



Driving Climate Actions

Project Verification Report

V3.1 - 2020

CONTENTS

COVER PAGE	5
1. PROJECT VERIFICATION REPORT	10
<u>A.1. EXECUTIVE SUMMARY</u>	10
<u>SECTION B. PROJECT VERIFICATION TEAM, TECHNICAL REVIEWER AND APPROVER</u>	12
<u>B.1. PROJECT VERIFICATION TEAM</u>	12
<u>B.2. TECHNICAL REVIEWER AND APPROVER OF THE PROJECT VERIFICATION REPORT</u>	12
<u>SECTION C. MEANS OF PROJECT VERIFICATION</u>	12
<u>C.1. DESK/DOCUMENT REVIEW</u>	12
<u>C.2. ON-SITE INSPECTION</u>	13
<u>C.3. INTERVIEWS</u>	13
<u>C.4. SAMPLING APPROACH</u>	14
<u>C.5. CLARIFICATION REQUEST (CLS), CORRECTIVE ACTION REQUEST (CARS) AND FORWARD ACTION REQUEST (FARS) RAISED</u>	14
<u>SECTION D. PROJECT VERIFICATION FINDINGS</u>	15
<u>D.1. IDENTIFICATION AND ELIGIBILITY OF PROJECT TYPE</u>	15
<u>D.2. GENERAL DESCRIPTION OF PROJECT ACTIVITY</u>	16
<u>D.3. APPLICATION AND SELECTION OF METHODOLOGIES AND STANDARDIZED BASELINES</u>	19
D.3.1 APPLICATION OF METHODOLOGY AND STANDARDIZED BASELINES	19
D.3.2 CLARIFICATION ON APPLICABILITY OF METHODOLOGY, TOOL AND/OR STANDARDIZED BASELINE	23
D.3.3 PROJECT BOUNDARY, SOURCES AND GHGS	23
D.3.4 BASELINE SCENARIO	23
D.3.5 DEMONSTRATION OF ADDITIONALITY	24
D.3.6 ESTIMATION OF EMISSION REDUCTIONS OR NET ANTHROPOGENIC REMOVAL	29
D.3.7 MONITORING PLAN	32
<u>D.4. START DATE, CREDITING PERIOD AND DURATION</u>	35

<u>D.5.</u>	<u>ENVIRONMENTAL IMPACTS</u>	<u>35</u>
<u>D.6.</u>	<u>LOCAL STAKEHOLDER CONSULTATION</u>	<u>36</u>
<u>D.7.</u>	<u>APPROVAL AND AUTHORIZATION- HOST COUNTRY CLEARANCE</u>	<u>37</u>
<u>D.8.</u>	<u>PROJECT OWNER- IDENTIFICATION AND COMMUNICATION</u>	<u>37</u>
<u>D.9.</u>	<u>GLOBAL STAKEHOLDER CONSULTATION</u>	<u>38</u>
<u>D.10.</u>	<u>ENVIRONMENTAL SAFEGUARDS (E+)</u>	<u>38</u>
<u>D.11.</u>	<u>SOCIAL SAFEGUARDS (S+)</u>	<u>39</u>
<u>D.12.</u>	<u>SUSTAINABLE DEVELOPMENT GOALS (SDG+)</u>	<u>40</u>
<u>D.13.</u>	<u>AUTHORIZATION ON DOUBLE COUNTING FROM HOST COUNTRY (FOR CORSIA)</u>	<u>41</u>
<u>D.14.</u>	<u>CORSIA ELIGIBILITY (C+)</u>	<u>41</u>
<u>SECTION E.</u>	<u>INTERNAL QUALITY CONTROL</u>	<u>42</u>
<u>SECTION F.</u>	<u>PROJECT VERIFICATION OPINION</u>	<u>43</u>
Appendix 1.	Abbreviations	45
Appendix 2.	Competence of team members and technical reviewers	45
Appendix 3.	Document reviewed or referenced	49
Appendix 4.	Clarification request, corrective action request and forward action request	51
Appendix 5.	Environmental safeguards assessment	61
Appendix 6.	Social Safeguards Assessment	70
Appendix 7.	United Nations Sustainable Development Goals (SDG) Assessment	77
Appendix 8.	Sample Photographs from Sites	82

