



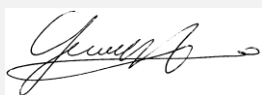
**Verified Carbon
Standard**

FINAL VERIFICATION REPORT

“TEPEKISLA DAM & HYDROPOWER PLANT PROJECT”



Report ID	2023TQMD51
Project title	Tepekisla Dam & Hydropower Plant Project
Project ID	2097
Verification period	01/09/2020 to 30/11/2023.
Original date of issue	21/02/2024
Most recent date of issue	19/04/2024
Version	3.0Aa
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Client	Sanko Enerji San Tic. A.Ş.
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Summary:

RINA Services S.p.A. (RINA), commissioned by Sanko Enerji San Tic. A.Ş., has verified the greenhouse gas emission reductions reported for the project activity “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey, VCS Registration Reference N° 2097, for the period 01/09/2020 to 30/11/2023 with regard to the relevant requirements for CDM and VCS activities.

The objective of the verification is to have an independent review ex post determination of the monitored reductions in GHG emission reductions, reported for the “Tepekisla Dam & Hydroelectric Power Plant Project” project in Turkey for the period 01/09/2020 to 30/11/2023.

Verification was conducted using RINA procedures in line with the requirements specified in the VCS Version 4.2 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 desk review, on-site assessment and the resolution of outstanding issues and the issuance of the final verification report and certification.

The verification shall ensure that reported emission reductions are complete and accurate in accordance with applicable VCS Version 4.2 requirements, which refer to CDM rules, in order to be certified.

In conclusion, it is RINA's opinion that the project activity “Tepekisla Dam & Hydroelectric Power Plant Project”, in “Turkey”, as described in the Monitoring Report version 02 of 22/02/2024, meets all relevant requirements for VCS and CDM activities and all relevant host Party criteria and correctly applies the baseline and monitoring methodology “ACM0002”, “Consolidated methodology for grid connected electricity generation”, version 15.0 of 01/06/2014. Hence, RINA is able to certify that the emission reductions from the project during the monitoring period 01/09/2020 to 30/11/2023 amount to 214,834 tCO₂e. During this monitoring period, 1 CAR is raised and closed.

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1 INTRODUCTION

1.1 Objective

The objective of the verification is to have an independent review ex post determination by a Validation and Verification Body (VVB) of the monitored reductions in GHG emissions that have occurred as a result of the registered VCS project activity during a defined monitoring period. Certification is the written assurance by the VVB that, during a specific time period, a proposed VCS project activity achieved the reductions in anthropogenic emissions by sources of GHGs as verified.

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 “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey for the period 01/09/2020 to 30/11/2023.

1.2 Scope and Criteria

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 VCS Version 4.2 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.

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.

1.3 Level of Assurance

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. All evidence had been confirmed during site visit with the invoices of electricity generation. The level of assurance is reasonable.

The technical review was performed by a technical reviewer(s) qualified in accordance with RINA's qualification scheme for VCS and CDM validation and verification. The verification team and the technical reviewers consist of the following personnel:

Role/Qualification	Last Name	First Name	Country
VCS Team Leader – VCS Verifier – Technical Expert	ERDOĞAN	Mehmet	Turkey
Independent Technical Reviewer	Hui Feng;	LIU	China

1.4 Summary Description of the Project

Sanko Enerji San Tic. A.Ş. has commissioned RINA to carry out the verification and certification of emission reductions reported for the registered “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey, VCS Registration Reference N° 2097, for the period 01/09/2020 to 30/11/2023.

The project site is located Kelkit river which one is the longest tributary of the Yesilirmak river basin in Turkey's Middle Black Sea Region, approximately 3.5 km to the south of the Doganyurt Nahiye center and 5.5 km upstream of Tepekisla village of Tokat. The project activity has the total installed capacity of 69.627 MWe (2 x 32.99 MWe and 3.641 MWe) as confirmed through the Generation License /13/. The project boundary in the registered VCS PD /1/ is in line with the actual project boundary. The generated electricity is fed to the national grid. The generated electricity is transmitted to the National Electricity System through 154 kV transmission lines through Erbaa - Almus transformer substations. The geographic coordinates of the project activity are confirmed through the registered PDD /1/.

The GHG benefit of the project activity was only accounted under VCS. There are not any other I-REC were being issued for the project activity. Furthermore, as a host country in Turkey such any program like a government-regulated system or program for the constraint and monetization of GHG emissions (such as emissions trading scheme, cap and trade or carbon tax mechanisms) has not been implemented.

The generated electricity is supplied to the National Electricity Transmission Grid of Turkey.

Project Participant(s)	Sanko Enerji San Tic. A.Ş.,		
Project Title	Tepekisla Dam & Hydroelectric Power Plant Project		
Location of the project	Doganyurt Nahiye center and 5.5 km upstream of Tepekisla village of Tokat.		
Methodology(ies)	“ACM0002”, “Consolidated methodology for grid connected electricity generation”, version 15.0 of 01/06/2014/6/		
Sectoral Scope(s)	1	RINA's Technical Area(s)	1.2
Registered VCS PD	Version 0.2 of 22/02/2024		
VCS Registration Reference No	2097		
Starting date of the crediting period	13/08/2015		
Project's crediting period	13/08/2015 to 12/08/2025 (first Crediting period)		
Monitoring period	01/09/2020 - 30/11/2023 (both days included)		
Project documentation link	https://registry.verra.org/app/projectDetail/VCS/2097		

2 VERIFICATION PROCESS

The project was validated by re-consult Certification, version 02 on 25/02/2015 and it was registered under the VCS registration reference N° 2097 for the first crediting period. This is the second verification assessment of first CP for the monitoring period 01/09/2020 to 30/11/2023 by RINA.

