المجلس العالمي للبصمة الكربونية
GLOBAL CARBON COUNCIL

Project Verification Report

V3.1 - 2020

CONTENTS

COVER PAGE **Project Verification Report Form (PVR)**	
Complete this form in accordance with the instructions.	
BASIC INFORMATION	
Name of approved GCC Project Verifier / Reference No. (also provide weblink of approved GCC Certificate)	EPIC Sustainability Services Private Limited http://globalcarboncouncil.com/wp-content/uploads/2021/10/gcc-verifier-cert-epic.pdf
Type of Accreditation	☐ Individual Track[1] ☒ CDM Accreditation ☐ ISO 14065 Accreditation Name of the entity that provided the accreditation: UNFCCC Date of validity: 31/08/2018 to 04/10/2023 Weblink of the active accreditation certificate and approval: https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0062
Approved GCC Scopes and GHG Sectoral scopes for Project Verification	Approved GCC scopes for project verification: Greenhouse Gas (GHG#-ACC) Environmental No-harm (E+) Social No-harm (S+) Sustainable Development Goals (SDG+) Approved GCC sectoral scopes for project verification: 1. Energy industries (renewable - / non-renewable sources) (CDM TA1.1, TA1.2) 2. Energy distribution (CDM TA2.1) 3. Energy demand (CDM TA3.1) 4. Manufacturing industries (CDM TA4.1) 5. Chemical industry (CDM TA5.1, TA 5.2) 6. Construction (CDM TA6.1) 7. Transport (CDM TA7.1) 8. Mining/mineral production (CDM TA8.1) 9. Metal production (CDM TA9.1, TA 9.2) 10. Fugitive emissions from fuels (solid, oil and gas) (CDM TA10.1)

[1] **Note:** GCC Verifier under Individual tack is not eligible to conduct verifications for the GCC project that intends to supply carbon credits (ACCs) for CORSIA requirements.

	11. Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride (CDM TA11.1, TA 11.2) 12. Solvents use (CDM TA12.1) 13. Waste handling and disposal (CDM TA13.1, TA 13.2) 14. Afforestation and reforestation (CDM TA14.1) 15. Agriculture (CDM TA15.1) 16. Carbon Capture and Storage of CO_2 in Geological Formations (CDM TA 16.1)
Validity of GCC approval of Verifier	15/10/2020 to 15/10/2022 Note: However, as per clause 9.3.1 of GCC Verifier Agreement signed between GCC and EPIC dated 03/03/2022 , EPIC is therefore allowed to continue GCC services one year after the end of service period
Title, completion date, and Version number of the PSF to which this report applies	Title: Karlitepe Wind Power Project Completion date: 13/06/2022; Version number: 05.0
Title of the project activity	Title: Karlitepe Wind Power Project
Project submission reference no. (as provided by GCC Program during GSC)	S00054
Eligible GCC Project Type[2] as per the Project Standard (Tick applicable project type)	☒ **Type A:** ☐ Type A1 ☒ Type A2: Sub-Type 1 ☐ **Type B – De-registered CDM Projects:** ☐ Type B1 ☐ Type[3] B2
Date of completion of Local stakeholder consultation	09/11/2021
Date of completion and period of Global stakeholder consultation. Have the GSC comments been	Date of completion of Global stakeholder consultation: 10/01/2022 Period of Global stakeholder consultation: 27/12/2021 to 10/01/2022 https://globalcarboncouncil.com/global-stakeholders-consultation.html

[2] Project Types defined in Project Standard and Program Definitions on GCC website.

[3] GCC Project Verifier shall conduct Project Verification for all project types except B_2.

<table>
<tr><td>verified. Provide web-link.</td><td></td></tr>
<tr><td>Name of Entity requesting verification service
(can be Project Owners themselves or any Entity having authorization of Project Owners)</td><td>Karlıtepe Enerji A.Ş</td></tr>
<tr><td>Contact details of the representative of the Entity, requesting verification service
(Focal Point assigned for all communications)</td><td>Ramazan Aslan,
Managing Partner
ramazan.aslan@lifeenerji.com</td></tr>
<tr><td>Country where project is located</td><td>Republic of Türkiye</td></tr>
<tr><td>GPS coordinates of the Project site(s)</td><td>
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</td></tr>
<tr><td>Applied methodologies</td><td>ACM0002: Grid-connected electricity generation from renewable sources, ver: 20.0[9]</td></tr>
</table>

(approved methodologies of GCC or CDM can be used)	
GHG Sectoral scopes linked to the applied methodologies	Sectoral scope 1. Energy industries (renewable / non-renewable sources)
Project Verification Criteria: Mandatory requirements to be assessed	☒ ISO 14064-2, ISO 14064-3 ☒ GCC Rules and Requirements ☒ Applicable Approved Methodology ☒ Applicable Legal requirements /rules of host country ☒ National Sustainable Development Criteria (if any) ☒ Eligibility of the Project Type ☒ Start date of the Project activity ☒ Meet applicability conditions in the applied methodology ☒ Credible Baseline ☒ Additionality ☒ Emission Reduction calculations ☒ Monitoring Plan ☒ No GHG Double Counting ☒ Local Stakeholder Consultation Process ☒ Global Stakeholder Consultation Process ☒ United Nations Sustainable Development Goals (Goal No 13- Climate Change) ☐ Others (please mention below)
Project Verification Criteria: Optional requirements to be assessed	☒ Environmental Safeguards Standard and do-no-harm criteria ☒ Social Safeguards Standard do-no-harm criteria ☒ United Nations Sustainable Development Goals (in additional to SDG 13) ☒ CORSIA requirements
Project Verifier's Confirmation: The *GCC Project Verifier* has verified the GCC project activity and therefore confirms the following:	The GCC Project Verifier [EPIC Sustainability Services Private Limited], certifies the following with respect to the GCC Project Activity [**Karlitepe Wind Power Project**]. ☒ The Project Owner has correctly described the Project Activity in the **Project Submission Form (version 5.0, dated 13/06/2022)** including the applicability of the approved methodology [**ACM0002 Grid-connected electricity generation from renewable sources, ver: 20.0**[9]] and meets the methodology applicability conditions and is expected to achieve the forecasted real and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reductions estimates correctly and conservatively. ☒ The Project Activity is likely to generate GHG emission reductions amounting to the estimated 677,590 tCO_2e for whole crediting period as indicated in the PSF, which are additional to the reductions that are likely to

	occur in the absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 and ISO 14064-3. ☒ The Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, and is likely to achieve the following labels: ☒ Environmental No-net-harm Label (**E+**) ☒ Social No-net-harm Label (**S+**) ☒ The Project Activity is likely to contribute to the achievement of United Nations Sustainability Development Goals (SDGs), complies with the Project Sustainability Standard, and contributes to achieving a total of **[4] SDGs,** with the following[4] SDG certification label (**SDG+**): ☐ Bronze SDG Label ☐ Silver SDG Label ☒ Gold SDG Label ☐ Platinum SDG Label ☐ Diamond SDG Label ☒ The Project Activity complies with all the applicable requirements of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.2 paragraph 21-23, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project. ☒ The Project Activity complies with all the applicable GCC rules[5] and therefore recommends GCC Program to register the Project activity with above mentioned labels.
Project Verification Report, reference number and date of approval	ESSPL/GCC/2021/012 Date of approval: 22nd December 2022
Name of the authorised personnel of GCC Project Verifier and his/her signature with date	R. B. Venkataramanaiah Director  Date: 22nd December 2022

[4] SDG Certification labels: Bronze label (1 star): by achieving 2 out of 17 SDGs; Silver label (2 star): by achieving 3 out of 17 SDGs; Gold label (3 star): by achieving 4 out of 17 SDGs; Platinum label (4 star): by achieving 5 out of 17 SDGs; and Diamond label (5 star): by achieving more than 5 out of 17 SDGs.

[5] "GCC Rules" are defined in Project Definitions and refers to the rules and requirements set out by the GCC program related to GHG emission reductions and its voluntary certification labels and are available on the GCC Program's public website: https://www.globalcarboncouncil.com/resource-centre.html

1. PROJECT VERIFICATION REPORT

Section A. Executive summary

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EPIC Sustainability Services Private Limited (EPIC) has been contracted by Life İklim ve Enerji Ltd. Şti. on behalf of GCC project owner Karlıtepe Enerji A.Ş dated 2nd November 2021 to undertake the independent project verification of the GCC project activity titled "Karlitepe Wind Power Project)" (hereafter the project). EPIC is accredited for GCC Scopes (GHG, E+, S+, SDG+) and all 16 GHG sectoral scopes including sectoral scope 1. So, the EPIC is eligible for conducting third-party independent external verification. EPIC and its project verification team are independent of the proposed GCC project.

The purpose of the GCC project verification is to perform an independent, third-party assessment of whether the project activity confirms to the qualification criteria set in the GCC standard and to attain real, measurable, additional and permanent emission reduction. The statement / opinion is a written assurance that the project complies with all the applicable requirements and can generate the emission reductions stated over the projects crediting period.

The objectives of this project verification are to validate that the GCC project meets the requirements of latest versions of GCC project framework/1/ v2.1, GCC program manual/2/ v3.1, GCC program processes/3/ v4.0, GCC project standard/4/ v3.1, GCC project sustainability standard/5/ v2.1, GCC verification standard/6/ v3.1, GCC Environment & Social safeguards standard/7/ v2.0, GCC Program definitions/8/ v3.1
applicable approved GCC Methodology for **"ACM0002 Grid-connected electricity generation from renewable sources, ver: 20.0/9/"**, Applicable Legal requirements/rules of host country, National Sustainable Development Criteria and CORSIA requirements and other GCC requirements related to aspects such as project design, applicable conditions, project boundary, baseline scenarios, additionality, emission reduction, monitoring plan, local stakeholder consultation, global stakeholder consultation, GHG emission reductions (ACCs), environmental no-net harm label (E+), social no net harm label (S+), **gold SDG label** (SDG+), CORSIA+. By means of document review, onsite visit and interview with stakeholders, a reasonable level of assurance to the GCC project is provided by the project verification team. The project verification team has determined whether GCC Project Activity meets all applicable GCC rules and requirements. This report summarizes the final project verification opinion which is based on **Project Submission Form v5.0/10/.**

The GCC project activity involved the construction and operation of Greenfield 30 MWe wind power project in Republic of Türkiye. The project activity will generate greenhouse gas (GHG) emission reductions by avoiding CO_2 emissions from electricity generation by fossil fuel power plants connected to Turkish National Power Grid. An estimated electricity net generation of 104,438 MWh by the efficient utilization of the available wind energy by project activity will replace the grid electricity, which is constituted of different fuel sources, mainly fossil fuels. The electricity produced by project activity will result in a total emission reduction of 67,759 tCO_2e/year. The emission reduction will be based on the amount of baseline electricity generation avoided due to the project and is calculated using the applied CDM approved large scale methodology, "**ACM0002: Grid-connected electricity generation from renewable sources, version: 20.0**"/9/.