COVER PAGE	
Project Verification Report Form (PVR)	
<i>Complete this form in accordance with the instructions.</i>	
BASIC INFORMATION	
Name of approved GCC Project Verifier / Reference No. (also provide weblink of approved GCC Certificate)	Earthood Services Private Limited/ GCCV001/01 http://globalcarboncouncil.com/wp-content/uploads/2021/10/gcc-verifier-cert-espl.pdf
Type of Accreditation	<input type="checkbox"/> Individual Track ¹ <input checked="" type="checkbox"/> CDM Accreditation <input type="checkbox"/> ISO 14065 Accreditation Active accreditation from United Nations Framework Convention on Climate Change valid till 01/08/2024; Ref no. CDM-E-0066; https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0066
Approved GCC Scopes and GHG Sectoral scopes for Project Verification	GHG Sectoral Scope: GHG SS# 1 - Energy (renewable/non-renewable sources) GCC Scopes: GHG emission reductions (i.e., Approved Carbon Credits (ACCs)) Environmental No-harm (E+) Social No-harm (S+) United Nations Sustainable Development Goals (SDG+)
Validity of GCC approval of Verifier	10/08/2022 to 01/08/2024
Title, completion date, and Version number of the PSF to which this report applies	Title: Kavak Beypazarı Bey Solar Power Plant Bundle Version no.- 6.0 Dated: 21/02/2024
Title of the project activity	Kavak Beypazarı Bey Solar Power Plant Bundle
Project submission reference no. (as provided by GCC Program during GSC)	S00904
Eligible GCC Project Type² as per the Project Standard (Tick applicable project type)	<input checked="" type="checkbox"/> Type A: <input type="checkbox"/> Type A1 <input checked="" type="checkbox"/> Type A2

¹ **Note:** GCC Verifier under Individual track 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.

	<input type="checkbox"/> Type B – De-registered CDM Projects: <input type="checkbox"/> Type B1 <input type="checkbox"/> Type ³ B2		
Date of completion of Local stakeholder consultation	LSC was conducted on 16 March 2022 and 17 March 2022		
Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide web-link.	GSC was conducted from 28/02/2023 - 14/03/2023 and as viewed on the project page. https://www.globalcarboncouncil.com/global-stakeholders-consultation-8/		
Name of Entity requesting verification service (can be Project Owners themselves or any Entity having authorization of Project Owners)	İşmen Gıda Sanayi ve Ticaret Ltd. Şti. Gaia Climate Finansal Danışmanlık Hizmetleri ve Ticaret A.Ş. (Focal Point)		
Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)	Name: Gediz Kaya Org: Gaia Climate Finansal Danışmanlık Hizmetleri ve Tic. A.Ş. Email: gkaya@gaiacclimate.com		
Country where project is located	Türkiye		
GPS coordinates of the Project site(s)	Name	Latitude	Longitude
	Kavak 1	41° 10' 4.7994"N	35° 54' 9.72"E
	Kavak 2 –	41° 10' 6.6"N	35° 54' 10.44"E
	Kavak 3 –	41° 10' 7.6794"N	35° 54' 6.48"E
	Beypazarı 1 –	40° 10' 37.56"N	31° 59' 42.36"E
	Beypazarı 2 –	40° 10' 37.9194"N	31° 59' 43.44"E
	Beypazarı 3 –	40° 10' 40.44"N	31° 59' 48.48"E
	Beypazarı 4 –	40° 10' 40.44"N	31° 59' 49.1994"E
	Beypazarı 5-	40° 10' 5.88"N	31° 57' 57.6"E
	Beypazarı 6 –	40° 10' 1.5594"N	31° 57' 59.04"E
Bey 1	40° 5' 23.2794"N	31° 31' 51.2394"E	


³ GCC Project Verifier shall conduct Project Verification for all project types except B₂.