2.1 Method and Criteria

Verification was conducted using RINA procedures in line with the requirements specified in the VCS Version 4.2 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:

- Document review;
- On-site assessment;

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

2.2 Document Review

The monitoring report, version 0.2 of 22/02/2024 and previous version /2/, the emission reduction calculations provided in the form of a spreadsheet, “Tepekisla_ER Calculation_v01.xlsx” 01 of 02/12/2023, /8/, the approved baseline and monitoring methodology ACM0002 version 15.0 /6/ and all the documentation provided to support the monitoring period /01 – 23/ were assessed as part of the verification. In addition, the VCS Project Description (VCS PD) /1/, in particular as regards the baseline estimations and the monitoring plan, and the Validation Report of 01.2 30/11/2022 /7/ for the project, were reviewed.

All supporting documents are shared in appendix that was reviewed during the verification.

2.3 Interviews

The Plant Manager was interviewed during site visit. To see how the monitoring procedures were implemented, the whole process was explained to the verification team. The carbon consultant was interviewed about the monitoring report and related parameters. Whole process related emission reduction calculation was explained. The mukhtar was interviewed. They confirmed that no grievance was announced by the stakeholders. The key personnel interviewed, and the main topics of the interviews are summarized in the table below.

	Date	Name and Role	Organization	Topic
/1/	02/01/2024	Cagla BALCI ERIS Carbon Consultant	Ruzgar Danismanlik	Monitoring plan Monitoring methodology Monitoring data Implementation status of the project Monitoring equipment and operation Calibration certificates Emission Reductions calculation Positive and negative impacts of the project activity Contact details of the project proponents
/2/		Beyza Dilara Kiliç Env. Eng.	Sanko Energy	
/3/		Muhsin DERViŞOĞULLARI Env. Eng.	Sanko Energy	
/4/		İsmet KAYA Plant Manager	Sanko Energy	
/5/		Cem GÜNEŞ Machinery Eng.	Sanko Energy	
/6/		Mert YELİS Electrical Main.	Sanko Energy	
/7/		Mustafa KÜŞÜM Mech. Main.	Sanko Energy	
/8/		Duran COŞKUN	Ayan Village Stakeholder	
/9/		İlhami COŞKUN	Ayan Village Stakeholder	
/10/		Nevzat DEMİR	Ayan Village Stakeholder	
/11/		Mikalat GÜREL	Ayan Village Stakeholder	
/12/		Duran ŞAHİN	Tepekışla Village Stakeholder	
/13/		Zeynel YILMAZ	Tepekışla Village Mukhtar	

2.4 Site Visits

On 02/01/2024, RINA performed a site visit for the hydro power plant located in Adana Province of Turkey. During the site visit for the project, it was confirmed that all the equipment and the systems were accessible. 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.

2.5 Resolution of Findings

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).

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 VCS requirements, which refer to CDM rules, have been met.

During this monitoring period, 1 CAR is raised and closed.

Figure 1 Verification protocol tables

Verification Protocol, Table 1 - Requirement checklist					
Checklist Question	Ref.	MoV	Comments	Draft Conclusion	Final Conclusion
Checklist questions organized in seven 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, CR and FAR see the definitions above.	OK is used if the information and evidence provided is adequate to demonstrate compliance with VCS 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.

2.5.1 Forward Action Requests

According to the e-mail sent by VCS /11/ and previous verification /21/ and validation Report /7/, no FAR is raised.

2.6 Eligibility for Validation Activities

The project activity is registered under VCS registration reference Number 2097 /11/; hence this section is not applicable.

3 VALIDATION FINDINGS

In the registered VCS PD for “*Tepekisla Dam & Hydroelectric Power Plant Project*” in Turkey, version 3 of 13/01/2014 [/1/](#), the project activity has a total installed capacity of 69.627 MWe as confirmed through the Generation License [/13/](#). The average electricity generation is estimated as 241,098 MWh as per the registered VCS PD [/1/](#). The additionality of the project activity is demonstrated by applying investment analysis registered VCS PD [/1/](#).

The project was validated by *Re-consultant* on 25/02/2015 [/7/](#) and it was registered under the VCS registration reference N° 2097.

3.1 Methodology Deviations

There is no methodology deviation in this monitoring period or previous monitoring periods.

3.2 Project Description Deviations

There are no project description deviations applied during this monitoring period.

3.3 New Project Activity Instances in Grouped Projects

This project This project is not a grouped project. Hence, this section is not applicable

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes

☒ No

4 VERIFICATION FINDINGS

4.1 Project Details

It was verified during the site visit conducted on 02/01/2024 that the proposed project activity has been implemented and it is in operation in accordance to the project activity described in the registered VCS PD /1/.

The carbon crediting period and therefore the monitoring starts when the plant commences electricity generation. Therefore, the first crediting period was from 13-08-2015 until 12-08-2025 with two times renewable crediting period of 10 years.