Section B. Project Verification team, technical reviewer, and approver

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B.1 Project Verification team

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader/Lead Auditor/ Financial Expert	IR	R	Vijayaraghavan	Central office, Bangalore, EPIC	√	x	√	√
2.	Auditor	IR	Suman	TVVM	Central office, Bangalore, EPIC	√	x	√	√

B.2 Technical reviewer and approver of the Project Verification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)
1.	Technical reviewer	IR	Anbazhagan	Prabu Das	Central office, Bangalore, EPIC
2.	Approver	IR	R.B.	Venkataramanaiah	Central office, Bangalore, EPIC

Section C. Means of Project Verification

C.1 Desk/document review

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The project verification is performed primarily based on the review of the all the documents related to the PSF and the supporting documentation. This process included review of data and information related to project design, project implementation, applicable conditions of the methodology, baseline, and additionality, estimated emission reductions, monitoring plan, environmental impacts, local stakeholder consultation, GHG emission reductions (ACCs), environmental no-net harm label (E+), social no net harm label (S+), gold SDG label (SDG+) and CORSIA(C+).

The **PSF v2.0**[/39/] (hereinafter referred to as initial PSF) complying GCC was submitted by the project owner and additional background documents related to the emission reductions are reviewed as an initial step of the project verification process. The subsequent step involved the identification of corrective action requests and clarification requests (CARs, CLs) which are presented in Appendix 4 of this report. As a result, project owner has submitted **PSF v5.0**[/10/] (hereinafter referred to as final PSF). A complete list of all documents and records reviewed is as attached in Appendix 3 of this report.

C.2 On-site inspection

Duration of on-site inspection: 21-01-2022 **(Remote)**				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	The verification team conducted visits to the project site to confirm the information and to resolve issues identified in the document review. Remote assessment was conducted as a part of verification activity and involved: 1. Checking General information about the project and Chronology of Events/ Implementation cycle of the project activity. 2. Minimum compliance requirements ➢ Real and Measurable GHG Reductions ➢ National Sustainable Development Criteria (as applicable) ➢ Apply credible baseline and monitoring methodologies ➢ Additionality ➢ Local Stakeholder Consultation Process ➢ Global Stakeholder Consultation Process ➢ No GHG Double Counting ➢ Contributes to United Nations Sustainable Development Goal 13 (Climate Action) ➢ Legal ownership of the project activity 3. Eligible GCC Project Type as per the Project Standard ➢ Do-no-net-harm Safeguards to address Environmental Impacts ➢ Do-no-net-harm Safeguards to address Social Impacts ➢ Contributes to United Nations Sustainable Development Goals (in addition to Goal 13) 4. GHG emission reductions (i.e., Approved Carbon Credits(ACCs)) 5. Environmental No-net-harm Label (E+) 6. Social No-net-harm Label (S+) 7. United Nations Sustainable Development Goals (SDG+) 1) Gold SDG Label	Project site (Remote audit on 21st January 2022)	21/01/2022	Project Verification team

C.3 Interviews

No.	Interview			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	KURT	ALAATTIN	Power Plant Manager - Karlitepe Enerji A.S	21/01/2022	As per section C2	Project Verification team
2.	LOKMAN	ERDOGAN	Power Plant Chief - Karlitepe Enerji A.S	21/01/2022	As per Section C2	Project Verification team
3.	Hazal	OZTURK	Consultant - Life Enerji	21/01/2022	As per Section C2	Project Verification team
4.	Asmin	SARIPINAR	Consultant - Life Enerji	21/01/2022	As per Section C2	Project Verification team
5.	Ali	KURT	Farmer -Local Stakeholder	21/01/2022	As per Section C2	Project Verification team
6.	Osman	BULUR	Farmer -Local Stakeholder	21/01/2022	As per Section C2	Project Verification team

C.4 Sampling approach

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No sampling approach is used for this project verification process.

C.5 Clarification request (CLs), corrective action request (CARs) and forward action request (FARs) raised

Areas of Project Verification findings	Applicable to Project Types	No. of CL	No. of CAR	No. of FAR
Green House Gas (GHG)				
Identification and Eligibility of project type	A_1, A_2, B_1, B_2	-	-	-
General description of project activity	A_1, A_2, B_1, B_2	-	4(CAR 01, CAR 05, CAR 06, CAR 08)	-
Application and selection of methodologies and standardized baselines	A_1, A_2, B_1, B_2		-	-
- Application of methodologies and standardized baselines	A_1, A_2, B_1, B_2	1(CL 01)	-	-
- Deviation from methodology and/or methodological tool	A_1, A_2, B_1, B_2	-	-	-
- Clarification on applicability of methodology, tool and/or standardized baseline	A_1, A_2, B_1, B_2	-	1(CAR 04)	-
- Project boundary, sources and GHGs	A_1, A_2, B_1, B_2		-	-
- Baseline scenario	A_1, A_2, B_1, B_2		-	-
- Demonstration of additionality including the Legal Requirements test	A_1, A_2, B_1, B_2		-	-
- Estimation of emission reductions or net anthropogenic removals	A_1, A_2, B_1, B_2	-	-	-
- Monitoring plan	A_1, A_2, B_1, B_2	-	-	-
Start date, crediting period and duration	A_1, A_2, B_1, B_2	-	2(CAR 02, CAR 03)	-

Environmental impacts	A_1, A_2, B_1, B_2	-	-	-
Local stakeholder consultation	A_1, A_2, B_1	1 (CL 02)	-	-
Approval & Authorization- Host Country Clearance	A_1, A_2, B_1, B_2	-	-	-
Project Owner- Identification and communication	A_1, A_2, B_1, B_2		-	-
Global stakeholder consultation	A_1, A_2, B_1		-	-
Others (please specify)	A_1, A_2, B_1, B_2		-	-
VOLUNTARY CERTIFICATION LABELS				
Environmental Safeguards (E^+)	A_1, A_2, B_1	-	-	-
Social Safeguards (S^+)	A_1, A_2, B_1		-	-
Sustainable development Goals (SDG^+)	A_1, A_2, B_1	-	-	-
Authorization on Double Counting from Host Country (only for CORSIA)	A_1, A_2, B_1	-	1(CAR 07)	-
CORSIA Eligibility (C^+)			-	-
Total		2	8	-

Section D. Project Verification findings

D1. Identification and eligibility of project type

Means of Project Verification	The project verification team determined whether the project owner identified the type of project activity (A1, A2, B1, B2) and its sub types in accordance with the Project Standard/3/ using the following means of verification such as remote interview and review of the documents such as technical specifications, commissioning documents and PSF.
Findings	No CL, CAR or FAR was raised in this section.
Conclusion	The project used the latest version of PSF template/13/ and followed the requirements contained in the template. The project is also verified to meet the requirement of the GCC project standard/3/ v3.2-2020 as well as latest versions of the associated GCC rules. The project verification team determined the description of the proposed GCC project activity in the final PSF/10/ is accurate. By reviewing the technical specifications/1/, the project verification team confirmed that the project is a wind power project. The project has started commercial operation on 23rd October 2020as per the commissioning certificates/12/. It is verified by the verification team that the project is not required by a legal mandate and does not implement a legally enforced mandate, further the project complies with the all-applicable host-country legal requirements. As per GCC clarification 1 v1.2, this GCC project qualifies under Type A2-Sub-Type 1 as this project has not been registered under any other GHG Program. Hence the project is eligible for GCC project registration. The GCC project applies all the four scopes such as GCC Scope of Greenhouse Gas (GHG) Emission Reductions, GCC Scope of Environmental No-harm, GCC Scope of Social No-harm, GCC Scope of Sustainable Development Goals and CORSIA requirements.

D.2 General Description of project activity

Means of Project Verification	The project verification team assessed whether the description of the proposed GCC project activity in accordance with applicable Project Verification requirements related to the description of the project activity in the Verification Standard/4/ and Project Standard/4/ and whether the project complied with the requirements on GHG reduction and the voluntary certification labels (E+, S+, SDG+) and CORSIA, as applicable, and this compliance were assessed in accordance with applicable Project Verification requirements in the Verification Standard/4/ and Project Standard/3/. The project verification team determined whether the description of the proposed GCC project activity in the final PSF/10/ is accurate, complete, and provides an understanding of the proposed GCC project activity using the following means of verification such as the remote audit observation, interview, and review of technical specifications/16/, PSF etc. As per para 36 of the Project Standard v3.1, it was checked whether the Project Owners has used the GCC Project Submission Form (PSF) V3.2-2020 to provide the details of the GHG emission-reduction Activity, including schematics, specifications and description of how the project reduces GHG emissions.
Findings	Four CARs (CAR 01, CAR 05, CAR 06 and CAR 08) are raised in this section.
Conclusion	The verification team observed from the commissioning certificates/1/ that the project installation is complete, and the project is operational since 23rd October 2020.The project verification team has checked the initial PSF/39/ and technical details of wind power project and it to be consistent. The purpose of this large scale bundled project activity is to generate electricity by harnessing the wind power. The project activity generates greenhouse gas (GHG) emission reductions by reducing CO_2 emission from electricity generation by fossil fuel power plants connected to Turkish National Power Grid. The project verification team has confirmed that total installed capacity of the wind power project is 30 MW_e from the Provisonal acceptance documents and Turbine installation agreement. The average annual generated energy is expected to be 104,438 MWh. The project has started commercial operation on 23rd October 2020 as per the provided provisional acceptance document/12/. The project verification team reviewed the single line diagram/17/, connection agreement/14/ and confirmed that electricity generated is supplied to the Turkish National Grid. The project verification team has checked the coordinates with the help of Google earth and confirms that the locations of all the 10 windmills are in-line with the coordinated provided in the submitted initial PSF/39/. The project verification team reviewed the EPC contract confirms the legal ownership of the project. The operational lifetime of the wind turbine is 25 years as per the technical specifications/11/ provided by the manufacturer. The Project Owners have fixed the crediting period of 10 years which is in accordance with the GCC program manual. The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 67,759 tCO_2e per year, by displacing estimated average of 104,438 MWh/year amount of electricity from the generation-mix of power plants connected to the Turkish National Power Grid, which is mainly dominated by thermal/fossil fuel based power plant. The project activity is described as Type A2-sub type 1 and has applied approved CDM methodology ACM0002 Version 20.0 and associated tools and falls into the large-scale category (as per the applied CDM methodology). No sampling approach was applied, as it was not required by the applied methodology, regarding verification of project description in accordance with the "Standard for sampling and surveys for CDM project activities and

programme of activities". In addition to generating emission reductions the wind power plant also qualifies for other voluntary certification labels

Voluntary Labels	Applied by the project	Score/ Label
Achieving the United Nations Sustainable Development Goals (SDG+)	Yes	4 out of total 17 SDG; Gold
Environmental No-net harm (E+)	Yes	+3
Social No-net harm (S+)	Yes	+2
CORSIA (C+)	Yes	All Post 2020 ACCs generated during the crediting period

In the baseline scenario the main source of emission was found to be CO_2 as the electricity was generated mainly through fossil-fuel based power plants whereas in project scenario the electricity is generated by the wind power plant thereby reducing the CO_2 emissions. Thus, the project activity was found to be acceptable as the project boundary does not include any of the GHG emissions in the project scenario as per the applied methodology.