	Bey 2	40° 5' 20.76"N	31° 31' 51.5994"E
	Bey 3	40° 5' 18.6"N	31° 31' 49.7994"E
Applied methodologies (approved methodologies of GCC or CDM can be used)	CDM approved small scale methodology: AMS-I.D.: Grid connected renewable electricity generation --- Version 18.0		
GHG Sectoral scopes linked to the applied methodologies	GHG-SS#1. Energy (renewable / non-renewable sources)		
Project Verification Criteria: Mandatory requirements to be assessed	<input checked="" type="checkbox"/> ISO 14064-2, ISO 14064-3 <input checked="" type="checkbox"/> GCC Rules and Requirements <input checked="" type="checkbox"/> Applicable Approved Methodology <input checked="" type="checkbox"/> Applicable Legal requirements /rules of host country <input checked="" type="checkbox"/> National Sustainable Development Criteria (if any) <input checked="" type="checkbox"/> Eligibility of the Project Type <input checked="" type="checkbox"/> Start date of the Project activity <input checked="" type="checkbox"/> Meet applicability conditions in the applied methodology <input checked="" type="checkbox"/> Credible Baseline <input checked="" type="checkbox"/> Additionality <input checked="" type="checkbox"/> Emission Reduction calculations <input checked="" type="checkbox"/> Monitoring Plan <input checked="" type="checkbox"/> No GHG Double Counting <input checked="" type="checkbox"/> Local Stakeholder Consultation Process <input checked="" type="checkbox"/> Global Stakeholder Consultation Process <input checked="" type="checkbox"/> United Nations Sustainable Development Goals (Goal No 13- Climate Change) <input checked="" type="checkbox"/> Others (please mention below)		
Project Verification Criteria: Optional requirements to be assessed	<input checked="" type="checkbox"/> Environmental Safeguards Standard and do-no-harm criteria <input checked="" type="checkbox"/> Social Safeguards Standard do-no-harm criteria <input checked="" type="checkbox"/> United Nations Sustainable Development Goals (in additional to SDG 13) <input checked="" type="checkbox"/> CORSIA requirements		
Project Verifier's Confirmation: The GCC Project Verifier has verified the GCC project activity and therefore confirms the following:	<p>The GCC Project Verifier Earthood Services Private Limited certifies the following with respect to the GCC Project Kavak Bepazarı Bey Solar Power Plant Bundle</p> <input checked="" type="checkbox"/> The Project Owner has correctly described the Project Activity in the Project Submission Form (version 06, dated 21/02/2024) including the applicability of the approved methodology AMS-I.D.:		

	<p>Grid connected renewable electricity generation --- Version 18.0 and meets the methodology applicability conditions and is expected to achieve the forecasted real and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reductions estimates correctly and conservatively.</p> <p><input checked="" type="checkbox"/> The Project Activity is likely to generate GHG emission reductions amounting to the estimated 148,225 tCO₂e, 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 ISO 14064-3.</p> <p><input checked="" type="checkbox"/> 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:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Environmental No-net-harm Label (E+) <input checked="" type="checkbox"/> Social No-net-harm Label (S+) <p><input checked="" type="checkbox"/> The Project Activity is likely to contribute to the achievement of United Nations Sustainability Development Goals (SDGs), complies with the Project Sustainability Standard, and contributes to achieving a total of 04 SDGs, with the following⁴ SDG certification label (SDG+):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bronze SDG Label <input type="checkbox"/> Silver SDG Label <input checked="" type="checkbox"/> Gold SDG Label <input type="checkbox"/> Platinum SDG Label <input type="checkbox"/> Diamond SDG Label <p>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 all phases of CORSIA and therefore request GCC Steering Committee to append CORSIA Certification label (C+) to this project.; However, Host country Attestation (HCLOA) on Double Counting required by CORSIA will provide during the Emission Reduction verification.</p>
--	--

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

Project Verification Report

	<input checked="" type="checkbox"/> The Project Activity complies with all the applicable GCC rules ⁵ and therefore recommends GCC Program to register the Project activity with above mentioned labels.
Project Verification Report, reference number and date of approval	Reference number: GCC.PVR.23.23 Date of approval: 27/02/2024 Version: 1.0
Name of the authorised personnel of GCC Project Verifier and his/her signature with date	 Date: 27/02/2024 Name: Dr. Kaviraj Singh Managing Director

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

1. PROJECT VERIFICATION REPORT

A.1. Executive summary

The project activity is about installation and operation of 12 individual Unlicensed solar photovoltaic power plants bundle in the Republic of Türkiye. The project consists of bundles encompassing twelve solar power plant installations at boundaries of Ankara and Samsun province of Türkiye. The renewable energy based solar power plant will generate clean energy and export the electricity to the Turkish National grid thereby reducing the indulgence of Turkish grid on carbon intensive based power plants. The project activity consists of bundles with cumulative capacity equal to 13.04 MWp.

The project activity is a green field project where no renewable power plant was operating prior to the implementation of all twelve project activities. The aim of the project is to generate electricity from solar energy, which is a renewable source of energy and thus leads to the generation of clean energy. The electricity generated from the project is being supplied to the Turkish national grid there by displacing the electricity which could have been generated from a carbon intensive fossil fuel base power plant.

The commissioning date for the earliest project activity plant is 23/01/2018. The project activity is expected to generate approximately 148,225 tCO_{2e} per year during the crediting period of 10 years.

The legal ownership of all the activity plants of project activity is with İşmen Gıda Sanayi ve Ticaret Ltd. Şti. who is also the project owner.

All the 12 plants of the Project activity are in the boundaries of Ankara and Samsun Province of Türkiye. The address of each project activity is indicated in the following table.

