Verification and certification report form for GS project activities

VERICATION AND CERTIFICATION REPORT	
Title of the project activity	Gunaydin WPP
GS Reference number of the project activity	1178
Version number of the verification and certification report	1.0Aa
Completion date of the verification and certification report	12/06/2020
Monitoring period number and duration of this monitoring period	5th Period 01/07/2018 – 30/11/2019 (both days included)
Version number of monitoring report to which this report applies	Version 03 of 18/05/2020
Crediting period of the project activity corresponding to this monitoring period	01/12/2012-30/11/2019
Project participant(s)	MANRES Elektrik Uretim A.S. (Private Entity, Project Owner) GTE Karbon Surdurulebilir Enerji Egitim Danismanlik ve Ticaret A.S (Private Entity, Project Developer)
Host Party	Turkey
Sectoral scope(s), selected methodology(ies)	Sectoral scope 1: Energy Industries (Renewable-/non-renewable sources) ACM0002, Grid-connected electricity generation from renewable sources - Version 14.0.0
Estimated GHG emission reductions or net anthropogenic GHG removals for this monitoring period in the registered PDD	01/07/2018 – 31/12/2018: 16,650 tCO_2 01/01/2019 – 30/11/2019: 30,525 tCO_2
Certified GHG emission reductions or net anthropogenic GHG removals for this monitoring period	01/07/2018 – 31/12/2018: 16,872 tCO_2 01/01/2019 – 30/11/2019: 31,939 tCO_2
Name of DOE	RINA Services S.p.A. (RINA)
Name, position and signature of the approver of the verification and certification report	**Laura Severino** (Authorized officer signing for the DOE) Head of Certification Innovation & Sustainability Unit

SECTION A. Executive summary

Purpose and general description of the project

The project activity is a wind power plant consists of 5 GE 2.5 MW and 3 GE 2.75 MW wind turbines with a total capacity of 20.75 MWm/20 MWe as confirmed through the Generation License /13/. The generated electricity is fed to the national grid. The estimated net electricity production is 55,500 MWh and the annual emission reductions are estimated to be 33,300 tCO_2 per year.

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.

Location

The project is located at Yaylakoy Village of Manyas District within boundaries of Balikesir Province.

Scope of verification

Verification is the periodic independent review and ex-post determination by a 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. Certification is the written assurance by a DOE that, during a specific period in time, a project activity achieved the emission reductions as verified. The objective of this verification is to verify and certify emission reductions reported for the Gunaydin WPP for the period 01/07/2018 – 30/11/2019. The scope of the verification is to verify that:

- The project activity has been implemented and operated in accordance with the registered PDD or any approved revised PDD;
- The monitoring plan, including compliance with any guidance provided by the Board regarding deviations from the provisions of a registered plan and/or methodology;
- The data and calculation of GHG emission reductions have been assessed to correctly support the emission reductions being claimed.

The verification shall ensure that reported emission reductions are complete and accurate in order to be certified.

Verification process

Verification is conducted using RINA procedures in line with the GS requirements and requirements specified in the CDM Validation and Verification Standard available at the time of the verification starts, and applying standard auditing techniques. RINA asses and determines that the implementation and operation of the project activity, and steps taken to report emission reductions comply with the GS criteria. The verification assessment involved a document review of relevant documentation and the on-site visit.

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.

Conclusion

RINA commissioned by MANRES Elektrik Uretim A.S. has performed the verification of the emission reductions reported for the project activity Gunaydin WPP, GS Registration Reference No. 1178 for the monitoring period 01/07/2018 – 30/11/2019, with regard to the relevant GS requirements and principles for project activities. The project was validated by RINA (validation report N° 2015-TQ-07-MD, version 1.3 of 21/12/2015) and it was registered on 14/06/2013.

The GHG emission reductions are calculated on the basis of the approved methodology ACM0002, Consolidated methodology for grid-connected electricity generation from renewable sources --- Version 14.0.0 and the monitoring plan included in the registered PDD version 09 of 21/10/2019. In our opinion the GHG emission reductions reported for the project in the monitoring report version 03 of 18/05/2020 are fairly stated.

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader, Verifier, Technical Expert TA 1.2	IR	KIRATLI	TUGCE	RINA Turkey	✓	✓	✓	✓

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	LUI	Huifeng	RINA China
2	Approver	IR	Severino	Laura	RINA HQ

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Human error in the quantification of emissions (which may be more likely to occur if personnel are unfamiliar with, or not well trained regarding, emissions processes or data recording).	Low	Being 5th verification, the project proponent is familiar with monitoring procedures and data reporting in line with the registered PDD and previous verification and certification reports. In addition, all the validation and verification process are performed by RINA. The prime monitoring parameter is net export to grid which is as per monthly generation report as recorded in calibrated energy meters. Hence, the risk level is low.	During the site visit, the verification team will interview the staffs of the CDM team and check all records to confirm whether the monitoring plan has been well implemented. The major parameters used for determining the project's baseline emissions are the measurement of net electricity generation according to the monitoring plan is recorded monthly. The team will review the whole data set of the monthly report, and crosschecked against invoice raised. The verification team will check the relevant records to confirm whether the data collection procedure and
2	Undue reliance on a poorly designed information system, which may have few effective quality controls.	Low	Being 5th verification, the project proponent has already established a well organized monitoring team, monitoring plan, including data collection procedure and QA/QC procedure consistent with registered monitoring plan. Monitoring equipments are	

			calibrated at defined frequency. Hence, the risk level is low.	QA/QC procedure have been well implemented.
3	Manual adjustment of otherwise automatically recorded activity levels.	Low	As detailed in section C.2 below, the data of the main monitoring parameters are taken from calibrated meters (energy meter) and can be verified from totalizer values. The monitoring equipment's are calibrated according to national standards and rules. Hence, the risk level is low.	

C.2. Consideration of materiality in conducting the verification

The project activity happens at a single site and export to grid from the plant is monitored and recorded using calibrated energy meter and 100% data is available for verification. The data which directly affect emission reduction calculations being net electricity generation is monitored and measured by calibrated electricity meters, 100% verifiable. Hence, in line with paragraph 329 and section 9.1.2.3.1 of the CDM Validation and Verification standard /6/ no significant reporting risks to the materiality of the verification were envisaged while planning for the verification and were not identified during the verification process. During the course of the verification, the team reviewed the whole data set of monthly records for net electricity /15/ and cross-checked with monthly meter records /25/. The data reported in the monitoring report are consistent with the monthly records, and the emission reductions are correctly calculated. In conclusion, the verification team confirms the data set to be free from material error.