The description in the final PSF/10/ includes sufficient details and provides clarity about the project activity. The project activity is a bundled project. The verification team also checked the GCC website and checked CDM/GS/VCS websites to determine if the project was part of any other GHG Program prior to commencement of this verification. The project has not applied for I-REC and therefore this is no double counting of the carbon credits. It is confirmed that the involved project owners have not submitted the project under any other GHG program apart from GCC. The project verification team has checked the ODA declaration document by Project owner.

In line with para 36 of the Project Standard v3.2 "Project Owners has used the GCC Project Submission Form (PSF) V3.2-2020 to provide the details of the GHG emission-reduction activity, including schematics, specifications and the description of how the project reduces GHG emissions. The project description as contained in the final PSF/10/ is found accurate and complete.

D.3 Application and selection of methodologies and standardized baselines

D.3.1 Application of methodology and standardized baselines

Means of Project Verification	The verification team assessed each applicability condition listed in the selected CDM methodology i.e., ACM0002, v20.0 (and tools) for the project activity with the relevant information contained in the initial PSF/39/ against these criteria.
Findings	One CAR (CAR 04) is raised in this section
Conclusion	The project owner has applied CDM approved large scale methodology ACM0002: Grid-connected electricity generation from renewable sources version 20.0 which is valid until 30th June 2023. This is valid to use this version as the project was listed in December 2021. The project owner did not use any standardized baseline. The project falls under sectoral scope 1- Energy industries (renewable - / non-renewable sources) (CDM TA1.2). EPIC is accredited for all the GHG sectoral scopes including sectoral scope 1. The assessment of compliance of applicable conditions of the applied methodology and the associated tools is mentioned below.

Requirements of applied CDM methodology ACM0002, V20.0	Opinion of verification team

		This methodology is applicable to grid-connected renewable power generation project activities that: (a) install Greenfield power plant; (b) involve a capacity addition to (an) existing plant(s); (c) involve a retrofit of (an) existing plant(s)/unit(s); (d) involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) involve a replacement of (an) existing plant(s)/unit(s)	The proposed project activity is a green field, Turkish grid connected renewable power plant. Document review including the project license and the provisional acceptance certificate of the project activity provided by Energy Market Regulatory Authority was checked to confirm if the project is greenfield project. Therefore, it meets the said criteria.
		The methodology is applicable under the following conditions: The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit	The project activity includes generation of electricity from the renewable source of energy and is a greenfield project. Thus, it meets the first applicability condition. This is verified from the provisional acceptance certificate of the project.
		In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity	The proposed project activity is the installation of greenfield wind power plant. Therefore, the said criteria are not applicable
		In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of reservoirs; or (b) The project activity is implemented in an existing single or multiple reservoirs, where the volume of the reservoir(s) is increased, and the power density calculated using equation (3) is greater than 4 W/m2; or (c) The project activity results in new single or multiple reservoirs and the power density calculate equation (3), is greater than 4 W/m2. (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density of any of the reservoirs, calculated using	The proposed project activity is the installation of a greenfield wind power plant. Therefore, the said criteria are not applicable

		equation (3), is lower than or equal to 4 W/m^2, all of the following conditions shall apply. (i) The power density calculated using the total installed capacity of the integrated project, as per equation (4) is greater than 4W/m^2. (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity. (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m^2shall be: (a) Lower than or equal to 15 MW; and (b) Less than 10% of the total installed capacity of integrated hydro power project	
		In the case of integrated hydro power projects, project proponent shall: (a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or (b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability indifferent seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.	The proposed project activity is the installation of a greenfield wind power plant. Therefore, the said criteria are not applicable

The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site. (b) Biomass fired power plants;	The proposed project activity is the installation of a greenfield wind power plants. Therefore, the said criteria are not applicable
In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".	The proposed project activity is the installation of a greenfield wind power plant. Therefore, the said criteria are not applicable

Requirements of Methodological tool: Tool for the demonstration and assessment of additionality	**Opinion of the project verification team**
1. The use of the "Tool for the demonstration and assessment of additionality"/19/ is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	The project owner did not propose new methodology. The project owner has applied this additionality tool in demonstrating additionality.

Requirements of tool-investment analysis/19/ v11.0	**Opinion of the project verification team**
1.) This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", the guidelines "Non-binding best practice examples to demonstrate additionality for SSC project activities", or baseline and	The project owner has applied ACM0002/9/ v20.0 for baseline and monitoring methodology. Therefore, this tool is applicable for the project owner to use.

monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.	
2)In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	The project owner has fully complied with the applied methodology and the investment analysis tool.

Requirements of common practice v3.1[/20/]	**Opinion of the project verification team**
1. This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.	The project owner had used "Tool for the demonstration and assessment of additionality"[/18/] v7.0. Hence application of this tool for common practice is accepted by the project verification team.
2. In case the applied approved baseline and monitoring methodology defines approaches for the conduction of the common practice test that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	The requirements of applied methodology specific to the project type are in line with the requirements of the common practice tool.

Requirements of Tool to calculate the emission factor of an electrical system[/21/] v7.0.	**Opinion of the project verification team**
1. This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would	The project activity involved the construction and operation of 30 MWe wind power project in Republic of Türkiye. The electricity thus generated is being sold to Turkish National grid. In the absence of the project activity, the same amount of electricity (grid electricity) would be generated in the Turkish National grid. Therefore, combined margin calculation applies to the Turkish National grid.

	have been provided by the grid (e.g. demand-side energy efficiency projects).	
	2. Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in "Appendix 1: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.	According to Ministry of Foreign Affairs, '' Republic of Türkiye was included in Annex I and Annex II lists at the very beginning of the process. At the same time, Republic of Türkiye did not take place in Annex B of the Protocol as she had not ratified the UNFCCC while the Annex B list of the Protocol was being established. In this regard, Republic of Türkiye has no obligation regarding quantified emission reduction neither in first nor second commitment periods of the Kyoto Protocol.'' The mentioned rule is for CDM projects and no CDM project is being developed in Republic of Türkiye anyway. So, it can be mentioned that this condition is not applicable, and the project is not a CDM project. For this reason, there is no problem in developing any GS, VCS and GCC projects in Republic of Türkiye. There are already more than a hundred projects registered to these standards. "Tool to calculate the emission factor for an electricity system" tool has already been used in all these projects. The project verification team has accepted the argument and confirmed that this condition is not applicable, and the project is not a CDM project.
	3. In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	"This condition of tool is Not applicable as GCC accepts project from worldwide whereas under CDM only non -Annex I country can submit projects and hence tool is referring to Annex I"
	4. Under this tool, the value applied to the CO_2 emission factor of biofuels is zero.	CO_2 emission factor of biofuels was never considered for this project activity.

D.3.2 Clarification on applicability of methodology, tool and/or standardized baseline

Means of Project Verification	The verification team assessed each applicability condition listed in the selected CDM methodology i.e., ACM0002, v20.0 (and tools) for the project activity with the relevant information contained in the PSF against these criteria.
Findings	One CAR (CAR 04) is raised in this section

Conclusion	The verification team confirms that; It has critically assessed each applicability condition listed in the selected methodology/tool and the relevant information contained in the PSF against these criteria.

D.3.3 Project boundary, sources and GHGs

Means of Project Verification	The project verification team has assessed the project boundary, selected sources and gases in accordance with applicable Project Verification requirements related to the project boundary in the Verification Standard[/6/] and Project Standard[/4/] and the applicable methodology. The project verification team has determined whether all main GHG emission sources, the project boundary of the proposed GCC project activity, and other relevant project and baseline emission sources covered in the selected methodologies and, where applicable, the selected standardized baselines are included within the project boundary for the purpose of calculating project and baseline emissions for the proposed GCC project activity using the following means of verification such as onsite observation, interview with project owners.
Findings	No CL, CAR or FAR is raised in this section
Conclusion	As per the initial PSF[/39/]submitted, the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the project power plant is connected to. Therefore, the project boundary includes the spatial extent of the power plants that are physically connected through transmission and distribution lines to supply electricity to the Indian Grid. In the baseline, CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity is applicable. In the project boundary, there are no emissions from Diesel Generator set as there is no DG set installed within the project boundary as confirmed from the remote audit. The baseline emissions are calculated based on quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the GCC project activity in project year y. Hence, emission from on-site electricity use (as import of electricity) in the project activity if any is accounted by considering the net electricity generation in the calculation of emission reduction. The project verification team reviewed the final PSF[/10/] under relevant section project boundary and accepted the source and sink of the project. Scenario mentioned in the relevant sections (under project boundary section and baseline section) is consistent. The components of the project boundary mentioned in the final PSF[/10/] were found to be in compliance with Section 5.1 Project Boundary - para 20 & 21 of the applied methodology. The geographic and system boundaries for the relevant electricity grid can be clearly identified and information on the characteristics of the Indian grid is available. The verification team confirmed that all GHG sources required by the methodology have been included within the project boundary. It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology or accuracy of the emission reductions.

D.3.4 Baseline scenario

Means of Project Verification	The baseline scenario of the project was checked as per paragraph 22 of the applied methodology (ACM0002 Version 20.0)
Findings	No CL, CAR or FAR is raised in this section
Conclusion	As per applied methodology para 22 “If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in “TOOL07: Tool to calculate the emission factor for an electricity system”.

