. The meters were calibrated on 11/08/2011 by TEIAS [/18/](#). The recalibration of these meters will be done in line with the equipment requirements and through the period defined by national metrology institutes country by country and for Turkey this period is defined as 10 years. The calibration of meters is deemed appropriate and in compliance with the national regulation [/17/](#). At the last day of each month, the electricity generation supplied to the grid and electricity consumption from the grid is read and the monthly official electricity metering reports [/15/](#). The monthly reading protocols are filled by the Project personnel and sent to TEIAS. In this way, it is checked if there are inconsistencies between the values read by OSOS and the reading protocols. Also the PMUM records are available for the project participant. All protocols [/14/](#) [/15/](#) within this monitoring period was checked during the site visit. The PMUM records [/14/](#) are crosschecked with the monthly official electricity metering reports (OSF Forms) [/15/](#) during this monitoring period. The Monthly Meter Reading Protocols, PMUM records and emission reduction calculation spreads sheet [/9/](#) are in line. During the monitoring period of 13/10/2011 to 31/12/2013 (both days included) the net electricity supplied to the grid amount to 224,234 MWh and the emission reductions to 136,356 tCO₂e.

According to the monitoring plan in the registered PDD [/1/](#) and in the monitoring report version 4 of 09/07/2014 [/3/](#), the following sustainability parameters are monitored: “Air Quality”, “Water Quality and Quantity”, “Other Pollutants”, “Biodiversity”, “Quality of Employment”, “Quantitative Employment and Income Generation”, “Tree Plantation”, “Domestic Waste”, “Waste Oil” and “Expropriation”.

The following parameters have been monitored in accordance with the monitoring plan in the registered PDD [/1/](#) and the monitoring report [/3/](#).

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3.5.3.1 Data and parameters fixed ex-ante or at renewal crediting period

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
Combined Margin Emission Factor	TEIAS statistics	0.6081 tCO ₂ /MWh	As per the approved methodology ACM0002 version 12.1.0, the combined emission factor has been determined using the ex-ante option and so it is not requested to monitor and recalculate the emission factors during the crediting period. The combined emission factor is determined to be 0.6081 tCO₂/MWh in the registered PDD /1/ and validation report /8/.

3.5.3.2 Sampling plan

Not applicable.

3.5.3.3 Data and parameters monitored ex-post

DATA/PARAMETER	EG _{facility,y}
Data Unit	MWh/yr
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year
Source of data to be used	Monthly Meter Reading Records are the main sources and PMUM (Market Financial Settlement Center) records of the main meters are cross-checked
Value data for the monitoring period	224,234
Measuring and reporting frequency; recording procedure.	Continuously monitoring, hourly and monthly recording
Type of monitoring equipment and its accuracy	Two electricity meters are installed at the project site, one is the main meter (ELSTER A1500 with serial number 424798) and the other one is the backup meter (ELSTER A1500 with serial number 424799). The accuracy of the meters is 0.5s as confirmed through the first index protocol /18/ , performed by TEIAS.
Calibration frequency/interval	TEIAS is responsible for calibration and maintenance of the devices as per the registered PDD. The project owner has no control on the meters since the meters are sealed by the TEIAS. If any major discrepancy occurs between the two meters, TEIAS performs necessary calibration. During this monitoring period no discrepancy was occurred. The meters were calibrated on 11/08/2011 by TEIAS /18/. The recalibration of these meters will be done in line with the equipment requirements and through the period defined by national metrology institutes country by country and for Turkey this period is defined as 10 years. The calibration of meters is deemed appropriate and in compliance with the national regulation /17/. During on-site assessment, it was confirmed that the meters are in place and functions well. During the

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	monitoring period, no brake down has been recorded.
How were the values in the monitoring report verified and cross-checked?	The net electricity supplied to the grid has been crosschecked with the PMUM Screenshots /14/ .
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions?	At the last day of each month, the electricity generation supplied to the grid and electricity consumption from the grid is read and the monthly official electricity metering reports /15/. The monthly reading protocols are filled by the Project personnel and sent to TEIAS. In this way, it is checked if there are inconsistencies between the values read by OSOS and the reading protocols. Also the PMUM records are available for the project participant. All protocols /14/ /15/ within this monitoring period was checked during the site visit. The monthly official electricity metering reports (OSF Forms) /15/ are crosschecked with the PMUM records /14/ during this monitoring period. The plant personnel records the electricity generation from the meters every day and the responsible engineer checks the figures regularly. In the case of difference between the data, TEIAS will be informed. The electricity generation supplied to the grid and electricity consumption from the grid is stored by PMUM on the web site. The Project owner has an ID and password to access this data on the web site. The project owner can easily access the data by using this portal.
If only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	All the data were available for the whole monitoring period.

3.5.3.4 Gold Standard sustainability monitored parameters

Data variable	Source of Data	Reported value for the project period
Air Quality Dust emissions during the construction phase	Interviewing stakeholders	No dust pollution
Assessment		
<i>Dust emissions during the construction phase:</i> The parameter is monitored continuously by Local people during the construction. During on the site visit, the stakeholders were interviewed about the dust emission and no negative feedback was received.		

Data variable	Source of Data	Reported value for the project period
Water Quality and Quantity Water Contamination	Sewage Truck Invoice	The wastewater is stored in a septic tank on site and disposed of periodically with vacuum
Assessment		
<i>Water Contamination:</i> The parameter is monitored continuously by checking the sewage truck invoice /29/ . It is confirmed that the waste water is stored in a septic tank on site and disposed of periodically with vacuum.		

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Data variable	Source of Data	Reported value for the project period
Other Pollutants The noise level in the region after the project implementation	Noise Measurement Report	Noise emissions were under the limits
Assessment		
<i>The noise level in the region after the project implementation:</i> The parameter is monitored in case of a complaint by the noise measurements. During this monitoring period, noise measurement analysis was performed on 20/12/2011. As per the report /44/, all the noise emissions are under the legal limits.		