SECTION D. Means of verification

D.1. Desk review

The monitoring report version 03 of 18/05/2020 /3/, the emission reduction calculations provided in the form of a spreadsheet "Conf _Gunaydin_VER_Calcs_5th Monitoring_Report_v03_18052020.xlsx" version 03, submitted on 18/05/2020 /9/, the approved baseline and monitoring methodology ACM0002 version 14.0 of 04/10/2013 /7/ and all the documentation provided to support the monitoring period /1 – 30/, was assessed as part of the verification. In addition, the Project Design Document (PDD) version 09 of 21/10/2010 /1/, in particular as regards the baseline estimations and the monitoring plan, Transition Annex submitted on 09/03/2020 /2/ and the validation report revision 1.2 of 25/07/2013 and previous verification report /8/ for the project, were reviewed. The list of all documents reviewed are referenced during the verification is available in Appendix 3 below.

D.2. On-site inspection

Duration of on-site inspection: 11/03/2020				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	Implementation and operation of the proposed project activity. Checked the monitoring equipment, 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	Yaylakoy Village of Manyas District, Balikesir Province	11/03/2020	Tuğçe KIRATLI
2	Reviewed the information flows for generating, aggregating and reporting the monitoring parameters	Yaylakoy Village of Manyas District, Balikesir Province	11/03/2020	Tuğçe KIRATLI
3	Checked calibration performance, reviewed calculations and assumptions made in determining the GHG data and emission reductions	Yaylakoy Village of Manyas District, Balikesir Province	11/03/2020	Tuğçe KIRATLI
4	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	Yaylakoy Village of Manyas District, Balikesir Province	11/03/2020	Tuğçe KIRATLI
5	Cross-checked between information provided in the monitoring report and data evidence, including the Gold Standard parameters	Yaylakoy Village of Manyas District, Balikesir Province	11/03/2020	Tuğçe KIRATLI

D.3. Interviews

No	**Interview**			**Date**	**Subject**	**Team member**
	Last name	**First name**	**Affiliation**			
1	AYGENC	Merve	GTE Karbon *Carbon Consultant*	11/03/2020	Implementation status of the project Monitoring equipments and operation Generated Electricity Monitoring of GS Parameters Soil, Quality of Employment, Quantitative Employment and Income Generation	Tugce Kiratli
2	CIFTCI	Omer Faruk	Gunaydin WPP *Operation Manager*	11/03/2020		Tugce Kiratli
3	TANRIVERDI	Umit	Gunaydin WPP *Security Staff*	11/03/2020	Monitoring equipment and operation Data collection Metering System Local Employment	Tugce Kiratli
4	BASARAN	Yalcin	Gunaydin WPP *Security Staff*	11/03/2020		Tugce Kiratli
5	BASARAN	Selahatdin	Yayla Village *Mukhtar*	11/03/2020	Benefit of the project to the village, Noise, Soil Conditions, Biodiversity, Access to Animal Grazing, Local Employment, Grievance Mechanism	Tugce Kiratli
6	KOC	Aydin	Yayla Village *Stakeholder*	11/03/2020		Tugce Kiratli

The project area was visited on 11/03/2020. The project employee were interviewed about the implementation status of the project, monitoring equipment and operation, generated electricity of the project activity. During on site visit, Mukhtar and stakeholders of Yayla village was also interviewed. It was confirmed that no negative feedbacks or comments were received related to project activity during grievance mechanism and continuous inputs for the monitoring period. They all defined that they have no complaints about the project activity. They did not see any bird death near the turbines. In other to that, they confirmed that the project had helped the village. During interview, it is asked to the stakeholders and project employees if any legal contests or disputes have arisen during the monitoring period and they confirmed that there is no legal contest or disputes have arisen. In addition to this, the DOE assessed that whether a comment book available at the most appropriate and publicly accessible location (Yayla Village where is the nearest location of the project activity) so that stakeholders can provide feedback on the project. The continuous input/grievance mechanism has been verified through interview with the headman of village and the logbook has been checked. There isn't any positive or negative comment written on it. The stakeholders also indicated that if they need, they communicate directly and easily with the operating manager.

D.4. Sampling approach

Not applicable.

D.5. Clarification requests, corrective action requests and forward action requests raised

Areas of verification findings	No. of CR	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form			
Compliance of the project implementation with the registered PDD	2		
Post-registration changes			
Compliance of the monitoring plan with the monitoring methodology including applicable tool and standardized baseline			
Compliance of monitoring activities with the registered monitoring plan		1	
Compliance with the calibration frequency requirements for measuring instruments			
Assessment of data and calculation of emission reductions or net removals	1	1	
Others (please specify)			
Total	3	2	

SECTION E. Verification findings

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

Means of verification	The monitoring report version 3 /3/ and previous versions submitted by the PP have been the basis for starting the verification process. RINA confirms that the Monitoring report is based on the currently valid GS4GG MR template /10/.
Findings	N/A
Conclusion	RINA verified that the monitoring report was completed in accordance with the GS4GG-MR-FORM - Monitoring report form, including its Attachment: Instructions for filling out the monitoring report form, version 1 /10/.

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

Based on the review of the Gold Standard Foundation /23/ and previous verification report /8/, 1 FAR was raised during the previous verification period.

FAR#1: The verifying DOE shall check the health & safety training certificates of newly started employee Fatih Tanriverdi during the next verification.

The training records of newly started eFmployee Fatih Tanrıverdi and this issue is now discussed in the MR.

Hence, FAR 1 is closed.

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

Means of verification	The Monitoring Report for the project activity "Gunaydin WPP", version 03 of 18/05/2020 and previous versions submitted by the Manres Elektrik Uretim A.S. has been the basis for the vrification process. 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 the crediting period is 01/12/2012. The turbines have been commissioned in three phases. The first phase acceptance protocol covered 5 turbines were commissioned on 20/11/2012, the second phase acceptance Protocol covered 2 turbines were commissioned on 20/12/2014, and the third phase acceptance protocol covered 1 turbine was commissioned on 26/12/2014 as verified through previous verification report /8/. The project activity consists of 5 model of GE 2.5 MW and GE 2.75 MW wind turbines making the total installed capacity of 20.75 MWm/20 MWe as confirmed through the Generation License /13/. The technical details of the wind turbines given as a figure in the monitoring report is comply with the registered PDD /1/. It is confirmed during the site visit that all installed turbines are GE 2.5 and 2.75 MW turbines. 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 Mustafa Kemal Pasa Transmission Line as confirmed through the Generation License /13/.
Findings	**CR 1:** Please revise or discuss these issues given below: - In milestone table, the all dates related with the project activity should be presented in the MR. - In the project activity, it was confirmed that two turbines type is commissioned. However, only one of them has specifications presented in the MR. Please add both of them. - In milestone table, the all dates related with the project activity are now presented in the MR. - In the project activity, it was confirmed that two turbines type is commissioned. Now, the second type of the turbine's specifications is now presented in the MR. **Hence, CR 1 is closed.** **CR 3:** In Section F.1 of the MR, please remove the information related with the previous monitoring period. In addition, grievance mechanism should be discussed in F.1 and FARs should be presented with their answers in F.2 of the MR. Section F is now revised. The given information is found acceptable. **Hence, CR 3 is closed.**
Conclusion	The project is fully implemented according to the description presented in the PDD, which is discussed above. The verifier confirms, through physical inspection at site that all features of the CDM project activity including the equipment's, data collecting systems and storage have been implemented in accordance with the registered PDD. The project activity is completely operational and the same has been confirmed on-site.