The project site is located Kelkit river which one is the longest tributary of the Yesilirmak river basin in Turkey's Middle Black Sea Region, approximately 3.5 km to the south of the Doganyurt Nahiye center and 5.5 km upstream of Tepekisla village of Tokat. The project activity has the total installed capacity of 69.627 MWe (2 x 32.99 MWe and 3.641 MWe) as confirmed through the Generation License /13/. The project boundary in the registered VCS PD /1/ is in line with the actual project boundary. The generated electricity is fed to the national grid. The generated electricity is transmitted to the National Electricity System through 154 kV transmission lines through Erbaa - Almus transformer substations. The geographic coordinates of the project activity are confirmed through the registered PDD /1/.

There are not any material discrepancies between project implementation and the project description. It is verified that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan. The project activity is not participated or rejected under other GHG Programs as confirmed through the websites of the standard /11/ /22/. No GHG related environmental credits are applied to the Turkish power sector.

The GHG benefit of the project activity was only accounted under VCS. There are not any other RECs were being issued for the project activity. Furthermore, as a host country in Turkey such any programme like a government-regulated system or programme for the constraint and monetisation of GHG emissions (such as emissions trading scheme, cap and trade or carbon tax mechanisms) has not been implemented.

There are no material discrepancies between the actual monitoring system and plan. The project contributes to SDG 7 by generating electricity from clean energy. The project also greatly supports sustainable economic development in the region. In accordance with SDG 8, employment was created during the construction and operation phases of the power plant. Compared to the business-as-usual scenario, which is considered a contribution to SDG 13, it has a significant contribution to reducing carbon emissions and protecting the climate. Therefore, the project has positive effects on sustainable development.

Item	Evidence gathering activities, evidence checked, and assessment conclusion:				
Audit history	Audit type	Period	Program	VVB name	Number of years
	Validation	25/02/2015	VCS	Re-consult	10 years
	Verification	13-08-2015 / 31-08-2020	VCS	Re-carbon	5 years
	Verification	01-09-2020 / 30-11-2023	VCS	RINA	3 years
Double counting and participation under other GHG programs	• No double accounting • No other VER programs • The project has not been rejected by another GHG programs				
No double claiming with emissions trading programs or binding emission limits	No				
No double claiming with other forms of environmental credit	No				
Supply chain (scope 3) emissions double claiming	The project activities doesn't affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain.				
Sustainable development contributions	The project produces electricity from renewable energy sources using hydro as the power source and to contribute to Türkiye's growing electricity demand through a sustainable and low carbon technology. The project displaces the same amount of electricity generated by the grid dominated with fossil fired power plants. The project contributes to the Sustainable Development Goal, Climate Action. During this monitoring period, the actualized emission reduction is 214,834 tCO ₂ e.				
	The project contributes to improve the environmental situation in the region and in the country as avoiding fossil fuel-based electricity will enhance the air quality and help to reduce the negative effects on the climate. Through renewable technologies and hydro-based electricity sustainable and climate friendly development is promoted. The project contributes to the Sustainable Development Goal, Affordable and Clean Energy. During this monitoring period, the actualized net electricity generation is 880,495.95 MWh.				
	During construction and operational period, the project has created employment opportunities for the local community. The project contributes the economic development of the region by providing sustainable energy resources. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments. The project contributes to the Sustainable Development Goal, Decent Work and Economic				

	Growth. Employment opportunities were provided for 21 personnel during the operation phase of the project.
Additional information relevant to the project	• No leakage • No commercially sensitive information • No further information.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	Nearest residential areas and stakeholders are defined according to project Description Documents that is prepared by Çınar Engineering on 10/2007 according to present potential the environmental effects of project. According to local laws in Türkiye a project description document should be provided to the Ministry and Ministry decide if EIA is required or not. So EIA not required decision is examined with decision number 3 and date of 22/11/2007.
Legal or customary tenure/access rights	The project has all tenure and access rights.
Stakeholder diversity and changes over time	Most of the stakeholders are villagers from Niksar, Tokat province
Expected changes in well-being	<i>The Project has resulted in the creation of new jobs in the project region and improvement in local roads, contributing to living standards in the region. Moreover, the project owner has provided contribution in kind to the local community, although these activities are not required legally. As a result, the community is supporting the project, and they believe that it creates a momentum for local sustainable development.</i>
Location of stakeholders	Niksar, Tokat- Türkiye.
Location of resources	The project has all tenure and access rights.

4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder engagement process	08 -11-2010
Consultation outcome	According to the regulation declared by the Ministry of Environment and Forestry and published on the Official Gazette (dated 17th July 2008, numbered 26939), projects which an EIA is required from are subject to an obligation to hold Stakeholder Meetings. Therefore, during the registration of the project a stakeholder meeting was carried out on 08/11/2010. So, mukhtars of local villages have been interviewed and continuously informed about the Project for understanding the general perspective about the HEPP. For the time being, it has been experienced that mukhtars and villagers of the region are the most cooperative about the exchange of information and opinions. For this monitoring period, local people were interviewed. It was learned that in general, the main form of communication between the local people and the project owner is face-to-face. They stated that in case of any problem, they can easily reach the responsible persons and convey their complaints. There are no complaints/compliance related to the project implementation during this monitoring period.
Ongoing communication	The contact information of the plant responsible exists at the Mukhtar, the project owner and local community are always in touch. The project owner regularly checks with the Mukhtar if any complaint or a request exists. Any complaint or need from the local community could directly be received by the project owner and appropriate contributions or improvements are made to the local community.
Stakeholder input	Generally, the stakeholders were pleased with the project. Since they have informed regarding the project at the first stakeholder consultation process, they have no negative comments on the project.