	The project activity is setting up of wind power project by harnessing the power of wind to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied to the electricity grid by the operation of grid-connected power plants (mainly by fossil fuel fired plants) and by the addition of new generation sources, as reflected in the combined margin (CM) calculations. Hence, the baseline for the project activity is the equivalent to the amount of power from the Turkish National Power grid. The combined margin ($EF_{grid,CM,y)}$ is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM). Calculations for this combined margin must be based on data from an official source (where available) and made publically available. According to "Turkey National Network Emission Factor Data Sheet" document from Ministry of Energy and Natural Resources, Operating, Build and Combined Margin Emission Factors have been published. The Ministry has calculated the factors as using the "Tool to calculate the emission factor for an electricity system". Since it's the latest available data, published by the ministry, these factors have been considered. Calculation of the Operating Margin Emission Factor: It's been published as 0.7424 tCO_2/MWh by the Ministry of Energy and Natural Resources. Calculation of the Build Margin Emission Factor: It's been published as 0.36803 tCO_2/MWh by the Ministry of Energy and Natural Resources. Calculating of the Combined Margin Emission Factor: It's been published as 0.6488 tCO_2/MWh by the Ministry of Energy and Natural Resources. The combined margin is calculated ex-post and has been fixed for the crediting period. The baseline case is in compliance with all applicable legal and regulatory requirements references. Hence accepted by verification team as the identified baseline scenario reasonably represents what would occur in the absence of the project activity.

D.3.5 Demonstration of additionality

Means of Project Verification	Additionality of the project was checked as per paragraph 49 - 52 of GCC Project Standard v3.1[4] i.e., demonstrated using the following two components a) A legal requirement test b) An Additionality Test either based on a Positive List test or a projects-specific additionality test.
Findings	No CL, CAR or FAR is raised in this section.
Conclusion	For demonstrating the additionality under the GCC, the project activity should undergo: • **Legal requirement test:** According to the Republic of Türkiye's Electricity Market Law, it is confirmed that there are no enforced laws, statues, regulations, court orders, environmental mitigation agreements, permitting conditions or any other legally binding mandates requiring its implementation of similar technology that would achieve equivalent levels of GHG emission reductions. The verification team assessed the relevant regulations to verify the project meets the legal requirement test: 1) Electricity Market Law 2) Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy 3) Energy Efficiency Law 4) Forest Law 5) Environment Law The project meets all the above legal requirements. • **Additionality tests:** As per the applied CDM approved methodology ACM0002 version 20.0, additionality of the

	project activity is demonstrated and assessed by the latest and the valid version of TOOL 01:" Tool for demonstration and assessment of additionality" version 7.0 The project owner has adopted the stepwise approach for demonstrating and assessing the project activity as follows: **Step 0:** Demonstration whether the proposed project activity is the first of its kind. This step is optional and not used in the project activity. **Step 1:** Identification of alternatives to the project activity consistent with current laws and regulations **Sub step 1a:** As per the applied methodology paragraph 19, the project activity is the installation of a Greenfield power plant, and the baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid." Thus, the baseline scenario is applied as per the methodology. **Sub-step 1b:** Mandatory legislation and regulations for each alternative are considered in sub-step 1b. Based on the above analysis, the proposed project activity is not the only alternative amongst the project participants that is in compliance with mandatory regulations. **Step 2: Investment Analysis** Step 2 is for the demonstration of the project activity is not economically or financially feasible, without the revenue from the sale of certified emission reductions. **Sub step 2a: Determine the appropriate analysis method.** Under sub step 2a, the PO has selected the Option III i.e., The Benchmark analysis as an investment analysis method. Option I is not applicable because the project activity sells the generated electricity to the Turkish national grid which generates financial benefits other than carbon revenue related income. The Project activity does not fulfill the requirements of Option I and Option II. So, the choice of the Option III by the PO is accepted by the Verification team. **Sub step 2b: Option III. Apply benchmark analysis** **Benchmark analysis:** After tax equity IRR is used as the financial indicator for the demonstration of financial unviability for the proposed project activity. A suitable benchmark i.e., expected return on equity has been selected as benchmark comparison purposes. The source of benchmark was assessed by the verification team and the selected post-tax equity IRR and selected benchmark were found to be appropriate and in-line with the applied tools, guidelines and other supporting documents provided by the PO. Para 15 of TOOL 27 states "*Local commercial lending rates or WACC are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied by relevant national authorities are also appropriate."* In-line with the above requirements, Since the project is a mid-term investment (exceeding one year), lending rate for medium term investment has been selected as the benchmark. The lending rate for the medium-term investment as estimated by the Turkish Development Bank is 21.50% for September 2019. Thus, 21.50% is taken as the benchmark value for Project IRR after tax. Therefore, the selected benchmark value is found to be appropriate for this project and

representative of the Host country Republic of Türkiye.

Appropriateness of the Input parameters:

Item	Value	Units	Verification opinion
Installed Power	35 MWm / 30 MWe	MWm/ MWe	The installed capacity and the number of turbines of the Project activity was verified from the technical specifications and the generation license which is issued by the "Enerji Piyasası DüZenleme Kurumu", a government agency in Republic of Türkiye. The value was also cross-checked from the provisional acceptance certificate which are issued by the Ministry of Energy and Natural Resources issued at the time of commissioning.
Operational lifetime of the project	25	years	The PO used Tool 10: "Tool to determine the remaining lifetime of equipment v1" to determine the lifetime of the wind turbine. The PO chose the default value for the lifetime of the onshore wind turbines which is provided in tool 10.
Net Generation to be sold	104,438	MWh/yr	The net generation of the electricity to be sold the grid was verified from the Energy yield assessment data issued by the
Investment Cost (Wind Turbine Systems)	25,500,000	EUR	The cost of the Wind turbines was verified from the Delivery agreement and Installation agreement with ENERCON
Operating Cost	1,145,509	EUR	The Operating Cost was verified from the Agreement with ENERCON, TEİAŞ System Usage and Operation Fees for 2019 (Region 11)[6]
Investment Decision Date	23/09/2019	-	The investment date was verified from the Turbine Installation Agreement with ENERCON (Page 64-65)
Electricity tariff	Between 2020-2025: 84.25 Between 2025-2030: 65.43 After 2030: 36.53	EUR/MWh	**Between 2020-2025:** The tariff is 84.25 EUR/MWh was verified from the 5346 Law on Utilization of Renewable Energy Sources, Page 10, Schedule I & Schedule II[7] **Between 2025-2030:** The tariff is

[6] https://www.epdk.gov.tr/Detay/DownloadDocument?id=zHp5VM7Z834=
[7] https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5346&MevzuatTur=1&MevzuatTertip=5

			65.43 EUR/MWh was verified from the Law No 5346, Page 10, Schedule I[8] **After 2030:** The tariff 36.53 EUR/MWh was verified from the EMRA Electricity Market Sector Report 2018 (page IX)[9]
Depreciation Duration	10	years	The depreciation duration was verified from the Depreciation Table – Revenue Administration, Page 21, No 45.1.7[10]
Corporate Tax Rate	22	% (per cent)	The corporate tax rate was verified from the Corporate Tax Rates Table – Revenue Administration, Page 1[11]

The input values of the parameters involved in the investment analysis was cross checked against each of the evidence provided by the PO and all the values were found to be applicable at the time of the investment decision.

Sub-step 2c: Calculation and comparison of financial indicators

All the relevant costs and revenues were found to be included in the IRR sheet provided by the PO for the calculations of financial indicator. All assumptions and estimates used for input values were checked against the relevant sources. The applied benchmark of 21.05% was found to be sourced from the Turkish Development bank for mid-term investments.

The after tax Equity IRR of this project is calculated as 11.30%, which is found to be well below applicable benchmark of 21.05%. Since the IRR is lower than the benchmark, the project activity cannot be considered as financially attractive as per TOOL 01: Tool for demonstration and assessment of additionality para 42(b).

Outcome of Step 2b: As the project activity has a lower IRR (11.30%) than the benchmark (21.05%), thus the project activity cannot be considered financially attractive.

Sub-step 2d: Sensitivity analysis

A variation of ±10% in the critical assumptions (i.e., total investment, annual O&M cost, power price and Energy yield) was considered and presented by the PO however the assessment has been performed at ±10% variation is in line to the TOOL 01 version 7.0.0.

Sensitivity Analysis:

Parameter	**Power Price**			**Investment Cost**			**Energy Yield**			**Operating Cost**		
Variance	-10%	0%	10%	-10%	0%	10%	-10%	0%	10%	-10%	0%	10%
Project IRR After Tax (for 25 years)	9.61%	11.30%	12.92%	13.13%	11.30%	9.77%	9.46%	11.30%	13.06%	11.61%	11.30%	10.99%

[8] https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5346&MevzuatTur=1&MevzuatTertip=5
[9] https://www.epdk.gov.tr/Detay/DownloadDocument?id=X/fUh6+7kaM=
[10] https://www.gib.gov.tr/sites/default/files/fileadmin/user_upload/Yararli_Bilgiler/amortisman_oranlari.pdf
[11] https://gib.gov.tr/sites/default/files/fileadmin/user_upload/Yararli_Bilgiler/KV_Oranlari.html

The assessment of the variation is as follows:

Parameter	Variation	Verifier opinion
Power Price	±10%	The revenue from the electricity is dependent on electricity tariff and electricity generation. The PO has applied a value of 84.25 EUR/MWh for the first five years and 65.43 EUR/MWh for the second five years and 36.53 EUR/MWh for the next consecutive years. However, the revenue has been calculated based on the maximum amount of electricity to be generated by the project activity and therefore the likelihood of the project producing more power is not possible. The project activity is unlikely to produce power generation during the peak hours due to the intermittent nature of the wind. The verification team analyzed the impact on the project IRR by increasing the power price by 10%, the resultant IRR is 12.92% which does not cross the benchmark.
Investment Cost	±10%	The total investment cost has been subjected to sensitivity and it is observed from IRR sheet that the benchmark is not breached even at 10% lower costs. Moreover, the project expense undertaken alone is higher (36.35 million Euros). Hence it is unlikely to reduce the cost of the investment of the project activity.
Energy Yield	±10%	The benchmark is not breached even if the energy yield is increased by 10%. The resultant IRR is 13.06% which is lesser than the benchmark 21.05%
Operating cost	±10%	The additionality of the project is not impacted even if the operating costs decrease by 50%, the project cannot reach the benchmark of 21.05% which is impossible to happen.

Hence, it is concluded that the benchmark is not breached:

- When electricity revenue increases by 10%.
- When Investment cost is decreased by 10%.
- When Energy yield is increased by 10%.
- When Operating cost is decreased by 10%.