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

Not applicable

E.4.2. Corrections

Not applicable

E.4.3. Changes to the start date of the crediting period

Not applicable

E.4.4. Inclusion of a monitoring plan to a registered project activity

PMUM records are provided as reference for electricity generation in the registered PDD. However, the name of this institution has been changed and electricity generation records belong to EPİAŞ. For this reason, EPIAS records will be taken into consideration.

Although PDD stated that "all employees will participate in first aid and health and safety trainings, only Mehmet Şenevren received first aid training among the Securitas employee. According to the Occupational Health and Safety Regulation No. 6331, 1 first aid worker is sufficient for very dangerous workplaces up to 10.6, therefore it is very compatible with the relevant regulation.

E.4.5. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

Not applicable

E.4.6. Changes to the project design of a registered project activity

Not applicable

E.4.7. Types of changes specific to afforestation and reforestation project activities

Not applicable

E.5. Compliance of monitoring plan with the monitoring methodology including applicable tool and standardized baseline

Means of verification	The project applies the approved methodologies ACM0002 "Grid-connected electricity generation from renewable sources" version 14.0 of 04/10/2013 /7/. The following tools are also applicable to the project activity: Tool to calculate the emission factor for an electricity system, version 2.2.1 of 29/08/2011 /11/; "Tool for the demonstration and assessment of additionality", version 06.0.0 of 25/11/2011 /12/.
Findings	N/A
Conclusion	The monitoring plan in the revised registered PDD /1/ is in accordance with the monitoring methodology ACM0002 "Grid-connected electricity generation from renewable sources" version 14.0 of 04/10/2013 /7/.

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

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

Means of verification

The parameters were available at the validation stage, which do not need to monitor during the crediting period, as per the registered PDD:

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/ Observation
Combined Margin Emission Factor	TEIAS statistics	0.600 tCO_2/MWh	As per the approved methodology ACM0002 version 14.0, 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 0.600 tCO_2/MWh in the registered PDD /1/ and validation report /8/.
Findings	N/A			
Conclusion	Data and parameters fixed ex-ante are in accordance with the registered revised PDD /1/			

E.6.2. Data and parameters monitored

Means of verification	The following parameters are monitored in accordance with the revised registered PDD /1/. The only monitoring parameter is "Quantity of net electricity generation supplied by the project plant to the grid in year y ($EG_{facility,y}$)" as per the registered monitoring plan presented in the registered PDD /1/. The parameter is monitored continuously as "GWh" by two electricity meters that are located at Mustafa Kemal Pasa substation. The main meter is EMH – LZQJXC with serial number 5944140 and the backup meter is ITRON SL7000 with serial number 65000753. The accuracy of the meters is 0.5s as confirmed through the index protocol /20/ /21/ and previous verification report /8/. 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. At the last day of each month, the electricity generation supplied to the grid and electricity consumption from the grid is read remotely from the electricity meters through Automatic Meter Reading System by the EPIAS personnel. Also the EPIAS records are available for the project participant /15/. All protocols /15/ /25/ within this monitoring period was checked during the site visit. The EPIAS records /15/ are crosschecked with the monthly official electricity metering records /25/ during this monitoring period. The Monthly Meter Reading Protocols, EPIAS records and emission reduction calculation spreads sheet /9/ are in line. For conservativeness, Maximum (import) and minimum (export) electricity values are used by the PP for ERs calculation. During the monitoring period of 01/07/2018 – 30/11/2019 (both days included) the net electricity supplied to the grid amount to 81,35 GWh.
Findings	**CAR 1:** The EPİAŞ data has 2 more digits after coma. Please add these digits to the calculation excel sheet. If there is any change in the electricity generation or emission reduction value, please revise the whole report. The missing digits are now added to the calculation excel sheet and the necessary corrections are made in the MR. **Hence, CAR 1 is closed.**
Conclusion	RINA's opinion that the monitoring of the project activity has been carried out in accordance with the monitoring plan in the registered PDD /1/. During the verification, all the relevant monitoring parameters of the registered monitoring plan have been verified with regard to the appropriateness of the verification method; the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures. In addition to this, the monitoring results are consistently recorded as per the approved frequency and the QA/QC procedures have been applied in accordance with the registered monitoring plan.

E.6.3. Implementation of sampling plan

Means of verification	N/A
Findings	N/A
Conclusion	N/A

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

Means of verification	TEAIS 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 parameter is monitored continuously by two electricity meters. The main meter is EMH LZQJ-XC with serial number 5944140[1] and the backup meter is ACTARIS SL7000 with serial number 65000753. The main meter has been changed by the TEIAS on 15/08/2017 due to be consistent with remote system of TEIAS and its calibration date has been verified through first index protocol performed by TEIAS /20/. The secondary meter was calibrated on 13/07/2012 as confirmed through the previous verification report /8/ and the calibration report /21/. 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 function well. During the monitoring period, no brake down has been recorded. No re-calibration is required for this monitoring period.
Findings	N/A
Conclusion	RINA's opinion that the monitoring of the project activity has been carried out in accordance with the monitoring plan in the registered PDD /1/. The DOE confirms that the calibration confirms the proper functioning of the monitoring equipment and is valid for the whole verification monitoring period. According to clause 341 (a) of VVS version 01.0, verification team has checked calibration to confirm that the frequency of calibration is carried out as specified in the registered monitoring plan (clause 368 , 374 of VVS, version 01.0) /6/.

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

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

Means of verification	The baseline emissions include the CO_2 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 CO_2 emission factor for grid connected power generation in year. BEy = EG facility,y x EFgrid,CM,y Where: BEy = Baseline emissions in year y (tCO2/yr). EGfacility,y = Quantity of net electricity supplied to the grid in year. EF grid,CM,y = Combined margin CO_2 emission factor for grid connected power generation calculated using the latest version of the "Tool to calculate the emission factor for an electricity system Baseline Emission in 2018 (starting from 01/07/2018 – 31/12/2018): BE 2018= 28,120.110 [MWh] * 0.600 [tCO_2/MWh] = 16,872 tCO_2 Baseline Emission in 2019 (01/01/2019 to 30/11/2019): BE 2019= 53,233.280 [MWh] * 0.600 [tCO_2/MWh] = 31,939 tCO_2 The net electricity generation supplied by the project activity (starting from 01/07/2018 to 30/11/2019) as follows; For 2018= 28,120.110 MWh For 2019= 53,233.280 MWh Total= 81,353.390 MWh The details of verified calculation is provided by the PP via calculation spreadsheet /9/
Findings	N/A
Conclusion	RINA verified that the baseline emissions were calculated in accordance with the registered PDD and methodology ACM0002 "Grid-connected electricity generation from renewable sources" version 14 of 04/10/2013 /7/

[1] The main meter has been changed by the TEIAS on 15/08/2017 due to be consistent with remote system of TEIAS.