4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	Relevant permits were obtained during the validation period.
Outcome of FPIC discussion	The project has not encroached on land, relocated people without consent, and forced physical or economic displacement.

4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	No negative inputs have been received during this monitoring period.
Grievance redress procedure	The grievance mechanism is in place, and this was also confirmed by the interviewed local villagers and Ayan and Tepekisla Villages Mukhtars during the site visit of the last verification. In addition, the contact information of the plant responsible is available in Mukhtars; any complaints or requests can be forwarded to the Project Owner.

4.2.5 Public Comments

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
The local villagers asked about employment possibilities.	Project owner gave priority to local villagers during construction and operation of the project for hiring employees.	The local villagers asked about employment possibilities.

4.2.6 Risks to Local Stakeholders and the Environment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
<i>Risks to stakeholder participation</i>	<i>Stakeholder consultation process was conducted. No risk is determined.</i>
<i>Working conditions</i>	The Project avoids community exposure to increased health risks and does not adversely affect the health of the workers and the community. No risk is determined.
<i>Safety of women and girls</i>	The project does not endanger the safety of girls and women. No risk is determined.
<i>Safety of minority and marginalized groups, including children</i>	The project does not jeopardize the safety of minorities and isolated groups, including children. No risk is determined.

Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)	The project activity is operated in line with Environmental Law and related regulations. Water Pollution Control Regulation, Hazardous Wastes Control Regulation, Industrial Air Pollution Control Regulation. No risk is determined.
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4.2.7 Respect for Human Rights and Equity

4.2.7.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Discrimination and sexual harassment	The project does not involve in any form discrimination in any kind of form. The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights. The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.
Management experience	There isn't an expert required for the Gender Safeguarding Principles & Requirements. Since this is a renewable energy project no gender expert was required as we executed for the other similar project activities. Additionally, no need was raised by the stakeholders.
Gender equity in labor and work	The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.
Human trafficking, forced labor, and child labor	Türkiye signed the convention of International Labour Organization. The related articles are 100 and 111. The project owner respects Article 5/8425 of Labour Law, which states no discrimination based on gender, race, religion, sexual orientation or any other basis is allowed.

4.2.7.2 Human Rights

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	Türkiye is a party to European Convention on Human Rights since 18 May 1954. The project owner respects internationally proclaimed human rights including dignity, cultural property, and uniqueness of indigenous people. The project is not complicit in Human Rights abuses.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection of cultural heritage	During the construction and operation of the project, there was not any damage, alteration or removal to the critical cultural heritage. Because the project location does not involve any critical cultural heritage. Cultural and environmental heritage is protected against alteration, damage or removal by the law.

4.2.7.4 Property Rights

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	There are no uncertainties with regards land tenure, access rights, usage rights or land ownership.
Respect for property rights	Forestry Permit Letter was issued by Forest Authority on 9 March 2010

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	NA
Benefit sharing during the monitoring period	NA

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	The Project does not physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified. Regarding the monitoring of “Water quality and quantity”, “Biodiversity and aquatic life”, stream gage gauging station is built for the measurement of flow to assess the environmental flow. General directorate for state hydraulic works executes the monitoring and the Project complies with the regulations.
Soil degradation and soil erosion	The project is operated under Soil Pollution Control Regulation.
Water consumption and stress	Wastewater is collected through within the septic tank and is transferred through the sewage truck.
Usage of fertilizers	Not related to the project activity.

4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	EIA not required decision is seen. The project has not impact habitats for rare, threatened, or endangered species.

4.2.8.2 Introduction of Species

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
NA	NA

Existing invasive species	Evidence gathering activities, evidence checked, and assessment conclusion
NA	NA

4.2.8.3 Ecosystem conversion

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	The project is not an ARR, ALM, WRC or ACoGS project.

4.3 Accuracy of Reduction and Removal Calculations

The emission reduction calculations provided in the spreadsheet /8/ have been verified to be correct and in line with the registered VCS PD /1/. According to the applied methodology “ACM0002”, “Consolidated baseline methodology for grid-connected electricity from renewable sources”, version 15 /6/, the emission reductions have been calculated based on the following formula:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

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

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

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

Baseline emissions

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.

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

Where:

EG_{PJ,y} = Net electricity delivered to the grid by the project activity in year y excluding transmission losses of the grid (MWh)

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

Project emissions

Project emissions from reservoir has been assumed to be 0 since the project activity has no reservoir as per the ACM0002 version 15.0 /6/ as defined in the validated VCS PD /1/. In the registered VCS PD for “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey, version 03 of 13/01/2014 /1/, it was confirmed that there is no need to calculate power density since the project activity has no reservoir.

Leakage emissions

The leakage emissions are assumed to be zero as per the ACM0002 version 15.0 /6/ as defined in the registered VCS PD /1/. The data presented in the monitoring report /2/ 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.

