المجلس العالمي للبصمة الكربونية GLOBAL CARBON COUNCIL



Project Verification Report

V3.1 - 2020

Project Verification Report

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COVER PAGE Project Verification Report Form (PVR) BASIC INFORMATION 4K Earth Science Private Limited Name of approved GCC Project Verifier / Reference No. https://www.globalcarboncouncil.com/wpcontent/uploads/2021/12/GCCV005-00 4KES GCC-Verifier-(also provide weblink of approved GCC Certificate) Certificate_13122021.pdf Individual Track1 Type of Accreditation CDM Accreditation (Active accreditation from United Nations Framework Convention on Climate Change valid till 14.06.2024 Ref. Number CDM-E-0069 https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0069) ISO 14065 Accreditation GHG Sectoral Scope: **Approved GCC Scopes and GHG** Scope 1 - Energy (renewable/non-renewable sources) **Sectoral scopes for Project** Verification GCC Scopes: Environmental No-harm (E+) Social No-harm (S+) Sustainable Development Goals (SDG+) Validity of GCC approval of Verifier 13/12/2021 to 12/12/2023. Title, completion date, and Version Makascı-4 Solar Power Plant Bundle number of the PSF to which this Version 3.0 dated 15/05/2023 report applies Makascı-4 Solar Power Plant Bundle Title of the project activity Project submission reference no. S00227 (As provided by GCC Program during GSC) Type A: Eligible GCC Project Type² as per the Project Standard Type A1 (Tick applicable project type) Type A2 (Sub-Type 1) Type B - De-registered CDM Projects: Type B1

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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.

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

	☐ Type³ B2
Date of completion of Local stakeholder consultation	01/03/2022
Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide web-link.	01/06/2022 GSC was conducted between 18/05/2022 to 01/06/2022 https://www.globalcarboncouncil.com/global-stakeholders-consultation/ No comments were received during the GSC period.
Name of Entity requesting verification service (can be Project Owners themselves or any Entity having authorization of Project Owners)	Desilyon Danışmanlık Ticaret A.Ş. (Focal point to act on behalf of all Project Owners)
Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)	Mr. Serkan KORKMAZ, Desilyon Danışmanlık Ticaret A.Ş., Mahall Ankara B-Blok No:37, Mustafa Kemal Mah. Dumlupınar Bulv. No:274, B-Blok No:37 Çankaya/Ankara, Türkiye. Tel: +90 312 473 4030 Email: serkan.korkmaz@desilyon.com.tr Website: www.desilyon.com.tr
Country where project is located	Türkiye
GPS coordinates of the Project site(s)	Provided in section A of the report.
Applied methodologies (Approved methodologies of GCC or CDM can be used)	AMS-I.D: Grid-connected renewable electricity generation - Version 18.0
GHG Sectoral scopes linked to the applied methodologies	GHG-SS: Scope 1 Energy Industries (renewable/non-renewable sources)
Project Verification Criteria: Mandatory requirements to be assessed	 ☐ ISO 14064-2 ☐ 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

 $^{^3}$ GCC Project Verifier shall conduct Project Verification for all project types except $\mathsf{B}_2.$

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	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:	Environmental Safeguards Standard and do-no-harm criteria
Optional requirements to be assessed	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	The GCC Project Verifier 4K Earth Science Private Limited certifies the following with respect to the GCC Project Activity "Makascı-4 Solar Power Plant Bundle".
therefore confirms the following:	The Project Owner has correctly described the Project Activity in the Project Submission Form (version 3.0 dated 15/05/2023) including the applicability of the approved methodology AMS-I.D version 18.0 and meets the methodology applicability conditions and is expected to achieve the forecasted real ,measurable 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 152,634 tCO _{2e} over the crediting period, as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2.
	 ∑ 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 Sustainable Development Goals (SDGs), complies with the Project Sustainability Standard, and contributes to

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	achieving a total of 05 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 requirement 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,	1.2 dated 17/05/2023
reference number and date of approval	Ref No: 22061-GCC-PV
Name of the authorised personnel	Chandrakala R
of GCC Project Verifier and	(Kadar
his/her signature with date	Managing Director

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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.

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

Summary of the Project activity:

The project involves installation of 17 individual Unlicensed Polycrystalline Silicon and Thin Film Solar Power Plants with a capacity of 14.901 MWp (DC) / 13.160 MWe (AC) in total, by Makascı İnşaat Enerji ve Ticaret A.Ş. The project activity is implemented with 17 solar power plants at different states of Türkiye and the facilities were put into operation at different time intervals.

The electricity generated from project activity is exported to the Turkish national grid through connection agreement/18/, there by displacing electricity from the regional grid generated by fossil fuel-based power plants. This bundled project activity consists of poly-crystalline cells and Monocrystalline type of panels and associated connection boxes, Inverters, other field equipment. Thus, the project activity generates an average of 23,548.659 MWh/year electricity and displacing 15,263 tCO2e/year.

In the baseline scenario the equivalent amount of electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid connected solar power plants and by the addition of new generation sources into the grid. The main emission source in the baseline scenario is the power plants connected to the grid and main greenhouse gas involved is CO2. The location details of project activity are provided below:

	Address and geodetic coordinates of the physical site of the Project Activity							
#	Name of SPP	Physical address	Coordinates (Decimal Degrees)	Coordinates (Degrees, minutes, seconds)				
1	BGES-1 GES	Konya Province Çumra District Alibeyhüyüğü Village Angutlukaya Local	37°27'27.60"N 32°41'30.57"E	37.457667° 32.691825°				
2	B GES ENERJİ-	Konya Province Meram District Çarıklar	37°38'46.69"N	37.646304°				
	3 GES	Neighborhood Çatyolu Local	32°31'11.04"E	32.519732°				
3	CGES-1 GES	Konya Province Çumra District Alibeyhüyüğü Village Angutlukaya Local	37°27'30.64"N 32°41'30.50"E	37.457978° 32.691806°				
4	C GES ENERJİ-	Konya Province Meram District Çarıklar	37°38'45.76"N	37.646044°				
	2 GES	Neighborhood Çatyolu Local	32°31'11.88"E	32.519968°				
5	DGES ENERJİ-	Konya Province Meram District Çarıklar	37°38'32.19"N	37.642274°				
	1 GES	Neighborhood Çatyolu Local	32°31'50.05"E	32.530569°				
6	DGES ENERJİ-	Konya Province Meram District Çarıklar	37°38'54.22" N	37.648394°				
	2 GES	Neighborhood Çatyolu Local	32°31'46.23"E	32.529508°				
7	EGES ENERJİ-	Konya Province Meram District Çarıklar	37°38'38.90"N	37.644140°				
	1 GES	Neighborhood Çatyolu Local	32°31'19.26"E	32.522016°				
8	EGES ENERJİ-	Konya Province Çumra District Uzunkuyu	37°38'40.51"N	37.644586°				
	2 GES	Neighborhood Karatepe Local	32°31'18.77"E	32.521881°				
9	ÇAĞLAYAN-2	Konya Province Çumra District Alibeyhüyüğü Village Angutlukaya Local	37°27'28.72"N 32°41'30.63"E	37.457978° 32.691842°				
10	ÇAĞLAYAN-4	Konya Province Meram District Çarıklar	37°38'39.75"N	37.644376°				
	GES	Neighborhood Çatyolu Local	32°31'19.01"E	32.521949°				
11	KEHRİBAR-2	Konya Province Meram District Çarıklar	37°38'29.58"N	37.641550°				
	GES	Neighborhood Çatyolu Local	32°31'48.98"E	32.530272°				
12	KEHRİBAR-3	Konya Province Meram District Çarıklar	37°39'0.91"N	37.650254°				
	GES	Neighborhood Çatyolu Local	32°31'16.54"E	32.521260°				

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	Address and geodetic coordinates of the physical site of the Project Activity							
# Name of SPP		Physical address	Coordinates (Decimal Degrees)	Coordinates (Degrees, minutes, seconds)				
13	GİTAŞ-3 GES	Konya Province Çumra District Uzunkuyu Neighborhood Karatepe Local	37°31'12.70"N 33° 6'44.32"E	37.520194° 33.112311°				
14	ADAKALE GES	Konya Province Çumra District Adakale Neighborhood Bozdağ Local	37°31'34.32"N 33° 5'9.60"E	37.526200° 33.086000°				
15	Cihangir AYDOĞANGES GES	Konya Province Çumra District Uzunkuyu Neighborhood Karatepe Local	37°31'12.72" N 33° 6'46.44" E	37.520200° 33.112900°				
16	Yaşar AYDOĞAN-3 GES	Konya Province Çumra District Uzunkuyu Neighborhood Karatepe Local	37°31'9.57"N 33° 6'49.39"E	37.519324° 33.113719°				
17	İbrahim AYDOĞAN-4 GES	Konya Province Çumra District Uzunkuyu Neighborhood Karatepe Local	37°31'7.32" N 33° 6'49.68" E	37.518700° 33.113800°				

Scope of Verification:

The scope of the services provided by 4K Earth Science Private Limited for the project is to perform Project Verification of concerned GCC Project Activity. The scope of verification is to assess the claims and assumptions made in the Project Submission Form (PSF) against the GCC criteria, including but not limited to, GCC PS, GCC VS, applied CDM methodology and other relevant rules and requirements established under Program process. The verification scope is given as a thorough independent and objective assessment of the project design including especially the correct application of the methodology, the project's baseline study, additionality justification, local stakeholder commenting process, environmental impacts and monitoring plan, which are included in the PSF and other relevant supporting documents, to ensure that the GCC project activity meets all relevant and applicable GCC criteria.

Verification Process and Methodology

The verification of the project consisted of the following steps:

- Publication of the project PSF (Project submission Form).
- Desk review of the PSF and supporting documents submitted by the project owner
- Remote assessment, background investigation and follow-up interviews with personnel of the project owner and its representatives.
- Draft verification reporting based on the audit findings and desk review of the PSF.
- Resolution of corrective actions (if any)
- Final Verification reporting based on the closure of corrective actions
- Technical review of the final verification opinion along with other documents by the independent competent technical review team
- Final approval of the final verification opinion

Conclusion:

The review of the PSF, supporting documentation and the subsequent follow-up interviews have provided 4KES with sufficient evidence to determine the project's fulfillment of all the stated criteria. In our opinion, the project activity "Makascı-4 Solar Power Plant Bundle" meets all applicable GCC requirements for the PSF and correctly applied methodology the AMS-I.D version 18.0.

The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 paragraph 23-25, 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

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all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project

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 therefore requests GCC Steering Committee to append to this project Environmental No-net-harm Label (E+), Social No-net-harm Label (S+) to this project.

The Project Activity is likely to contribute to the achievement of United Nations Sustainable Development Goals (SDGs), complies with the Project Sustainability Standard and therefore requests GCC Steering Committee to append UN SDG Certification Labels (SDG+) to this project

☐ The Project activity is being recommended to GCC Steering Committee for request for registration.

The Project activity is not recommended for request for registration.

Section B. Project Verification team, technical reviewer and approver

B.1. Project Verification team

No.	Role		Last name	First name	Affiliation	lı	Involvement in		n
		Type of resource			(e.g., name of central or other office of GCC Project Verifier or outsourced entity)	Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader	İR	Puratchikkanal	Ma Paa	Central Office	Χ	-	Х	Χ
2	Technical Expert	IR	Puratchikkanal	Ma Paa	Central Office	X	-	Х	Х
3.	Team Member	IR	Acharya	Swati S	Central Office	Χ	-	Χ	Χ

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

No.	Role	Type of	Last name	First name	Affiliation
		resource			(e.g., name of
					central or other
					office of GCC
					Project Verifier or
					outsourced entity)
1.	Technical reviewer	EI	Kumar	Sanjay	Central Office
2	Approver	IR	R	Chandrakala	Central Office

Section C. Means of Project Verification

C.1. Desk/document review

The report is based on the assessment of the PSF undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., on remote audit, electronic (telephone or e-mail) interviews) and also the review of the applicable approved methodological and relevant tools, guidance and GCC decisions. Additionally, the cross checks were

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performed for information provided in the PSF/28/ using information from sources other than the verification sources, the verification team's sectoral or local expertise and, if necessary, independent background investigations

All the documents used for arriving verification conclusion are listed in Appendix 03 and referenced accordingly in verification report

C.2. On-site inspection

	Duration of on-site inspection: NA							
No.	Activity performed on-site	Site location	Date	Team member				
1.	Opening Meeting	-	-	-				
2	Verification of Installation and monitoring procedure of the project activity.		-					
3	Document Review & Closing Meeting		-					

According to paragraph 29 of Verification Standard/2/, on-site visit is not mandatory for the Project Activities if the estimated average annual GHG emission reductions or net anthropogenic GHG removals are less than $100,000 \text{ t CO}_{2\text{ eq}}$ and there is no pre-project information that is relevant to the registration requirements for the project activity and may not be traceable after the registration since the project has been operational since 04/10/2017.

Project Verification team performed the Google Meet remote interview on 24/06/2022 and interviewed PO representative/ Consultant/ Local Stakeholders and reviewed documents to achieve a reasonable level of assurance in the verification. The interview details are provided in the section C.3.

C.3. Interviews

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No.		Interview		Date	Subject Te	am
	Last name	First name	Affiliation		_	nber
1.	Dilara Kılıç	Beyza	Desilyon Danışmanlık Ticaret A.Ş.	24/06/2022 (Google Meet)	 Project Kanal I Implementation Swati S Project Boundary Achary 	3
2.	Erol	Ceron	Desilyon Danışmanlık Ticaret A.Ş.		 Methodology Eligibility criteria Host country Requirements 	3
3.	Akdağ Gökağaçlı	Baharsu	Desilyon Danışmanlık Ticaret A.Ş.		 Monitoring Plan Project activity start date and Crediting period 	
4.	Sezen	Alper	Desilyon Danışmanlık Ticaret A.Ş.		 Roles and responsibilities of the project owner Local Stake holder 	
5.	Ceke	Kubilay	Local Stakeholder		consultation Baseline assumptions Emission reduction	
6.	Berber	Cenk	Local Stakeholder		 Calculations Additionality Training to the Monitoring personnel Legal Ownership of the project activity Doble counting of the carbon credits of the 	
					project activity • E+, S+, SDG+ and CORSIA aspects as per the PSF and GCC requirements	

C.4. Sampling approach

Not applicable as no sampling has been used during the project verification.