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

Means of verification	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/.
Findings	NA
Conclusion	RINA verified that the project emissions were calculated in accordance with the registered PDD and methodology ACM0002 /7/

E.8.3. Calculation of leakage GHG emissions

Means of verification	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.
Findings	N/A
Conclusion	Leakage was considered as zero in accordance with the applied methodology /7/.

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

Means of verification	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: ERy = BEy – PEy – Ly Where: BEy = Baseline emissions in year y (tCO_2/yr) PEy = Project emissions in year y (tCO_2/yr) Ly = Leakage emissions in year y (tCO_2/yr) Emission Reductions in 2018 (starting from 01/07/2018 – 31/12/2018): ERs_{2018}= 16,872 - 0 - 0 = 16,872 tCO_2 Emission Reductions in 2019 (01/01/2019 to 30/11/2019): ERs_{2019}= 31,939 - 0 - 0 = 31,939 tCO_2 ERs_{TOTAL} = 48,811 tCO_2
Findings	N/A
Conclusion	RINA confirms: - All the data and parameters were monitored in accordance with the registered PDD; - 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. - The calculation of emission reductions has been carried out in accordance with the formulae and methods described in the registered PDD, the applied methodology and methodological tools; Emission factor and default values have been applied in the calculation in accordance to the registered PDD /1/.

E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	The emission reductions from the project for the monitoring period as reported in the monitoring report version 03 of 18/05/2018 /3/ is equivalent to 48,811 tCO_2. The reported emission reductions are slightly higher (around 3.47%) than the estimated emission reduction of 47,175 tCO_2 for the period as per the registered PDD /1/.
Findings	N/A
Conclusion	Verified during the onsite visit the reported emission reductions are higher than the estimated emission reduction in the registered PDD /1/. The reason of the difference between the actual and estimation emission reduction is explained

	related to high wind speed than expected.

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

Means of verification	The emission reductions from the project for the monitoring period as reported in the monitoring report version 03 of 18/05/2018 /3/ is equivalent to 48,811 tCO_2. The reported emission reductions are slightly higher (around 3.47%) than the estimated emission reduction of 47,175 tCO_2 for the period as per the registered PDD /1/.
Findings	N/A
Conclusion	Verified during the onsite visit the reported emission reductions are higher than the estimated emission reduction in the registered PDD /1/. The reason of the difference between the actual and estimation emission reduction is explained related to high wind speed than expected.

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

Means of verification	The emission reductions from the project for the monitoring period as reported in the monitoring report version 03 /3/ is equivalent to 48,811 tCO_2.
Findings	N/A
Conclusion	Verified during the onsite visit the reported emission reductions are higher than the estimated emission reduction in the registered PDD /1/. The reason of the difference between the actual and estimation emission reduction is explained related to high wind speed than expected.

E.8.8. Assessment of the sustainability parameters

Means of verification

The assessment of the monitored parameters is described in the tables below:

Data variable	**Source of Data**	**Reported value for the project period**
SDG13: Air Quality SO2 and NOx emissions from grid connected plants	Electricity Generation and Calculation /9/	- 159 tons SO_2 - 121 tons NO_x
Assessment		
SDG13: Climate Action 13.2.1. Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development Principle 3.4.3 Release of Pollutants *SO_2 and NO_x emissions from grid connected plants:* The parameter is monitored yearly by calculation with the Turkey's GHG Inventory and TEIAS Statistics. The value of the parameter is calculated as 159 tons SO2 and 121 tons NOx as confirmed through the calculation excel sheet /9/.		

Data variable	**Source of Data**	**Reported value for the project period**
Water Quality and Quantity Disposal of the wastewater	Waste Disposal Records /18/	The wastewater is transported by sewage trucks
Assessment		
Principle 4.3.4 Release of pollutants *Disposal of the wastewater:* The parameter is monitored annually by assessing disposal methods during site visits and checking waste disposal records /18/. It is confirmed that the wastewater is stored in a septic tank on site and disposed of periodically with vacuum.		

Data variable	**Source of Data**	**Reported value for the**

		project period
Other Pollutants Level of noise	Interview	No noise problem
Assessment		
Principle 4.3.5 Hazardous and Non-hazardous Waste *Level of noise:* According to the interview with the headman and the stakeholders of the village, there is no noise complain from the stakeholders.		

Data variable	**Source of Data**	**Reported value for the project period**
Soil Condition Amount of non-hazardous solid wastes	Correspondence with Manyas Municipality	Waste disposal are transferred to the storage area of Manyas Municipality
Assessment		
Principle 4.3.4 Release of pollutants *Amount of non-hazardous solid wastes during construction and operational phases. Appropriate management of all waste in line with regulations:* The parameter is monitored annually. Site visit and checking waste disposal records. During on site visit it is confirmed that the waste disposal are transferred to the storage area of Manyas Municipality by Municipality /28/. Stakeholders are also confirmed this information during the interviews.		

Data variable	**Source of Data**	**Reported value for the project period**
Biodiversity Ensuring that the project creates no disturbance to the regional habitat	Assessments during site visits and observation (ornithology) reports	2018: 19 carcases 2019: 8 carcases
Assessment		
Principle 4.3.11 Endangered Species *Biodiversity:* The parameter is monitored annually by ornithology reports. According to the reports, in 2018, 19 deaths observed and in 2019, 8 deaths observed. Moreover, according to the ornithology report, the operation of the project does not cause a serious risk for the bats. /29/.		

Data variable	**Source of Data**	**Reported value for the project period**
Other Pollutants Proper management of waste oil	Waste Oil Disposal Records	2018: 0.522 tons waste oil 2019: 0.417 ton waste oil
Assessment		
Principle 4.3.5 Hazardous and Non-hazardous Waste *Proper management of waste oil:* The parameter is monitored annually through waste oil disposal records /30/. According to the reports, in 2018, 0.522 tons and in 2019, 0.417 ton waste oil were disposed.		

Data variable	**Source of Data**	**Reported value for the project period**
SDG 8: Quality of Employment Number of personnel	Certificates and attendance lists of the trainings /22/ /24/	Employees participated to the trainings.

	certified/trained during operation phase	/26/ /19/	

Assessment

SDG 8: Decent Work and Economic Growth - 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status

Principle 3.6.1: Labour Rights

Number of personnel certified/trained during operation phase: The parameter is monitored yearly by review employment records and training documents/certificates. All the trainings /22/ /24/ /26/ /19/ during this monitoring period was provided to the verification team. All the employees attend to the trainings.