Table 1 Address and geodetic coordinates of the physical site of the Project Activity		
Physical address	Latitude	Longitude
Kavak 1 – Kavak/SAMSUN	41° 10' 4.7994"N	35° 54' 9.72"E
Kavak 2 – Kavak/SAMSUN	<u>41° 10' 6.6"N</u>	<u>35° 54' 10.44"E</u>
Kavak 3 – Kavak/SAMSUN	41° 10' 6.6"N	35° 54' 10.44"E
Beypazarı 1 – Beypazarı/ANKARA	<u>40° 10' 37.56"N</u>	<u>31° 59' 42.36"E</u>
Beypazarı 2 – Beypazarı/ANKARA	41° 10' 7.6794"N	35° 54' 6.48"E
Beypazarı 3 – Beypazarı/ANKARA	40° 10' 40.44"N	31° 59' 48.48"E
Beypazarı 4 – Beypazarı/ANKARA	40° 10' 40.44"N	31° 59' 49.1994"E

Beypazarı 5 – Beypazarı/ANKARA	40° 10' 5.88"N	31° 57' 57.6"E
Beypazarı 6 – Beypazarı/ANKARA	40° 10' 1.5594"N	31° 57' 59.04"E
Bey 1 – Nallıhan/ANKARA	40° 5' 23.2794"N	31° 31' 51.2394"E
Bey 2 – Nallıhan/ANKARA	40° 5' 20.76"N	31° 31' 51.5994"E
Bey 3 – Nallıhan/ANKARA	40° 5' 18.6"N	31° 31' 49.7994"E

Scope of Verification

The scope of the services provided by Earthood Services Private Limited for the project is to perform Project Verification service of concerned GCC Project Activity and implemented safeguards aimed to achieve environmental and social impacts without causing any net harm. The contribution of the project activity towards the United Nations Sustainable Development Goals are also verified. The compliance for the project activity related to CORSIA requirement for C+ label is also checked as a part of scope. 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, ICAO-CORSIA requirements for GCC projects and other relevant rules and requirements established under Program process.

Verification Process and Methodology

The verification process was undertaken by a competent verification team and involved the following,

- the desk review of documents and evidence submitted by the project owner in context of the reference rules and guidelines issued by GCC,
- undertaking/conducting remote site visit, interview or interactions with the representative of the project owners/representatives,
- reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate and
- preparing a draft verification opinion based on the auditing findings and conclusions.
- technical review of the draft verification opinion along with other documents as appropriate by an independent competent technical review team
- finalization of the verification opinion (this report)

Conclusion

The review of the PSF/6/, supporting documentation and subsequent follow-up actions (remote site audit and interviews)/11/ have provided ESPL with sufficient evidence to determine the fulfilment of stated criteria. ESPL is of the opinion that the project activity “Kavak Beypazarı Bey Solar Power Plant Bundle” as described in the PSF, version 06/6/ meets all relevant requirements of GCC and have correctly applied the CDM methodology AMS-I.D.: Grid connected renewable electricity generation --- Version 18.0/9/. During the crediting period, the project activity shall achieve the emission reduction which are real and additional. The project activity has also fulfilled all the requirements related to Environmental Safeguards (E+ label), Social Safeguards (S+ label) and has forecasted to contribute to 4 UN SDGs. 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 all phases of CORSIA and therefore request GCC Steering Committee to append CORSIA Certification label (C+) to this project.; However, Host country Attestation (HCLOA) on Double Counting required by CORSIA will provide during the Emission Reduction verification. Therefore, the project is being recommended to GCC Steering Committee for request for registration.

Section B. Project Verification team, technical reviewer and approver

>>

B.1. Project Verification team

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)	Involvement in			
						Desk/document review	remote-site inspection	Interviews	Project Verification findings
1.	Team Leader	IR	Amlani	Jinesh	Central Office	Y	Y	Y	Y
2.	Validator (Trainee TL)	IR	Karfa	Diyotima	Central Office	Y	Y	Y	Y
3.	Technical Expert (TA1.2),	IR	Amlani	Jinesh	Central Office	Y	Y	Y	Y
5.	Financial Expert	IR	Kumar	Nitish	Central Office	Y	N	N	Y
6.	Local Expert (Türkiye)	IR	Agriman	Kubra	Central Office	N	Y	Y	N

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)
1.	Technical reviewer	IR	Guleria	Shifali	Central Office
2.	Approver	IR	Singh	Kaviraj	Central Office

Section C. Means of Project Verification

C.1. Desk/document review

>> The verification was performed primarily as a document review of the PSF/6/. The verification of information provided in the PSF was performed using the source of information provided by the project owner. Additionally, the cross checks were performed for information provided in the PSF using information from sources other than the verification sources, the verification team’s sectoral or local expertise and, if necessary, independent background investigations.