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 Ga	s (GHG)			
Identification and Eligibility of project type	A ₁ , A ₂ , B ₁ , B ₂	1	-	-
General description of project activity	A ₁ , A ₂ , B ₁ , B ₂	1	-	-
Application and selection of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂	1	1	-
 Application of methodologies and standardized baselines 	A ₁ , A ₂ , B ₁ , B ₂	1	-	-
 Deviation from methodology and/or methodological tool 	A ₁ , A ₂ , B ₁ , B ₂	-	-	-

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Total - 05 06 01				01
CORSIA Eligibility (C+)		-	-	1
(only for CORSIA)				
Authorization on Double Counting from Host Country	A ₁ , A ₂ , B ₁	-	-	-
Sustainable development Goals (SDG+)	A ₁ , A ₂ , B ₁	-	-	-
Social Safeguards (S+)	A ₁ , A ₂ , B ₁	-	-	-
Environmental Safeguards (E+)	A ₁ , A ₂ , B ₁	-	1	-
VOLUNTARY CERTIFICATION OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE	ATION LABELS			
Others (please specify)	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
Global stakeholder consultation	A ₁ , A ₂ , B ₁	-	-	-
Project Owner- Identification and communication	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
Approval & Authorization- Host Country Clearance	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
Local stakeholder consultation	A ₁ , A ₂ , B ₁	-	-	-
Environmental impacts	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
Start date, crediting period and duration	A ₁ , A ₂ , B ₁ , B ₂	1	-	-
- Monitoring plan	A ₁ , A ₂ , B ₁ , B ₂	•		-
anthropogenic removals				
- Estimation of emission reductions or net	A ₁ , A ₂ , B ₁ , B ₂		3	-
Legal Requirements test	, =, ., =			
- Demonstration of additionality including the	A ₁ , A ₂ , B ₁ , B ₂	-	1	-
- Baseline scenario	A ₁ , A ₂ , B ₁ , B ₂	1	-	-
 Project boundary, sources and GHGs 	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
tool and/or standardized baseline	, =, ., =			
 Clarification on applicability of methodology, 	A ₁ , A ₂ , B ₁ , B ₂	-	-	-

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Project Verification

The project is eligible under Type A2 (Sub-Type1) category as per GCC Project standard/2/ and Clarification No 01/14/ which is acceptable since the project has not been registered under any GHG program and the program operations started since 04/10/2017 which is the earliest commissioning date of the solar power plant bundle involved in the project activity. The commissioning documents/16/ of the all the solar power plant bundles involved in the project activity has been verified in this regard and found in order. Further following project meets the Type A2 (Sub-Type 1) project category as:

- It is not required by a legal mandate and it does not implement a legally enforced mandate, as confirmed by the assessment team verification of the relevant policies pertaining to generation of energy in the host country i.e., Electricity Market Law/31/, Law on Utilization of Renewable Energy Resources for the purpose of generating Electricity Energy/32/, Energy efficiency law/33/, Forest law/35/ and Environment law/36/.
- It complies with all the applicable host country legal requirements and it ensures compliance with legal requirements. The project is a renewable energy project activity and meets the host country requirements of sustainable development criteria. Connection Agreement/18/ was signed for the project activity prior to the start date of the Project activity which is in-line with the paragraph 16 (b) of Project Standard Version 3.1/02/, the project owner has demonstrated that required approvals and authorizations are available or being processed prior to the start of commercial operations of the project activity which is acceptable to the project verification team.
- The project also delivers real, measurable and additional emission reduction of 15,263 tCO2e annually (average value over the crediting period) as compared to the baseline scenario.

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	 Project applies an approved CDM monitoring and baseline methodology AMS-I.D version 18.0: Grid-connected renewable electricity generation – Version 18.0/08/.
Findings	CL01 was raised and closed successfully.
Conclusion	The project is eligible as per the requirements under section 4 and Section 5 of the GCC project standard Version 3.1/02/ and Section 6 of the clarification no 1/14/ of GCC Version 1.2 which was verified the from the documents submitted by the project owner. Further verification team cross checked the Clean Development Mechanism (CDM) website/36/, VERRA website/37/, Gold Standard (GS) website/37/, confirmed that the project was not submitted or registered under any other GHG programs like International REC Standard (I-REC)/40/ for the information regarding the consistency of the title of the project activity, GPS coordinates, Legal Ownership of the Project activity and confirmed that the project was not submitted or registered under any other GHG programmes and voluntary/non-voluntary non-GHG Programs.

D.2. General description of project activity

Means of Project Verification

The project involves installation of all individual Unlicensed Solar Power Plants with a capacity of 14.901 MWp (DC)/ 13.160 Mwe (AC) in total, greenfield, grid connected renewable electricity generation project activity. The project activity is promoted by Makascı İnşaat Enerji ve Ticaret A.Ş. Through different solar power plant. The facilities were put into operation at different time intervals. The criteria of bundling have been made by considering the location of all facilities in this project. By implementing the project, investors also aim to reduce dependency to the fossil fuels thereby reducing the sources of environmental pollution.

The electricity generated from project activity is exported to the Turkish National grid through connection agreement/16/, there by displacing electricity from the grid generated by fossil fuel-based power plants. Thus, the project activity generated average 23,548.659 MWh/year electricity and displacing 15,263 tCO2e/year.

In the baseline scenario the equivalent amount of 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. The main emission source in the pre-project scenario is the power plants connected to the grid and main greenhouse gas involved is CO2. The Location details of each project locations are mentioned in section A of this report. The Location details has been verified through google earth/Maps and found to be correct.

The project uses 3,240 Nos 270wp, poly crystalline and 720 Nos 120wp mono crystalline cells type of panels and associated connection boxes, Inverters, other field equipment. The technical details provided in the PSF/28/ has been verified from the technical datasheets/15/ and found in order.

The project owner declared in the PSF/28/ the lifetime of the project activity is 25 Years as guaranteed by the suppliers of PV panels of the project activity and same has been verified in the technical data sheet/15/ provided by the project owner and found acceptable. Hence the lifetime considered by the project owner is acceptable to the project verification team. However, the Project owner have fixed crediting period 10 years which is in accordance GCC project manual version 03.1/02/ paragraph 51.

The project activity described as Type A2 (Sub-Type 1) and applied AMS I-D: methodology version 18.0 falls into the small-scale category as per CDM methodology/08/.

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	In addition to generating emission reductions the project activity also qualifies for other voluntary certification labels Achieving the United Nations Sustainable Development Goals – 05 SDG+ (Platinum) Environmental No-net harm – E+ +05 Social No-net harm – (S+) +03 CORSIA – C+
	In the baseline scenario the main source of emission was found to be CO_2 as electricity was generated mainly through fossil-fuel based power plants whereas in project scenario the electricity is generated by the Solar Power plant bundle thereby reducing the CO_2 emissions. Thus, non-application of GWP in this 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 PSF/28/ includes sufficient details and provides clarity on the project activity The verification team also checked the GCC website and performed secondary research (internet) to determine if the project was part of any other GHG Program prior to commencement of this verification. It was confirmed that the involved project owners have not submitted the project under any other GHG program apart from GCC.
Findings	CL 02 was raised in this context and closed successfully.
Conclusion	The project description was verified based on the review of documents. Based on the review of documents and by means of interviewing the project representatives during remote audit, the details provided in the PSF/28/ is found acceptable and complete.

D.3. Application and selection of methodologies and standardized baselines

D.3.1 Application of methodology and standardized baselines

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Means of Verification	Project	Applicability criterion as per AMS-I.D Version 18.0	Verifier Assessment.
		This methodology is applicable to grid-connected renewable energy power generation project activities that: • Install a Greenfield power plant; • Involve a capacity addition to (an) existing plant(s); • Involve a retrofit of (an) existing operating plants/units; • Involve a rehabilitation of (an) existing plant(s)/unit(s); or • Involve a replacement of (an) existing plant(s)/unit(s).	The project involves installation of 14.901 MWp (DC) / 13.160 MWe (AC) Makascı-4 Solar Power Plant Bundle, at a site where there was no renewable power plant operating prior to implementing the project activity (Greenfield plant). The electricity generated from project activity is exported to the Turkish national grid through system connection agreement/16/. In the baseline scenario the equivalent amount of 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. Thus, the project activity is projected on an average to generate 23,548.659 MWh/year/8/ electricity and is estimated to displacing 15,263 tCO ₂ e annually over the crediting period. This was verified through the documents /13/14/ submitted by the Project owner and confirmed the requirement. Hence the methodology is applicable to the project activity.
		Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology: (a) The project activity is implemented in an existing reservoir with no change in the volume of reservoir; (b) The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m²; (c) The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m².	
		If the new unit has both renewable and non- renewable components (e.g., a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable	The project does not have non- renewable components. The project has only renewable components which has installed

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component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	capacity is 13.160 MWe. Therefore, the project activity is small scale.
Combined heat and power (co-generation) systems are not eligible under this category.	The project does not have combined heat and power systems. Hence, the methodology is applicable.
In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.	This project is not a project involving the capacity addition of renewable energy generation units in an existing renewable energy production facility. Hence the methodology is not applicable to the project activity.
In the case of retrofit, rehabilitation or replacement, to qualify as a small-scale project, the total output of the retrofitted, rehabilitated or replacement power plant/unit shall not exceed the limit of 15 MW	The project does not have a process which includes replacement from fossil fuel to
In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. If the recovered methane is used for electricity generation for supply to a grid then the baseline for the electricity component shall be in accordance with procedure prescribed under this methodology. If the recovered methane is used for heat generation or cogeneration other applicable Type-I methodologies such as "AMS-I.C.: Thermal energy production with or without electricity" shall be explored.	The project activity is a solar power generation plant. Hence the methodology is not applicable to the project activity.
In case biomass is sourced from dedicated plantations, the applicability criteria in the tool "Project emissions from cultivation of biomass" shall apply.	The project activity is a solar power generation plant. Hence the methodology is not applicable to the project activity.

TOOL07: Tool to calculate the emission factor for an electricity system; (Version 7.0)

Condition Para 01:

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

According to "Türkiye National Network Emission Factor Data Sheet" document from Ministry of Energy and Natural Resources, Operating, Build and Combined Margin Emission Factors have been published in 20/09/20226. According to "Türkiye National Network Emission Factor Data Sheet"

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⁶ Reference document has been provided in the folder named "2019 Emission Factors".

⁷Reference document has been provided in the folder named "2019 Emission Factors".

would have been provided by the grid (e.g., demand-side energy efficiency projects).

document from Ministry of Energy and Natural Resources, the emission factor coefficient (EF $_{grid,CM,y}$) could be used as 0.6482 tCO $_2$ /MW as using the "Tool to calculate the emission factor for an electricity system". Therefore, this document and the emission factor has been used for this project.

Thus, the application of this tool was found to be acceptable, and the methodology is applicable to the project activity.

Condition Para 02:

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 offgrid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project owner, i.e., option IIa and option IIb. If option IIa is chosen, the conditions specified in "Appendix 1: Procedures related to offgrid 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 percent 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.

Off grid power generation data has not been used. Thus, the methodology is not applicable to the project activity.

Condition Para 03:

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.

The project is not a CDM project. Thus, the methodology is not applicable to the project activity.

Condition Para 04:

Under this tool, the value applied to the CO_2 emission factor of biofuels is zero.

Biofuels has not been used. Thus, the methodology is not applicable to the project activity.

TOOL21: Demonstration of additionality of small-scale project activities (Version 13.1)

Condition Para 04:

The use of the methodological tool "Demonstration of additionality of small-scale project activities" is not mandatory for project owner when proposing new

Since the additionally tool is included in the approved methodology, it is applicable for the project activity. Thus, the application of this tool was found to

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methodologies. Project owner and coordinating/managing entities may propose alternative methods to demonstrate additionality for consideration by the Executive Board.

be acceptable, and the methodology is applicable to the project activity.

Project owner and coordinating/managing entities may also apply "TOOL19: Demonstration of additionality of microscale project activities" as applicable.

Since the additionally tool is included in the approved methodology, it is applicable for the project activity. Thus, the application of this tool was found to be acceptable, and the methodology is applicable to the project activity.

TOOL27: Investment analysis, Version 11.0

Condition Para 02:

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". ٥r baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario."

Since the proposed project activity applies the methodological tool "Tool for the demonstration and assessment of additionality". Hence, the methodological tool is applicable to project activity.

Condition Para 03:

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.

Since the proposed project activity applies the methodological tool "Tool for the demonstration and assessment of additionality". Hence, methodological tool is applicable to project activity.

TOOL20: Assessment of debundling for small-scale project activities (Version 04.0)

Condition Para 04:

This methodological tool is applicable to proposed small-scale project activities and small-scale CPAs in order to check whether they are debundled The project is a small-scale project. Therefore, it is not debundled from large scale project There is only one plant in the area where the project is located.

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components of large-scale project Hence, the methodology is not activities.

GCC Clarification No.01 V1.3, paragraph 7 states "The key principle is to ensure that activities included in the bundles must be of homogeneous nature that facilitates the collective establishment of baseline, emission reductions calculation, additionality demonstration and assessment of certification labels for multiple activities in a bundle. The additionality must be assessed at the bundle or activity level. As any non-additional bundles cannot qualify to be included in the project document, the project as a whole cannot qualify to pass additionality test if any bundle fails to demonstrate additionality." As per GCC Clarification No.01 V1.3, two-level analysis for formulation of homogeneous bundles has been applied for this project.

- (a) Similarity in Technological Considerations:All activities in a bundle uses the same technology, which is
- the same technology, which is PV solar technology.

 (b) Similarity in Economic and
- Policy Considerations:
 Activities under one bundle have same additionality approach.
 In doing this, the Project

In doing this, the Project Owners shall consider every element of the project design to ensure homogeneity. For example, following elements should be considered:

- same investment analysis method (e.g., post-tax project or equity IRR, or pretax project or equity IRR, NPV, etc.);
- comparable key input values (which constitute more than 20% of total project investment costs and total project revenues, which is applicable as per the specific project situation);
- same investment decision year;
- investment benchmark;
- Location;
- supplying electricity to the different grids/ captive purposes;
- project capacity;

According to the Level-1 analysis in paragraph 11 of GCC Clarification, project activity is regarded as a homogenous bundle because it provides all three subpoints. Hence, two-level analysis for formulation of homogeneous bundles is applicable for the project activity.

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- geographical location;
- project and spatial boundary;
- project investors profile;
- legal ownership of bundles;
- other elements
- (c) Similarity in Environmental or Methodological Considerations:

Activities in one bundle shall have:

- i. application of same methodology (or approved combinations where cross effects are addressed);
- ii. same baseline approach and the outcome; and
- iii. same monitoring approach and parameters for the part included for GHG.

<u>Level-2 analysis – Criteria for</u> differentiating the bundles:

Formulate a separate bundle of activities if any of the following criteria is not complied with.