Data variable	Source of Data	Reported value for the project period
Biodiversity Impact of migration of birds	- Picture of the turbines - Ornithology Report	No bird deaths was observed
Assessment		
<i>Impact of migration of birds:</i> Bird collisions are monitored continuously and reported yearly by the company. During on site visit, no dead birds were encountered. The stakeholders were interviewed about biodiversity and no negative feedback was received. In addition, the turbines were painted with an inverted colour and red flash lights were mounted on top of the turbines as confirmed through the pictures of the turbines /41/ and ornithology report was prepared on 22/02/2010 /19/.		

Data variable	Source of Data	Reported value for the project period
Quality of Employment Training Records	Certificates and attendance lists of the trainings	Employees participated to the trainings.
Assessment		
<i>Training Records:</i> The parameter is monitored annually by checking the certificates and attendance lists of the trainings. During this monitoring period, all the attendance lists and the certificates /49-57/ related to the performed trainings were submitted to the verification team. All the employees participated to the trainings.		

Data variable	Source of Data	Reported value for the project period
Quantitative Employment and Income Generation	- Payroll Sheets - Registration Document	18 employees are hired and 15 of them are local. 5 employees are working for subcontractors.
Assessment		
<i>Household income generated from the project:</i> This parameter is monitored continuously by the Registration Document of employees. It was confirmed that 18 employees are hired by the project (13 of them are working for Tokat Enerji and 5 of them are working for Akdeniz Security) and 15 employees' originates are from the same province as confirmed through the Social Insurance Institution Records /30/ and Payroll Sheets /48/.		

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Data variable	Source of Data	Reported value for the project period
Tree Plantation	- Invoices - Permission Correspondence	45 trees were planted
Assessment		
<u>Number of trees planted in the region:</u> This parameter is monitored before the initial verification by the invoice of payment to Forestry Directorate or invoices /40/ of payment for the seedlings. PP has guaranteed to plant totally 3,000 trees. However, in validation stage 250 trees were planted and in first verification 45 trees were planted. Therefore a FAR is raised. In addition, PP sent a permission correspondence /46/ to Provincial Directorate of Food, Agriculture and Livestock for planting pine sapling in the next verification period.		

Data variable	Source of Data	Reported value for the project period
Domestic Waste	- Correspondence - Forms	The domestic wastes should be transported to the waste collection points
Assessment		
<u>Agreement with the municipality, waste disposal records, existence of waste transportation vehicles or interview with the municipality:</u> This parameter is monitored continuously by the letter of Tokat Directorate of Sanitation of 28/08/2012 /25/. As per the letter, the domestic wastes should be transported to the waste collection points with project owner's own facilities. It could be confirmed through the National Waste Transportation Forms /23/.		

Data variable	Source of Data	Reported value for the project period
Waste Oil	Waste disposal records	Stored in the project area collected by the authorised companies
Assessment		
<u>Waste disposal records, interview with the municipality:</u> This parameter is monitored continuously by the waste disposal records /23/. Waste oil is stored in the project area by the company and then collected by the authorised companies. In addition, Waste oil analysis report /27/ was prepared by Dokuz Eylul University.		

Data variable	Source of Data	Reported value for the project period
Expropriation	- Interviews - Land Registers	There is no expropriation
Assessment		
<u>The only land purchased from the land owner is the location of the 8th turbine and the expropriation conducted for the 8th turbine will be monitored:</u> This parameter is monitored during the first verification by interview with the land owner. The land owner was interviewed by phone call because he lives in Istanbul. He justified that there is no expropriation. He is no longer living in Tokat; therefore, his land was purchased voluntarily. Also the land registers /33/ was provided to the verification team.		

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3.5.4 Assessment of data and calculation of emission reductions

All the monthly meter protocols [/15/](#) are available for the project participant. All PMUM records [/14/](#) within this monitoring period was checked during the site visit. The monthly meter reading protocols [/15/](#) were crosschecked with the PMUM records [/14/](#).

The data of generated electricity are transferred correctly to the excel sheet [/9/](#) and emission reduction is calculated correctly. The excel sheet is crosschecked with the PMUM records [/14/](#) and the monthly meter reading protocols [/15/](#) and it seems appropriate.

3.5.5 Accuracy of emission reduction calculations

The emission reduction calculations provided in the spreadsheet [/9/](#) have been verified to be correct and in line with the registered PDD [/1/](#).

The emission reductions from the project for the monitoring period as reported in the monitoring report version 4 of 09/07/2014 [/3/](#) is equivalent to 136,356 tCO₂e. The reported emission reductions are 21.95% higher than the estimated emission reduction of 111,809 tCO₂e for the period as per the registered PDD [/1/](#). According to the statement made by the project owner, the project has a high efficiency.

The data presented in the monitoring report [/3/](#) were assessed by reviewing in detail project documentation, collection of monitored data, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment. Sufficient evidence was presented and verified by RINA for the reported emission reductions as listed in the above Section 3.5.3.3.

3.5.6 Accuracy of the GS indicators of sustainable development

All the documented evidences related to the sustainable monitored parameters such as the sewage truck invoice [/29/](#), noise measurement report [/44/](#), picture of the turbines [/41/](#), ornithology report [/19/](#), attendance lists and the certificates [/49-57/](#), Social Insurance Institution Records [/30/](#), Payroll Sheets [/48/](#), planting invoices [/40/](#), permission correspondence [/46/](#), letter of Tokat Directorate of Sanitation [/25/](#), National Waste Transportation Forms [/23/](#), Waste oil analysis report [/27/](#) are provided as objective evidences.

3.5.7 Management system and quality control

The electricity generation supplied to the grid and electricity consumption from the grid is read from the electricity meters through Monthly Meter Reading Protocols by the TEIAS personnel. The monthly meter reading protocols are prepared as per these readings. The plant personnel records the electricity generation from the meters every day and the responsible engineer checks the figures regularly. In case of difference between the data, TEIAS will be informed. The generated electricity is measured by two meters that were sealed by TEIAS. The project owner has no control on the meters.