C.2. On-site inspection

Duration of on-site inspection: DD/MM/YYYY to DD/MM/YYYY				
No.	Activity performed on-site	Site location	Date	Team member
1.	NA	NA	NA	NA

The estimated annual average of ERs for the project activity is 14,823 tCO_{2e}, which is below 100,000 tCO_{2e}. Thus, in accordance with GCC Verification standard – paragraph 29/3/, a site visit was not deemed mandatory for the verification by the assessment team and alternate methods for verification were chosen.

The team adopted alternative means to assure that all project information is in accordance with PSF/6/ and undertook independent checks and verification through different sources.

Alternative means applied:

Following alternative means have been used to verify the project details:

1. Remote interviews (online video) with the Project Owner and Site in-charge confirming the implementation, project details such as installed capacity, location, monitoring, emission reduction calculation) /11/
2. Provisional Acceptance Certificate /12/.
3. Employment records /32/ and Training records/47/
4. Review of Other Documentary evidence (ER sheet/8/)

The verification team applied standard auditing techniques while verifying the project details, as discussed below.

ESPL as a part of verification procedure conducted a comprehensive interaction with stakeholders. It was done during the remote site visit on 16/08/2023/11/. It included interaction with the local villagers and representatives of Project Owner. The assessment team have interviewed the local stakeholders, and they were questioned for various topics as summarized below:

- When was the Local Stakeholder Consultation process conducted?
- Have you faced any problem with the project, or do you have any problem with the project as on date?
- If you have any problem is there any grievance mechanism when you can report your problem?
- Is there a Grievance logbook on-site?

C.3. Interviews

No.	Remote Interview			Date	Subject	Team member
	Last name	First name	Affiliation			

1.	Civelek	Emre	İşmen Gıda Sanayi ve Ticaret Ltd. Şti.	16/08/2023	Baseline identification Project boundary, ER calculation, E+, S+ labels	Jinesh Amlani, Diyotima Karfa, Kubra Agriman
2	Kaya	Gediz	Gaia Climate Finansal Danışmanlık Hizmetleri ve Tic. A.Ş. (Focal Point)		Baseline identification Project boundary, ER calculation, E+, S+ labels	Jinesh Amlani, Diyotima Karfa, Kubra Agriman
3	Gurel	Ali	Local Stakeholder,		Local Stakeholders Consultation process, Employment generation, Positive /negative aspects of project (if any), Environmental and social impacts Employment generation Contribution to the sustainable development of the region by the project activity	Jinesh Amlani, Diyotima Karfa, Kubra Agriman
4	Gurer	Bahriye				Jinesh Amlani, Diyotima Karfa, Kubra Agriman

C.4. Sampling approach

>> No Sampling has been applied for the project activity. The 100% information regarding project design, technical specification and monitoring mechanism has been checked by the assessment team. A remote site visit has been undertaken by the team, where they have checked the on-going project implementation, technical details of plant, substation and verified the details mentioned in the PSF/06/.

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

Areas of Project Verification findings	Applicable to Project Types	No. of CL	No. of CAR	No. of FAR
Green House Gas (GHG)				
Identification and Eligibility of project type	A ₁ , A ₂ , B ₁ , B ₂	CL 01		
General description of project activity	A ₁ , A ₂ , B ₁ , B ₂	CL 01		
Application and selection of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂			
- Application of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂	CL 03	CAR 01	

- Deviation from methodology and/or methodological tool	A ₁ , A ₂ , B ₁ , B ₂		CAR 02 CAR 03	
- Clarification on applicability of methodology, tool and/or standardized baseline	A ₁ , A ₂ , B ₁ , B ₂			
- Project boundary, sources and GHGs	A ₁ , A ₂ , B ₁ , B ₂	CL 03		
- Baseline scenario	A ₁ , A ₂ , B ₁ , B ₂			
- Demonstration of additionality including the Legal Requirements test	A ₁ , A ₂ , B ₁ , B ₂	CL 03	CAR 01	
- Estimation of emission reductions or net anthropogenic removals	A ₁ , A ₂ , B ₁ , B ₂		CAR 04	
- Monitoring plan	A ₁ , A ₂ , B ₁ , B ₂		CAR 04	
Start date, crediting period and duration	A ₁ , A ₂ , B ₁ , B ₂			
Environmental impacts	A ₁ , A ₂ , B ₁ , B ₂	CL 04		
Local stakeholder consultation	A ₁ , A ₂ , B ₁		CAR06	
Approval & Authorization- Host Country Clearance	A ₁ , A ₂ , B ₁ , B ₂			FAR 01
Project Owner- Identification and communication	A ₁ , A ₂ , B ₁ , B ₂			
Global stakeholder consultation	A ₁ , A ₂ , B ₁			
ER sheet	A ₁ , A ₂ , B ₁ , B ₂	CL 02		
Others (please specify)	A ₁ , A ₂ , B ₁ , B ₂			
VOLUNTARY CERTIFICATION LABELS				
Environmental Safeguards (E ⁺)	A ₁ , A ₂ , B ₁	CL 04	CAR 05	
Social Safeguards (S ⁺)	A ₁ , A ₂ , B ₁	CL04, CL 05		
Sustainable development Goals (SDG ⁺)	A ₁ , A ₂ , B ₁		CAR 05	
Authorization on Double Counting from Host Country (only for CORSIA)	A ₁ , A ₂ , B ₁			01
CORSIA Eligibility (C ⁺)				01
Total		05	06	01