- (a) Same baseline of each activity within a bundle;
- (b) Same output of each activity (e.g., heat or power or cogeneration);
- (c) Same Technology of each activity (e.g., wind or solar);
- (d) Same additionality approach stipulated by the applicable methodology:
 - i) If a large scale CDM/GCC as well as small scale CDM methodology, considered for crosseffects, is applied in a bundled project, the additionality approach stipulated by the large-scale methodology will supersede.
 - ii) If investment analysis is applied:
 - a. Similar key investment costs of

Therefore, Level-2 analysis is not required since the project meets criteria (c). Hence, two-level analysis for formulation of homogeneous bundles is applicable for the project activity.

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activities (which constitute more than 20% of either total project investment costs or total project revenues, which is applicable as per the specific project situation); and

- b. Same investment benchmark applicable for additionality analysis (e.g., Cost of Equity, weighed average cost of capital).
- iii) If barrier analysis is used:
 - a. All the activities within the bundle should have same barrier(s).

Common Eligibility Criteria for All Project Types

Condition para 14:

To confirm eligibility for registration under the GCC Program, for both project Types A and B, prior to submitting project documents to the GCC for conducting a Global Stakeholder Consultation (GSC), the Project Owner shall demonstrate that the GHG emission reduction project:

- (a) Complies with the eligibility requirements of one of the project types allowed under the GCC, as stipulated in section 44 above.
- (b) Has started operations, and begun generating emission reductions, after 1 January 2016;
- (c) Complies with the GCC Rules related to:
 - (i) GHG emission reductions (mandatory requirement);
 - (ii) Contributions to the UN SDGs (SDG+ label) (voluntary requirement for selection, but

The project type is Type A, and the project activity started after 1 January 2016. Also, the project meets all GCC Rules. Hence, the criterion is applicable.

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- mandatory if selected);
- (iii) Do-no-net-harm Environmental requirements (E+ label) (voluntary requirement for selection, but mandatory if selected);
- (iv) Do-no-net-harm requirements for Society (S+ label) (voluntary requirement for selection, but mandatory of selected); and
- (v) Submission of Host
 Country Attestation
 on Double
 Counting as and
 when required by
 CORSIA
 (mandatory
 requirement for
 projects that intend
 to use ACCs for
 CORSIA).

Condition para 15:

Project Owners planning to use ACCs for the pilot phase of CORSIA are eligible to apply under project types A1, A2 and B1, and can be registered under the GCC Program provided that they meet all of the GCC Rules and criteria for CORSIA.

The project is Type A2 and Sub-Type 1. Also, the project meets the GCC rules and criteria for CORSIA. Hence, the criterion is applicable.

Specific Eligibility Criteria for Type A Projects

Condition para 16:

For Type A projects (both A1 and A2), as stipulated in section 44 above, the Project Owner shall demonstrate that the Project Activity:

- (a) Is not required by a legal mandate and does not implement a legally enforced mandate (government regulation or law);
- (b) Complies with all applicable host-country legal requirements with compliance focused at project level scope. The Project

The project activity is installation of solar power plant which meets legal requirements and does not implement a legally enforced mandate. Also, the project aims to reduce the measurable emission using an approved CDM Monitoring Methodology (AMS-I.D "Grid connected renewable electricity generation" - Version 18.0). Hence, the criterion is applicable.

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	Owners shall ensure compliance with legal requirements by demonstrating that the project has either acquired the necessary licenses for their implementation and operation or provide an undertaking that these approvals and the licenses are under process and shall be available prior to start of commercial operations of the project; (c) Delivers real, measurable, and additional emission reductions compared to its baseline; and (d) Applies an approved CDM or GCC Baseline and Monitoring Methodology.		
Findings	CAR01, CL03 and CL04 were raised and closed successfully.		
Conclusion	The project verification team confirms that approved methodology: AMS-I.D version 18.0/08/ is applicable to the PSF/28/ which is valid from 28 November 2019 to 01 November 2022 where the request for registration can be submitted until 30/06/2023. All applicability conditions of the applied methodology and applicable Tools are being met and the PSF/28/ are in line with all the requirements indicated in the methodology. Related eligibility criteria with respect to the applicability of the methodologies have been established and met by the PSF/28/ of the GCC Project activity.		

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

Means of Project Verification	Since the applicability of methodology AMS-I.D version 18.0, Grid-connected renewable electricity generation was found to be fulfilled, further clarification to the
	methodology were not required.
Findings	No finding was raised.
Conclusion	Since the applicability of methodology was found to be fulfilled, further clarification to the methodology were not required.

D.3.3 Project boundary, sources and GHGs

Means of Project Verification	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. The components of the project boundary mentioned in the PSF/28/ were found to be in compliance with para of the applied methodology.
	The verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified. The verification team confirmed that all GHG sources required by the methodology have been included within the project boundary.

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	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. The project boundary is clearly depicted with the help of a line diagram in section B.3 of the PSF/28/ and duly verified by the verification team via commissioning certificates/16/ of the project activity & System Connection Agreement/18/ between project owner and National Electricity Grid of Türkiye which is found to be acceptable and appropriate.
Findings	No findings raised in this context.
Conclusion	 The verification team was able to assess that complete information regarding the project boundary has been provided in PSF/28/ and could be assured from the line diagram. The verification team confirms that the identified boundary, selected emissions sources are justified for the project activity.

D.3.4 Baseline scenario

Means of Project Verification

As per applied methodology AMS-I.D version 18.0/08/, Grid-connected renewable electricity generation is the methodology for small scale project activities. Therefore, Makasci-4 Solar Power Plant Bundle follows this methodology. Within the scope of this methodology, Selected methodology has been applied together with the "tool to calculate the emission factor for an electricity system, version 07".

The baseline scenario selected is in compliance with all applicable legal and regulatory requirements as the implementation of project activity is a voluntary initiative and is not mandatory or a legal requirement. The regulations and policies/32/33/34/35/36/ referred in section B.5 of the PSF does not restrict or empower any authority to restrict the fuel choice for power generation and the applicable environmental regulations/45/ do not restrict the use of solar energy and there is no legal requirement on the choice of a particular technology. All the policies and regulations which gives comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies. Hence as per CDM VVS/49/ paragraph 81(b) it can be concluded that the provincial and sectoral policies are E- policies that decrease GHG emissions. Also, these policies have been implemented since the adoption by the COP of the CDM M & P (decision 17/CP.7, 11 November 2001). Hence the project owner has not considered them in developing the baseline scenario for the project activity. Instead, the baseline scenario is based on hypothetical situation without the provincial and sectoral polices being in place. Based on the sectoral expertise of the project verification team, the selection of baseline scenario by the project owner is more appropriate and acceptable.

As per paragraph 22 of the applied methodology, baseline emissions include only CO_2 emissions from electricity generation in 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 the product of electrical energy produced by the renewable generating unit expressed in MWh multiplied by the grid emission factor in tCO_2/MWh .

As per paragraph 23 of the applied methodology, the grid emission factor is calculated in a transparent and conservative manner as follows

 a. A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the "Tool to calculate the emission factor for an electricity system"; or

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OR

b. The weighted average emissions (in t CO2/MWh) of the current generation mix. The data of the year in which project generation occurs must be used.

The Project Owner has selected option a for calculation of emission factor for the project activity which is appropriate as per methodological requirement.

Determination of Grid Emission Factor (EFgrid,CM,y)

The project owner used the "Tool to calculate the emission factor for an electricity system" Version 7.0 to determine the combined margin emission factor. And "Tool to calculate the emission factor for an electricity system" states that 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. The grid boundary w.r.t the connected grid is Turkish National grid.

The calculation of EFgrid,CM,y is current and publicly available and published by the Ministry of Energy and Natural Resources/26/. Operating, Build and Combined Margin Emission Factors have been published in "Türkiye National Network Emission Factor Data Sheet" document from Ministry of Energy and Natural Resources. Turkish National Electricity Network Emission Factor is calculated according to IPCC Electricity Network Emission Factor Calculation Methodology Tool 07, Ver 07. The project verification team is convinced of the result of the emission coefficient calculation. It is deemed to be adequate and transparent.

The Operating Margin Emission Factor has been published as 0.7258 tCO2/MWh, Build Margin Emission Factor as 0.4153 tCO2/MWh and Combined Margin Emission Factor as 0.6482 tCO2/MWh by the Ministry of Energy and Natural Resources dated 20/09/2022. The calculation of EFgrid,y is current and publicly available/32/. The baseline scenario in the PSF/28/ is reported as the supply of electricity to Turkish National Grid by the project activity would have otherwise been generated by the operation of grid-connected power plants. The baseline scenario applied in the PSF was compared with the requirements of the baseline described in the applied methodology and found consistent.

Findings Conclusion

No findings raised in this context.

The verification team confirms the following:

- All assumptions and data used by the project owner are listed in the PSF/28/, including their references and sources;
- All documentation used by project owner as the basis for assumptions and source of data for establishing the baseline scenario is correctly quoted and interpreted in the PSF/28/;
- The verification team also concluded that the identified baseline scenario reasonably represents what would occur in the absence of the project activity.

D.3.5 Demonstration of additionality

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Means of Project Verification

The GCC applies the following approach for demonstrating additionality, consisting of two components:

- a) A Legal Requirement Test
- b) An Additionality Test either based on a Positive List test or a projects-specific additionality test.

Legal Requirement Test

Type A projects shall be deemed non-additional if their implementation is required by a law that is enforced. A positive outcome of the legal requirement test ensures that eligible projects (and the GHG emission reductions that they achieve) would not have occurred in order to comply with federal, state or local regulations, or other legally-binding mandates. A project passes the legal requirement test when there are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions or other legally-binding mandates requiring its implementation, or requiring the implementation of a similar technology/measure that would achieve equivalent levels of GHG emission reductions. Voluntary commitments/agreements within a sector or by an entity do not constitute the legal requirements.

The project is not enforced by laws or regulations, and project activity is entirely a voluntary action. Also, the project activity complies with all applicable legal requirements of the host country, Türkiye⁸. The project passes the legal requirement test since there are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions of other legally binding mandates requiring its implementation. Since voluntary commitments/agreements within a sector or by an entity do not constitute the legal requirement, the project is additional as per paragraph 46 of Project Standard Version 3.1.

The proposed project activity meets the criteria for additionality since:

- The project without carbon credits does not provide benefit financially.
- Due to increasing demand of electricity, the proposed project activity is not enough for meeting the demand. Thus, new power plants should be constructed which includes mainly thermal power plants.
- Mandatory laws and regulations are present:
 - Electricity Market Law⁹

<u>Summary:</u> The purpose of the electricity market law is to ensure the establishment of a financially sound, stable and transparent electricity market operating in a competitive environment under, and subject to, private law provisions as well as to ensure the independent regulation and supervision of this market for purposes of providing sufficient, good quality, uninterrupted, low cost and environment-friendly electricity to consumers.

 Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy¹⁰

<u>Summary:</u> The purpose of the law on utilization of renewable energy sources for the purpose of generating electrical energy is to expand the utilization of renewable energy sources for generating electric energy, to benefit from

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⁸ Declaration for Voluntary Action

⁹ https://www.mevzuat.gov.tr/MevzuatMetin/1.5.4628.pdf

¹⁰ https://www.mevzuat.gov.tr/MevzuatMetin/1.5.5346.pdf

these resources in a secure, economic and qualified manner, to increase the diversification of energy resources, to reduce greenhouse gas emissions, to assess waste products, to protect the environment and to develop the related manufacturing industries for realizing these objectives.

Energy Efficiency Law¹¹

<u>Summary:</u> The purpose of this law is to increase efficiency in using energy sources and energy in order to use energy effectively, avoid waste, ease the burden of energy costs on the economy and protect environment.

Forest Law¹²

Summary: The purpose of this law is to protect forest area.

Environment Law¹³

<u>Summary:</u> The purpose of the environment law is to protect and improve the environment which is the common asset of all citizens; make better use of, and preserve land and natural resources in rural and urban areas; prevent water, land and air pollution; by preserving the country's vegetative and livestock assets and natural and historical richness, organize all arrangements and precautions for improving and securing health, civilization and life conditions of present and future generations in conformity with economical and social development objectives, and based on certain legal and technical principles.

According to Tool 21 paragraph 11, criteria of the project activity has been determined. The criteria figure is given below.

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¹¹ https://www.resmigazete.gov.tr/eskiler/2007/05/20070502-2.htm

https://www.mevzuat.gov.tr/MevzuatMetin/1.3.6831.pdf

https://www.mevzuat.gov.tr/MevzuatMetin/1.5.2872.pdf

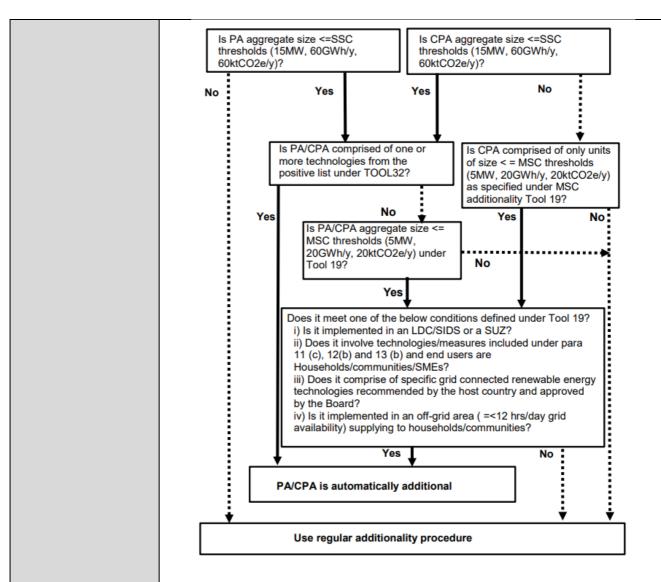


Figure 1. Criteria for automatic additionality using provisions of small-scale (SSC) or microscale (MSC) additionally tools

Regarding the above figure, criteria has been decided as "Use regular additionality procedure" because project is not under the positive list of technology Tool 32. Therefore, according to paragraph 10 states of "Demonstration of additionality of small-scale project activities (Tool 21)" paragraph 10: Project owner shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:

- (a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions
- (b) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions
- (c) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions
- (d) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited

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information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.

Option (a) is chosen.

To evaluate economic and financial status of the project activity, the investment analysis is made (Tool 27). There is no public funding in Turkey for finance of this project.

Step 0: Demonstration whether the proposed project activity is the first-of its-kind¹⁴

The proposed project activity is not the first-of-its-kind.