The electricity generation supplied to the grid and electricity consumption from the grid is stored by PMUM on the web site. The Project owner has an ID and password to access this data on the web site. The project owner can easily access the data by using this portal. The project owner also archives a hardcopy of these protocols, scanned and stored electronically.

The collected data during the monitoring period will be kept by the project owner at least two years after the last issuance of VERs as stated in the registered PDD [/1/](#) and monitoring report [/3/](#) in line with the ACM0002 version 12.1 [/7/](#).

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4 VERIFICATION AND CERTIFICATION OPINION

RINA Services Spa (RINA) has performed verification of the emission reductions reported for the project activity "Killik Wind Power Plant" in Turkey, GS Registration Reference N° 947, for the period 13/10/2011 to 31/12/2013, with regard to the relevant requirements for GS activities.

The project participants of the "Killik Wind Power Plant" project are responsible for:

- the preparation of greenhouse gas emissions data and the reported greenhouse gas emission reductions from the project on the basis set out in the monitoring plan contained in the registered Project Design Document version 05 of 24/04/2012,
- the development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

It is the responsibility of RINA to express an independent verification opinion about the project's conformity with the requirements of paragraph 62 of the CDM modalities and procedures, GS requirements and on the reported greenhouse gas emission reductions from the project.

Based on documented evidence and corroborated by an on-site assessment RINA can confirm that:

- the project has been implemented and operated as per the registered PDD;
- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable CDM and GS VER requirements;
- monitoring is in place as per the applied baseline and monitoring methodology;
- monitoring complies with the monitoring plan in the registered PDD;
- the monitoring plan in the registered PDD is as per the applied baseline and monitoring methodology.

It is RINA's opinion that the GHG emission reductions stated in the monitoring report version 4 of 09/07/2014 for the "Killik Wind Power Plant" project in Turkey for the period 13/10/2011 to 31/12/2013 are fairly stated. The GHG emission reductions were calculated correctly, the sustainability development indicators were correctly monitored, on the basis of the approved monitoring methodology "ACM0002", "Consolidated baseline methodology for grid-connected electricity from renewable sources", version 12.1.0 of 26/11/2010 and the monitoring plan contained in the registered PDD.

Hence, RINA is able to certify that the emission reductions from the project during the monitoring period 13/10/2011 to 31/12/2013 amount to 136,356 tCO₂e.

Year 2011 13/10/2011 to 31/12/2011 8,305 tCO₂e

Year 2012 01/01/2012 to 31/12/2012 61,756 tCO₂e

Year 2013 01/01/2013 to 31/12/2013 66,295 tCO₂e

GHG Emission Reductions or Removals	tCO ₂ e
Baseline Emissions	136,356
Project Emissions	0
Leakage	0
Net GHG emission reductions or removals	136,356

Istanbul, 10/07/2014

Genova, 11/07/2014



Tugce KIRATLI
GS Team Leader
RINA Denizcilik ve Belgelendirme Ltd. Sti.



Laura Severino
Authorized officer signing for the DOE
RINA Services S.p.A.

APPENDIX A

GOLD STANDARD VERIFICATION PROTOCOL

TABLE 1 REQUIREMENTS CHECKLIST

Checklist Question	Reference	Mov ¹	Comments	Conclusion
A A.1 Title of the project activity, revision number and date of Monitoring Report	/1/ /3/ /32/ /36/	DR, CC	The title of the project activity is given as "Killik Wind Power Plant" in the Monitoring Report version 1 /3/. The title is in line with the registered PDD /1/. The revision number and date of the Monitoring Report seems appropriate. However, in the timeline table, the date of the MR, version 1 is presented as 01/04/2013. Please correct. The registration date of the project activity is 14/09/2012 as confirmed through the GS 8-week Issuance Review Period Document of 14/11/2013 /32/ and correspondence between GS and PP /36/. However, it is expressed in different ways in the monitoring report such as 14/09/2013 and 01/08/2013. Please clarify. The Monitoring report form (F-CDM-MR) is in line with the latest version. However, the format of the dates should be corrected as DD/MM/YYYY.	CR-1 OK
A.2 Is the actual implementation and operation of the proposed project activity in accordance with the project activity in the registered PDD?	/1/ /3/ /24/ /38/	DR, CC, I	It is confirmed during the site visit performed on 15/04/2014 that project activity is implemented and operated as per the registered PDD /1/. The starting date of operation and crediting period is 13/10/2011. All turbines have been commissioned in three phases. The first commissioning phase covers 8 turbines which were commissioned on 13/10/2011, the second commissioning phase covers 6 turbines which were commissioned on 01/12/2011 and the third commissioning phase covers 2 turbines which were commissioned on 17/12/2011 as confirmed through the Temporary Acceptance Protocol /24/. The project activity is a wind power plant consists of 16 Nordex N100 wind turbines each capacity are 2.5 MWe making the total installed capacity of 40 MWe as confirmed through the	CAR-1 OK

¹ Mov: DR document review, I interview, CC cross checking

Checklist Question	Reference	Mov ¹	Comments	Conclusion
			Generation License /38/. However, the turbine model and the mark are not discussed in the monitoring report. Please clarify. The project boundary in the registered PDD /1/ is in line with the actual project boundary. Two meters will be placed (one main and one reserve) at the project area and The generated electricity is supplied to the National Electricity Transmission Grid of Turkey via 15 km transmission line to the 154 kV Tokat OSB Transformer Station as confirmed through the Generation License /38/. The UTM coordinates of the turbines are confirmed through the registered PDD /1/. The estimated emission reduction given in the cover page of Monitoring Report version 1.0 /3/ is not in line with the registered PDD /1/ and Section E.5. Please correct. The crediting period given in section A.5 of the monitoring report is not correct. The crediting period is mentioned as 7 years; however, as per the dates the monitoring period is about 2 years. Please correct. The provided validation report date is 29/05/2012. However, in the timeline table, the date is presented as 15/03/2013. Please provide the final version of the report. Please correct the explanation “the third date” as “the third data” in page 8 in section C of the monitoring report.	
A.3	/1/ /7/	DR	The registered project activity applies the approved baseline and monitoring methodology ACM0002 version 12.1.0 of 26/11/2010 /7/.	OK
B Monitoring				
B.1 Monitoring plan				
B.1.1	/1/ /7/	DR, CC	The monitoring plan of the registered GS project activity complies with the applied methodology ACM0002 version 12.1 /7/.	OK
B.1.2	/1/ /2/ /7/	DR, CC	Quantity of net electricity generation supplied by the project plant to the grid in year y (EG_{facility,y}) needs to be monitored as per the ACM0002 version 12.1.0 /7/ and registered PDD /1/. In addition, since the project is developed under Gold	OK