The sensitivity analysis result is found to be appropriate and is calculated in-line with the TOOL 01 version 7.0.0. verified from the IRR sheet.

Step 4: Common Practice Analysis:

The sensitivity analysis is as per step 4 of the “Tool for the demonstration and assessment of additionality”, version 7.0.0 and according to “Common Practice” Tool 24 version 03.1.

Step 1: The applicable capacity calculated as ±50% of the total design capacity of proposed project activity is 15 MW and 45 MW as the proposed project has a capacity of 30 MW.

Step 2: All similar projects which fulfil the criteria given in TOOL 24 para 14 were identified by the PO considering the whole country of Republic of Türkiye as the applicable geographical area. A total of 16 projects were found in the applicable geographical area as

	checked from the Electricity Production License Database (YEKDEM) by EMRA for 2020 which is the latest available year before the start date of the project activity. **Step 3:** It is noted that Republic of Türkiye is an Annex I country and hence the number of ongoing similar project seeking incentives from carbon revenue was checked from the websites/registries of other GHG programs (VCS, GS, GCC,). It is confirmed that the number of projects neither registered nor submitted for registration (N_{all}) value of 6 projects is appropriately determined. **Step 4:** Projects with technologies different to technology applied in the proposed activity were identified as N_{diff}=3. **Step 5:** The factor F is found to be calculated in line with TOOL 24 version 03.1. F=1- N_{diff}/N_{all} = 1 – (3/6) = 0.5 N_{all}-N_{diff}= 6-3 For the concerned project activity, F=1 and N_{all}-N_{diff}= 3, therefore, the proposed project is not a common practice within the applicable geographical area. Hence, the proposed project is additional.

D.3.6 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	The project verification team determined whether the steps taken and the equations and parameters to calculate the emission reductions or net anthropogenic removals are in accordance with the applicable Project Verification requirements related to emission reductions in the Verification Standard/6/ and Project Standard/4/ and the applicable methodology using using the remote audit observation, interview and review of technical specifications/11/, provisional acceptance protocol documents/12/, power purchase agreement/14/, FSR/25/ etc.
Findings	No CL, CAR or FAR is raised in this section.
Conclusion	The verification team confirms that the methodology is correctly applied, the selected methodology (i.e., ACM0002, version 20.0) is applicable to the project and selected version of the methodology is valid at the time of submission for registration. As per the paragraph 54 of the methodology ACM0002, Version 20.0 emission reductions are calculated as follows **Emission Reductions:** $ER_y = BE_y - PE_y$ Where, ER_y = Emission reductions in year y (t CO_2e/yr) BE_y = Baseline emissions in year y (t CO_2/yr) PE_y = Project emissions in year y (t CO_2/yr) **Baseline Emissions:** In line with CDM approved large scale Methodology ACM0002 version 20.0 “Baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity “. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows: $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ Where,

	BE_y = Baseline emissions in year y (t CO_2/yr) $EG_{PJ,y}$= Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr) $EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (t CO_2/MWh) As per para 1 of ACM0002, version 20.0, when the project activity is installation of Greenfield power plant, then: $EG_{PJ,y} = EG_{facility, y}$ Where, $EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr) $EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr) As per the methodology combined margin, grid emission factor has been calculated as per the "Tool to calculate the grid emission factor for an Electricity System" version 7.0. For the emission factors, that were used to calculate estimated emission reductions, publication of Turkish Ministry of Energy and Natural Resources which is indicating Turkey"s National Electric Grid Emission Factor for the year of 2020 was used. Publication includes calculated Emission Factor values that are Operating Margin (OM), Growth Based Margin (Build MarginBM) and Combined Margin (CM) Emission Factors, for the relevant year with usage of the Clean Development Mechanism Tool 07-V07.0. For this calculation, information regarding used data set is given below in detail; • TEİAŞ Turkey's electricity generation-consumption and loss statistics, • Common prepared report under Turkey's National Greenhouse Gas Inventory Reporting Format. - Common Reporting Format (CRF) tables for electricity generation (1.A.1.a.i) emission values • Chronological order of power generation plants from TEİAŞ Load Dispatch Department with commissioning dates, plant names, fuel types, installed power values, electricity generation for the calculated year • Checking from the websites of Gold Standard (GS) and Verified Carbon Standard (VCS) for the ownership status of the carbon reduction certificate and, • From Clean Development Mechanism (CDM) Tool 009- V2.0, Power plant efficiency figures are used According to this publication; Operating Margin-OM: 0.7424 tCO_2/MWh Build Margin-BM: 0.36803 tCO_2/MWh Combined Margin-CM (for solar and wind): 0.6488 tCO_2/MWh . **Project emissions:** The proposed project activity involves the generation of electricity by development of a wind plant. The generation of electricity does not result in greenhouse gas emissions and therefore is taken as 0 tCO_2/year.

	Leakage: No Leakage emissions are considered. The main emission potentially giving rise to leakage in the context of electrical sector projects is emission arising due to activities arising such as power plant construction and upstream emission from fossil fuel use (e.g. extraction, processing, and transport). These emission sources are neglected. Then: $ER_y = BE_y$ **Baseline emissions:** Baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity, calculated as follows: $BE_y = EG_y$ - x $EF_{grid,CM,y}$ Where: BE_y = Baseline emissions in year y (tCO_2/yr). EG_y = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y. $EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system (version 07.0)". Then: $ER_y = BE_y = EG_y * EF_{grid,CM,}$ = 104,438 MWh/year * 0.6488 tCO_2/MWh = 67,759 tCO_2/year

D.3.7 Monitoring plan

Means of Project Verification	The project verification team determined whether the monitoring plan is in accordance with the applicable Project Verification requirements related to the monitoring plan in the Verification Standard[/6/] and Project Standard[/4/] and the applicable methodology using using the onsite observation, interview and review of technical specifications, provisional acceptance documents, power purchase agreements etc.
Findings	No CL, CAR or FAR is raised in this section.
Conclusion	The monitoring plan has been documented as per the methodology ACM0002, in a complete and transparent manner. The monitoring plan is as described in Section B.7 of final PSF[/10/]. The verification team, based on document review and interviews with the relevant personnel, confirms that the proposed monitoring plan is feasible within the project design. Further, the monitoring methodology, data management, and quality assurance and quality control procedures to be implemented in the context of the project will be implanted by the managing entity i.e., project owner. Therefore, the project owner will be able to implement the monitoring plan and the achieved emission reductions can be reported and verified. As per the monitoring plan in final PSF[/10/], there is only one parameter to be monitored i.e., EG_y = Quantity of net electricity generation supplied by the project (wind) plant/unit to the grid in year y.

	According to the methodology applied, the electricity supplied to the national grid by the project and the electricity consumed by the project activity shall be monitored. The net electricity is the difference of the electricity supplied and consumed by the project and shall be considered for emission reduction calculations. Two power meters are installed at the grid interface of the project. One is the main meter and the other is back-up meter for cross-checking. Both meters are jointly inspected and sealed to be protected from interference by any of the parties. TEİAŞ is performing remote reading of the meters and monthly power meter readings are the basis for monitoring net electricity fed into the grid. EPİAŞ records will used as the source of net generated electricity value and meter reading forms issued by TEİAŞ will be used for the crosscheck. **Roles and Responsibilities of the Monitoring Team:** The responsibility of project management as well as monitoring, measurement and reporting lies with Life Enerji as the Karlıtepe Enerji A.Ş.'s carbon consultant. In other words, the project proponent has formulated a Monitoring Team to ensure proper and continuous monitoring of the emission reductions as well as performance of turbines and generation of power. To ensure trouble free operation of all the wind turbines, Karlıtepe Enerji A.Ş. has entered into a comprehensive Operation and Maintenance agreement with the manufactures of the turbines. The contractor, Siemens, would be responsible for the operation and maintenance of the WTGs. The O&M personnel are qualified engineers and are trained at the WTG manufacturing facility of Enercon. The monitoring team will interact with the O&M contractors as well as the National Authority officials for executing the monitoring plan. **Metering Arrangements and Procedures:** The electricity exported from the sub-station will be metered using electronic meters. A main and check meter would be installed for every feeder and at the sub-station of the state utility. On a monthly basis, a joint meter reading will be carried out in the presence of the national authority officials and representatives of the project promoters. The power from all feeders would be exported to the sub-station of the state utility, from where it would be exported to the grid. A calculation would be carried out to calculate electricity generated from the project activity. **Calculation of Net Electricity Exported from Project Activity:** The net electricity supplied to the grid by project activity is recorded in electricity generation statements of Karlıtepe WPP. The main billing meter at substation records total supplied, and total consumed by all the connected WTGs. Additionally, the O&M contractors maintain records of the electricity generation from WTGs. This data is used for the calculation of electricity supplied and consumed by WTGs. The net electricity generation by the WTGs of Karlıtepe WPP would be calculated by: Net electricity generation amounts by project activity = Total electricity generated by project activity - Total electricity consumed by project activity

	The above calculations are under purview of state electricity board and PP do not have any control on it. The monitoring plan mentioned the generation, consumption, and net electricity parameters available with PP. As a result, the net electricity generation amounts are calculated by subtracting electricity withdrawn from the grid from electricity supplied to the grid. **Quality control and Quality Assurance Procedures:** **Calibration Procedures:** Main meters and check meters are installed for monitoring the energy exported. According to the 'Regulation of Metering and Testing of Metering Systems', the main and check meters shall be calibrated once in a decade with reference to a portable standard meter. The meters shall be deemed to be working satisfactorily if the errors are within specifications for meters' accuracy class. The data registered by the main meter alone will be adopted for the purpose of calculation as long as the error in the main meter is within permissible limits. If during the annual accuracy tests, the main meter is found to be within the permissible limit of error and the corresponding check meter is beyond the limits, the main meter reading shall be considered as usual. However, the check meter shall be calibrated immediately. If the main meter is found to be beyond the permissible limits of error, but corresponding check meter is within limits, then the check meter reading shall be adopted for that period. The main meter shall be calibrated immediately. **Data collection and archiving** The daily data on electricity generation from WTGs at the site is collected in electronic form. Monthly Karlıtepe WPP statements are collected and maintained in hard copy and archived electronically. The project proponent shall keep complete and accurate records of all the data as a part of monitoring for at least a period of 2 years after the end of the crediting period or the last issuance of ACCs for the project activity, whichever occurs late. The final PSF/10/ describes the monitoring system, monitoring procedures, data collection and reporting, responsibilities of relevant staff/departments, emergency procedures, calibrations that were implemented and QA/QC procedures. The verification team confirmed the data collection mechanism is as described in the Monitoring Plan of the final PSF/10/. It was confirmed that the QA/QC procedures implemented at the site are consistent with the final PSF/10/.