Step 1 - Identification of alternatives to the project activity consistent with current laws and regulations ¹⁵

Sub-step 1a - Define alternatives to the project activity:

The most realistic and reliable alternatives to the project activity are:

- 1. Proposed project is not undertaken as a VER or ACC project activity
- 2. Continuation of the current situation-supply of equal amount of electricity by the newly built grid connected power plants

The first alternative, which is the implementation of the project without carbon revenue is not financially attractive as discussed in investment analysis section below. The second alternative (Scenario 2) is the baseline scenario and implementation of the proposed project as a VER or ACC activity would be additional to this scenario. Continuation of the current situation is not considered as a realistic alternative due to increasing electricity demand therefore new power plants should be constructed which includes mainly thermal power plants. Implementation of the project is additional to the baseline scenario which is alternative 2 above and therefore reduces the emissions.

Outcome of Step 1a

Continuation of the current situation is not seen as a realistic alternative due to the increasing electricity demand. Therefore, new power plants should be established in order to meet the electricity demand. In order to prevent the establishment of thermal power plants, new power plants should be established using renewable energy. Implementation of the project is in addition to the base scenario alternative 2 above and therefore reduces emissions.

Sub-step 1b. Consistency with mandatory laws and regulation

The following applicable mandatory laws and regulations have been identified for the project activity:

1. Electricity Market Law

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¹⁴ https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

¹⁵ https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

- 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 resultant alternatives to the project as outlined in Step 1a are in compliance with the applicable laws and regulations.

Outcome of Step 1b

Mandatory legislation and regulations for each alternative are taken into account in Outcome of Step 1a. The project owners that is in compliance with mandatory regulations. Therefore, the proposed ACC project activity is considered as additional.

Step 2 - Investment analysis 16

The investment analysis has been done in order to make an economic and financial evaluation of the project. No public funding or ODA are available in Türkiye for finance of this type of projects.

Step 2a - Determine appropriate analysis method¹⁷

Three options to identify the analysis methods are as follows:

- Simple Cost Analysis
- Investment Comparison Analysis
- Benchmark Analysis

The Simple Cost Analysis is not applicable because the project activity provides economic benefits by selling electricity.

There is no alternative investment because the baseline of the project is generation of electricity by the grid.

Based on the above situations, the benchmark analysis is chosen for evaluation of the project investment.

Step 2b - Apply Benchmark Analysis (Option III)

For the purpose of benchmark analysis pre-tax Project IRR has been chosen as the indicator.

Local Commercial Lending Rates

As the tool states local commercial lending rate is convenient benchmarks for a project IRR, therefore it could be chosen as a benchmark. The lending rates for medium term investments provided by the Strategy and Budget Department of Presidency of the Republic of Türkiye. This project is as a medium-term investment¹⁸ because time frame of the project activity is 25 years.

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¹⁶ https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

¹⁷ https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

¹⁸ https://www.investopedia.com/terms/m/mtn.asp

The Strategy and Budget Department publishes "Interest Rates Applied to Loans and Savings^{19"} monthly. The benchmark has been calculated by the Department into taking account real values. The interest rate of December 2015 (the investment decision date is 25/12/2015) is 11.5 % which reflects the banker's expectations for a similar pre-tax investment. The investment decision date is taken as the FSRs date. Therefore, the period of time between the finalization of the FSR and the investment decision is the same.

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

Investment decision date is 25/12/2015 For this SPP Bundle. Details about the IRR calculation explained below.

Particulars	Value	Unit	Assessment
Installed Capacity	13.160	MWe (AC)	Verified against Commissioning certificates of plants/16/ which was available at the time of investment decision date of the Makascı-4 SPP Bundle is 25/12/2015 according to the
	14.901	MWp (DC)	Feasibility Study Reports/19/ and cross verified against System Connection Agreement/18/ of the project. Further, the same has been confirmed during Remote audit.
Amount Of Equity	17,061,213.000	\$	Verified against
Total Expenses	1,06,386.00		Feasibility Study Reports/19/ of the Plants which was available at the time of investment decision. The verification team also crosschecked the project with the project cost considered in other registered projects under various carbon mechanisms

¹⁹ https://www.sbb.gov.tr/temel-ekonomik-gostergeler/#1542268521132-a9825b93-fa4c

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which are commissioned around the same time: From the above cost, it is found that the project cost considered for the project activity is appropriate. Also, the PO's audited financial report is verified and found that the total amount of equity is 17,061,213.000 and total expenses of 1,06,386.00 are considered in the IRR sheet/29/ and Feasibility Study Reports of the Plants/19/.

Hence,
verification team
confirms that the
Feasibility Study
Reports of the
Plants /19/
considered for the
project activity is
appropriate;
hence acceptable.

Financial calculation and conclusion

The project Internal rate of return (IRR) calculations were provided in a spreadsheet. The calculation was verified and found to be correct by project verification team; as well as the assumptions used in the calculation were deemed to be correct. The IRR without carbon credit revenues is 8.55% which confirms that the proposed project activity in absence of the carbon credit benefits and compared to the benchmark return on equity 11.50% is not financially attractive.

Sub-step 2d - Sensitivity Analysis

Sensitivity analysis has been carried out for the below mentioned parameters are identified;

- Investment cost
- Operating Cost
- Electricity Income
- Electricity Generation
- PLF

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Table: Sensitivity analysis for Makascı-4 RES (except carbon revenue)

The Guidance on Assessment of Investment Analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation. The project developer has identified generation, project cost, O&M cost, tariff and PLF as critical assumptions. These constitute more than 20% of the project cost/revenue. Guidance 28 of Tool 27 states that as a general point of departure, variations in the sensitivity analysis should at least cover a range of +10% and -10%, unless this is not deemed appropriate in the context of the specific project circumstances. Since project has already been implemented any variation in project cost is hypothetical. Nevertheless, the project cost has also been subjected to 10% variation. The sensitivity analysis reveals that excepting when the power tariff or PLF goes up by 10% or project cost comes down by 10% as given in the following table

Variation %	-10%	Normal	10%
Investment Cost	10.80%	8.55%	6.63%
Operating Cost	9.57%	8.55%	7.38%
Electricity Income	7.86%	8.55%	9.14%
Electricity Generation	5.02%	8.55%	11.49%
PLF	6.09%	8.55%	10.44%

The results of sensitivity analysis show that with a variation of +10% in tariff, PLF and -10% in project cost pre -tax equity IRR is higher than the benchmark. However, these scenarios are not a likely scenario and the reasonable variations for these parameters were checked by calculating the variation necessary to reach the benchmark and then discussing the likelihood for that to happen.

Step 3: Barrier Analysis

The additionality of the project has been demonstrated by applying the investment analysis, thus no barrier analysis is carried out.

Findings Conclusion

CAR05 was raised and closed successfully.

Based on the information provided in the PSF/28/ and guidance by GCC Project Standard version 03.1/02/ and clarification 01/14/ from GCC verification team confirmed the project activity is deemed additional without any further analysis of the other barriers.

D.3.6 Estimation of emission reductions or net anthropogenic removal

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

where

BE_y= Baseline emissions in year y (tCO₂/yr)

 $EG_{PJ,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

 $\mathsf{EF}_{\mathsf{grid}, \ y} = \mathsf{Combined}$ 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" (tCO₂/MWh)

According to the Section A.1, average $EG_{PJ,y} = 23,548.569$ MWh/yr. Also, According to "Türkiye National Network Emission Factor Data Sheet" document from Ministry of Energy and Natural Resources, the emission factor coefficient ($EF_{grid,y}$) could be used as 0.6482 tCO₂/MWh.

Therefore, the baseline emission annually is:

$$BE_v = (23,548.569) \times (0.6482) = 15,263 \text{ tCO}_2\text{e/yr}$$

Project Emission:

According to the AMS-I.D methodology version 18.0 paragraph 39, the project activity is a solar power plant that neither uses fossil fuel nor operates geothermal power plant or having water reservoirs (i.e $PE_{FF,y} = 0$; $PE_{GP,y} = 0$; $PE_{HP,y} = 0$); therefore, the project emission have been considered to be zero. The generation of electricity does not result in GHG emissions.

Therefore.

$$PE_v = 0$$

Leakage Emission:

No leakage is applicable for Makascı-4 Solar Power Plant Bundle under AMS-I.D methodology.

Therefore,

$$LE_v = 0$$

Baseline Emission:

The baseline emissions are to be calculated as follows:

$$BE_y = (EG_{PJ,y} - EG_{PJ,baseline}) \times EF_{grid,y}$$

Where:

 BE_y = Baseline emissions in year y (tCO₂/yr)

EG_{PJ,y} = Quantity of net electricity generation supplied by

the project plant/unit to the grid in year y (MWh/yr)

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	EF _{grid} ,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" (tCO ₂ /MWh)
	EGPJ,baseline	= Baseline electricity supplied to the grid in the case of modified or retrofit facilities (MWh). For new power plants this value is taken as zero.
	The project activity is the install so,	ation of a new grid-connected renewable power plant
	EG _{PJ,baseline} = 0	
		ar Power Plant Bundle ER Calculation Sheet, $EG_{PJ,y}$ = according to the calculation, the emission factor d as 0.6482 tCO ₂ /MWh.
	Therefore, the baseline emission	on annually is:
	$BE_y = (23,548)$	$(0.6482) = 15,263 \text{ tCO}_2\text{e/yr}$
	Based on the data above, the Plant Bundle is:	emission reduction value for Makascı-4 Solar Power
	ER _y	$= BE_y = 15,263 \text{ tCO}_2\text{e/yr}$
Findings		ere raised and closed successfully.
Conclusion	project emissions, baseline e PSF/28/ is in line with the requir 18.0/08/.	the algorithms and formulae proposed to calculate missions, leakage and emission reductions in the rements of the selected methodology AMS-I.D version
	 For ex-ante calculation, the ass All assumptions and data including their references a 	used by the project owner are listed in the PSF/28/
	All documentation used b source of data is correctly or source.	y project owner as the basis for assumptions and quoted and interpreted in the PSF/28/. 7/28/ are considered reasonable in the context of the
	proposed project activity	720/ are considered reasonable in the context of the
	The baseline methodology	and the applicable tool(s) have been applied correctly sions, baseline emissions, leakage and emission
	All estimates of the emissi values provided in the PSF	
	 All calculations are comple 	te and without any omissions.

D.3.7 Monitoring plan

Werification The monitoring plan described in the PSF/28/ is in compliance with the applied methodology AMS-I.D version 18.0/08/. The monitoring plan has been found to be in compliance with the requirements of the applied methodology for calculation of GHG emission reductions, GCC Environment and-Social-Safeguards-Standard-v2.0/04/ and Project-Sustainability-Standard-v2.1/05/. The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that monitoring parameters are applied in line with the requirement of the methodology and relevant in the context of the program. The procedures have been reviewed by the assessment team through document review and interviews with the respective monitoring personnel. The information provided

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has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the project owner. Specifically, these points include the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the project. Therefore, the project owner will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified

The parameters that are fixed ex-ante are:

Parameter	Value	Source
Build Margin Emission	0.4153 tCO ₂ /MWh	Emission factor of the
factor (EF _{grid, BM, y})		Turkish grid determined
Operating Margin emission	0.7258 tCO ₂ /MWh	ex-ante. It's been
factor (EF grid, OM, y)		published by the Ministry
Combined Margin CO ₂	0.6482 tCO ₂ /MWh	of Energy for 2019 on
emission factor (EF _{CO2})		06/10/2021.

The parameters that are to be monitored ex-post are:

1	EG	Not Electricity generated and delivered to the grid by
'	$EG_{PJ,y}$	Net Electricity generated and delivered to the grid by the power plant in year y: The monitoring parameter will
		be continuously monitored by means of bi-directional tri-
		vector energy meter of 0.5s accuracy class which is
		,
		located delivery point of individual project plant.
		Calibration of the meters are valid for 10 years based on
		related regulation. ²⁰ The meters are sealed and the project
		owner are not allowed to access the meters. If there is a
		significant difference between the readings of two devices,
		electricity distribution companies are informed about this
		situation. In case of delay in the calibration of the meters,
		the electricity distribution company and the company itself
		may be subject to penalties. In case of delay, margin of
		error is included in ER calculations. EPDK regulations
		should be followed for the meters to identify the accuracy
		class of the meters as 0.2 or 0.5. Regarding this, all of the
		meters have 0.5s accuracy class.
		Electricity generation which is measured by meters which
		are located in each plant sites and recorded by electricity
		distribution company. On the 15th of each month, the
		previous month's data is verified and the project owner
		invoices the distribution company for this electricity
		generation data.
		Electricity generation data is determined based on data
		from meter reading reports (OSF reports) provided by the
		relevant distribution company.
		These are more conservative than plant records. Electricity
		generation is recorded through a remote reading system
		which is called OSOS. Data are cross-checked against
		invoices or receipts issued for electricity generation and
		consumption data.
		The quantity of electricity supplied by the project plant/unit
		to the grid (UECM) and the quantity of electricity delivered
		to the project plant/unit from the grid (UEVM) are measured.
		Net generation electricity data is calculated by subtracting

²⁰ https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5

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		energy delivered by the project activity to the grid for internal consumption from electricity delivered to the grid.
2	CO ₂ Emissions Reduction	The parameter is calculated based on the net electricity generation from the project activity and grid emission factor. Reduction of CO ₂ emissions due to implementation of project activity that would otherwise been emitted by thermal power plants. The monitoring parameter will be continuously monitored by means of energy meters as mentioned above monitoring parameter EGPJJy
3	Replacing Fossil Fuels with renewable sources of energy	The parameter is calculated based on the net electricity generation from the project activity. The monitoring parameter will be continuously monitored by means of energy meters as mentioned above monitoring parameter EG _{BL y} .
4	Long-term jobs (> 1 year) created/ lost	This parameter is monitored based on the number of jobs created by the project owner in the long-term basis and ensures that at least ten employments will be provided from the project activity. This will be verified using the monthly employee records/21/ of the employees who worked on the project activity. This was confirmed by interviewing the project representative during remote audit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
5	Sources of income generation increased / reduced	The values of monitored parameter is monitored by the number of people employed. This will be verified using the monthly employee records /21/ of the employees who worked on the project activity. This was confirmed by interviewing the project representative during remote audit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
6	Solid waste Pollution from Hazardous wastes	As per monitoring plan, Solid waste Pollution from Hazardous wastes like transformer oil disposal / replacement or any other oil hazardous from the project activity will be disposed as per guidance given in the 'Turkish Waste Management Regulation' which is the applicable laws/regulations in the host country. This will be monitored by means of the records/41/ by the project owner in the installation site as and when there is a need of disposal/replacement of transformer oil. This was confirmed by interviewing the monitoring personnel of the project activity during remote audit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
7	Solid waste Pollution from Batteries	The waste batteries will be collected and sent to licensed companies. Amount of waste battery generated are disposed of in an environmentally-sound manner. This parameter is monitored by keeping invoices/41/ of the defunct batteries. This was confirmed by interviewing the project representative during remote audit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.