Checklist Question	Reference	Mov ¹	Comments	Conclusion
B.1.3	/4 /5/	DR, CC	standard, the following GS sustainable development parameters needs to be monitored for the second monitoring period as per the registered GS Passport /2/: "Air Quality", "Water Quality and Quantity", "Other Pollutants", "Biodiversity", "Quality of Employment", "Quantitative Employment and Income Generation", "Tree Plantation", "Domestic Waste", "Waste Oil" and "Expropriation". The project activity is developed and registered under Gold standard Version 2.1; therefore, GS Toolkit 2.1 is applicable to the project activity. The sustainability indicators in the monitoring report complies with the sustainability indicators established by the Gold Standard.	OK
B.1.4	/1/ /7/	DR, CC, I	No change has been occurred to the sustainable development indicators during the monitoring period of 13/10/2011 to 31/12/2013 as confirmed through the site inspection and interviews.	OK
B.2 Data and parameters that are available at validation and that are not monitored				
B.2.1	/1/ /7/ /8/	DR, CC	Combined Margin Emission Factor: As per the approved methodology ACM0002, the combined emission factor has been determined using the ex-ante option, so it is not requested to monitor and recalculate the emission factors during this crediting period. The combined emission factor is determined to be 0.6081 tCO ₂ /MWh in the monitoring report. However, in registered PDD /1/ and validation report /8/.it is stated in different ways such as 0.6108 and 0.6107. As per the annual electricity generation registered in PDD and Validation report the emission factor must be 0.6081. There is a mistake or miswritten and it should be explained in Section B.2.2 of the monitoring report. In addition, the name of the parameter is not in line with the registered PDD. Please correct.	CR-2 OK
B.3 Data and parameters monitored				
B.3.1	/1/ /14/ /15/	DR, CC, I	Quantity of net electricity generation supplied by the project plant to the grid in year y (EG_{facility,y}): The electricity generation and electricity consumption is measured in MWh	CAR-2 OK

Checklist Question	Reference	Mov ¹	Comments	Conclusion
			and it is monitored by two electricity meters that are located at the project area. The electricity generation and electricity consumption of the project activity is based on the monthly official electricity metering reports (OSF Forms) /15/. The monthly meter readings are crosschecked with the PMUM records /14/ during this monitoring period. However, the name and the description of the parameter given in section D.2 (EG_{facility,y}) is not in line with the PDD /1/. As defined in the registered PDD, the emission reduction is based on the monthly meter readings and PMUM data is used to cross-checked. Please correct the explanation "The quantity of net electricity delivered to the grid has been used to cross check the PMUM records." in page 7 of the monitoring report as per the current situation. In addition, it is stated in the MR and PDD that "The plant manager is responsible to control the electricity measurements with the authorized person from Camibel EDAS and store the monthly electricity measurement records in the power plant for the calculation of emission reductions at the end of each monitoring period". However, no authorized person from Camibel EDAS is responsible controlling the measurements. Please correct and add a definition in section B.2.2 Corrections. Also, the value of the parameter is not in line with the current situation as per the monitoring period. Please make sure that the last 4 months have been included and make the necessary corrections in the Monitoring Report. In calculation excel sheet, PMUM data of 2011 is not in line with the screen shot and PMUM data of 2012 is not calculated correctly. Please correct. Please check the emission factor in the calculation excels sheet /9/. Recalculate the emission reduction and make the necessary corrections in necessary parts of the monitoring period.	
B.3.2	Is the measurement equipment described? Is /3/ /18/	DR,	Two electricity meters are installed at the project area. The	CR-3

Checklist Question	Reference	MoV ¹	Comments	Conclusion
the accuracy of the measurement equipment addressed and deemed appropriate?		CC,I	main meter is ELSTER A1500 with serial number 424798 and the backup meter is ELSTER A1500 with serial number 424799. The meters have the accuracy of 0.5s as confirmed through the first index protocol /18/ , performed by TEIAS. However, it is also stated that the accuracy of the electricity meters are 1s which is not in the permitted range. Please correct. The description of the meters presented in the monitoring report is in line with the operation as confirmed through the site visit observation.	OK
B.3.3 Are the requirements for maintenance and calibration of measurement equipment described and deemed appropriate?	/1/ /3/ /18/	DR, CC,I	TEIAS is responsible for calibration and maintenance of the devices as per the registered PDD /1/ . The project owner has no control on the meters since the meters are sealed by the TEIAS as confirmed during the site visit. If any major discrepancy occurs between the two meters, TEIAS performs necessary calibration. During this monitoring period no discrepancy was occurred. The meters were calibrated on 11/08/2011 by the TEIAS /18/ . The recalibration of these meters will be done in line with the equipment requirements and through the period defined by national metrology institutes country by country and for Turkey this period is defined as 10 years. The calibration of meters is deemed appropriate and in compliance with the national regulation.	OK
B.3.4 Is the monitoring frequency adequate for all monitoring parameters? Is it in line with the registered monitoring plan?	/1/ /3/ /7/	DR, CC, I	The electricity generation supplied to the grid and electricity consumption from the grid is monitored continuously (reading in real time) by two meters as verified during the site visit. Monitoring frequency is in line with the applied methodology and registered PDD.	OK
B.3.5 Is the recording frequency adequate for all monitoring parameters? Is it in line with the registered monitoring plan?	/1/ /3/ /7/	DR, CC, I	The electricity generation supplied to the grid, electricity consumption from the grid is recorded monthly. This is in line with the monitoring plan in the registered PDD. However, measuring and reading frequency of the electricity generation is not discussed in the parameter of EGfacility,y	GR-4 OK
B.3.6 Does data management (from monitoring equipment to emission reduction calculation)	/3/ /15/	DR, CC, I	At the last day of each month, the electricity generation supplied to the grid and electricity consumption from the grid is read and the monthly official electricity metering reports /15/ .	OK