Parameters Available at Validation and Data Fixed Ex-ante

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
EG_{gross,y} Turkey's Gross Electricity Generated by primary energy source for the five most recent years (2008 - 2012)	TEIAS statistics	Validated VCS Project Description (Version 3, dated 13/01/2015) of the Project, Section 3.1	TEIAS (Turkish Electricity Transmission Company) is the official source for this data, providing the most up-to-date and accurate information available.

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
Cap_{BL} Installed capacity of the hydro power plant after the implementation of the project activity	Project Site and Generation License	0	The parameter is monitored through the Generation License; therefore, measurement equipment is not used

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
FC_{i,y} Amount of fossil fuel type i consumed in the project electricity system in year y	TEIAS statistics	Validated VCS Project Description (Version 3) of the Project, Section 3.1 (Step 4)	According to the Tool to Calculate the Emission Factor for an Electricity System version 04.0, the national average default value shall be used if values are reliable and documented in regional or national energy statistics / energy balances. TEIAS (Turkish Electricity Transmission Company) is the official source for this data, providing the most up-to-date and accurate information available. Therefore, the uncertainty for the data is low.

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
NC_{vi,y} Net calorific value of fossil fuel type	TEIAS statistics	Validated VCS Project Description (Version 3) of the Project, Section 3.1	TEIAS (Turkish Electricity Transmission Company) is the official source for this data, providing the most up-to-date and accurate information available.

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
EF_{CO2,i,y} Default CO2 emission factor of fossil fuel type i	IPCC default values (	Validated VCS Project Description (Version 3) of the Project, Section 3.1	There is no information on the fuel specific default emission factor in Turkey. Hence, IPCC values have been used as per the "Tool to calculate the emission factor for an electricity system (version 04.0)".

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
EF_{CO2,i,y} Default CO2 emission factor of fossil fuel type i	IPCC default values (	Validated VCS Project Description (Version 3) of the Project, Section 3.1	There is no information on the fuel specific default emission factor in Turkey. Hence, IPCC values have been used as per the "Tool to calculate the emission factor for an electricity system (version 04.0)".

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
Electricity Imports	TEIAS statistics	TEIAS	TEIAS (Turkish Electricity Transmission Company) is the official source for this data, hence providing the most up to - date and accurate information available

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
Electricity capacity additions	TEIAS statistics	Validated VCS Project Description (Version 3) of the Project, Section 2.4	TEIAS (Turkish Electricity Transmission Company) is the official source for this data, hence providing the most up to- date and accurate information available.

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
$\eta_{m,y}$ Average net energy conversion efficiency of power unit m in year y	UNFCCC	Validated VCS Project Description (Version 3) of the Project, Annex 3	NA

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
$EG_{m,y}$ Net electricity generated by power plant/unit m in year y	TEIAS statistics	Validated VCS Project Description (Version 3) of the Project, Section 3.1 (Step 5)	TEIAS (Turkish Electricity Transmission Company) is the official source for this data, hence providing the most up to- date and accurate information available.

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
$EF_{L,m,y}$ The CO2 emission factor of the grid power unit m (Default CO2 emission factor of fossil fuel types are used)	IPCC	Validated VCS Project Description (Version 3) of the Project, Section 3.1 (Step 5)	There is no information on the power unit specific emission factor in Turkey. Hence, IPCC values have been used as per the "Tool to calculate the emission factor for an electricity system (version 04.0.0)".

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
W_{om} Weight of operating margin emissions factor	Tool 07	0.5	Tool to calculate the emission factor for an electricity system (Version 04.0)", suggests wOM = 0.5 and wBM = 0.5 for the first crediting period, except wind and solar power plants. In the second and third crediting periods wOM=0.25 and wBM=0.75

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
W_{BM} Weight of build margin emissions factor	Tool 07	0.5	Tool to calculate the emission factor for an electricity system (Version 04.0)", suggests wOM = 0.5 and wBM = 0.5 for the first crediting period, except wind and solar power plants. In the second and third crediting periods wOM=0.25 and wBM=0.75

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
EF_{grid,CM,y} Baseline emission factor (for the first crediting period)	TEIAS statistics	0.474 tCO ₂ /MWh	According to the approved methodology ACM0002 version 15.0, 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 emission factor is determined to be 0.474 tCO ₂ /MWh in the VCS PD /1/ and validation report /7/ .