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	9 R	colid vaste vaste vollution rom end- f-life roducts/ quipment	This parameter is monitored on continuous basis based on the solar panels and other equipment's after ending lifecycle. The PSF/28/ describes the methods for handling and disposing of solar panels and other equipment in accordance with national/local laws. There is no prevailing law in place in regard to how the damaged/defunct solar panels shall be stored or replaced in the host country. The project owner is in the process of devising an internal policy for the same based on the best practice followed domestically/internationally. In the meantime, if regulation or guideline of the host country is released, it shall be ensured that the same is adhered to. This was confirmed by interviewing the monitoring personnel of the project activity during remote audit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team. This parameter is monitored on yearly basis based on the number of trainings provided by the project owners to the
		ccidents	employees and staffs of the project activity to reduce the accidents at site. The project owner declared that the employees of this project have not been involved in any occupational accidents during their employment. This will be verified using the training records registers maintained in the project site. This was confirmed by interviewing the project representatives during the remote audit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
	w P fr P	colid vaste vollution vom vlastics	Generated plastic waste such as plastic packages within the scope of the project and generated plastic waste due to personal activity may cause soil contamination. Disposal of waste is monitored in case of solid waste pollution caused by plastics in the project site. This was confirmed with the project owner undertakes to manage the plastics in compliance to the prevailing laws and regulations.
Findings		y was raised	
Conclusion	The v monite The n emiss arrang design The m the en activite Stand The n emiss monite	rerification to oring methor monitoring period from reduction reduction reduction reduction reduction reduction reduction reductioning of any	confirms that, eam confirms that the monitoring plan based on the approved odology is correctly applied to the PSF/28/. In the verification team considers that monitoring escribed in the monitoring plan is feasible within the project plementation of the monitoring plan are sufficient to ensure that duction and other voluntary labels achieved from the project able and thereby satisfying the requirement of Verification colan will give opportunity for real measurements of achieved ons. There are no host country requirements pertaining to y sustainable development indicators. Therefore, there are no identified in the PSF/28/.

D.4. Start date, crediting period and duration

Means of Project	The Start date of the project activity is 04/10/2017 which is earliest commissioning
Verification	date of solar power plant bundle in the project activity. The Commissioning

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	certificates/16/ of all the installation of the project activity has been verified and confirmed start date as per PSF/28/ is found correct and acceptable to verification
	A crediting period of a maximum length of 10 years has been selected by project owner. The start date of the crediting period is stated as 04/10/2017, which is appropriate as per paragraph 40(b) of the Project Standard version 02.1/02/.
	The expected lifetime of the project activity is 25 years which is verified by the technical details has confirmed based on the sectoral expertise.
Findings	CL05 was raised and closed successfully.
Conclusion	The start dates and the crediting period type & length have been verified and found to be in accordance with GCC project standard version 03.1/02/.

D.5. Environmental impacts

Means of Project	Environmental Impact Assessment Report was prepared within the scope of the
Verification	Annex-1 list of the EIA Regulation with the letter of the Ministry of Environment and
	Urbanization dated 20/09/2022.
Findings	No findings raised.
Conclusion	In the opinion of the assessment team, in the project activity environmental impacts is not significant as per host country legislation. Further analysis not required in this context.

D.6. Local stakeholder consultation

Means of Project Verification	According to the Ministry of Environment, Urbanization and Climate, the facilities where the "EIA is not Required" decision is taken are within the scope of Annex-2
	list, and Public Participation Meeting is not held in accordance with the regulation.
	Within the Makascı-4 Solar Power Plant Bundle project, the decision of "EIA is not
	required" has been made, and a public participation meeting has not been held before.
	Therefore, the Local Stakeholder meetings were organized by Desilyon Danışmanlık
	Ticaret A.Ş. for Makascı-4 Solar Power Plant Bundle project. To enhance the participation of all stakeholders several meetings held in the central part of the Konya province Meram district. It was arranged at 14:00 on 01/03/2022. The meetings were announced orally. Furthermore, announcements were sent to the headmen and coffee houses of the nearby settlements and posted on the board. Agenda
	14:00 – 14:15 = Opening and Presentation
	14:15 – 14:40 = Project Introduction and Sustainability Evaluation
	14:40 – 14:55 = Q&A
	14:55 – 15:10 = Evaluation and Feedback
	15:10 – 15:25 = Closing
	Local stakeholders were given some information about the project at the beginning of the meeting. The electricity capacity of the project, its effects on the environment, people, and natural life in the region where the project is located were mentioned. Local stakeholders were informed about climate change, the impact of greenhouse gases on the climate and greenhouse gas emissions. It was explained why solar power was preferred for the project and the contribution of renewable energy sources to greenhouse gas emissions. In addition, at the end of the meeting, the Sustainable
	Development Indicators Evaluation Form was prepared, and the information of the
	owner was obtained.

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	The stakeholder consultation responses were received by the assessment team. The verification team confirmed by review of the stakeholder responses that the summary of stakeholders' comments reported in PSF/28/ was accurate. There was no negative feedback received. The list of the relevant stakeholders who were requested for feedback is also provided in the PSF/28/.
Findings	No finding was raised.
Conclusion	The verification team confirms that the summary of stakeholders' comments reported in PSF/28/ is complete. In the opinion of the team, the local stakeholder consultation process was adequately conducted by the project participant considering the ongoing pandemic to receive unbiased comments from the all the stakeholders. The verification team confirms that the local stakeholder consultation process performed for the project activity fulfils the requirements and all the LSC documents/20/ are verified and found acceptable.

D.7. Approval and Authorization- Host Country Clearance

Means of Project Verification	As per the GCC program guidelines the submission of HCA on double counting is required by CORSIA labelled project after 31/12/2020 as verified under section D.13 of this report. For carbon credits issued during 01/01/2016 – 31/12/2020. the host country approval is not required. Thus, for this project activity Host country clearance is not required at the time of project verification.
Findings	FAR 01 raised.
Conclusion	The verification team confirms that no Host Country approval is required by the CORSIA labelled project activity and the HCA will be required during the first or subsequent verification, when the issuance of carbon credit is considered beyond 1 st Jan 2021.

D.8. Project Owner- Identification and communication

Means of Project Verification	The information and contact details of the project owner and project owners themselves has been appropriately incorporated in Appendix 1 of the PSF/28/ which was checked. The Authorization letters signed by the project owners has been verified and also the company registration documents and project owner valid passports have been checked. All information was consistent between these documents.
Findings	No finding was raised.
Conclusion	The verification team confirms that the information of the project owners has been appended as per the template and the information regarding the project owners stated in the PSF/28/ and authorization letter/17/ were found to be consistent

D.9. Global stakeholder consultation

Means of Project Verification	The PSF/28/ was made available through the dedicated interface on the GCC website.				
	The duration of the period for submission of comments for the global stakeholder consultation from 18/05/2022 to 01/06/2022. There were no comments received during this period.				
	• 1				
Findings	No findings raised.				
Conclusion	The PSF/28/ had been made public for receiving stakeholder feedback and no comments were raised during the GSC process				

D.10. Environmental Safeguards (E+)

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Means of Verification	Project	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 of the PSF/28/. Out of all the safeguards no risks were identified to the environment due to the project implementation and operation. And the following have been indicated as positive impacts Environment – Air- CO ₂ emissions. Environment – Natural Resources - Replacing fossil fuels with renewable sources of energy. Environment – Land - Solid waste Pollution from Hazardous wastes. Environment – Land - Solid waste Pollution from end-of-life products/ equipment. Environment – Land - Solid waste Pollution from Batteries. Environment – Land - Solid waste Pollution from Plastics. Few risks identified regarding solid waste like disposal of damaged PV modules, E waste generated from the project activity & Solid waste Pollution from end-of-life products/ equipment and project owner provided mitigation plan to reduce the risk is not likely to cause any harm. The appropriate monitoring plan has been put in place to monitor the elements marked positive and risks identified due to implementation of the project activity. The
Findings		detailed matrix has been included in appendix 7 of the report. CAR06 was raised and closed successfully.
Conclusion		
Conclusion		Based on the documentation review the verification team can confirm that 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.

D.11. Social Safeguards (S+)

Means of F Verification	Project	The Project owner has chosen to apply for the Social No-net-harm Label (S+). The assessment of the impact of the project activity on the social safeguards has been carried out in section E.2 of the PSF/28/. Out of all the safeguards no risks were identified to the society due to the project implementation and operation. Only positive impacts identified by the Project owner which is not likely to cause any harm. The following have been identified as positive impacts of the project activity. Social – Jobs - Long-term jobs (> 1 year) created/ lost. Social – Health and Safety – Reducing / Increasing Accidents. Social – Jobs - Sources of income generation increased / reduced. An appropriate monitoring plan has been put in place to monitor both the elements. The project verification team cross-check the claims of positive impact of project in society during the site visit and through supporting documents. The detailed matrix providing the project verification team's assessment has been included in appendix 6 of the verification report.
Findings		CAR06 was raised and closed successfully.
Conclusion		Based on the documentation review the verification team can confirm that Project Activity is not likely to cause any negative harm to the society but would have a positive impact, hence, is eligible to achieve additional S+ certifications

D.12. Sustainable development Goals (SDG+)

Means of I	Project	The assessment of the contribution of the project activity on United Nations
Verification		Sustainable Development Goals has been carried out in section F of the PSF/28/.
		Out of the 17 Goals project activity has no adverse effect on any of the goal and contribute to 05 SDGs:
		Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
		Goal 8. Promote sustained, inclusive and sustainable economic growth, full and
		productive employment and decent work for all

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	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13. Take urgent action to combat climate change and its impacts
	The detailed matrix has been included in appendix 7 of the report.
Findings	CAR06 was raised and closed successfully.
Conclusion	Based on the documentation review the verification team can confirm that Project Activity is likely to contribute to the United Nations Sustainable Development Goals and would have a positive impact, hence, is eligible to achieve additional SDG+certifications

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

Means of Project Verification	A declaration under section A.5 of the PSF/28/ has been included for offsetting the approved carbon credits (ACCs) for the entire crediting period from 04/10/2017 – 03/10/2027.
Findings	FAR 01 was raised.
Conclusion	The project owner has clarified the intent of use of carbon credits for CORSIA hence no double counting/15/ will take place.

D.14. CORSIA Eligibility (C+)

Means of Project Verification	The project activity meets the CORSIA Eligibility since the crediting period is after 04/10/2017 and the project is applying for registration under GCC which is one of the approved programs for eligibility. It was also confirmed that the project activity does not fall under the excluded unit types, methodologies, programmed elements, and/or procedural classes.
Findings	FAR 01 was raised.
Conclusion	The project activity meets the CORSIA Label (C+) eligibility: a) The Project Activity complies with all the requirements for the Emission Unit Criteria of CORSIA b) A written attestation from the host country's national focal point on double counting is not required for Emission units till 31 st December 2020; c) The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1/14/., v1.2 paragraph 21-23, and the ACCs/22/ expected to be issued during the crediting period 04/10/2017 – 03/10/2027 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.

Section E. Internal quality control

The verification report prepared by team leader is reviewed by an independent technical reviewer (having competence of relevant technical area himself/herself or through an independent technical area expert) to confirm the internal procedures established by 4KES are duly followed and the Verification report/opinion is reached in an objective manner and complies with the applicable GCC requirements.

The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the verification team. The independent technical reviewer(s) may approve or reject the draft verification report. The findings may be identified even at this stage, which needs to be satisfactorily resolved, before submit final report to GCC. The final approval decision is taken by the Head of DOE/Director.

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Project Verification Report

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Section F. Project Verification opinion

4K Earth Science Private Limited has been contracted by 'Desilyon Danışmanlık Ticaret A.Ş' to undertake verification of the project activity "Makascı-4 Solar Power Plant Bundle" in Türkiye. The verification was performed based on rules and requirements defined by GCC for the project activity.

The project activity is a solar power project, which results in reductions of CO₂e emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario and the emission reductions attributable to the project are, hence, additional to any that would occur in the absence of the project activity. The project correctly applies the approved baseline and monitoring AMS-I.D version 18.0 and is assessed against latest valid PS/02/, VS/03/ and Environment and Social Safeguards Standard/04/, Project-Sustainability-Standard/05/ and/or other applicable GCC/CDM Decisions/Tools/Guidance/Forms.

The project activity is likely to achieve the anticipated emission reductions stated in the PSF provided the underlying assumptions do not change. The expected emission reductions (annual average) from the project activity are estimated to be 15,263 tCO2e/year over the 10 years crediting period starting from 04/10/2017.

4K Earth Science Private Limited has verified and hereby certifies that the GCC Project Activity "Makascı-4 Solar Power Plant Bundle":

- has correctly described the Project Activity in the Project Submission Form (version 3.0, dated 15/05/2023) including the applicability of the approved methodology AMS-I.D version 18.0 and meets the methodology applicability conditions, is additional and is expected to achieve the forecasted real, measurable and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reduction estimates correctly and conservatively;
- is likely to generate GHG emission reductions amounting to the estimated 1 tCO2eq over the crediting period, as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 and therefore requests the GCC Program to register 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 therefore requests the GCC Program to register the Project Activity, which is likely to achieve the requirements of the Environmental No-net-harm Label (E+) and the Social No-net-harm Label (S+); and
- is likely to contribute to the achievement of United Nations Sustainable Development Goals (SDGs), comply with the Project Sustainability Standard, and contribute to achieving a total of 05 SDGs, which is likely to achieve the Platinum SDG certification label (SDG+).
- The Project Activity complies with all the applicable requirement 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
- is likely to contribute to CORSIA Eligible Emission Units and has CORSIA Label (C+) certification valid till 31 December 2020. A written attestation from the Host country on double counting is not required until 31 December 2020 and the project was found meeting the applicable requirements prescribed by ICAO.