Checklist Question	Reference	Mov ¹	Comments	Conclusion
ensure correct transfer of data and reporting of emission reductions?			The monthly reading protocols are filled by the Project personnel and sent to TEIAS. In this way, it is checked if there are inconsistencies between the values read by OSOS and the reading protocols. The plant staff explained the monitoring procedures during the site visit. As confirmed through the observation, the plant personnel records the electricity generation from the meters and fills the monthly reading protocols.	
B.4 Monitoring of GS indicators of sustainable development /environmental impacts				
B.4.1	Data/Parameter monitored / Data unit / Description / Source of data to be used / Value data for the monitoring period /2/ /3/ /19/ /23/ /25/ /29/ /30/ /41/	DR, CC, I	The following GS sustainable development parameters are monitored as per the registered GS Passport /2/: "Air Quality", "Water Quality and Quantity", "Other Pollutants", "Biodiversity", "Quality of Employment", "Quantitative Employment and Income Generation", "Tree Plantation", "Domestic Waste", "Waste Oil" and "Expropriation". Air Quality: <u>Dust emissions during the construction phase:</u> The parameter is monitored continuously during the construction. Also, the stakeholders were interviewed about the dust emission and no negative feedback was received. Water Quality and Quantity: <u>Water Contamination:</u> The parameter is monitored continuously by checking the sewage truck invoice /29/. It is confirmed that the waste water is stored in a septic tank on site and disposed of periodically with vacuum. Other Pollutants: <u>The noise level in the region after the project implementation:</u> The parameter is monitored in case of a complaint by the noise measurements. During on site visit, PP is stated that noise measurements were performed. However, the supporting document is not provided to the verification team. Biodiversity : <u>Impact of migration of birds:</u> Bird collisions are monitored continuously and reported yearly by the company. During on site visit, no dead birds were encountered. The stakeholders were interviewed about biodiversity and no negative feedback	CAR-3 OK

Checklist Question	Reference	MoV ¹	Comments	Conclusion
			was received. In addition, the turbines were painted with an inverted colour and red flash lights were mounted on top of the turbines as confirmed through the pictures of the turbines /41/ and ornithology report was prepared on 22/02/2010 /19/. Quality of Employment: <u>Training Records:</u> The parameter is monitored annually by checking the certificates and attendance lists of the trainings. However, provided trainings are not in line with Registration Document /30/ given for the employee list. Please clarify. Quantitative Employment and Income Generation: <u>Household income generated from the project:</u> This parameter is monitored continuously by the Registration Document of employees. It was confirmed that 15 employees are hired by the project (10 of them are working for Tokat Enerji and 5 of them are working for Akdeniz Security) and 13 employees' originates are from the same province as confirmed through the Social Insurance Institution Records /30/ However, the total number of employees and number of local employment is not discussed in the monitoring report for this parameter. Tree Plantation: <u>Number of trees planted in the region:</u> This parameter is monitored before the initial verification by the invoice of payment to Forestry Directorate or invoices of payment for the seedlings. PP has guaranteed to plant totally 3,000 trees. However, in validation stage 250 trees were planted and in first verification 45 trees were planted. Please clarify. Domestic Waste: <u>Agreement with the municipality, waste disposal records, existence of waste transportation vehicles or interview with the municipality:</u> This parameter is monitored continuously by the letter of Tokat Directorate of Sanitation of 28/08/2012 /25/. As per the letter, the domestic wastes should be transported to the waste collection points with project owner's own facilities. It could be confirmed through the National Waste Transportation Forms /23/. Waste Oil:	

Checklist Question	Reference	Mov ¹	Comments	Conclusion
			<u>Waste disposal records, interview with the municipality:</u> This parameter is monitored continuously by the waste disposal records /23/. Waste oils is stored in the project area by the company and then collected by the authorised companies. Expropriation: <u>The only land purchased from the land owner is the location of the 8th turbine and the expropriation conducted for the 8th turbine will be monitored.:</u> This parameter is monitored during the first verification by interview with the land owner. The land owner was interviewed by phone call because he lives in Istanbul. He justified that there is no expropriation. He is no longer living in Tokat; therefore, his land was purchased voluntarily. Please also add "How, When and Who" columns for all the parameters to monitor easily.	
B.4.2	/1/ /2/ /3/	DR, CC, I	The monitoring complies with the monitoring plan presented in the registered PDD.	OK
B.5 Management, quality assurance and quality control				
B.5.1	/1/ /3/	DR, I	An on-site inspection has been performed on 15/04/2014 and it could be confirmed that the monitoring arrangements in the monitoring plan are feasible within the project design.	OK
B.5.2	/1/ /3/	DR, I	The electricity generation supplied to the grid and electricity consumption from the grid is monitored by two meters as verified during the site visit. The meters are sealed by TEIAS. The electricity generation supplied to the grid and electricity consumption from the grid is read remotely from the electricity meters by TEIAS. The reading results are stored by PMUM on the web site. The project manager explained the monitoring procedures during the site visit. As confirmed through the observation, the plant staff monitors and records the data at the end of each month from both meters, fills the forms and compares the values for consistency. Also, the data was measured hourly, transferred to excel and reported daily. The responsible engineer performs regular checks of this procedure each month. If any difference occurs between the two meters,	OK