D.4 Start date, crediting period and duration

Means of Project Verification	The project verification team determined whether the start date of the Project, expected operational lifetime, crediting period and duration in accordance with the applicable Project Verification requirements in the Verification Standard and Project Standard using the remote audit observation, interview and review of technical specifications, provisional acceptance documents, operational log, FSR, power purchase agreement etc.
Findings	No CL, CAR or FAR is raised in this section
Conclusion	The project verification team has reviewed the operational log/12/. It is confirmed that the project has started commercial operation from 23rd October 2020. So, the project falls under type A1 project. As per the FSR, lifetime of the project is 25 years. Hence 10-year crediting period is applicable. For type A1 project, the start date of the crediting period would be from the start date of the operations of the GCC Project Activity i.e. from 23/10/2020 and 22/10/2030 (10 years).

D.5 Environmental impacts

Means of Project Verification	The project verification team determined the analysis of the environmental impacts and, if considered significant by the Project Owners or by the host Party, the environmental impact assessment are in accordance with the applicable Project Verification requirements related to the environmental impacts in the Verification Standard and Project Standard using using the onsite observation, interview and review of technical specifications, EIA report, Host country nationals standards, etc.
Findings	NO CL, CAR or FAR is raised in this section.
Conclusion	The verification team checked the relevant regulations and laws in Republic of Türkiye. In line with Turkish environmental regulations, an "Environmental Impact Assessment (EIA) not required letter/15/" was approved by the Ministry of Environment and Urbanization in 08/11/2017 (Section D&E of final PSF/10/) and found that wind power projects are not among the activities that requiring an EIA since it will not have negative environmental impacts. Hence the proposed project does not require an EIA study.

D.6 Local stakeholder consultation

Means of Project Verification	The project verification team determined the local stakeholder consultation process was in accordance with the applicable Project Verification requirements related to the local stakeholder consultation in the Verification Standard and Project Standard using the remote audit observation, interview with local stakeholders and review of LSC documents.
Findings	One CL (CL 02) is raised in this section
Conclusion	LSC was conducted on 9th November 2021 the consultation was done by using information notes and evaluation forms sent to the local stakeholders via e-mail. Therefore, the consultation was done by using information notes and evaluation forms sent to the local stakeholders via e-mail. The project verification team have also checked all evaluation forms received and confirmed that no negative opinion on the proposed project from local stakeholders.

D.7 Approval and Authorization- Host Country Clearance

Means of Project Verification	The project verification team has determined whether the approval and clearance from the host-country was in accordance with the applicable Project Verification requirements related to the approval in the Verification Standard and Project Standard.
Findings	NO CL, CAR or FAR is raised in this section
Conclusion	There is no host country approval or authorisation required for the GCC project.

D.8 Project Owner- Identification and communication

Means of Project Verification	The project verification team has determined whether the Project Owners and their communication details as provided in the PSF are in accordance with the applicable Project Verification requirements related to the modalities of communication in the Verification Standard and Project Standard using interview with project owners, review of letter of authorisation, business licences etc.
Findings	No CL, CAR or FAR is raised in this section.
Conclusion	The verification team checked and found the information and contact details of the representation of the project owner. Hence the verification team confirms that all the information presented is consistent between these documents.

D.9 Global stakeholder consultation

Means of Project Verification	The project verification team has determined whether the global stakeholder consultation process was in accordance with the applicable Project Verification requirements related to the global stakeholder consultation in the Verification Standard and Project Standard by checking the GCC website.
Findings	No CL, CAR or FAR was raised in this section.

Conclusion	The project was submitted for GSC from 27th December 2021 to 10th January 2022 (15 days). But there were no comments received from public stakeholders. https://www.globalcarboncouncil.com/global-stakeholders-consultation/

D.10 Environmental Safeguards (E+)

Means of Project Verification	The project verification team has determined whether the Project Owner has chosen to apply for this certification label and whether PSF (in section E) has provided the information required regarding the Environmental Safeguards as per Verification Standard and Project Standard and that the Project Activity will not cause any net-harm to the environment as per Verification Standard and Project Standard using the onsite observation, interview and review of technical specifications, EIA report, Host country nationals standards etc.
Findings	NO CL, CAR or FAR is raised in this section
Conclusion	The verification team based on the documentation review confirms that the project activity is not likely to cause any negative harm to the environment but would have a positive impact, hence, is eligible to achieve additional E+ certifications The Project owner has chosen to apply for the Environmental No-net-harm Label (E+). The assessment of the impact of the project activity on the environmental safeguards has been carried out in section E.1 ("Environment - Land" part) of the PSF. Out of all the safeguards no risks to the environment due to the project implementation were identified and the following have been indicated as positive impacts a) Environment – Air; CO_2 emissions (+1): The project reduces the CO_2 emissions from entering into atmosphere by generating power from wind energy which would have been otherwise generated from the Fossil fuel based power plants in the absence of project activity which has been calculated by the combined margin emission factor as mentioned in the PSF. b) Environment – Natural Resources; Replacing fossil fuels with renewable sources of energy (+1): Project activity causes positive impact on the environment by replacing the fossil fuels with the renewable energy sources of energy (Wind power). Hence harmless . c) Environment – Natural Resources; Replacing fossil fuels with renewable sources of energy (+1): The generated electricity by the project activity will be continuously measured and the related CO_2 emission reduction will be calculated according to the applied methodology. The verification team confirms that the project activity will not cause any net harm to the environment and the net score for the project activity is (+3)

D.11 Social Safeguards (S+)

Means of Project Verification	The project verification team has determined whether the Project Owner has chosen to apply for this certification label and whether PSF (in section E) has provided the information required regarding the Social Safeguards as per Verification Standard and Project Standard and that the Project Activity will not cause any net-harm to the society as per Verification Standard and Project Standard using the onsite observation, interview, review of employee records etc.
Findings	No CL, CAR or FAR is raised in this section
Conclusion	The project owner has submitted the certification labels targeted (S+) is clearly reported in the PSF. The project is not likely to cause any net-harm to the society (S+) and complies with the Environmental and Social Safeguards Standard. The project owner has demonstrated in the PSF that project Activity does not cause any net harm to society. The project owner has identified the social impacts, DNH assessment, action plans, monitoring etc in the PSF. The project owner has reported

in the PSF stating that the social impacts anticipated resulting from their Project Activity. The project is unlikely to cause any net harm to the society.

The project owner has conducted Do-No-Harm Risk Assessment to determine the severity of identified impacts and classified them into not applicable or harmless or harmful.

Particulars	**Project verification opinion**
Social impacts on the identified categories-indicators	1)Social-Jobs-Long term jobs (>1 year) created or lost (+1)
Description of impact	The project provides long term job opportunities during operation.
Legal requirement	National employment regulations
Severity of impacts (Do Not Harm Assessment) (Not applicable/ Harmless/ Harmful)	Therefore, it is termed as harmless.
Monitoring	Records of People employed (at least 8 people) (Social Security Records) by the project will be maintained. The monitoring is as per the PSF.
Particulars	**Project verification opinion**
Social impacts on the identified categories-indicators	2)Social Welfare- Community and rural welfare (+1)
Description of impact	The project activity provided short term job opportunities during the construction phase of the project.
Legal requirement	There is no legal requirement for local job creation.
Severity of impacts (Do Not Harm Assessment) (Not applicable/ Harmless/ Harmful)	Therefore, it is termed as harmless.
Monitoring	Site personnel will be interviewed on permanent job opportunities.

As reported in the final PSF[/10/], the project owner has assessed the Project Activity is not likely to cause any harm to the society. The project is not likely to cause any net-harm to the society (S+) and complies with the Environmental and Social Safeguards Standard.

D.12 Sustainable development Goals (SDG+)

Means of Project Verification	The project verification team has determined whether the Project Owner has chosen to apply for this certification label and whether PSF (in section F) has provided the information required regarding the contribution towards achieving the United Nations Sustainability Development Goals (SDGs) as per Verification Standard and Project Standard and that the Project Activity will contribute towards achieving the United

	Nations Sustainability Development Goals (SDGs) as per Verification Standard and Project Standard using onsite observation, interview with the project owner, review of initial PSF[/39/], ER sheet, SDG goals, employee records, etc.
Findings	No CL or CAR is raised in this section
Conclusion	The assessment of the contribution of the project activity on United Nations Sustainable Development Goals has been carried out in section F of the PSF. Out of the 17 Goals project activity has no adverse effect on any of the goal and contribute to following 04 SDGs which are SDG 6, SDG 7, SDG 11 and SDG 13. **SDG 7.** Energy**:** The project contributes: SDG Target 7.2 "By 2030, increase substantially the share of renewable energy in the global energy mix" by the utilization of biomass as a renewable energy source. SDG target 7.2.1.: Renewable energy share in the total final energy consumption. The project installation of 30 MWe wind power project and it generates electricity of 104,438 MWh per year. It would increase the renewable energy share in the total final energy consumption. The installation of wind project is voluntarily in nature. It positively affects the chosen SDG indicator. In the absence of the project, the equivalent amount of electricity would be generated from Turkish National Power Grid, which is GHG intensive. **Goal 8.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all SDG Target 8.5, "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities and equal pay for work of equal value." SDG target 8.5.1.: "Average hourly earnings of employees by sex, age, occupation and persons with disabilities" The project activity is expected to create 8 permanent jobs in the renewable energy sector with contribution to the local economy as many employees are from the local community. During the construction phase, the project activity provided short-term employment. This was verified from the employment records. **Goal 9**. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation SDG Target 9.4 requires "By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities". The project helps the Target 9.4 by implementing a clean, reliable and environmental-friendly infrastructure for clean energy production / up-to-date industrialization. Indicator: 9.4.1 CO_2 emission per unit of value added The wind power is cost-effective as the electricity from the wind power plants is sold at a fixed price over a long period of time and its fuel is free, wind energy mitigates the price uncertainty that fuel costs add to traditional sources of energy. Wind energy doesn't pollute the air like power plants that rely on combustion of fossil fuels, such as coal or natural gas, which emit particulate matter, nitrogen oxides, and sulfur dioxide—causing human health problems and economic damages. Wind power

	plants don't produce atmospheric emissions that cause acid rain, smog, or greenhouse gases. The solar energy is sustainable. **Goal13** Climate Change: SDG target 13.3.; Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning SDG target 13.3.2.: Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions - Project owner operates the plant since 2020 and complies with targeted SDGs so far. Since the project uses solar energy, there is no GHG emissions related to the project activity. It eliminates 67,759 tCO_2e annually. Since the project contributes to the 4 SDGs, level of certification label is gold level.