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Project Verification	<p>The project activity is correctly identified as A2 category in the PSF/6/. As confirmed by the provisional acceptance report/12/, the project activity has already been implemented and earliest activity of the bundle was commissioned on 23/01/2018. Thus, the project activity has started operation after 01/01/2016.</p> <p>The project activity is not registered under any other GHG program or registry. This has been confirmed through declaration/27/ from the Project Owner verified through search in relevant publicly available data for other registries.</p> <p>The assessment team has searched for similar projects having the same nature, capacity and project owner as well as legal owner. The name of the owners mentioned in the regulatory licenses are also matched and checked. It was concluded that no such projects having same location and geo-coordinates, technology or project/legal owners are registered in various carbon schemes like CDM, Verra, Gold Standard, and other international/domestic carbon or renewable energy certificate scheme. Also, further the project owner has provided a declaration/27/ that they have not been applied/registered/rejected with any other international/domestic carbon or renewable energy certificate scheme.</p> <p>Thus, the project activity is confirmed to be eligible as Type A2 – Sub Type 1 under GCC program.</p>
--------------------------------------	--

	<p>The project activity also complies with the relevant GCC eligibility requirements as per Para 14 (c) of the Project Standard, version 03.1/2/. This compliance is discussed under relevant sections for this report.</p> <p>Being a Type A activity, following specific criteria are checked for the project activity as per Para 16 of Project Standard and confirmed that.</p> <ol style="list-style-type: none"> 1. The project activity is not required by a legal mandate, and it does not implement a legally enforced mandate also the project activity complies with all the applicable host country legal requirements. 2. The project activity delivers real, measurable, and additional emission reduction of 14,823 tCO₂e annually (average value over the crediting period) as compared to the baseline scenario. <p>Project applies an approved CDM monitoring and baseline methodology AMS-I.D. version 18.0/9/</p>
Findings	CL 01 was raised and resolved successfully
Conclusion	The project activity is found eligible as per the requirements under section 4 and section 5 of the GCC Project Standard.

D.2. General description of project activity

Means of Project Verification	<p>The project activity is about generation of renewable energy from bundle of 11.250 MWe Solar power plants in Türkiye. The project activity consists of 12 Nos of small solar power plant bundles having capacity ranging from 0.920 to 0.990 MWe the same has been verified using provisional acceptance report/12/ and Distribution System Connection Agreement/14/. The earliest commissioning date is 23/01/2018 and the latest is 21/02/2018 and all these has been verified from the provisional acceptance report/12/. Therefore, all the 12 solar power plants are currently in operation and exporting electricity to the Turkish National grid.</p> <p>The details regarding project description, commissioning and operation as provided in the PSF/6/ have been checked from Provisional Acceptance protocol/12/, system user agreements/14/ for all 12 power plants. In Türkiye there is only one national grid and thus it can be confirmed that all 12 plants are connected to the same grid. The verified commissioning details for each plant are as below.</p>																																				
	<table border="1"> <thead> <tr> <th>Plant No</th> <th>Plant Name / Identification</th> <th>Location</th> <th>Commissioning Date</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Kavak 1</td> <td rowspan="3">Kavak/SAMSUN Province</td> <td>23.01.2018</td> </tr> <tr> <td>2</td> <td>Kavak 2</td> <td>23.01.2018</td> </tr> <tr> <td>3</td> <td>Kavak 3</td> <td>23.01.2018</td> </tr> <tr> <td>4</td> <td>Beypazarı 1</td> <td rowspan="5">Beypazarı/ANKARA Province</td> <td>2.02.2018</td> </tr> <tr> <td>5</td> <td>Beypazarı 2</td> <td>2.02.2018</td> </tr> <tr> <td>6</td> <td>Beypazarı 3</td> <td>2.02.2018</td> </tr> <tr> <td>7</td> <td>Beypazarı 4</td> <td>2.02.2018</td> </tr> <tr> <td>8</td> <td>Beypazarı 5</td> <td>21.02.2018</td> </tr> <tr> <td>9</td> <td>Beypazarı 6</td> <td rowspan="2">Nallıhan/ANKARA Province</td> <td>21.02.2018</td> </tr> <tr> <td>10</td> <td>Bey 1</td> <td>2.02.2018</td> </tr> </tbody> </table>	Plant No	Plant Name / Identification	Location	Commissioning Date	1	Kavak 1	Kavak/SAMSUN Province	23.01.2018	2	Kavak 2	23.01.2018	3	Kavak 3	23.01.2018	4	Beypazarı 1	Beypazarı/ANKARA Province	2.02.2018	5	Beypazarı 2	2.02.2018	6	Beypazarı 3	2.02.2018	7	Beypazarı 4	2.02.2018	8	Beypazarı 5	21.02.2018	9	Beypazarı 6	Nallıhan/ANKARA Province	21.02.2018	10	Bey 1
Plant No	Plant Name / Identification	Location	Commissioning Date																																		
1	Kavak 1	Kavak/SAMSUN Province	23.01.2018																																		
2	Kavak 2		23.01.2018																																		
3	Kavak 3		23.01.2018																																		
4	Beypazarı 1	Beypazarı/ANKARA Province	2.02.2018																																		
5	Beypazarı 2		2.02.2018																																		
6	Beypazarı 3		2.02.2018																																		
7	Beypazarı 4		2.02.2018																																		
8	Beypazarı 5		21.02.2018																																		
9	Beypazarı 6	Nallıhan/ANKARA Province	21.02.2018																																		
10	Bey 1		2.02.2018																																		