Checklist Question	Reference	Mov ¹	Comments	Conclusion
B.5.3 Are the data management and quality assurance and quality control procedures sufficient to ensure that the emission reductions achieved by/resulting from the project can be reported ex post and verified?	/1/ /3/ /14/	DR, I	TEIAS has to be informed. The generated electricity is measured by two meters that were sealed by TEIAS. The project owner has no control on the meters. The electricity generation supplied to the grid and electricity consumption from the grid is stored by PMUM on the web site. The project owner also archives a hardcopy of the monthly official electricity metering reports /14/ , scanned and stored electronically.	OK
B.5.4 Will all monitored data required for verification and issuance be kept for two years after the end of the crediting period or the last issuance of VERs, for this project activity, whichever occurs later?	/1/ /3/ /7/	DR, I	The collected data during the monitoring period will be kept by the project owner at least two years after the last issuance of VERs as stated in the registered PDD /1/ line with the ACM0002 version 12.1.0 /7/ . However, it is not stated in the monitoring report /3/ .	CR-5 OK

TABLE 2 RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
CAR 1 The project activity is a wind power plant consists of 16 Nordex N100 wind turbines each capacity are 2.5 MWe making the total installed capacity of 40 MWe as confirmed through the Generation License /38/. However, the turbine model and the mark are not discussed in the monitoring report. Please clarify. The estimated emission reduction given in the cover page of Monitoring Report version 1.0 /3/ is not in line with the registered PDD /1/ and Section E.5. Please correct. The crediting period given in section A.5 of the monitoring report is not correct. The crediting period is mentioned as 7 years; however, as per the dates the monitoring period is about 2 years. Please correct. The provided validation report date is 29/05/2012. However, in the timeline table, the date is presented as 15/03/2013. Please provide the final version of the report. Please correct the explanation “the third date” as “the third data” in page 8 in section C of the monitoring report.	A.2	Response to CAR 1: The project consisted of 16 wind turbines of 2.5 MW each. As discussed in the PDD the first-hand turbines were used in the project which are Nordex N100 type with 80 m hub and 100 m rotor diameter. This turbine is known to have IEC WTGS Class II type certificates and considered suitable to the project site after the wind and energy yield assessments. The Assessment is provided in the attachment. The relevant clarification is added in the monitoring report as requested. The estimated emission reduction given in the cover page of Monitoring Report is corrected as per Section E.5 The crediting period is corrected as Total crediting period. The final version of the report, dated 29/05/2012 is in the attachment. The typo is corrected. Response to Review 1 : Section A.5 is corrected as 1st crediting period is from 13/10/2011 to 13/10/2018 (both days are included). The final validation report is corrected as 29/05/2012 in the timeline table.	Review 1 (28/05/2014): The turbine specifications are added to the MR and confirmed through the Wind Data Analysis and Energy Generation Report /43/. The estimated emission reduction is now corrected as 111,809 tCO₂e in the monitoring report, version 2 of 27/05/2014. For the renewable GS projects, there are 3 crediting periods each have 7 years. However, the given dates (13/10/2011 to 31/12/2013) in Section A.5 are relevant with the monitoring period not the crediting period. Please correct. The final validation report is still presented as 15/03/2013 in the timeline table. Please correct. The miswriting is corrected. Hence, CAR 1 is not closed. Review 2 (04/06/2014): The crediting period is now stated as 13/10/2011 to 12/10/2018 in Section A.5. The final validation report is now presented as 29/05/2013 in the timeline table. Hence, CAR 1 is closed.
CAR 2	B.3.1	Response to CAR 2: The description of the	Review 1 (28/05/2014):

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
Quantity of net electricity generation supplied by the project plant to the grid in year y ($EG_{facility,y}$): The name and the description of the parameter given in section D.2 ($EG_{facility,y}$) is not in line with the PDD /1/. As defined in the registered PDD, the emission reduction is based on the monthly meter readings and PMUM data is used to cross-checked. Please correct the explanation "The quantity of net electricity delivered to the grid has been used to cross check the PMUM records." in page 7 of the monitoring report as per the current situation. In addition, it is stated in the MR and PDD that "The plant manager is responsible to control the electricity measurements with the authorized person from Camibel EDAS and store the monthly electricity measurement records in the power plant for the calculation of emission reductions at the end of each monitoring period". However, no authorized person from Camibel EDAS is responsible controlling the measurements. Please correct and add a definition in section B.2.2 Corrections. Also, the value of the parameter is not in line with the current situation as per the monitoring period. Please make sure that the last 4 months have been included and make the necessary corrections in the Monitoring Report. In calculation excel sheet, PMUM data of 2011 is not in line with the screen shot and PMUM data of 2012 is not calculated correctly. Please correct. Please check the emission factor in the calculation excels sheet /9/. Recalculate the emission reduction and make the necessary corrections in necessary parts of the monitoring period.		parameter given in section D.2 ($EG_{facility,y}$) is amended in line with the PDD. The Readings have been assumed as the default data source for evaluation of the emission reduction and the PMUM records have been used to cross-check. The correction is made accordingly Currently an authorized person from Camibel EDAS has not any responsibilities during the electricity measurements. The definition above is added in section B.2.2 Corrections PMUM Dec. 2011 is corrected. PMUM data of 2012 is rechecked and any mistakes are not found. Last 4 months' data of PMUM 2013 are added. The emission factor in the calculation is corrected as 0.6081 and the relevant calculations are amended accordingly. The necessary definition in section B.2.2 Corrections is added. Response to Review 1: PMUM data of 2012 (column G line 18) is corrected. Total Emission Reductions during the 1st Monitoring Period are corrected as 136,356 and the emission reductions before 2012 are calculated as 70,061tCO₂e. Section E.4, E.5, E.6 and E.7 are corrected according to the excel sheet.	The necessary corrections were made in the monitoring report. It is now mentioned in the monitoring report that the emission reduction is based on the monthly meter readings and PMUM data is used to cross-checked and it is in line with the registered PDD. Camibel EDAS is removed from the monitoring report since the plant manager is the only responsible to control the electricity measurement. The necessary explanation is added to Section B.2.2 of the MR. The value of the parameter $EG_{facility,y}$ is now revised as per the actual situation. PMUM data of 2011 is now in line with the screen shot. However, in 2012, (column G line 18), the calculation seems as E18-F108. Please correct. In addition, the total emission reduction and the emission reductions before 2012 are presented in different ways as "136,357" - "136,356" and "70,062" - "70,061" respectively. Please clarify which one is true. Also, in Section E.4, E.5, E.6 and E.7 are not in line with the calculation excel sheet. Please revise. Hence, CAR 2 is not closed. Review 1 (28/05/2014): The calculation of the 2012 PMUM data (column G line 18), is now corrected. In addition, the total emission reduction and the emission reductions before 2012 are presented as "136,356" and "70,061" respectively. Also, in Section E.4, E.5, E.6 and E.7, the