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Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits
AMS	Approved Methodology for SSC Projects
BE	Baseline Emission
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
СМ	Combined Margin
CPA	Component Project Activity
CO2	Carbon dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CP	Crediting Period
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Green House Gas
GW	Giga Watt
GWh	Giga Watt hour
IPCC	Intergovernmental Panel on Climate Change
kW	kilo Watt
kWh	kilo Watt hour
LSC	Local Stakeholder Consultation
MoV	Means of Verification
MP	Monitoring Plan
MW	Mega Watt
MWh	Mega Watt hour
OM	Operating Margin
PA	Project Activity.
PSF	Project Submission Form
PE	Project Emission
PLF/CUF	Plant Load Factor/Capacity utilization factor
PO	Project Owner
PS	Project Standard
SDG	Sustainable Development Goal
tCO ₂ e	Tonnes of Carbon dioxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
VS	Verification Standard

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Appendix 2. Competence of team members and technical reviewers

Certificate of Competence								
Name Mr. Ms.	Ma Paa Puratchikk	anal						
Qualification	· · · · · · · · · · · · · · · · · · ·							
Procedure	Procedure for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects.							
Appointed to work	as:							
	CDM	Team	Team	Technical	Technical	Financial		
	Validator/Verifier	Leader	Member	Expert	Reviewer	Expert		
Appointed	Yes	Yes	Yes	Yes	Yes	Yes		
Appointed Date	15-11-2021							
Authorized to work	k as Technical Exper							
Authorized	Sectoral Sco	ope	TA Code	Technica	l Area within	the scope		
Technical Area	Energy industries (r	enewable	1.1	Therm	ial energy ger	neration		
	- / non-renewable	,						
	Energy industries (r	enewable	1.2	Renewables				
	- / non-renewable	sources)						
	Energy dema	and	3.1	E	Energy demar	nd		
	Construction	n	6.1		Construction	1		
	Waste handling and	d disposal	13.1	Solid w	vaste and was	stewater		
	Waste handling and	d disposal	13.2		Manure			
	Agriculture	9	15.1		Agriculture			
	GHG+							
	E+							
	S+							
	SDG+							
Authorized to work	k as Local Expert for	:						
Country/Countries	India, Sri Lanka, Ind	onesia, Vie	tnam, Turke	y, Thailand, E	Brazil, Myanm	ar		
Compliance check	Anand S. R.							

Certificate of Competence							
Name Mr. Ms.	Swati S Acharya	Swati S Acharya					
Qualification	Fulfils the requireme	ent as per ti	he appointm	ent of person	nel procedur	e of 4KES	
Procedure	for Validation and V	erification c	of CDM/VCS	/GS/GHG Pro	ojects.		
Appointed to work a	as:						
	CDM Validator/Verifier						
Appointed	No	No	Yes	No	No	No	
Appointed Date	01-11-2021						
Authorized to work as Technical Expert for:							
Authorized	Sectoral Sco	рре	TA Code	Technica	l Area within	the scope	
Technical Area	Energy industries (r - / non-renewable		1.2		Renewables	3	

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	GHG+		
	E+		
	S+		
	SDG+		
		•	
Authorized to work	as Local Expert for:		
Country/Countries	India		
Compliance check l	<i>by:</i> Anand S. R.		

	Cer	tificate of C	Competence				
Name Mr.	Sanjay Kumar						
Qualification Procedure	Fulfils the requirement for Validation and V	ent as per th erification of	e appointme	nt of personn GS/GCC/GH	el procedure 3 Projects.	of 4KES	
Appointed to wor	rk as:				•		
	CDM Validator/Verifier	Team Leader	Team Member	Technical Expert	Technical Reviewer	Financia Expert	
Appointed	Yes	Yes	Yes	Yes	Yes	No	
Appointed Date	24-11-2022						
Authorized to wo	rk as Technical Expe	rt for:					
Authorized	Sectoral Sc	ope	TA Code	Technica	Technical Area within the scope		
Technical Area	Energy industries (renewable - / non-renewable sources)		1.2		Renewables		
	Energy dem	Energy demand		Energy demand			
	Construction	Construction		Construction			
	Waste handling an	Waste handling and disposal		Solid waste and wastewater			
	GHG+						
	E+	E+					
	S+	S+					
	SDG+						
Authorized to wo	ork as Local Expert for	·-					
Country/Countries		•					
Compliance chec	ck by: Anand S. R.						

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Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1	GCC	GCC Program Manual	Version 03.1	Publically
				available
2	GCC	Project Standard	Version 03.1	Publically
				available
3	GCC	Verification Standard	Version 03.1	Publically
				available
4	GCC	Environment-and-Social -	Version 3.0	Publically
		Safeguards-Standard		available
5	GCC	Project-Sustainability-Standard	Version 3.0	Publically
				available
6	GCC	Project Submission Form	Version 01.1	Publically
	000	D : 10 l : : 5 (D05)		available
7	GCC	Project Submission Form (PSF)-	Version 3.2	Publically
0	UNFCCC	Template	Version 20.0	available
8	UNFCCC	Methodology: AMS-I.D version 18.0	version 20.0	Publically available
9	UNFCCC	Tool to calculate the emission factor	Weblink	Publically
9	UNFCCC	Version 7.0	<u>vvebiirik</u>	available
10	UNFCCC	TOOL01: Tool for the demonstration	TOOL 01	Publically
10	ON CCC	and assessment of additionality	100201	available
		(Version 07.0.0)		available
		(**************************************		
11	UNFCCC	TOOL07: Tool to calculate the	TOOL 07	Publically
		emission factor for an electricity		available
		system; Version 07.0.		
12	UNFCCC	TOOL21: Demonstration of	TOOL 21	Publically
		additionality of small-scale project		available
		activities; Version 13.1.		
13	UNFCCC	TOOL24: Common practice, Version	<u>TOOL 24</u>	Publically
		03.1.		available
14	UNFCCC	TOOL27: Investment analysis,	<u>TOOL 27</u>	Publically
		Version 11.0.		available
15	GCC	Clarification No. 01.	CLARIFICATION No 01	Publically
				available
16	Project Owner	Standard on Avoidance of Double	Dated 22/07/2022	Project
47	D :	Counting, Version 1.0	D + 104/40/0047	Owner
17	Project Owner	Commissioning Certificate (Earliest)	Dated 04/10/2017	Project
40	Desired O	Latter of A that after one Pro-	Data 140/05/0000	Owner
18	Project Owner	Letter of Authorization regarding	Dated 10/05/2022	Project
		project Owner of Makascı-4 Solar Power Plant Bundle.		Owner
19	Project Owner	System Connection Agreement of	Dated 27/08/2014	Project
19	i Toject Owner	Makascı-4 Solar Power Plant Bundle.	Dateu 27/00/2014	Project Owner
20	Project Owner	Feasibility Study Reports of the	Dated 10/04/2017	Project
20	i roject Owner	Plants.	Dated 10/04/2017	Owner
21	Project Owner	Local Stakeholder Consultation	Dated 01/03/2022	Project
_ '	. rojout owner	documents like invitation, Notes on	24.04 0 17.00/2022	Owner
		LSC, Meeting Photos, MOM.		
22	Project Owner	Employee Records / HR Records	-	Project
		, 12, 22 1222132, 111233133		Owner
23	Project Owner	Declaration for Intended use of ACCs	Dated 28/07/2022	Project

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No.	Author	Title	References to the document	Provider
			a countries	Owner
24	Project Owner	ODA Declaration	Dated 28/07/2022	Project
	,			Owner
25	GCC	Solid Waste Records/Register	Dated 13/04/2023	Publically
				available
26	Project Owner	EIA Regulation for Makascı-4 Solar Power Plant Bundle.	Dates	Project Owner
		BGES-1 GES	05/02/2016	
		B GES ENERJİ-3 GES	20/01/2016	
		CGES-1 GES	05/02/2016	
		C GES ENERJİ-2 GES	20/01/2016	
		DGES ENERJİ-1 GES	20/01/2016	
		DGES ENERJİ-2 GES	18/01/2016	
		EGES ENERJİ-1 GES	18/01/2016	
		EGES ENERJİ-2 GES	22/01/2016	
		ÇAĞLAYAN-2	05/02/2016	
		ÇAĞLAYAN-4 GES	22/01/2016	
		KEHRİBAR-2 GES	18/01/2016	1
		KEHRİBAR-3 GES	18/01/2016	1
		GİTAŞ-3 GES	08/03/2016	1
		ADAKALE GES	22/03/2016	1
		Cihangir AYDOĞANGES GES	17/03/2016	
		Yaşar AYDOĞAN-3 GES	17/03/2016	
		İbrahim AYDOĞAN-4 GES	07/03/2016	-
27	Project Owner	Calibration Certificate	-	Project
	.,			Owner
28	GCC	Project Verification Report Template	Version 03.1	Publically available
29	Project Owner	PSF Version 1.1	Dated 21/09/2022	Project
		PSF Version 2.0	Dated 14/04/2023	Owner
		PSF Version 3.0	Dated 15/05/2023	
30	Project Owner	IRR Sheet Version 1.1	Dated 21/09/2022	Project
		IRR Sheet Version 2.0	Dated 27/03/2023	Owner
		IRR Sheet Version 3.0	Dated 14/04/2023	
31	Project Owner	ER Sheet Version 1.1	Dated 21/09/2022	Project
		ER Sheet Version 2.0	Dated 27/03/2023	Owner
		ER Sheet Version 3.0	Dated 20/04/2023	
32	Project Owner	Electricity Market Law	https://www.mevzuat.gov.tr/Mev zuatMetin/1.5.4628.pdf	Publicly Available
33	Project Owner	Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy	https://www.mevzuat.gov.tr/MevzuatMetin/1.5.5346.pdf	Publicly Available
34	Project Owner	Energy Efficiency Law	https://www.resmigazete.gov.tr/ eskiler/2007/05/20070502- 2.htm	Publicly Available
35	Project Owner	Forest Law	https://www.mevzuat.gov.tr/MevzuatMetin/1.3.6831.pdf	Publicly Available
36	Project Owner	Environment Law	https://www.mevzuat.gov.tr/Mev zuatMetin/1.5.2872.pdf	Publicly Available
37	CDM	CDM Website https://cdm.unfccc.int/Projects/projse arch.html https://cdm.unfccc.int/Projects/Valid ation/index.html	-	Publically Available

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No.	Author	Title	References to the document	Provider
38	VERRA	Verra Registry https://registry.verra.org/app/search/ VCS/All%20Projects	-	Publically Available
39	Gold Standard	GS Website https://registry.goldstandard.org/projects?q=&page=1	-	Publically Available
40	Project Owner	HSE Law\Hse law.pdf	-	Publically Available
42	I.REC Standard	International REC Standard (I-REC) https://www.irecstandard.org/registries/	-	Publically Available.

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

Table 1. **CLs from this Project Verification**

CL ID	01	Section no.	Date: 04/07/2022
	(0)		

Description of CL

Project Owner's (PO) is requested to submit the following documents / supporting's:

- 1. Commissioning Certificates of all the 15 Installations.
- 2. Details of Sanctioned Connected Load / Contract Demand of all 15 installations.
- 3. Power Purchase Agreements.
- 4. Proof for Start date of project.
- 5. Declaration of intended use of Approved Carbon Credits (ACCs).
- 6. EIA decision proof.
- 7. Local Stakeholder Invitations, Photographs and Minutes of Meeting.
- 8. Company HR Policy to support the claims made in PSF.
- 9. Makasci's Waste management practices and record keeping process.
- 10. ODA declaration
- 11. Details of workers employed during construction stages (both temporary & permanent) and no. of women employed.
- 12. Details of employees employed for the operation of project activity (both temporary & permanent) and no. of women employed.
- 13. Details of Balance of Plant (BOP).
- 14. Calibration certificates for the energy meters.
- 15. Records of training.

Project Owner's response

- Date: 27/03/2023 1. It has been shared in "5-Commissioning Certificates" of LoD.
- 2. It has been shared in "9-Connection Agreement" of LoD.
- 3. It has been shared as Connection Agreement because for SPP in Turkey, the connection agreement can use instead of Power Purchase Agreement "9-Connection Agreement" of LoD.
- 4. It has been mentioned in Commissioning Certificates of all plants. So kindly find the List of Document in "5-Comissioning Certificates".
- 5. It has been shared in "25-ACC Declaration" of LoD.
- 6. It has been shared in "22-EIA Exemption Decision" of LoD.
- 7. It has been shared in "26-LSC Proof" of LoD.
- 8. It has been shared in "27- Company Policy" of LoD.
- 9. It has been shared in "24-Proof for Environmental and Social benefit" of LoD.
- 10. It has been shared in "28-ODA Declaration" of LoD.
- 11. It has been shared in "24-Proof for Environmental and Social benefit" of LoD.
- 12. It has been shared in "24-Proof for Environmental and Social benefit" of LoD.
- 13. It has been shared in "17- Single Line Diagram" of LoD.
- 14. It has been shared in "29- Calibration Certificates" of LoD.
- 15. It has been shared in "15-Training Records" of LoD.

Documentation provided by Project Owner's

Revised List of Documents.

GCC Verifier assessment Date: 25/04/2023

The above-mentioned documents have been provided and it have been reviewed.

Thus, the CL01 is closed.

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CL ID 02 Section no. A.1 Table 3 **Date**: 04/07/2022 Description of CL PO to clarify the difference in the number of inverters i.e. why more number of inverters used for less area? Project Owner's response Date: 27/03/2023 Since the maximum power (kW) of inverters are different from each other, different number of inverters are being used. Documentation provided by Project Owner's Revised PSF. GCC Verifier assessment Date: 25/04/2023 The PSF revised in this context and now in line with the details provided in the Section A.1 is appropriate. CL02 is closed.

CL ID	03	Section no.	Section no. A.3 – Table 3 Date : 04/07/2022									
Description	Description of CL											
The total of	of electricity gen	eration looks to be 25,0	004. Please clarify ac	cordingly.								
Project O	wner's respons	se		Date: 27/03/2023								
The total e	electricity genera	ation is provided by usir	ng feasibility report a	nd the value has been corrected.								
Documen	tation provided	d by Project Owner's										
Revised P	SF.											
GCC Verifier assessment Date: 25/04/2023												
The PSF revised in this context and now in line with the details provided in the feasibility report.												
Thus, CL0	3 is closed.											

CL 04 Section no. B.2 Date: 04/07/2022 **Description of CAR** The applicability of methodologies for AMS-I.D version 18.0 conditions is not matching with the para mentioned in the PSF. **Project Owner's response** Date: 27/03/2023 The applicability of methodology has been revised accordingly. **Documentation provided by Project Owner's** Revised PSF. **GCC Verifier assessment Date:** 25/04/2023 The PSF revised in this context and now in line with the details provided in the applicability of methodologies for AMS-I.D version 18.0 conditions. Thus, CL04 is closed.

CL	05	Section no. C.3.2 and C.3.3 Date : 04/07/2022										
Description	Description of CAR											
Start date of	of crediting perio	d need to be clarified.										
Project Ow	ner's respons	е		Date: 27/03/2023								
			10/2017 and the crediting pe	eriod start date is day after								
the commis	sioning date wh	nich is 05/10/2017.										
Document	ation provided	by Project Owner's										
Revised PS	SF.											
GCC Verifi	GCC Verifier assessment Date: 25/04/2023											
The above-mentioned query has been clarified and reviewed with the PSF.												
Thus, CL05	Thus, CL05 is closed.											