D.13 Authorization on Double Counting from Host Country (for CORSIA)

Means of Project Verification	The project verification team has determined whether the Project Owner has chosen to apply for CORSIA (section A.6 of initial PSF[/39/]) and has obtained and provided, a written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA Emissions Unit Eligibility Criteria as required by Verification Standard and Project Standard and whether the Project Activity will not lead to double counting of ACCs as per Verification Standard and Project Standard using interview with the project owner, review of CDM, GS, Verra websites and declaration from the project owner.
Findings	One CAR (CAR 07) is raised in this section.
Conclusion	As per the PSF, Karlıtepe WPP, as a large-scale wind power plant project, serves as a perfect project to demonstrate long-term potential of wind energy as a means to efficiently reducing GHG emissions as well as to diversifying and increasing security of the local energy supply and contributing to a sustainable development. Wind driven turbines rotates in generators and electricity generated here is transferred to the grid for consumer without any greenhouse gas emissions. ACCs from the project activity shall help to realize this seminal technology by providing an adequate compensation for the lacking financial incentives in the Turkish renewable energy market. On the other hand, Project owner confirms that the carbon credits (ACCs) from the Project Activity shall not be double counted. The project activity is being registered only with GCC and no other carbon standard nor Renewable Energy Certification Program.

D.14 CORSIA Eligibility (C+)

Means of Project Verification	The project verification team has determined whether the Project Owner has chosen to apply for CORSIA (section A.6 of PSF) and that the Project Activity will be eligible to generate ACCs compatible with the requirements of CORSIA Emissions Unit Eligibility Criteria as required by Verification Standard and Project Standard using interview with the project owner, review of CDM, GS, Verra websites and declaration from the project owner.
Findings	No CLs or CARs raised in this section
Conclusion	The Project Activity complies with all the applicable requirements of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.1 paragraph 21-23,

	and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project. The project activity meets the CORSIA Eligibility since the crediting period is after 01/01/2016 and the project is applying for registration under GCC which is one of the approved programme for eligibility.

Section E. Internal quality control

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After the completion of assessment by the project verification team all the relevant documentation is submitted to a qualified, Independent Technical reviewer as part of EPIC' internal quality control system. A Technical reviewer team is appointed to review the draft final project verification report. The comments made by the technical reviewer team are taken into consideration and incorporated in the final project verification report. The technical reviewer team assesses whether all the reporting requirements have been fulfilled and whether all the issues raised were closed satisfactorily by the project verification team with justification. The technical review process can also raise issues in this regard which is resolved further by the project verification team to the satisfaction of the technical reviewer. The technical reviewer team either accepts or rejects the report made by the project verification team. The final project verification report (after resolutions of all findings) is then submitted to the quality manager for review and subsequently for director's approval.

Section F. Project Verification opinion

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EPIC Sustainability Services Private Limited (EPIC) has been contracted by Lifeenerji on behalf of GCC project owner **Karlıtepe Enerji AS** to undertake the independent project verification of the GCC project activity titled "**Karlıtepe Wind Power Project**". The objectives of this project verification is to verify that the GCC project meets the requirements of GCC project framework v2.1[/1/], GCC program manual v3.1[/2/], GCC program processes v4.0[/3/], GCC project standard v3.1[/4/], GCC project sustainability standard v2.1[/5/], GCC verification standard v3.1[/6/], GCC Environment & Social safeguards standard v2.0[/7/], ISO 14064-2 & ISO 14064-3, applicable **CDM approved large scale Methodology"ACM0002 Grid-connected electricity generation from renewable sources, ver: 20.0[/9/]**, Applicable Legal requirements/rules of host country, National Sustainable Development Criteria and CORSIA requirements and other GCC requirements related to aspects such as project design, applicable conditions, project boundary, baseline scenarios, additionality, emission reduction, monitoring plan, local stakeholder consultation, global stakeholder consultation, GHG emission reductions (ACCs), environmental no-net harm label (E+), social no net harm label (S+), **gold SDG label (SDG+)**, CORSIA+. This report summarizes the final project verification opinion which is based on **Project Submission Form v4.0**.

The GCC project activity involved the construction and operation of Greenfield 35 MW wind power plant in Republic of Türkiye. The expected net annual electricity generation of the project activity is approximately 104,438 MWh. The electricity thus generated will be sold to the Turkish national grid. In the absence of the project activity, the equivalent amount of electricity would be supplied from GHG intensive Indian grid. The emission reduction will be based on the amount of baseline electricity avoided due to the project and is calculated using the applied **CDM approved large scale Methodology "ACM0002 Grid-connected electricity generation from renewable sources, ver: 20.0[/9/].**

The project verification team has verified that the information submitted by the project owner is correct and that the emission reduction achieved has been determined correctly. Based on the information seen and evaluated, the project verification team has requested for registration of the GCC by confirming the following:

Project title:	Karlıtepe Wind Power Project
Sector and Methodology used	Sectoral Scope 1: Energy Industries (renewable/non-renewable sources) CDM approved large scale Methodology, "ACM0002 Grid-connected

	electricity generation from renewable sources, ver: 20.0[9].
Estimated Emissions reductions	67,759 tCO_2e per year
Voluntary certification labels	E+, S+, SDG+ (Gold level) and C+

Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits
CAP	Installed Capacity
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification request
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DVR	Draft Validation Report
EIA	Environmental Impact Assessment
EPIC	EPIC Sustainability Services Private Limited
ER	External Resources
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Green House Gas
GSCP	Global Stakeholder Consultation Process
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
IR	Internal Resources
ISO	International Organization for Standardization
LSC	Local Stakeholder Consultation
PSF	Project Submission Form
PVR	Project Validation Report

Appendix 2. Competence of team members and technical reviewers

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The following validation team has been assigned to carry out the project verification of the project.

Name	**Mr. R. Vijayaraghavan**	**Mr. TVVMARUTHI SUMAN**	**Mr. A. Prabu Das**
Role	Lead Auditor	Auditor	Technical Reviewer
Competence in the TA	Sector 1	Sector 1	Sector 1
Responsibility	Doc review, Interview, DVR preparation, DVR resolution, FVR preparation	Doc review, Interview, DVR preparation, DVR resolution, FVR preparation	Technical review, Doc review, Interview, DVR preparation, DVR resolution, FVR preparation

A brief summary of the personnel involved in the validation is indicated below.

Mr. R. Vijayaraghavan holds BE in Mechanical Engineering, M. Tech in Energy Conservation and Management and MBA in Technology Management. He is certified as Energy Auditor by Bureau of Energy Efficiency (BEE), Government of India. He has 15 years of working experience in energy sector including 11 years as validator. He has successfully completed around hundred CDM, VCS/GS projects. He has

been qualified as Lead Auditor for Sectoral Scope 1, 3 and 13

Mr. TVV MARUTHI SUMAN, holds Doctorate in Environmental Science & Engineering, M. Tech in Energy Systems and BTech in Electrical & Electronics Engineering. He has 12 years of working experience in Construction of wind power projects and Electrical Power Transmission & Distribution projects in India and Overseas.

Mr. A Prabu Das, holds a Master of Technology degree in Energy Conservation and Management. He has around 16 years of working experience. He is an approved GHG Lead Auditor and Technical Reviewer for EPIC as per the applicable scheme rules and stipulations.

Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	GCC	GCC project framework v2.1, https://www.globalcarboncouncil.com/wp-content/uploads/2021/10/GCC-Program-Framework-v2.1-1.pdf	1	Publicly available
2	GCC	GCC program manual v3.1, https://www.globalcarboncouncil.com/wp-content/uploads/2021/10/GCC-Program-Manual-v3.1.pdf	2	Publicly available
3	GCC	GCC program processes , V3.0 https://www.globalcarboncouncil.com/wp-content/uploads/2021/10/GCC-Program-Processes-v4.pdf	3	Publicly available
4	GCC	GCC project standard v3.1, http://globalcarboncouncil.com/wp-content/uploads/2021/10/Project-Standard-v3.1.pdf	4	Publicly available
5	GCC	GCC project sustainability standard v2.1, http://globalcarboncouncil.com/wp-content/uploads/2021/10/Project-Sustainability-Standard-v2.1.pdf	5	Publicly available
6	GCC	GCC verification standard v3.1, http://globalcarboncouncil.com/wp-content/uploads/2021/10/Verification-Standard-v3.1.pdf	6	Publicly available
7	GCC	GCC Environment & Social safeguards standard v2.0 http://globalcarboncouncil.com/wp-content/uploads/2021/10/Environment-and-Social-Safeguards-Standard-v2.pdf	7	Publicly available
8	GCC	GCC Program definitions v3.1 http://globalcarboncouncil.com/wp-content/uploads/2021/10/Program-Definitions-v3.1.pdf	8	Publicly available
9	CDM	ACM0002 Grid-connected electricity generation from renewable sources, ver: 20.0	9	Publicly available
10	Project owner	Project Submission form v5.0	10	Project owner
11	Karlitepe Wind Power Project	Technical specifications Characteristics of wind turbines, Main &	11	Project owner

		Back up meters, Control room Building plan, Technical details, site Photos ,videos, stakeholders		
12	Turkish National Grid	Provisional acceptance documents-electricity operation	12	Project owner
13	GCC	PSF template requirements v3.2 https://www.globalcarboncouncil.com/wp-content/uploads/2021/10/Project-Submission-Form-v3.2.docx	13	Publicly available
14	Turkish National Grid and project owner	Connection agreement between PO and TEIAS	14	Project owner
15	Karlitepe Wind Power Project	EIA not required	15	Project owner
16	Project owner	Social Security institution – Service list of employees	16	Project owner
17	Karlitepe Wind Power project & Life Enerji	Agreement between Karlitepe Enerji A.S & Life Enerji	17	Project owner
18	UNFCCC	Tool for the demonstration and assessment of additionality v7.0 https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf	18	Publicly available
19	UNFCCC	Tool-investment analysis v11.0 https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v11.0.pdf	19	Publicly available
20	UNFCCC	Tool -Common practice v3.1 https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf	20	Publicly available
21	UNFCCC	Tool to calculate the emission factor of an electrical system v7.0 https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf	21	Publicly available
22	GCC	GCC clarification no 1, version 1.1-2022 https://www.globalcarboncouncil.com/wp-content/uploads/2022/01/Clarification-No.-01.pdf	22	Publicly available
23	Karlitepe Enerji A.S	Construction Agreement between Karlıtepe Enerji A.Ş. and Eon Danışmanlık Mühendislik Dış Tic. İnş. San. Ltd. Şti. (	23	Project owner
24	Karlitepe Enerji A.S	Energy Yield Assessment report by Ucyel Enerji	24	Project owner
25	Karlitepe Enerji A.S	EPIAS ELECTRICITY SALE INVOICE sample	25	Project owner
26	UNFCCC	Guidelines on the assessment of investment analysis v5.0 https://cdm.unfccc.int/Reference/Guidclarif/reg/reg_guid03.pdf	26	Publicly available
27	Karlitepe Enerji A.S	Signed copy of GCC letter of AUTHORIZATION	27	Project owner
28	Karlitepe Enerji A.S	Generation License	28	Publicly available
29	Karlitepe Enerji A.S	Common Practice v1.0	29	Publicly available
30	Karlitepe Enerji A.S	Land use right document	30	Publicly available