Data variable	Source of Data	Reported value for the project period
SDG 8: Quantitative Employment and Income Generation Number of locally recruited staff and their social security records	Social Security Records Declaration of Employment	9 employees are hired

Assessment

SDG 8: Decent Work and Economic Growth - 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities

Principle 3.6.1: Labour Rights

Payments made to staff: This parameter is monitored yearly by the evaluation documents for wages paid and social security documents. It was confirmed that 9 employees are hired by the project activity and 5 of them are local as confirmed through the Social Insurance Institution /14/.

Data variable	Source of Data	Reported value for the project period
SDG 7: Balance of Payments and Investment	Electricity Generation and Calculation /9/	3,317.756 million € 17.213 bn m^3 natural gas have been avoided

Assessment

SDG 7: Energy – 7.2.1 Renewable energy share in the final energy consumption

Principle 4.1.2 Climate and Energy

Balance of Payments and Investment: This parameter is monitored yearly by through comparing electricity generated by Gunaydin WPP and natural gas that would be used to produce the same amount of electricity according to baseline scenario.

Findings

CR 2:
Please correct the given issues.

- In Section E.1 of the MR, please check the baseline situation and revise. Please clarify the given information “since the project is a greenfield project, EG baseline is considered as zero”.
- In Section E.2 of the MR, estimated of project situation should be given, not the current situation.
- Please clarify why the other SDG’s are not discussed in Section E (E.1 – E.2 – E.3 – E.4 – E.5 – E.6) of the MR.

	- Please check “Project Estimate” and “Net Benefit” columns in Section E.4 of the MR and revise Section E.5 accordingly. - In Section E.6 of the MR, the expected electricity generation (55,500 MWh) is referred to generation license. However, this value is not in line with the generation license. In addition, please re-calculate the difference in EG. - In Section E.1 of the MR, the necessary corrections have been made. - In Section E.2 of the MR, estimated of project situation are now given, instead of the current situation. - All the other SDG’s are now discussed in Section E (E.1 – E.2 – E.3 – E.4 – E.5 – E.6) of the MR. - Section E.4 is now revised, Section E.5 is now corrected accordingly. - In Section E.6 of the MR, necessary changes have been made. **Hence, CR 2 is closed.** **CAR 2:** Data and Parameters Monitored: - **EGfacility,y:** Since the unit of the parameter was chosen as GWh, the values should be presented in the MR as GWh. The calibration report of the back-up meter should be provided to DOE to confirm the electricity meter information. - **Air Quality (Reduction of SO2 and NOx):** In Transition Annex, the year of 2010 was taken into account. However, 2012 is presented in the MR. Please check. In addition, the links given in the calculation excel sheet do not show the direct value. - **Quality of employment:** In Transition Annex, it was mentioned that all employees will attend trainings on first aid and health & safety. However, according to the provided supporting documents, only 1 employee was attended to the first aid training. In addition, he was attended to first aid and health&safety training at the same day. Please clarify this issue. - **Water Quality and Quantity:** The current situation (such as how many times during this monitoring period wastewater was disposed of with sewage truck, etc.) should be given instead of given information about construction phase in “value(s) applied” line. The construction phase had already been completed. - **Biodiversity:** The parameter should be monitored by ornithology reports. However, no ornithology report is provided. In addition, please discuss the current situation in “value(s) applied” line. - **Soil Condition:** Please discuss the current situation in “value(s) applied” line. - **Air Quality (Road pavement and watering construction area):** According to the Transition Annex, this parameter should be monitored once after construction. In the first verification after the capacity addition, this issue was discussed and confirmed. Therefore, there is no need to monitor this parameter. - **Other Pollutants:** Please discuss the current situation in “value(s) applied” line. - **Level of Noise:** Please discuss the current situation in “value(s) applied” line. - **Compensation of Expropriation:** According to the Transition Annex, this parameter should be monitored annually. However, in the first verification after the capacity addition, this issue was discussed and confirmed. Therefore, there is no need to monitor this parameter. - **Balance of Payment and Investment:** The links given in the calculation excel sheet do not show the direct value. - **Quantitative Employment and Income Generation:** Since the parameter was

	chosen as “number of locally recruited staff, the current situation about local employment should be given. The given employees list, the names are not in line with the provided training certificates. Please clarify. Also provide SGK record to confirm the number of security employees and their locality. Data and Parameters Monitored: - **EGfacility,y:** The unit of the values is now presented as GWh, The calibration report of the back-up meter is now provided. The electricity meter information is now confirmed. - **Air Quality (Reduction of SO2 and NOx):** The year of 2010 is now taken into account in both calculations excel sheet and MR. In addition, from the links given in the calculation excel could now confirmed the values. - **Quality of employment:** The approach is correct according to the relevant regulation. Since the necessary explanation is also added to “deviations from monitoring plan”, it is accepted. - **Water Quality and Quantity:** The current situation is now discussed in “value(s) applied” line. - **Biodiversity:** The ornithology reports are now provided to VVB. In addition, the current situation is now discussed in “value(s) applied” line. - **Soil Condition:** The current situation is now discussed in “value(s) applied” line. - **Air Quality (Road pavement and watering construction area):** The parameter is now removed from the MR since in the first verification after the capacity addition, this issue was discussed and confirmed. - **Other Pollutants:** The current situation is now discussed in “value(s) applied” line. - **Level of Noise:** The current situation is now discussed in “value(s) applied” line. - **Compensation of Expropriation:** The parameter is now removed from the MR since in the first verification after the capacity addition, this issue was discussed and confirmed. - **Balance of Payment and Investment:** The value given for “NG based Generation in 2018” is now in line with the given supporting link. - **Quantitative Employment and Income Generation:** The given explanation is found acceptable with the provided supporting documents. **Hence, CAR 2 is closed.**
Conclusion	RINA verified that the GS indicators described in the monitoring report are accurate and real. Data to cross check the monitored parameters are available at the office of the company. Also, the registers of the sustainability indicators were available during the onsite inspection.

SECTION F. Internal quality control

The draft final verification report before being submitted to the client will be/is subjected to an independent technical review to confirm that all validation activities has been completed according to the pertinent RINA's procedures. The technical review will be/is performed by a technical reviewer(s) qualified in accordance with the RINA's qualification procedure.

SECTION G. Verification opinion

RINA Services Spa (RINA) has performed verification of the emission reductions reported for the project activity "Gunaydin WPP", Turkey, GS Registration Reference No. 1178 for the period 01/07/2018 – 30/11/2019, with regard to the relevant GS requirements and principles. The project participants are responsible for the preparation for the collection of data in accordance with the monitoring plan and the reporting emission reductions from the project. It is RINA's responsibility to express an independent verification opinion on the reported emission reductions from the project and does not express any opinion on the selected baseline scenario or on the validated and registered PDD. Based on documented evidences and corroborated by an on-site assessment RINA can confirm that: (i) the project has been implemented and operated as per the registered PDD; (ii) the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable GS requirements and principles; (iii) the monitoring is in place as per the applied baseline and monitoring methodology; (iv) the monitoring complies with the registered monitoring plan; (v) the monitoring plan in the registered PDD is as per the applied baseline and monitoring methodology.