11	Bey 2	2.02.2018
12	Bey 3	2.02.2018

Since, the project activity is grid connected generation, in the absence of activity same electricity would have been produced from the fossil intensive Turkish grid. It was verified during the remote site audit and all photos taken during the process/11/.

The assessment team has also checked the photographs of the project site and equipment installations as provided by the project owner and is found appropriately in line with details provided in the PSF/6/.

Legal Ownership:

The legal ownership of the project activity is with İşmen Gıda Sanayi ve Ticaret Ltd. Şti. This has been checked with the details published in Turkish Energy Trade Registry Gazette/15/, where legal ownership of each of 12 power plants are confirmed. The same legal entity is also the project owner in the PSF/6/. This name of owner is also found to be consistent with the details provided as project owner in PSF/6/ and letter of authorization/35/ and is found appropriate.

Location:

The project activity is proposed as a bundled project and is spread across two locations in Türkiye. All 12 power plants of the project activity are located in Central Anatolia and Black Sea Region in the boundaries of Ankara and Çankırı province.

The geo-coordinates for the project activity are as below.

Name	Latitude	Longitude
Kavak 1	41° 10' 4.7994"N	35° 54' 9.72"E
Kavak 2	41° 10' 6.6"N	35° 54' 10.44"E
Kavak 3	41° 10' 7.6794"N	35° 54' 6.48"E
Beypazarı 1	40° 10' 37.56"N	31° 59' 42.36"E
Beypazarı 2	40° 10' 37.9194"N	31° 59' 43.44"E
Beypazarı 3	40° 10' 40.44"N	31° 59' 48.48"E
Beypazarı 4	40° 10' 40.44"N	31° 59' 49.1994"E
Beypazarı 5	40° 10' 5.88"N	31° 57' 57.6"E
Beypazarı 6	40° 10' 1.5594"N	31° 57' 59.04"E
Bey 1	40° 5' 23.2794"N	31° 31' 51.2394"E
Bey 2	40° 5' 20.76"N	31° 31' 51.5994"E
Bey 3	40° 5' 18.6"N	31° 31' 49.7994"E

Technical Details:

Out of the 12 power plants of the project activity, 3 are located at Kavak/SAMSUN province and 6 are located at Beypazarı/ANKARA province and remaining 3 are located Nallıhan/ANKARA province.