Parameters and Data Monitored

DATA/PARAMETER	EGfacility, y
Data Unit	MWh/y
Description	Quantity of net electricity supplied to the grid by The Tepekisla Dam & Hydroelectric Power Plant Project in year “y”
Source of data	EPIAS Records Monthly Meter Reading (OSOS) Forms
Description of measurement methods and procedures to be applied	The electricity generation figures are based on the EPIAS records /14/ and the OSOS Records /15/ are used for crosscheck.
Frequency of monitoring/recording	Continuously monitoring and monthly recording
Value monitored	453,239,642 MWh
Monitoring equipment	Two unit's electricity meters (2 main meters and 2 backup meters) are installed at the project site. The main meters are EMH-LZQJ-XC with serial number 12744468 and 12744470. The backup meters are EMH-LZQJ-XC with serial number 12744469 and 12744471. The meters have the accuracy of 0.2s as confirmed through change protocol of the electricity meters /12/. The accuracy class of the meters complies with the “Communiqué for Measurement Devices used in the Electricity Market” /17/. The main and back meters was changed on 12/10/2023 old main meters are ITRON-SL761W071 with serial numbers 68010502 and 68010504. The backup meters are ITRON- SL761W071 with serial number 68010503 and 68010505. The meters have the accuracy of 0.2s as confirmed through change protocol of the electricity meters /12/.
QA/QC procedures to be applied	TEIAS is responsible for calibration and maintenance of the meters as per the registered VCS PD /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. The new meters were calibrated on 2023 (factory level and tested on site) as confirmed through the meter change protocol /19/. Old meters were calibrated on 2013 as confirmed through the meter change protocol. As per the “Regulation of Metering and Testing of Metering Systems” /16/, the meters shall be calibrated every 10 years, therefore the calibration of meters is deemed appropriate and in compliance with the national regulation. During on-site assessment, it was confirmed that the meters are in place and functions well. During the monitoring period, no brake down has been recorded. During this monitoring period two metering tests were performed on 24/08/2020 and 16/06/2022 for old meters and according to system usage agreement /23/ test period is defined as two years.
Purpose of the data	To calculate the baseline emission value
Calculation method	The electricity generation and consumption are measured in line with the TEIAS rules and requirements /18/. The electricity generation supplied to the grid and electricity consumption from the grid is stored by EPIAS on the web site. The Project owner has an ID and password to access this data on the web site. The collected data during the monitoring period will be kept by the project owner at least two years after end of the last crediting period as stated in the registered VCS PD /1/ and monitoring report /2/ in line with the ACM0002 /6/.
Comments	-

DATA/PARAMETER	Capex
Data Unit	MWe
Description	Installed capacity of the hydro power plant after the implementation of the project activity
Source of data to be used	Project Site
Value data for the monitoring period	69.627 MWe
Measuring and reporting frequency; recording procedure	Yearly
Type of monitoring equipment and its accuracy	The parameter is monitored through the Generation License; therefore, measurement equipment is not used.
Calibration frequency/interval	NA
How were the values in the monitoring report verified and cross-checked?	The parameter is monitored through the Generation License /13/
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions?	NA
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.

DATA/PARAMETER	ApJ
Data Unit	m ²
Description	Area of the reservoir measured on the surface of the water, after the implementation of the project activity, when the reservoir is full
Source of data to be used	Project Site
Value data for the monitoring period	2,319,000
Measuring and reporting frequency; recording procedure	Measured from topographical surveys, maps, satellite pictures.
Type of monitoring equipment and its accuracy	The parameter is monitored through the On site observation, maps and photos; therefore, measurement equipment is not used.
Calibration frequency/interval	NA
How were the values in the monitoring report verified and cross-checked?	The project activity is a run of river hydropower plant and does not constitute a reservoir as confirmed through the site visit.
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions?	NA
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.

Emission Reductions Achieved

The emission reductions calculation reported in the Monitoring Report version 0.2 of 22/02/2024 [/2/](#) and calculation spreadsheet “Tepekisla _ER Calculation_v01.xlsx” version 01 of 02/12/2023 [/8/](#) have been verified to be correct.

The emission reductions from the project for the monitoring period from 01/09/2020 to 30/11/2023 as reported in the Monitoring Report is equivalent to 214,834 tCO₂e. All data were examined without sampling and it was seen that there was no error in data transfer. RINA confirmed that GHG emission reductions and removals have been quantified correctly in accordance with the project description and applied methodology.

4.4 Quality of Evidence to Determine Reductions and Removals

Two unit's electricity meters (2 main meters and 2 backup meters) are installed at the project site. The main meters are EMH-LZQJ-XC with serial number 12744468 and 12744470. The backup meters are EMH-LZQJ-XC with serial number 12744469 and 12744471. The meters have the accuracy of 0.2s as confirmed through change protocol of the electricity meters [/12/](#). The accuracy class of the meters complies with the "Communiqué for Measurement Devices used in the Electricity Market" [/17/](#). The main and back meters was changed on 12/10/2023 old main meters are ITRON-SL761W071 with serial numbers 68010502 and 68010504. The backup meters are ITRON- SL761W071 with serial number 68010503 and 68010505. The meters have the accuracy of 0.2s as confirmed through change protocol of the electricity meters [/12/](#).

TEIAS is responsible for calibration and maintenance of the meters as per the registered VCS PD [/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. The new meters were calibrated on 2023 (factory level and tested on site) as confirmed through the meter change protocol [/19/](#). Old meters were calibrated on 2013 as confirmed through the meter change protocol. As per the "Regulation of Metering and Testing of Metering Systems" [/16/](#), the meters shall be calibrated every 10 years, therefore the calibration of meters is deemed appropriate and in compliance with the national regulation. During on-site assessment, it was confirmed that the meters are in place and functions well. During the monitoring period, no brake down has been recorded. During this monitoring period two metering tests were performed on 24/08/2020 and 16/06/2022 for old meters and according to system usage agreement [/23/](#) test period is defined as two years.

The electricity generation figures are based on the EPIAS records [/14/](#) and the Monthly Meter Readings [/15/](#) are used for crosscheck from 01/09/2020 to 30/11/2023. The records and emission reduction calculation spreads sheet [/8/](#) are consistent.