SECTION H. Certification statement

It is RINA's opinion that the GHG emission reductions stated in the monitoring report version 03 of 18/05/2020 for the project activity "Gunaydin WPP" in Turkey, for the period 01/07/2018 – 30/11/2019 are fairly stated. The GHG emission reductions were calculated correctly on the basis of the approved monitoring methodology ACM0002, Grid connected renewable electricity generation from renewable sources --- Version 14.0.0 /7/. Hence RINA is able to certify that the emission reductions from the project during the monitoring period 01/07/2018 – 30/11/2019 amount to 48,811 tCO_2.

Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CER(s)	Certified Emission Reduction(s)
CH_4	Methane
CL	Clarification Request
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CRT	Coordination and Technical Control Staff
DCI	Certification Division of RINA Services Spa
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
ER	Emission Reductions
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GS	Gold Standard
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
MoV	Means of Verification
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
PDD	Project Design Document
PE	Project Emission
PP(s)	Project Participant(s)
Ref.	Document Reference
RINA	RINA Services Spa
SS(s)	Sectoral Scope(s)
TA(s)	Technical Area(s)
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers

RINA SERVICES

classification, certification, inspection & testing

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:

Tugce Kiratli

è qualificato come:
is qualified as:

TEC, VAL, VER, TL, ITRP
LOCAL EXPERT

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*
1.2	Renewables	1
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
1	09/06/2017	Added qualification as ITRP and Local Expert

Responsabile di schema
Scheme Leader
Laura Severino

*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/riconosciuto da
RINA Services S.p.A. is accredited /recognized by

UNFCCC	quale 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-beneft CCB *to carry out Validation and Verification of co-benefit CCB projects*

GHG_QUAL_CERT_EN_07_16 Voluntary(Certificate) Page 1 of 1

RINA SERVICES

classification, certification, inspection & testing

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: Indipendent technical reviewer

RINA Services S.p.A. è accreditato/riconosciuto da
RINA Services S.p.A. is accredited /recognized by

UNFCCC	quale 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-beneft CCB *to carry out Validation and Verification of co-beneft CCB projects*

Appendix 3. Documents reviewed or referenced

No	Author	Title	References to the document	Provider
1	GTE	GS-PDD for "Gunaydin WPP" in Turkey	version 09 of 21/10/2019	Project participant
2	Gold Standard Foundation	Approved Gold Standard for the Global Goals Transition Annex "titled as "GUNAYDIN – TRANSITION – Review Response I.pdf"	submitted on 09/03/2020	Project participant
3	GTE	Monitoring Report for "Gunaydin WPP" in Turkey	version 01 of 24/02/2020 version 02 of 03/04/2020 version 03 of 18/05/2020	Project participant
4	Gold Standard Foundation	Gold Standard for Global Goals Principles & Requirements	version 1.2 of 23/10/2019	Publicly available
5	Gold Standard Foundation	Gold Standard for Global Goals Certification Procedures & Requirements for Validation/Verification Bodies (VVBs)	Version 1.0 of 01/03/2018	Publicly available
6	CDM Executive Board	Clean Development Mechanism Validation and Verification Standard	version 02.0 of 29/11/2018	Publicly available
7	CDM Executive Board	Baseline and monitoring methodology "ACM0002", "Grid-connected electricity generation from renewable sources"	version 14.0 of 04/10/2013	Publicly available
8	RINA	Validation Report for "10 MW Gunaydin WPP" No. 2012-TQ-16-MD Verification Report of "GS_VER_REP_Gunaydin WPP_18TQ06MD_Rev 1.1Aa_04092018.pdf"	version 1.2 of 25/07/2013 version 1.1 of 04/09/2018	Others
9	GTE	Emission Reduction Calculation Spreadsheet "Conf _Gunaydin_VER_Calcs_5th Monitoring_Report.xlsx" Emission Reduction Calculation Spreadsheet "Conf _Gunaydin_VER_Calcs_5th Monitoring_Report.xlsx" Emission Reduction Calculation Spreadsheet "Conf _Gunaydin_VER_Calcs_5th Monitoring_Report.xlsx"	version 01 of 24/02/2020 version 02 of 03/04/2020 version 03 of 18/05/2020	Project participant
10	Gold Standard Foundation	Gold standard for the global goals Monitoring Report Template	version 1 of 01/03/2018	Publicly available
11	CDM Executive Board	Methodological Tool "Tool to calculate the emission factor for an electricity system"	version 05.0.0 of 27/11/2015	Publicly available
12	CDM Executive Board	Methodological Tool "Tool for the demonstration and assessment of additionality"	version 07.0.0 of 23/11/2012	Publicly available
13	Energy Market Regulatory Authority	Generation License EU/3490-17/2141 (based on 20.75 Mwe/20 MWm installed capacity)	date of 11/11/2011, amended on 24/07/2014	Project participant
14	Social	SGK Service List	from	Project

	Insurance Institution	SGK Records for 5 Employees (Manres Enerji) SGK Records for 4 Employees (Security service outsource)	01/07/2018 to 30/11/2019 submitted on 03/04/2020	participant
15	Market Financial Settlement Center (EPIAS)	Monthly Electricity Records within the Monitoring Period	from 01/07/2018 – 30/11/2019	Project participant
16	Energy Market Regulatory Authority	Communiqué for Measurement Devices used in the Electricity Market	date of 22/03/2003	Publicly available
17	The Ministry of Trade and Industry	Regulation of Metering and Testing of Metering Systems	date of 24/07/1994	Publicly available
18	Balikesir Metropolitan Municipality	Invoices of Sewage Truck	date of 30/10/2019 05/12/2018 12/09/2018	Project participant
19	Balıkesir Provincial Health Directorate	First Aid Trainingfor 1 employee	date of 16/04/2019	Project participant
20	TEIAS	Calibration Certificate (first index protocol) of Electricity Meter with a Serial No: 5944140	date of 15/08/2017	Project participant
21	Kesir Muhendislik	Calibration Certificate of Electricity Meter with a Serial No: 65000753	date of 13/07/2012	Project participant
22	Ilk Dost OSGB	Health and Safety Training for 4 Employees	date of 30/10/2018 and 23/11/2019	Project participant
23	The Gold Standard Foundation	GS1178_GS4GG Transition Review_Final Round.pdf	date of 09/03/2020	Others
24	Autodrom	Safe Driving Training for 5 employees	date of 11/11/2019	Project participant
25	TEIAS	Monthly Reading Records	from 01/07/2018 – 30/11/2019	Project participant
26	Ekoglobal, Surec OSGB	Health and Safety Training for 4 Employees	date of 15-16/04/2019	Project participant
27	Alkan Yapi Dekorasyon	Aid receipt to the mosque, No. 42297	date of 15/11/2017	Project participant
28	Manyas Municipality	Official Correspondence with Manyas Municipality, No: 2014/5	date of 02/07/2014	Project participant
29	Expert Biologist Yakup Sasmaz	Ornithology Report for 2018 Ornithology Report for 2019	Date of 20/12/2018 Date of 20/12/2019	Project participant
30	Provincial Directorate of Environment and Urbanization	Waste declaration (Contains Waste Oil) for 2018 Waste declaration (Contains Waste Oil) for 2019	Date of 25/02/2019 Date of 04/02/2020	Project participant