31	UNFCCC	Guidelines for the reporting and validation of plant load factors v1.0 EB48 Annex 11 https://cdm.unfccc.int/Reference/Guidclarif/meth/meth_guid35.pdf	31	Publicly available
32	Project owner	Single line diagram	32	Project owner
33	Karlitepe Enerji A.S	Combined Margin sheet (CM) v1.0	33	Project owner
34	Karlitepe Enerji A.S	IRR sheet v1.0	34	Project owner
35	Project owner	Local Stakeholder Consultation (LSC) document	35	Project owner
36	GCC	GCC website (to support GSC/listing) https://www.globalcarboncouncil.com/global-stakeholders-consultation/	36	Publicly available
37	United Nations-Department of Economic and Social Affairs	SDG goals https://sdgs.un.org/goals	37	Publicly available
38	Project owner	Declaration on 'no double counting' claim	38	Project owner
39	Project Owner	PSF v2.0	39	Project Owner

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

Table 1. Table 1. CLs from this Project Verification

CL ID	01	**Section no.**	D.3.1	**Date:** 27/01/2022
Description of CL				
As per para 5 of the Emission factor tool v7.0, the tool is not applicable to the Annex I countries like Republic of Türkiye. In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.				
Project Owner's response				**Date:** 10/02/2022
According to Ministry of Foreign Affairs; ''Turkey was included in Annex I and Annex II lists at the very beginning of the process. At the same time, Turkey did not take place in Annex B of the Protocol as she had not ratified the UNFCCC while the Annex B list of the Protocol was being established. In this regard, Turkey has no obligation regarding quantified emission reduction neither in first nor second commitment periods of the Kyoto Protocol.'' The mentioned rule is for CDM projects and no CDM project is being developed in Turkey anyway. So, it can be mentioned that this condition is not applicable, and the project is not a CDM project. For this reason, there is no problem in developing many GS, VCS and GCC projects in Turkey. There are already more than a hundred projects registered to these standards. "Tool to calculate the emission factor for an electricity system" tool has already been used in all these projects.				
Documentation provided by Project Owner				
Tool for the demonstration and assessment of additionality v7.0 https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf				
GCC Project Verifier assessment				**Date:** 10/02/2022
The project verification team has accepted the argument and confirmed that this condition is not applicable, and the project is not a CDM project. Hence, CL01 is closed				

CL ID	02	Section no.	D.6.	Date: 27/01/2022
Description of CL				
Please provide LSC document.				
Project Owner's response				**Date:** 10/02/2022
This is not a Gold Standard project. For this reason, any LSC document has not been prepared except from the PSF. English and Turkish versions of the evaluation forms received from the local people regarding the Local Stakeholder Consultation process are available at PSF. A summary of comments received from local stakeholders is also provided in the section G.2 of the PSF. Additionally, screenshot of the e-mails sent to institutions on 09/11/2021 are now provided. Also, a video has been provided where local stakeholders expressed their opinions regarding the Karlıtepe WPP.				
Documentation provided by Project Owner				
LSC document //41//				
GCC Project Verifier assessment				**Date:** 10/02/2022
The project verification team reviewed the LSC document and accepted the same. Hence, CL 02 is closed.				

Table 2. CARs from this Project Verification

CAR ID	01	Section no.	D.2.	Date: 27/01/2022
Description of CAR				
PP to mention Generation voltage and intermediate voltage and voltage at which electricity is sold in the B.3 of PSF.				
Project Owner's response				**Date:** 10/02/2022
Related information has been added in section B.3 of the PSF. Also, Single Line Diagram has been provided regarding this issue.				
Documentation provided by Project Owner				

GCC Project Verifier assessment				**Date:** 10/02/2022
The project verification team has checked above related data on generation and accepted the same. Hence, CAR 01 is closed.				

CAR ID	02	Section no.	D.4	Date: 27/01/2022
Description of CAR				
PP mention the date of the investment in the PSF.				
Project Owner's response				**Date:** 10/02/2022
Investment date (01/11/2019) has been added in the page 31 of PSF				
Documentation provided by Project Owner				
Investment date (01/11/2019) has been added in the page 31 of PSF				
GCC Project Verifier assessment				**Date:** 10/02/2022
The project verification team has Checked/reviewed the corresponding documents that are applicable for the project and accepted the same. Hence, CAR02 is closed.				

CAR ID	03	Section no.	D.4	Date: 27/01/2022
Description of CAR				
PO to mention the date of commissioning of each wind turbine in the PSF.				
Project Owner's response				**Date:** 10/02/2022
Date of commissioning of each wind turbine has been added in the Page 35 of PSF.				
Documentation provided by Project Owner				
Commissioning certificate				
GCC Project Verifier assessment				**Date:** 10/02/2022
The project verification team has Checked/reviewed the commission dates of each turbine with the commissioning certificate and accepted the same. Hence, CAR03 is closed				

CAR ID	04	Section no.	D.3.2	Date: 27/01/2022

Description of CAR	
The equation 11 and 12 used in the submitted PSF is not as per the applied methodology ACM0002.	
Project Owner's response	**Date:** 10/02/2022
Related equations have been corrected according to the ACM2 meth equations 11 and 12 in the PSF.	
Documentation provided by Project Owner	
GCC Project Verifier assessment	**Date:** 10/02/2022
The project verification team checked the related equations which have been corrected according to ACM0002 meth equations 11 and 12 in the PSF and found correct. Hence, CAR04 is closed	

CAR ID	05	**Section no.**	D.2	**Date:** 27/01/2022
Description of CAR				
PO to provide Employee contracts of at least 2 and list of employees employed by the project and their salary and training records.				
Project Owner's response				**Date:** 10/02/2022
List of employees employed by the project has been now provided. In accordance with the personal data protection law, the project owner cannot provide any documents about employee salaries. However, according to the laws in Turkey, no worker can be employed with a salary below the minimum wage. For this reason, none of the personnel working at the power plant work on the salary they deserve in accordance with legal obligations.				
Documentation provided by Project Owner				
Social security institution – service list of employees.				
GCC Project Verifier assessment				**Date:** 10/02/2022
The project verification team has Checked/reviewed the records to support employment of personal and accepted the same. Hence, CAR05 is closed				

CAR ID	06	**Section no.**	D.2	**Date:** 27/01/2022
Description of CAR				
PO to mention all the events from date of investment to EPC contract, LSC to till operation date				
Project Owner's response				**Date:** 10/02/2022
All events have been added in milestone table in PSF.				
Documentation provided by Project Owner				
Generation license, Commissioning certificates (Provisional Acceptance certificate), PSF, LSC document				
GCC Project Verifier assessment				**Date:** 10/02/2022
The project verification team has reviewed all the events and accepted the same. Hence, CAR06 is closed				

CAR ID	07	**Section no.**	D.13	**Date:** 27/01/2022
Description of CAR				
PO to provide document for no double counting and no ODA.				
Project Owner's response				**Date:** 10/02/2022
Related document has been now provided. In addition to this, no GHG related environmental credits are applied to the Turkish power sector and renewable energy projects are not included in an ETS or other GHG trading mechanism in Turkey. Since an ETS is not implemented in Turkey, an emission reduction cap has not been enforced for any sector. Since an ETS is not implemented in Turkey, any double count risk does not exist for Turkey and also this project.				
Documentation provided by Project Owner				
Declaration on 'no double counting' claim				
GCC Project Verifier assessment				**Date:** DD/MM/YYYY
The project verification team has accepted the argument and confirmed there is no ODA involved. Hence, CAR07 is closed				

CAR ID	08	**Section no.**	D.2	**Date:** 27/01/2022
Description of CAR				

PO to mention the technical specifications, make and country of make, date of installation of meters in the PSF. Please provide single line diagram.	
Project Owner's response	**Date:** 10/02/2022
Necessary information (such as date of manufacture, place of manufacture, brand of meters, information about voltage etc.) has been added. Also, Single Line Diagram has been now provided.	
Documentation provided by Project Owner	
GCC Project Verifier assessment	**Date:** 10/02/2022
The project verification team has Checked/reviewed the single line diagram to understand the entire electrical system. Also the technical specifications make and country of make, date of installation of meters mentioned in the commissioning certificates are checked and accepted the same. Hence, CAR08 is closed	

Table 3. FARs from this Project Verification

FAR ID	-	**Section no.**	-	**Date:** DD/MM/YYYY
Description of FAR				
No FAR is raised				
Project Owner's response				**Date:** DD/MM/YYYY
-				
Documentation provided by Project Owner				
-				
GCC Project Verifier assessment				**Date:** DD/MM/YYYY
No FAR is raised				

DOCUMENT HISTORY

Version	Date	Comment
V 3.1	31/12/2020	▪ The name of GCC Program's emission units has been changed from "Approved Carbon Reductions" or ACRs to "Approved Carbon Credits" or ACCs.
V 3.0	23/08/2020	▪ Revised version released on approval by the Steering Committee as per the GCC Program Process; ▪ Revised version contains the following changes: ○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC); ○ Considered and addressed comments raised by the Steering Committee: ➢ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and ➢ electronic consultations EC01-Round 04 (17.08.2020 – 22.08.2020). ▪ Feedback from the Technical Advisory Board (TAB) of ICAO on GCC submissions for approval under CORSIA[12];
V 2.0	25/06/2019	▪ Revised version released for approval by the GCC Steering Committee. ▪ This version contains details and information to be provided, consequent to the latest worldwide developments (e.g., CORSIA EUC).
v1.0	01/11/2016	▪ Initial version released for approval by the GCC Steering Committee under GCC Program Version 1

[12]See ICAO recommendation for conditional approval of GCC at https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf

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