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
CAR 3 Other Pollutants: <i>The noise level in the region after the project implementation:</i> The parameter is monitored in case of a complaint by the noise measurements. During on site visit, PP is stated that noise measurements were performed. However, the supporting document is not provided to the verification team. Quality of Employment: <i>Training Records:</i> The parameter is monitored annually by checking the certificates and attendance lists of the trainings. However, provided attendance list of the trainings are not in line with Registration Document /30/ given for the employee list. Please clarify. Quantitative Employment and Income Generation: <i>Household income generated from the project:</i> This parameter is monitored continuously by the Registration Document of employees. It was confirmed that 15 employees are hired by the project (10 of them are working for Tokat Enerji and 5 of them are working for Akdeniz Security) and 13 employees' originates are from the same province as confirmed through the Social Insurance Institution Records /30/ However, the total number of employees and number of local employment is not discussed in the monitoring report for this parameter. Tree Plantation: <i>Number of trees planted in the region:</i> This parameter is monitored before the initial verification by the invoice of payment to Forestry	B.4.1	Response to CAR 3: Other Pollutants: The noise level in the region after the project implementation: Noise Level Measurement Report, dated 2011 December is attached. Quality of Employment: Training Records: In accordance with the employee list, the certificates and attendance lists of the trainings are attached. Quantitative Employment and Income Generation: Household income generated from the project: The relevant parameter is revised accordingly. Tree Plantation: Number of trees planted in the region: Before finalising the verification process, the PP aims totally 3000 trees are planted in order to mitigate the effect of the project on flora in the Region. Therefore a letter of	values are revised as per the calculation sheet. Hence, CAR 2 is closed. Review 1 (28/05/2014): Other Pollutants: <i>The noise level in the region after the project implementation:</i> The noise measurement report of 20/12/2011 is provided to the verification team. According to the report /44/, it has been determined that the performed measurements provide the limit value. Quality of Employment: <i>Training Records:</i> All the trainings were submitted to DOE. However, there are still minor disputes. Hamza Onal and Can Soguksu seems as a member of the project activity as per the trainings but there is no registration document for them. Please provide the last month of SGK record (December 2013) to monitor the final number of employment. Quantitative Employment and Income Generation: <i>Household income generated from the project:</i> The total number of employees and number of local employment are now discussed in the monitoring report. Tree Plantation: <i>Number of trees planted in the region:</i> A letter of permission /45/ is provided to the verification team. Therefore, A FAR is raised to monitor this parameter in the next verification. "How, When and Who" columns for all the parameters are added to the monitoring

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
Directorate or invoices of payment for the seedlings. PP has guaranteed to plant totally 3,000 trees. However, in validation stage 250 trees were planted and in first verification 45 trees were planted. Please clarify. Please also add "How, When and Who" columns for all the parameters to monitor easily.		permission has been presented to the Governor of Tokat Provincial Directorate of Food, Agriculture and Livestock for planting remained 2700 trees. The permission process is in progress. Futhermore, "How, When and Who" columns for all the parameters are added to monitor easily. Response to Review 1 : Quality of Employment: SGK records for Hamza Onal and Can Soguksu are presented in the attachment. Furthermore the last month of SGK record (December 2013) is presented as requested.	report. Hence, CAR 3 is not closed and also a FAR is raised. Review 2 (04/06/2014): Quality of Employment: Training Records: The last month of SGK record (December 2013) is provided to monitor the final number of employment. Totally 18 employees are hired, 15 of them are local and 5 of them are working for subcontractor. In addition, the registration documents for Hamza Onal and Can Soguksu are now provided to the verification team. Hence, CAR 3 is closed.
CR 1 The revision number and date of the Monitoring Report seems appropriate. However, in the timeline table, the date of the MR, version 1 is presented as 01/04/2013. Please correct. The registration date of the project activity is 14/09/2012 as confirmed through the GS 8-week Issuance Review Period Document of 14/11/2013 /32/ and correspondence between GS and PP /36/. However, it is expressed in different ways in the monitoring report such as 14/09/2013 and 01/08/2013. Please clarify. In addition, the format of the dates should be corrected as "/" - DD/MM/YYYY.	A.1	Response to CR 1: The registration date of the project activity is corrected as 14/09/2012 . During the site visit the officially registered 8-week registration review period document and correspondence between GS and Gaia are presented to the DOE. The format of the timeline dates' is corrected as DD/MM/YYYY Response to Review 1 : The month corrected as "10"	Review 1 (28/05/2014): The date of the MR is now corrected as 01/04/2014 in the timeline table. The registration date is now defined as 14/09/2012 in the monitoring report. The format of the dates are now revised as DD/MM/YYYY. However in Section B.1 of the monitoring report, the month "october" is presented as "09". Please correct. Hence, CR 1 is not closed. Review 2 (04/06/2014): In Section B.1 of the monitoring report, the month "october" is now corrected as "10". Hence, CR 1 is closed.
CR 2 The combined emission factor is determined to be 0.6081 tCO₂/MWh in the monitoring report. However, in registered PDD /1/ and validation	B.2.1	Response to CR 2: In accordance with the registered PDD and Validation report the emission factor is corrected as 0.6081 in ER calculations and relevant sections in the	Review 1 (28/05/2014): The combined emission factor is now presented as 0.6081 tCO₂/MWh in the monitoring report and the calculations given