RINA confirmed that quantity, and appropriateness of quality, of the evidence used to determine the GHG reductions and removals are found sufficient.

4.5 Non-Permanence Risk Analysis

There is no non-permanence risk rating determined by the project proponent.

5 VERIFICATION OPINION

5.1 Verification Summary

RINA has performed the verification of the updated VCS-MR version 0.2 of 22/02/2024 for the project activity “Tepekisla Dam & Hydropower Plant Project”. The verification is performed for the 1st crediting period (from 13/08/2015 to 12/08/2025). The project complies with the certification criteria for projects set out in VCS guideline version 4.2 and standard version 4.3 /4/ /5/. The project activity is likely to achieve estimated GHG emission reduction or removals. RINA also declares that GHG statement was conducted in accordance with ISO 14064-3:2019.

RINA Services Spa (RINA) has performed verification of the emission reductions reported for the project activity “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey, VCS Registration Reference N° 2097, for the period 01/09/2020 to 30/11/2023, with regard to the relevant requirements for CDM and VCS activities.

It is RINA’s opinion that the GHG emission reductions stated in the Monitoring Report for the “Tepekisla Dam & Hydroelectric Power Plant Project in Turkey for the period 01/09/2020 to 30/11/2023 are fairly stated. The GHG emission reductions were calculated correctly on the basis of the approved monitoring methodology “ACM0002”, “Consolidated methodology for grid connected electricity generation”, version 15 and the monitoring plan contained in the registered VCS PD.

The project has been verified to comply with the validation criteria for the projects and the greenhouse gas emission reductions or removals specified in VCS version 4.3. It is also confirmed that the level of assurance of this verification report is reasonable.

Hence, RINA is able to certify that the emission reductions from the project during the monitoring period 01/09/2020 to 30/11/2023 amount to 214,834 tCO₂e.

Verification period: From 01/09/2020 to 30/11/2023 (for the second crediting period).

Verified GHG emission reductions and removals in the above verification period:

5.2 Verification Conclusion

Verification period: From [01-09-2020] to [30-11-2023]

Verified GHG emission reductions and carbon dioxide removals in the above verification period:

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCU (tCO ₂ e)	Removal VCU (tCO ₂ e)	Total VCUs (tCO ₂ e)
Year 2020 (01/09/2020) (31/12/2020)	22,827	0	0	22,827	0	22,827
2021	42,598	0	0	42,598	0	42,598
2022	67,904	0	0	67,904	0	67,904
Year 2023 (01/01/2023) (30/11/2023)	81,505	0	0	81,505	0	81,505
Total	214,834	0	0	214,834	0	214,834

5.3 Ex-ante vs Ex-post ERR Comparison

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference (%)	Explanation for the difference
Year 2020 (01/09/2020) (31/12/2020)	38,217	22,827	-67	Only last 3 months of the year. This is not correct compare with whole year production for Hydropower Project
2021	114,337	42,598	-63	Annual areal precipitation in the Black Sea Region is lower than normal.
2022	114,337	67,904	-68	Annual areal precipitation in the Black Sea Region is lower than normal.
Year 2023 (01/01/2023) (30/11/2023)	104,626	81,505	-28	Annual areal precipitation in the Black Sea Region is lower than normal.
Total	371,517	214,834	-42	Annual areal precipitation in the Black Sea Region is lower than normal.

The emission reductions from the project for the monitoring period as reported in the monitoring report Version 0.2 of 22/02/2024 is equivalent to 214,834 tCO₂. The reported emission reductions are less (42%) than the estimated emission reduction of 371,517 tCO₂ for the period as per the registered PDD due to dry weather conditions.

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Use the table below to describe the commercially sensitive information included in the monitoring report to be excluded in the public version.