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

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

FAR ID	1	**Section no.**		**Date:** 25/03/2020
Description of FAR				
The verifying DOE shall check the health & safety training certificates of newly started employee Fatih Tanriverdi during the next verification.				
Project participant response				**Date:** 31/03/2020
Training records of Fatih Tanrıverdi are represented below: 10/04/2018 Fire and Emergency Training 30/10/2018 Environment and Spill Drill 15-16/04/2019 HSE Training 05/11/2019 Emergency and Fire Fighting Drill				
Documentation provided by project participant				
Training records have been submitted.				
DOE assessment				**Date:** 16/04/2020
The training records of newly started employee Fatih Tanrıverdi and this issues is now discussed in the MR. **Hence, FAR 1 is closed.**				

Table 2. CR from this verification

CR ID	1	**Section no.**		**Date:** 25/03/2020
Description of CR				
Please revise or discuss these issues given below: - In milestone table, the all dates related with the project activity should be presented in the MR. - In the project activity, it was confirmed that two turbines type is commissioned. However, only one of them has specifications presented in the MR. Please add both of them.				
Project participant response				**Date:** 31/03/2020
- The milestone table has been revised so that it includes all dates as approved in 4th monitoring period. - Technical characteristics of both turbines are now mentioned.				
Documentation provided by project participant				
- Transition approval document for checking the date in milestone table. - Günaydın WF Extension ESIA				
DOE assessment				**Date:** 16/04/2020
Please revise or discuss these issues given below: - In milestone table, the all dates related with the project activity are now presented in the MR instead of the date of this monitoring period. Please add. - In the project activity, it was confirmed that two turbines type is commissioned. Now, the second type of the turbine's specifications is now presented in the MR. **Hence, CR 1 is not closed.**				
Project participant response				**Date:** 19/04/2020
- Dates of the 5th monitoring period has been added to the milestone table.				
DOE assessment				**Date:** 02/06/2020
Please revise or discuss these issues given below: - In milestone table, the all dates related with the project activity are now presented in the MR. **Hence, CR 1 is closed.**				

CR ID	2	**Section no.**		**Date:** 25/03/2020
Description of CR				

Please correct the given issues.

- In Section E.1 of the MR, please check the baseline situation and revise. Please clarify the given information “since the project is a greenfield project, EG baseline is considered as zero”.
- In Section E.2 of the MR, estimated of project situation should be given, not the current situation.
- Please clarify why the other SDG’s are not discussed in Section E (E.1 – E.2 – E.3 – E.4 – E.5 – E.6) of the MR.
- Please check “Project Estimate” and “Net Benefit” columns in Section E.4 of the MR and revise Section E.5 accordingly.
- In Section E.6 of the MR, the expected electricity generation (55,500 MWh) is referred to generation license. However, this value is not in line with the generation license. In addition, please re-calculate the difference in EG.

Project participant response | **Date:** 31/03/2020

- This part was revised during site visit.
- The values have been revised according to the values exist in PDD.
- Please indicate more clearly what should be mentioned in E.1 to E.6. All relevant information about SDG 7-8 and 13 are already available in Section E.
- Section E.4. and E.5 corrected.
- The statement has been revised as “The project was expected to generate 55,500 MWh according to the Energy Assessment Report). There is no change occurred in percent calculation after EPİAS digits revision.

Documentation provided by project participant

DOE assessment | **Date:** 17/04/2020

Please correct the given issues.

- In Section E.1 of the MR, the necessary corrections have been made.
- In Section E.2 of the MR, estimated of project situation are now given, instead of the current situation.
- In the “Data and Parameters to be monitored” section of the Transition Annex document, lots of parameter is defined as “SDG”. So, all SDGs should be discussed in Section E of the MR. Here is the list:

SDG	Parameter	Description	Discussed or not
SDG 7 - Indicator	EGfacility,y	Net electricity generated and delivered to the grid by the proposed project in year	Discussed
SDG13: Climate Action	Air Quality	Reduction of SO2 and NOx emissions	Not discussed
SDG 8: Decent Work and Economic Growth	Quality of Employment	Number of personnel certified/trained during operation phase	Not discussed
SDG 8: Decent Work and Economic Growth	Quantitative employment and income generation	Number of **locally** recruited staff and their social security records	Not discussed
SDG 7: Energy	Balance of payments and investment	Project has started generating electricity and contributing balance of payments.	Not discussed

- Section E.4 is now revised, however; for SDG 8, 11 employees are presented for both estimation and current situation. Please check and correct whichever is wrong. Section E.5 is now corrected accordingly.
- In Section E.6 of the MR, necessary changes have been made.

Hence, CR 2 is not closed.

Project participant response | **Date :** 18/05/2020

- All of them are now mentioned under Section E. - Please see Section E.4. for the revised SDG 8.
DOE assessment **Date:** 02/06/2020
Please correct the given issues. - The necessary corrections are made. - Section E.4 is now revised. **Hence, CR 2 is closed.**

CR ID	3	**Section no.**		**Date:** 25/03/2020
Description of CR				
In Section F.1 of the MR, please remove the information related with the previous monitoring period. In addition, grievance mechanism should be discussed in F.1 and FARs should be presented with their answers in F.2 of the MR.				
Project participant response				**Date:** 01/04/2020
Section F has been revised.				
Documentation provided by project participant				
DOE assessment				**Date:** 16/04/2020
Section F is now revised. The given information is found acceptable. **Hence, CR 3 is closed.**				

Table 3. CAR from this verification

CAR ID	1	**Section no.**		**Date:** 25/03/2020
Description of CAR				
The EPİAŞ data has 2 more digits after coma. Please add these digits to the calculation excel sheet. If there is any change in the electricity generation or emission reduction value, please revise the whole report.				
Project participant response				**Date:** 31/03/2020
All digits have been added to the calculation. As a result, there is no change in emission reduction value, but energy generation value has been changed slightly. All related parts in MR have been revised, accordingly.				
Documentation provided by project participant				
ER Calculation excel sheet				
DOE assessment				**Date:** 16/04/2020
The missing digits are now added to the calculation excel sheet and the necessary corrections are made in the MR. **Hence, CAR 1 is closed.**				