Corrective action and/or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
report /8/ . It is stated in different ways such as 0.6108 and 0.6107. As per the annual electricity generation registered in PDD and Validation report the emission factor must be 0.6081. There is a mistake or miswritten and it should be explained in Section B.2.2 of the monitoring report. In addition, the name of the parameter is not in line with the registered PDD. Please correct.		MR are revised accordingly. The name of the parameter is amended in line with the registered PDD.	in the excel sheet is revised accordingly. The name of the parameter is now in line with the registered PDD. Hence, CR 2 is closed.
CR 3 Two electricity meters are installed at the project area. The main meter is ELSTER A1500 with serial number 424798 and the backup meter is ELSTER A1500 with serial number 424799. The meters have the accuracy of 0.5s as confirmed through the first index protocol /18/ , performed by TEIAS. However, it is also stated that the accuracy of the electricity meters are 1s which is not in the permitted range. Please correct.	B.3.2	Response to CR 3: The accuracy of 1 is removed from the relevant sections in the MR v2.	Review 1 (28/05/2014): The accuracy of the electricity meter is now seen as 0.5s. Hence, CR 3 is closed.
CR 4 The electricity generation supplied to the grid, electricity consumption from the grid is recorded monthly. This is in line with the monitoring plan in the registered PDD. However, measuring and reading frequency of the electricity generation is not discussed in the parameter of EGfacility,y.	B.3.5	Response to CR 4: The relevant definition is added under the parameter of EGfacility,y.	Review 1 (28/05/2014): Measuring and reading frequency of the electricity generation is now discussed in the parameter of EGfacility,y. Hence, CR 4 is closed.
CR 5 The collected data during the monitoring period will be kept by the project owner at least two years after the last issuance of VERs as stated in the registered PDD /1/ line with the ACM0002 version 12.1.0 /7/ . However, it is not stated in the monitoring report /3/ .	B.5.4	Response to CR 5: It has already stated in the MR, under section C Description of monitoring system, Responsibilities for monitoring.	Review 1 (28/05/2014): "The collected data during the monitoring period will be kept by the project owner at least two years after the last issuance of VERs" has been already stated in the MR. Hence, CR 5 is closed.

TABLE 3 FORWARD ACTION REQUEST

Forward action request	Reference to Table 1	Response by project participants Verification conclusion
FAR 1 Tree Plantation: <i>Number of trees planted in the region:</i> PP has guaranteed to plant totally 3,000 trees for this project activity. However, in validation stage only 250 and in first verification 45 trees were planted. Related to that a letter of permission to plant pine saplings is provided to the verification team. Therefore, A FAR is raised to monitor this parameter in the next verification.	B.4.1	The plantation permission process of 2700 trees in the region still continues. The supporting documents of the relevant parameter will be provided to the verifier DOE in the next verification <u>RINA Opinion:</u> This parameter will be monitored during the next verification.



RINA

CERTIFICATO DI QUALIFICA QUALIFICATION CERTIFICATE

Si attesta che il sig./sig.ra:
We declare that Mr/Mrs/Ms:

Tugce Kiratli

è qualificato come¹:
is qualified as:

CDM-TEC, JI-TEC, VCS-TEC, GS-TEC, VCS-VAL, VCS-
VER, GS-VAL, GS-VER, GS-TL, VCS-TL

per le seguenti aree tecniche:
for the following technical areas:

1.2, 13.1

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.2*	Energy generation from renewable energy sources	1
13.1	Waste handling and disposal	13

*Just for GS and VCS, not for CDM

in accordo alle istruzioni della Divisione Certificazione.
in accordance with the instructions of the Certification Division.

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
4	14/01/2014	Updated qualification as VCS-GS TL
0	26/11/2012	-

Il Resp. QPT
Head of QPT

¹ Legend:

VAL: Validator
VER: Verifier
TEC: Technical Expert
TL: Team Leader
FIN-EXP: Financial Expert
DET: Determiner

CDM: Clean Development Mechanism
VCS: Verified Carbon Standard:
GS: Gold Standard
SCS: SocialCarbon Standard
JI: Joint Implementation

RINA Services S.p.A. è accreditato da UNFCCC, quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM, da VCSA per condurre la Validazione e la Verifica di Progetti VCS, da GS Foundation, per condurre la Validazione e la Verifica di Progetti GS, da Ecologica Institute per condurre la Validazione e la Verifica di rapporti SCS

RINA Services S.p.A. is accredited by the UNFCCC, as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects, by the VCSA, to carry out Validation and Verification of VCS Projects, by the GS Foundation, to carry out Validation and Verification of GS Projects and by the Ecologica Institute, to carry out Validation and Verification of SCS Reports



RINA

CERTIFICATO DI QUALIFICA QUALIFICATION CERTIFICATE

Si attesta che il sig./sig.ra:
We declare that Mr/Mrs/Ms:

Isil Timuroglu

è qualificato come¹:
is qualified as:

GS-TEC, GS-VAL, GS-VER, GS-TL,
VCS-TEC, VCS-VAL, VCS-VER, VCS-TL,
SCS-TEC, SCS-VAL, SCS-VER, SCS-TL,
Local expert (Turkish language),
CDM-TEC, CDM-VAL, CDM-VER, CDM-TL

per le seguenti aree tecniche:
for the following technical areas:

1.2, 13.1

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.2	Energy generation from renewable energy sources	1
13.1	Waste handling and disposal	13

in accordo alle istruzioni della Divisione Certificazione.
in accordance with the instructions of the Certification Division.

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
-	13/02/2012	-
4	12/09/2013	Annual revision

Il Resp. QPT
Head of QPT

¹ Legend:

VAL: Validator
VER: Verifier
TEC: Technical Expert
TL: Team Leader
FIN-EXP: Financial Expert
DET: Determiner

CDM: Clean Development Mechanism
VCS: Verified Carbon Standard
GS: Gold Standard
SCS: SocialCarbon Standard
JI: Joint Implementation

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