Section	Information	Justification	Assessment method and conclusion
NA	NA	NA	NA

APPENDIX 2: SUPPORTING DOCUMENTS

/1/	VCS PD for “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey, version 0.3 of 13/01/2014
/2/	Ruzgar Danismanlik: Monitoring report for “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey, 0.1 of 02/12/2023, Ruzgar Danismanlik: Monitoring report for “Tepekisla Dam & Hydroelectric Power Plant Project” in Turkey, 0.2 of 22/02/2024,
/3/	VCS Verified Carbon Standard: VCS Program Guide, VCS Version 4.2 of 22/06/2022
/4/	VCS Verified Carbon Standard: VCS Standard, VCS Version 4.3 of 22/06/2022
/5/	CDM Executive Board: CDM validation and verification standard for project activities, version 03.0 of 09/09/2021
/6/	CDM Executive Board: Baseline and monitoring methodology “ACM0002”, “Consolidated methodology for grid connected electricity generation”, version 15.0 of 01/06/2014
/7/	Re-Consult Rüzgar Enerjisi Danışmanlık İç ve Dış Tic. Ltd. Şti.: Validation Report for “The Tepekisla Dam & Hydroelectric Power Plant Project”, version 02 of 25/02/2015
/8/	Ruzgar Danismanlik: Emission Reduction Calculation Spreadsheet “Tepekisla_ER Calculation_2023_v01.xlsx” version 0.1 of 02/12/2023,
/9/	VCS Verified Carbon Standard: VCS Verification Report Template Version 4.2 of 21/12/2022
/10/	CDM Executive Board: Methodological Tool “Tool to calculate the emission factor for an electricity system”, version 07.0 of 31/08/2018
/11/	Website: https://registry.verra.org/app/projectDetail/VCS/2097 ; Argument: Verra Database Language: English; Retrieved on: 21/02/2024
/12/	Turkish Electricity Transmission Company (TEİAŞ): Change Protocol of the Electricity Meters of 12/10/2023
/13/	Energy Market Regulatory Authority: Generation License, No: EÜ/8940-5/04372, date of 21/11/2019
/14/	EPIAS: Monthly Meter Reading Protocols for the monitoring period
/15/	OSOS: Monthly Meter Reading Protocols for the monitoring period
/16/	The Turkish Ministry of Trade and Industry: Regulation of Metering and Testing of Metering Systems of 24/07/1994
/17/	Turkish Energy Market Regulatory Authority: Communiqué for Measurement Devices used in the Electricity Market of 22/03/2003
/18/	The Energy Market Regulatory Authority: Electricity Market Balancing and Settlement Regulation of 14/04/2009
/19/	TEİAŞ Energy Test report of the Electricity Meters of 24/08/2020 and 16/06/2022
/20/	Ministry of Environment and Forestry: EIA positive decision, dated on 08/06/2011
/21/	RE CARBON: Previous Verification Report, version 02 of 24/06/2021
/22/	Website: https://registry.goldstandard.org/projects?q=tepek%C4%B1%C5%9Fla&page=1 Argument: GS Database, Language: English; Retrieved on: 21/02/2024
/23/	Turkish Electricity Transmission Company (TEİAŞ): system usage agreement of 03/02/2020



CERTIFICATO DI QUALIFICA QUALIFICATION CERTIFICATE

Si attesta che il sig.:
We declare that Mr:

Mehmet ERDOGAN

è qualificato come¹:
is qualified as:

TL – VAL⁴ – VER – TEC – REG-EXP³

nello schema²:
for the scheme:

VCS – CCB – GS4GG

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

1.1 – 1.2 – 9.2 – 13.1 – 13.2

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.1	Thermal energy generation	1
1.2	Renewables	1
3.1	Energy demand	3
9.2	Iron, steel and Ferro-alloy production	9
13.1	Waste handling and disposal	13
13.2	Manure	13

in accordo alle istruzioni dell'Unità responsabile (OU) per sostenibilità & cambiamenti climatici.
in accordance with the instructions of the responsible unit (OU) for the sustainability & climate change.

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	24.03.2023	First Issue
1	12/04/2023	GS4GG extension
2	24/07/2023	GS4GG VAL extension
3	10/12/2023	TEC SS3 extension

Il Responsabile di schema
Scheme Manager



¹
VAL: Validator
VER: Verifier
TEC: Technical Expert
TL: Team Leader
FIN-EXP: Financial Expert
REG-EXP: Regional Expert
ITR: Independent Reviewer
DET: Determiner

²
CDM: Clean Development Mechanism
VCS: Verified Carbon Standard
GS4GG: Gold Standard for Global Goals
SCS: SocialCarbon Standard
JI: Joint Implementation
ISO14064-2: International standard 14064 part 2
UER: Upstream Emission Reduction
CCB: The Climate, Community & Biodiversity Alliance

³ Turkey

⁴ For GS4GG only

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 Ecologia 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 GS4GG Projects and by the Ecologia Institute, to carry out Validation and Verification of SCS Reports

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CERTIFICATO DI QUALIFICA PER GLI SCHEMI VOLONTARI*
QUALIFICATION CERTIFICATE FOR VOLUNTARY SCHEMES*

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

Hui Feng Liu

è qualificato come:
 is qualified as:

TEC, VAL, VER, TL, ITRP

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

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.1	Thermal energy generation	1
1.2	Renewables	1
8.1	Mining and mineral processes	8
9.2	Iron, steel and Ferro alloy production	9
13.1	Solid waste and wastewater	13

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	19/07/2016	First issue with new template (this certificate is linked to CDM qualification)

Responsabile di schema
 Scheme Leader
 Rita Valoroso



*SCHEMI VOLONTARI/ VOLUNTARY SCHEMES: ACR American Carbon Registry, CCB The Climate, Community & Biodiversity Alliance, GS Gold Standard, JI Joint Implementation, SCS Social Carbon Standard, VCS Verified Carbon Standard.

TEC: Technical expert; VAL: Validator; VER: Verifier; TL: Team leader; FIN EXP: Financial Expert; ITRP: Independent technical reviewer

RINA Services S.p.A. è accreditato/recognized by

UNFCCC	quali Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects
VCSA	per condurre la Validazione e la Verifica di Progetti VCS to carry out Validation and Verification of VCS Projects
GS Foundation	per condurre la Validazione e la Verifica di Progetti GS to carry out Validation and Verification of GS Projects
Ecologica Institute	per condurre la Validazione e la Verifica di rapporti SCS to carry out Validation and Verification of SCS Reports
American Carbon Registry ACR	per condurre la Validazione e la Verifica di Progetti ACR to carry out Validation and Verification of ACR projects
The Climate, Community & Biodiversity Alliance CCB	per condurre la Validazione e la Verifica di Progetti co-benefit CCB to carry out Validation and Verification of co-benefit CCB projects

GHG_QUAL_CERT_EN_07_16 Voluntary(Certificate)

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