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Table 2. CARs from this Project Verification

CAR	01 Section no. A.3 Date : 04/07/2022									
Description of CAR										
	The following details are not adequately presented:									
- Type	e of PV modules used	l is not clear (w	hether Mono / Poly Crystallin	ie Technology)						
- Deta	ails of Inverter									
- Туре	e of structure used for	solar panel mo	ounting							
Project Own	ner's response			Date: 27/03/2023						
Detailed info	ormation about modul	es and inverter	s have been added in section	n A.3.						
Documenta	tion provided by Pro	ject Owner's								
Revised PSI	₹.									
GCC Verifier assessment Date: 25/04/2023										
The PSF revised in this context and now in line with the details provided in the section A.3.										
Thus, CAR0	1 is closed.		·							

CAR	02	Section no.	tion no. ER Excel Sheet Date: 04/07/2022								
Description of CAR											
Project nar	me mentioned in	the Excel sheet is incor	rect.								
Project Ov	wner's response)		Date: 27/03/2023							
It has beer	n corrected.										
Document	tation provided	by Project Owner's									
Revised Ex	xcel sheet.										
GCC Verifier assessment Date: 25/04/2023											
The Excel sheet revised in the context and now in line with project name mentioned in the PSF.											
Thus, CAR	R 02 is closed.										

CAR	03	Section no.	Excel and J1		(J13,	J14	Date: 04/07/2022			
Description of CAR										
The "Paramet	ers" column states El	ectricity genera	ition, Re	duction	of PM	12.5 ar	nd PM10 for Meldan Solar			
Power Plant calculated?	Bundle. Why Meldan	SPP Bundle?	And o	n what	basis	132.6	9 GWh value have been			
Project Owne	er's response						Date: 27/03/2023			
The name of t	he bundle has been wi	itten mistakenly	and it h	as beer	n corre	cted. A	Ilso, GWh value corrected.			
Documentati	on provided by Proje	ect Owner's								
Revised Exce	l Sheet.									
GCC Verifier assessment Date: 25/04/2023										
	The Excel sheet revised in the context and now in line with name of the bundle mentioned in the PSF. Thus, CAR 03 is closed.									

CAR	04	Section no.	Date: 04/07/2022								
Description of CAR											
Crediting pe	riod duration mer	ntioned is not matchin	g with what has been p	rovided in the PSF.							
Project Ow	ner's response			Date: 27/03/2023							
It has been	corrected.										
Documenta	tion provided by	y Project Owner's									
Revised Exc	cel Sheet.										
GCC Verifie	er assessment			Date: 25/04/2023							
The Excel sheet revised in the context and now in line with duration of the crediting period mentioned in											
the PSF.											
Thus, CAR	Thus, CAR 04 is closed.										

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CAR 05 Section no. IRR Excel Sheet Date: 04/07/2022

Description of CAR

Project name mentioned in the IRR sheet is incorrect. And also provide the IRR sheets for each PO as

Project name mentioned in the IRR sheet is incorrect. And also provide the IRR sheets for each PO as per the requirements addressing the investment analysis guidelines.

Sensitivity on Generation is not provided. Clarify?

Project Owner's response Date: 27/03/2023

Project name has been revised accordingly and Sensitivity on Generation is also provided.

Documentation provided by Project Owner's

Revised IRR Sheet.

GCC Verifier assessment Date: 25/04/2023

The IRR sheet revised in the context and now in line with project name mentioned in the PSF and as above mention sensitivity on generation details have been provided and reviewed.

Thus, CAR 05 is closed.

 CAR
 06
 Section no.
 E.1, S.2 and F
 Date: 04/07/2022

 Description of CAR

Please provide the following for claims in the PSF:

- 1. Claims for environmental safeguards in the section E.1
- 2. Claims for social safeguards in the section S.1
- 3. And proof for claims on SDGs in section F.

Project Owner's response Date: 27/03/2023

All claims the Section E.1, S.2 and F have been shared in "List of Documents".

Documentation provided by Project Owner's

Revised PSF.

GCC Verifier assessment Date: 25/04/2023

The above-mentioned claims for Environmental safeguards in the section E.1, Social safeguards in the section S.1 and SDGs in section F have been provided and reviewed.

Thus, CAR06 is closed.

Table 3. FARs from this Project Verification

FAR ID	01	Section no.		Date: 04/07/2022				
Description	on of FAR							
Verifier should certify CORSIA Label (C+) till 31 Dec 2020. For first or subsequent verifications Host								
Country A	uthorization to be prov	ided and same t	o be verified.					
Project O	wner's response			Date:				
Documen	tation provided by Pr	oject Owner						
	-	-						
GCC Proj	ect Verifier assessme	ent		Date:				

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Appendix 5. Matrix for Identifying Environmental Impacts, Establishing Safeguards and Performing Do-No-Harm Risk Assessments in the PSF and GCC Verifier's conclusion

Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards									ds	Project Ow Conclusi		GCC V Concl	erifiers lusion		
Impact of B. I.				Do-No-H	larm Risk Ass	essment		ation Action lans		n Residual Risk essment	Self-Declara		3 rd Part	3 rd Party Audit	
Impact of Activity on	of Project	Description of Impact (both positive and negative)	Legal require ment / Limit	Not Applicable (No actions required)	Harmless (No actions required)	Harmful (Actions required)	Operation al Controls	Program of Risk Managemen t Actions	Re- evaluate Risks	Monitoring	Explanation of Conclusion	The Project Activity will not cause any harm	Verification Process	Will the project activity cause any harm?	
Environmen tal impacts on the identified categories ²¹ indicated below.	Indicators for environmental impacts	Describe anticipated environmental impacts, both positive and negative from all sources (stationary and mobile), that may result from the Project Activity, within and outside the project boundary, over which the Project Owner(s) has control, and beyond what would reasonably be expected to occur in the absence of the Project Activity.	Describe the applicabl e national regulatory requirem entite //legal limits related to the identified risks of environm ental impacts.	If no environment al impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicable (No actions required)	If environmen tal impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirement s/ below the legal limits, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Harmless (No actions required)	compliance with the applicable national regulatory requirement s or are likely to exceed legal limits, then the Project Activity is likely to cause harm	Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as Harmful.	Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce the risk of impacts that have been identified as Harmful.	Re-evaluate risks after Risk Mitigation Action Plans have been developed (refer to previous two columns) for impacts that have been identified as Harmful. Indicate whether the risks have been eliminated or reduced and, where appropriate, indicate them as Harmless (No actions required)	Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as Harmful and described in the PSF (refer to Table 3).	Describe how the Project Owner has concluded that the Project Activity is likely to achieve the identified Risk Mitigation Action Plan targets for managing risks to levels that are unlikely to cause any harm.	Confirm that the Project Activity risks of negative environm ental impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for Yes or and -1 for No)	Describe how the Project Owner has concluded that the Project Activity is likely to achieve the identified Risk Mitigation Action Plan targets for managing risks to levels that are unlikely to cause any harm.	Confirm that the Project Activity risks of negative environmental impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for Yes or and -1 for No)	
Environn	nental Safe	guards													
	SO ₂ emissions	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-	
	NO _x emissions	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-	
Environ ment - Air	CO₂ emissions	The project reduces CO ₂ emissions since it reduces the amount of fossil fuel used. Thus, air pollution decreases.	N/A	The project reduces CO ₂ emissions in the baseline; hence the project will not cause any harm in this regard	-	-	N/A	N/A	N/A	The electricity generation will be monitored by using electricity meters. Thus, emission reduction will be calculated accordingly	The project is expected to result in lower CO ₂ emission than the baseline throughout the crediting period	+1	The project will have a positive impact by reducing measurable amount of CO ₂ emissions. This amount of emission reduction will be monitored as per monitoring plan in the PSF in section B.7.1.	+1	
	CO emissions	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-	
	Suspended particulate matter (SPM) emissions	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A		
	Fly ash emissions	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-	
	Non-Methane Volatile Organic Compounds (NMVOCs)	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A		
	odor bahesio Runci	J N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-	
Environ ment - Land	Noise Pollution	Generated plastic waste such as plastic packages within the scope of the project and generated plastic waste due to personal activity may cause soil contamination	N/A	N/A	Harmless	-	N/A	N/A	N/A	Disposal of waste is monitored in case of solid waste pollution caused by plastics in the project site.	The project owner undertakes to manage the plastics in compliance to the prevailing laws and regulations.	+1	N/A The project will have a positive impact of handling of generated plastic wastes is similar with handling of hazardous wastes and batteries. Waste invoices that are recorded once in a year by mobile waste tracking system are data source for this parameter. For further endorsemen t, plastic waste generation and handling reports are kept. The data / parameter	+1	

 $^{21} \ sourced \ from \ the \ CDM \ SD \ Tool \ and \ the \ sample \ reports \ are \ available \ (\ \underline{https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx}\)$

	1	I											table related	
													table related to this monitoring parameter has been added the section B7.1.	
	Solid waste Pollution from Hazardous wastes	Damaged solar panels on site can cause adverse environmental impacts if not managed well.	N/A	N/A	Harmless		N/A	N/A	N/A	The details of the damaged and returned solar panel modules will be kept in the records for future verifications.	The project owner undertakes to manage the solar panel module waste in an appropriate manner and in accordance with applicable laws and regulations.	+1	The Transformer oil or any other hazardous waste will be disposed as per applicable laws and regulations in the host country. Hence there is no impact considered for the project activity however to ensure to compliance of the laws and regulations the project owner monitored the same throughout the crediting period by means of records of oil disposed /replaced from the project activity. The monitoring plan provided in section B.7.1 is appropriate and acceptable to the verification team.	+1
	Solid waste Pollution from Bio-medical wastes	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Solid waste Pollution from E-wastes	N/A	N/A	N/A	-		N/A	N/A	N/A	N/A	N/A	-	N/A	
Global Car	Solid waste Pollution from Batteries	There is no battery pollution which is anticipated during the operation of the project. It will be disposed in the future according to "Turkish Waste Management Regulation".	Turkish Waste Manage ment Regulati on	-	Harmless	-	N/A	N/A	N/A	Disposal of waste is monitored in case of solid waste pollution caused by batteries in the project site.	The project owner undertakes to manage the battery in compliance to the prevailing laws and regulations.	+1	The project will have a positive impact by using the waste manageme nt of batteries under the regulation Turkish government . This amount of energy generated from the renewable energy sources i.e., solar power plant will be monitored as per monitoring plan in the PSF section B.7.1 for the parameter EGracility.y and assessment of the same is provided section D.3.7 of the Project Verification Report.	+1
	Solid waste Pollution from end of life products/ equipment	If the solar panel modules have not been managed well after their end-of-life, they might have negative impact for environment.	Waste Manage ment Regulati on ²²		Harmless		·	Damage d/defecti ve solar module modules will be stored and disposed of in accordan ce with national/l ocal laws.	Harmless	Details of damaged and returned solar modules will be retained for future verification.	The project owner undertakes to manage the solar panel module waste in an appropriate manner and in accordance with applicable laws and regulations.	+1	Project owner provided mitigation plan to reduce the risk is not likely to cause any harm to the environment The appropriate monitoring plan has been put in place to monitor the risks identified	+1

²² https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20644&MevzuatTur=7&MevzuatTertip=5

													due to the implementati on of the project activity This will be monitored as per monitoring plan in the PSF section B.7.2 and assessment of the same is provided section D.3.7 of the Project Verification	
	Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	Report.	-
	Soil erosion	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Reliability/ accessibility of water supply	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Water Consumption from ground and other sources	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Environ ment -	Generation of wastewater	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Water	Wastewater discharge without/with insufficient treatment	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Pollution of Surface, Ground and/or Bodies of water	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Conserving mineral resources	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Protecting/ enhancing plant life	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Protecting/ enhancing species diversity	N/A	N/A	-	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Protecting/ enhancing forests	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Protecting/ enhancing other depletable natural resources	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Conserving energy	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Environ ment – Natural Resource s	Replacing fossil fuels with renewable sources of energy	The project replaces fossil fuels with renewable sources of energy since it is a solar power plant.	There is no such legal limit.	N/A			N/A	N/A	N/A	The electricity generated from solar power will be monitorred throughout the crediting period. You can see the data and monitoring records in B.7.1.	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.	+1	The project will have a positive impact by equally replacing the energy generated by fossil fuels with renewable energy sources (solar). This amount of energy generation from the project activity will be monitored as per monitoring plan in the PSF Section B.7.1 for the parameter EG, nacilly, and assessment of the same is provided section D.3.7 of the Project Verification Report.	+1
	Replacing ODS with non-ODS refrigerants	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Note: If the score is: (a) zero or greater, the overall impact is neutral or positive and there is no net harm; and (b) less than zero, the overall impact is negative and there is net harm to Environment. Score is obtained after adding the individual scores in each of the rows in the last column of the above table. Net Score: +5														

Project Owner's Conclusion in PSF:	The Project Owner confirms that the Project Activity will not cause any net harm to the environment.
ject Verifier's Opinion	The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to Environment.