CAR ID	2	**Section no.**		**Date:** 25/03/2020
Description of CAR				

Data and Parameters Monitored:

- **EGfacility,y:** Since the unit of the parameter was chosen as GWh, the values should be presented in the MR as GWh. The calibration report of the back-up meter should be provided to DOE to confirm the electricity meter information.
- **Air Quality (Reduction of SO2 and NOx):** In Transition Annex, the year of 2010 was taken into account. However, 2012 is presented in the MR. Please check. In addition, the links given in the calculation excel sheet do not show the direct value.
- **Quality of employment:** In Transition Annex, it was mentioned that all employees will attend trainings on first aid and health & safety. However, according to the provided supporting documents, only 1 employee was attended to the first aid training. In addition, he was attended to first aid and health&safety training at the same day. Please clarify this issue.
- **Water Quality and Quantity:** The current situation (such as how many times during this monitoring period wastewater was disposed of with sewage truck, etc.) should be given instead of given information about construction phase in "value(s) applied" line. The construction phase had already been completed.
- **Biodiversity:** The parameter should be monitored by ornithology reports. However, no ornithology report is provided. In addition, please discuss the current situation in "value(s) applied" line.
- **Soil Condition:** Please discuss the current situation in "value(s) applied" line.
- **Air Quality (Road pavement and watering construction area):** According to the Transition Annex, this parameter should be monitored once after construction. In the first verification after the capacity addition, this issue was discussed and confirmed. Therefore, there is no need to monitor this parameter.
- **Other Pollutants:** Please discuss the current situation in "value(s) applied" line.
- **Level of Noise:** Please discuss the current situation in "value(s) applied" line.
- **Compensation of Expropriation:** According to the Transition Annex, this parameter should be monitored annually. However, in the first verification after the capacity addition, this issue was discussed and confirmed. Therefore, there is no need to monitor this parameter.
- **Balance of Payment and Investment:** The links given in the calculation excel sheet do not show the direct value.
- **Quantitative Employment and Income Generation:** Since the parameter was chosen as "number of locally recruited staff, the current situation about local employment should be given. The given employees list, the names are not in line with the provided training certificates. Please clarify. Also provide SGK record to confirm the number of security employees and their locality.

Project participant response | **Date:** 01/04/2020

- EGfacility, y is now expressed as GWh. Calibration reports submitted.
- Air Quality (Reduction of SO2 and NOx): The value in transition annex was considered. The links have been also updated. Please see MR and the excel sheet.
- Quality of Employment: HSE training also includes first aid topics as can be seen in the training documents (for Securitas records – 2019). Additional certificates (for MANRES) are also now provided. Please clarify why first aid and HSE training cannot be get at the same day. HSE training is 12 hours and given in 2 days.
- Water Quality and Quantity: Values(s) applied revised.
- Biodiversity: Since the monitoring obligation for birds has been terminated by Directorate of Nature Conservation and National Parks (DMKP), there is no ornithology studies conducted in this monitoring period. Reports for bats have been provided. Please also see "value(s) applied" part.
- Soil Condition: "Value(s) applied" revised.
- Air quality parameter removed.
- Other pollutants: Proper management of waste oil parameter values revised.
- Level of noise: Value(s) applied revised.
- Compensation for expropriation parameter has been removed.
- Balance of Payments and Investment: Links revised. A mistake (double counting) was also realized in the calculation and corrected both in excel sheet and related parameter in MR. Please see them.
- Quantitative Employment and Income Generation: Only info on locally employed staff has been given now. Please see "quality of employment" parameter for training certificates. Employment records for MANRES were provided before. Please see the records of SECURITAS provided now.

Documentation provided by project participant

- Calibration Reports
- Solid Waste Disposal Record
- SECURITAS employment records
- Training records

DOE assessment	**Date:** 17/04/2020

Data and Parameters Monitored:

- **EGfacility,y:** The unit of the values is now presented as GWh, The calibration report of the back-up meter is now provided. The electricity meter information is now confirmed.
- **Air Quality (Reduction of SO2 and NOx):** The year of 2010 is now taken into account in both calculations excel sheet and MR. In addition, from the links given in the calculation excel could now confirmed the values.
- **Quality of employment:** Health and safety training should be given minimum 16 hours in very dangerous workplaces. For this reason, it is not possible to give both first aid and occupational health and safety training together on the same day. Please check if all employees have first aid certificate or not. If not, please add a clear explanation for this issue.
- **Water Quality and Quantity:** The current situation is now discussed in "value(s) applied" line.
- **Biodiversity:** The ornithology reports are now provided to VVB. In addition, the current situation is now discussed in "value(s) applied" line.
- **Soil Condition:** The current situation is now discussed in "value(s) applied" line.
- **Air Quality (Road pavement and watering construction area):** The parameter is now removed from the MR since in the first verification after the capacity addition, this issue was discussed and confirmed.
- **Other Pollutants:** The current situation is now discussed in "value(s) applied" line.
- **Level of Noise:** The current situation is now discussed in "value(s) applied" line.
- **Compensation of Expropriation:** The parameter is now removed from the MR since in the first verification after the capacity addition, this issue was discussed and confirmed.
- **Balance of Payment and Investment:** The links given in the calculation excel sheet are now show the direct value. However, the value given for "NG based Generation in 2018" is not in line with the given supporting link.
- **Quantitative Employment and Income Generation:** The current situation about local employment is now given given. However, Omer Ozden is not local as per the SGK records. Please explain why he is added as local.

Hence, CAR 2 is not closed.

Project participant response	**Date:** 19/04/2020

- Although PDD states that "all employee will attend trainings on first aid and health & safety, only Mehmet Şenevren got first aid training among Securitas employee. According to the Occupational Health and Safety Regulation #6331, 1 first-aider is sufficient for very dangerous workplaces having people up to 10. Please see revised parameter for the same explanation.
- NG based generation in 2018 has been revised. Please see excel sheet and related parameter in MR.
- According to the info obtained from the site, Omer Ozden has been living in Balıkesir for 17 years although he is registered in Erzurum civil registry. Screenshots of e-mails are provided.

DOE assessment	**Date:** 17/04/2020

Data and Parameters Monitored:

- **Quality of employment:** The approach is correct according to the relevant regulation. Since the necessary explanation is also added to "deviations from monitoring plan", it is accepted.
- **Balance of Payment and Investment:** The value given for "NG based Generation in 2018" is now in line with the given supporting link.
- **Quantitative Employment and Income Generation:** The given explanation is found acceptable with the provided supporting documents.

Hence, CAR 2 is closed.

Table 4. FAR from this verification

FAR ID	1	**Section No.**		**Date:**
Description of FAR				
Project participant response				**Date:**
Documentation provided by project participant				
DOE assessment				**Date:**

Document information

Version	*Date*	*Description*
01.0	10/06/2016	Initial publication.