Appendix 6. Matrix for Identifying Environmental Impacts, Establishing Safeguards and Performing Do-No-Harm Risk Assessments in the PSF

				Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards								Project C			erifier's Iusion
		(Due le et			Do-No	-Harm Risk Asses	ssment	Risk Mitiga Pla	tion Action ans	Do-No-Harm R Assess		Self-Dec	laration	3rd Par	ty Audit
	Impact o Activi		Description of Impact (both positive and negative)	Legal requiremen t /Limit	Not Applicable (No actions required)	Harmless (No actions required)	Harmful (Actions required)	Operational Controls	Program of Risk Manageme nt Actions	Re-evaluate Risks	Monitoring	Explanatio n of Conclusion	The Project Activity will not cause any harm	Verificatio n Process	Will the Project Activity cause any harm?
the cat	pacts on identified egories ²³ icated	Indicators for social impacts	Describe the impacts on society and stakeholders, both positive and negative, that may result from constructing and operating of the Project Activity.	Describe the applicable national regulatory requirements / legal limits related to the identified risks of social impacts.	If no social impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicable (No actions required)	If social impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirements/ legal limits, then it the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Harmless (No actions required)	If social impacts are anticipated that will not be with the applicable national regulatory requirements / legal limits, then the Project Activity is likely to cause harm (may be unsafe) and shall be indicated as Harmful (Actions required).	Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as Harmful.	Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., construction of crèche for workers) that will badopted to reduce the risk of impacts that have been identified as Harmful.	Re-evaluate risks after Risk Mitigation Actions plans have been developed (refer to previous two columns) for impacts that have been identified as Harmful. Indicate whether the risks have been eliminated or reduced and, where appropriate, indicate them as Harmless (No actions required)	Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as Harmful and to be described in the PSF (refer to Table 3).	Describe how the Project Owner has concluded that the Project Activity is likely to achieve the identified Risk Mitigation Action Plan targets for managing risks to levels that are unlikely to cause any harm.	Confirm that the Project Activity risks of negative social impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for Yes or and -1 for No)	Describe how the Project Owner has concluded that the Project Activity is likely to achieve the identified Risk Mitigation Action Plan targets for managing risks to levels that are unlikely to cause any harm.	Confirm that the Project Activity risks of negative social impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for Yes or and - 1 for No)
						Socia	I Safeguard:	5						The	
So	cial - bs	Long-term jobs (> 1 year) created/lost	The project creates permanent job opportunities for the operational period. 10 people have been employed as long-term workers. Without this project, people would be engaged in farming or animal husbandry, but thanks to this work, they have permanent and regular jobs.	Employme nt is made according to national employmen t regulations.	N/A	-	-	N/A	N/A	N/A	The number of people employed in the project will be monitored through SGK (Social Security Institution) records or payroll records.	Employme nt has been recorded. Labor law protects the employees. In addition, there are signed contracts between the project owner and the employees.	+1	The project operation has created new job opportunities in the area during operational phase of the project activity. The number of persons employed would be monitored through HR records. Also, project owner ensures that at least ten employme nts will be provided in the project activity. This will be monitored as per monitoring plan in the PSF section B.7.1 and assessme nt of the same is provided section D.3.7 of the Project Verification	+1
		New short- term jobs (< 1 year) created/ lost	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	Report.	-
		Sources of income generation increased / reduced	The project increases income by creating job opportunities	All payments and right comply with the Labor Law. ²⁴	N/A	-	-	N/A	N/A	N/A	The number of people employed in the project will be monitored through payroll records.	When necessary, statement of employme nt can be provided.	+1	This parameter is monitored on a yearly basis based on revenues generated and recurring expenses from the	+1

²³ sourced from the CDM SD Tool and the sample reports are available (https://www.mevzuat.gov.tr/MevzuatMetin/1.5.4857.pdf

													project activity. This will be verified based on the annual audited accounts book of the project owner. This will be monitored as per monitoring plan in the PSF section B.7.1 and assessme nt of the same is provided section D.3.7 of the Project Verification Report.	
	Disease prevention	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Social - Health & Safety	Reducing / increasing accidents	Occupational accidents at the site may be occurred.	All trainings and precautions are completed according to the HSE Law ²⁵ .	N/A			N/A	N/A	N/A	In order to prevent possible accidents, employees are regularly provided with trainings by authorized institutions and persons. Records of these trainings will be provided.	Occupation al health and safety training is provided to all employees regularly. Moreover, new employees are provided to these trainings.	+1	The Project owner will provide regular safety training to the employees and also encouragin g tto do the work with always with PPE kits for avoiding the accidents at the project site which is assessed as positive impacts of the project activity and hence the score claim by the project owner is acceptable and appropriat e This will be monitored as per monitoring plan in the PSF section B.7.1 and assessme nt of the same is provided section D.3.7 of the Project Verification Report.	+1
Global Carl	Reducing / increasing crime :	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
S.SSAI SAII	increasing food wastage	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Reducing / increasing indoor air pollution Efficiency of	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	
	health services Sanitation	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Sanitation and waste manageme nt	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	
	Job related training imparted or not	N/A	-	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Social - Education	Educational services improved or not Project-	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	
	related knowledge disseminati on effective or not	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	

²⁵ https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf

	Improving/ deterioratin g working conditions	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Community and rural welfare	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Poverty alleviation (more people above poverty level)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Social - Welfare	Improving / deterioratin g wealth distribution/ generation of income and assets	N/A	N/A	N/A		-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Increased or / deterioratin g municipal revenues	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
	Women's empowerme nt	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A		N/A	-
	Reduced / increased traffic congestion	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	-	N/A	-
Note: If the so	core is: (a) zero or adding the individ	greater, the ove	ter, the overall impact is neutral or positive and there is no net harm; and (b) less than zero, the overall impact is negative and there is net harm to society. Score is cores in each of the rows in the last column of the above table.											
	Score:		+3											
	t Owner's ion in PSF:		The Project Owner confirms that the Project Activity will not cause any net harm to society.											
	Project 's Opinion:		The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to Society.											

Appendix 7. Matrix for Demonstration of Contribution of Project to Sustainable Development

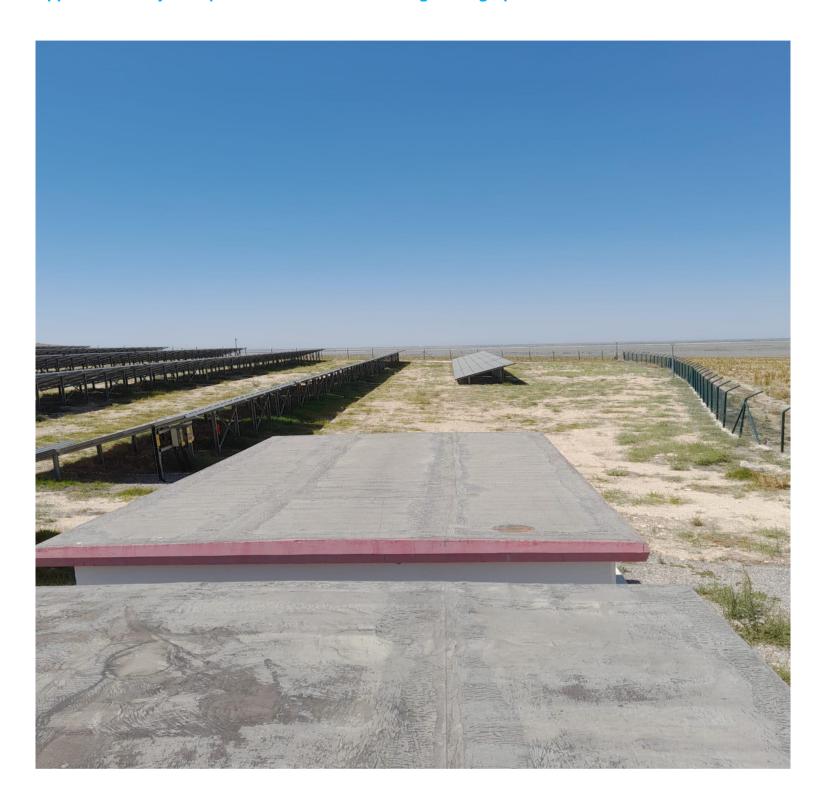
	a Ge UN-level C	Decl ared		Defining Proje	ect-level SDG	is			Owner(s)'s clusion	GCC Project Verifier's Conclusion (to be included in Project Verification Report only)		
UN-level SDGs	UN-level Target	Cou ntry- level SDG	Project-level SDGs	Project-level Targets/ Actions	Project- level Indicator s	Contributi on of Project- level Actions to SDG Targets	Monitoring	Explanation of Conclusion	Are Goal/ Targets Likely to be Achieved?	Verification Process	Are Goal/ Targets Likely to be Achieved?	
Describe UN (\$DIQ::la@ets and) indicators See: https://unstats.un. org/sdgs/indicator s/indicators-list/	Describe O thaci lN-level target(s) and correspondi ng indicator no(s)	Has the host count ry decla red the SDG to be a natio nal priorit y? Indic ate Yes or No	Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope. For guidance see: Integrating the SDGs into Corporate Reporting- A Practical Guide: https://www.unglobalcompact.org/docs/publications/Practical Guide SDG Reporting.pdf Case-study from Coca-Cola and other organizations to develop organization-wide SDGs (page 114): https://pub.iges.or.jp/pub/realising-transformative-potential-sdgs	Define project- level targets/actions, by suitably modifying and customizing UN/Country- level targets to the project scope. Define the target date by which the Project Activity is expected to achieve the project-level SDG target(s). Refer to the previous column for guidance	Define project-level indicators by suitably modifying and customizing UN/Country-level indicators to the project scope or creating a new indicator(s). Refer to the previous column for guidance	Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project- level SDG targets and is additional to what would have occurred in the absence of the Project Activity	Describe the monitoring approach and the monitoring parameters to be applied for each project- level SDG target and Indicator	Describe how the Project Owner has concluded that the project is likely to achieve the identified Project level SDGs target(s).	Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or No)	Describe how the Project Owner has concluded that the project is likely to achieve the identified Project level SDGs target(s	Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or No)	
Goal 1: End poverty in all its forms everywhere	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Goal 3. Ensure healthy lives and promote well- being for all at all ages	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 5. Achieve gender equality and empower all women and girls	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 6. Ensure availability and sustainable management of water and sanitation for all	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	SDG Target 7.2 "By 2030, increase substantially the share of renewable energy in the global energy mix" by the utilization of solar power as a renewable energy source. Related indicator: 7.2.1 Renewable energy share in the total final energy consumptio n.	Yes	Increasing the share of renewable energy sources in the total electricity generation delivered to the national grid	Generate 23,548.659 MWh clean energy annually in average.	To increase the share of electricity generatio n capacity installed from renewable energy sources.	The project increases the share of renewable energy in Türkiye's energy generation mix by providing clean energy. The plant provides 23,548.659 MWh of clean energy to the grid annually in average.	Calculate the share of installed capacity from renewable energy.	The first commissioni ng date of project is 04/10/2017. Project continues to produce clean energy without any problems.	Yes	This project is renewable solar power project started operation from 04/10/2017 and same was verified with the commissionin g certificates provided by the project owner. The generated power from the project activity is the clean energy and continuously monitored by the energy meters installed at the site and included in the monitoring plan in the PSF.	Yes
Global Carbon C 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, oincluding for young people and persons with disabilities and equal pay for work of equal value". Related indicator: 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	Yes	Generating income and job opportunities	Providing employment opportunities for at least 10 people	Recruitme nt of at least 10 people, including people with disabilities	The project generate employmen t for both operation and constructio n period and created long-term employmen t for the people working at the constructio n site.	The number of people employed in the project will be monitored through SGK (Social Security Institution) records or payroll records.	Personnel have been employed by the project owner according to the regulations and the social security payments of the personnel are made regularly.	Yes	This is a direct positive impact of the project activity, which will help to reduce unemployme nt in the host country, this parameter is verifiable during the monitoring period. The total number of persons working in the project activity along with details of female-male break up, age and role and persons with disabilities, if any will be monitored and Payroll/ HR records will be used to monitor this parameter. The relevant monitoring plan is included in the section B.7.1 of the PSF also the assessment of the same has been provided D.3.7 of PVR.	Yes

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDG Target 9.4 "By 2030, upgrade infrastructur e and retrofit industries to make them sustainable, with increased resourceuse efficiency and greater adoption of clean and environment ally sound technologie s and industrial processes, with all countries taking action in accordance with their respective capabilities". Related indicator: 9.4.1 CO2 emission per unit of value added	Yes	Provides a clean and resilient power generation facility	The project is annual 23,548.659MWh resilient energy generation facility.	Providing clean energy	Providing clean energy by avoiding 15,263 tCO ₂ annually in average.	The project has produced clean energy by implementing a solar power plant and helps the adaptation of clean energy technologies.	Check project implementati on continues	Yes	This is the indirect positive impact of the project activity; this project is renewable solar power project and same was verified with the commissionin g certificates provided by the project owner. The generated power from the project activity continuously monitored by the energy meters installed at the site and included in the monitoring plan in section B.7.1 of the PSF.	Yes
Goal 10. Reduce inequality within and among countries	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	SDG Target 11.6 "By 2030, reduce The adverse per capita environment al impacts of cities, including by paying special attention to air quality and municipal and other waste manageme nt." Indicator 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2 .5 and PM10) in cities (population weighted)	Yes	Decrease the amount of PM2.5 and PM10 emissions in the cities	Reduction of PM2.5 is 0.0031 µg/m³. and reduction of PM10 is 0.0063 µg/m³.	Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (populatio n weighted)	As known, fossil fuel emissions are secondary sources of PM2.5 and PM10 in the cities. Since the project reduces the use of fossil fuels, PM2.5 and PM10 formation will be reduced accordingly. Hence, the project helps to improve air quality in cities.	PM2.5 and PM10 have been recorded by Ministry of Environmen t Urbanizatio n and Climate Change and you can see the ER calculation sheet excel. PM2.5 and PM10 were measured in implementa tion of the project activity several times. The measurement will be conducted by project owner after 5 years. Also, General Directorate of Meteorolog y measures these levels regularly.	Project Owner operates the first plant since 04/10/2017 and complies with targeted SDGs so far	Yes	This is direct positive impact of the project which will avoid around 15,263 tCO2 /year. The generated power from the project activity is the clean energy and continuously monitored by the energy meters installed at the site and included in the monitoring plan in the PSF.	Yes
Goal 12. Ensure sustainable consumption and production patterns	N/A	N/A	N/ Reduction of PM2.5 is 0.0174 µg/m³. and reduction of PM10 is 0.0352 µg/m³. A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Goal 13. Take urgent action to combat climate change and its impacts	SDG Target 13.3 "Improve education, awareness- raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning". Related indicator: 13.3.2 Number of countries that have communicat ed the strengthenin g of institutional, systemic and individual capacity- building to implement adaptation, mitigation and technology transfer, and developmen t actions	Yes	Eliminate 15,263 tCO ₂ annually in average	Commissioning of annual average 23,548.659 MWh renewable energy power plant	Reducing greenhou se gas emissions by 15,263 tCO ₂ tons annually in average.	Since solar energy is used in the project, there is no greenhouse gas emission related to the project activity. Eliminates 15,263 tCO ₂ tCO ₂ annually in average.	Calculate avoided GHG emissions every year.	The first plant is operated since 04/10/2017 by project owner and complied with targeted SDGs so far.	Yes	This is direct positive impact of the project which will avoid around 15,263 tCO ₂ annual average over the crediting period. The generated power from the project activity is the clean energy and continuously monitored by the energy meters installed at the site and included in the monitoring plan in the PSF.	Yes
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, arbon c accountable and inclusive institutions at all levels	N/A ouncil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			SUMMARY			Targ	eted	l ikely to b	e Achieved		
			Number of SDGs				<u> </u>		5		
Certification labe	er, Gold,	Platinum, or Diamond the PSF	inum Platinum								

Appendix 8. Project Implementation and Monitoring Photographs





Photographic Evidence of Makascı-4 Solar Power Plant Bundle





Meters Photographic Evidence of Makascı-4 Solar Power Plant Bundle

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:
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

²⁶See 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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