	<p>The PV modules utilized in the installation consist of First Solar panels specifications, totalling 112,680 panels. All modules employ Thin Film technology, offering an expected operational lifetime of 25 years. In Kavak 1,2,3 First Solar panels with a capacity of 1.065 MWp, 1.114 MWp, 1.051 MWp have been installed. For Beypazarı 1,2,3,4,5,6 First Solar panels with capacities of 1.090 MWp have been employed. And for Bey 1,2, 3 First Solar panels with a capacity of 1.090 MWp is installed. The inverters are manufactured by ABB.</p> <p>The technical specifications have been verified from the specification's sheet/16/17/18/ provided by the Project owner as well as from the photographs taken during the remote site visit/11/.</p> <p>The other components of the power plant like Module, transformers, Transformer were discussed during the remote audit of the site and interviews with the site in charge/11/.</p> <p>The project activity has a fixed crediting period of 10 years which is in accordance with the GCC program manual and will generate an estimate 14,823 tCO₂e emission reduction annually.</p> <p>Requirements related to the Bundling of project activity:</p> <p>GCC Clarification No. 01, version 1.3/21/ specifies design requirements for any project activity having sub-bundles. The project activity is a bundle/activity of 12 solar power plants having same technology (Photovoltaic), same output (electricity) and same baseline (grid). The project activity also applies same baseline and monitoring methodology (AMS I.D Version 18.0/9/) for the project bundles at bundle level.</p> <p>Thus, the project activity is demonstrated assessed and classified as a homogenous bundle. As per para 13 of Clarification No 01, version 1.3/21/, Level-1 analysis for Consideration of key aspects for developing Homogeneous Bundles is assessed.</p> <ul style="list-style-type: none"> - Similarity in Technological Considerations: All activities in the bundle applies same type of technology of Solar PV based electricity generation as allowed by the applied Methodology AMS I.D. - Similarity in Economic and Policy Considerations: All Activities under bundle/project activity have applied the same additionality approach of Investment Analysis. - Similarity in Environmental or Methodological Considerations: The activities in the project have applied the single similar methodology, have same baseline and outcome and also have the same monitoring approach and parameters for the part included for GHG. <p>Further, assessment team is of the opinion that project activity as the project activity power plants have same technology (Solar PV based power) and methodology (AMS I.D, v18.0), has same baseline (which is national electricity grid), generate the same output (electricity), apply the same additionality approach. The activities are having different investment decision dates as it was required to be assessed but the project activity plants do have a same legal owner.</p> <p>Thus, we are of the opinion that project activity is by default 'homogenous' and can be treated with requirements applicable to single project (with multiple sites). Even if not so, the project meets the bundling requirements of GCC Clarification No. 01, version 1.3/21/ and the project owner has correctly applied the methodology, additionality, and ER calculation at bundle level and is in compliance with the requirements set out in clarification No 01 version 1.3/21/.</p>
--	---

	<p>Other Labels:</p> <p>In addition to GHG emission reductions, the project activity has applied and qualifies below for other voluntary certification labels in accordance with the GCC requirements.</p> <table border="1"> <thead> <tr> <th>Voluntary Labels</th> <th>Applied by the project</th> </tr> </thead> <tbody> <tr> <td>UN Sustainable development goals (SDG+)</td> <td>Yes The project activity has applied and complies with 4 out of total 17 SDG; Gold</td> </tr> <tr> <td>Environmental No-net harm (E+)</td> <td>Yes</td> </tr> <tr> <td>Social No-net harm (S+)</td> <td>Yes</td> </tr> </tbody> </table> <p>CORSIA:</p> <p>The project activity has applied for the CORSIA compliance. The requirements for the same with respect to the scope of project verification have been checked and found appropriate in accordance with Para 23, GCC Clarification -01, version 1.3/21/ and Para 16, Standard on Avoidance of Double Counting, version 1.0/25/.</p> <p>Final compliance with respect to CORSIA (C+ label) will only be checked and confirmed at the Emission Reduction Verification stage. The project owner has confirmed in the PSF /6/ that host country approval on double counting HCLOA shall be provided at the emission reduction verification stage. The compliance is discussed in detailed under section D.14 of this report.</p> <p>The description in the PSF/6/ includes sufficient details and provides clarity about the project activity. The verification team also checked the GCC website and performed secondary independent research on publicly available data to determine if the project was part of any other GHG Programs 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.</p>	Voluntary Labels	Applied by the project	UN Sustainable development goals (SDG+)	Yes The project activity has applied and complies with 4 out of total 17 SDG; Gold	Environmental No-net harm (E+)	Yes	Social No-net harm (S+)	Yes
Voluntary Labels	Applied by the project								
UN Sustainable development goals (SDG+)	Yes The project activity has applied and complies with 4 out of total 17 SDG; Gold								
Environmental No-net harm (E+)	Yes								
Social No-net harm (S+)	Yes								
Findings	CL 01 was raised and resolved successfully.								
Conclusion	The project verification was based on review of the key documents such as provisional acceptance/12/ and system connection agreements/14/, technical evaluation reports/16/17/18/. The project description as contained in the final PSF/6/ was found accurate and complete								

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

D.3.1 Application of methodology and standardized baselines

Means of Project Verification	<p>The project activity has applied the approved CDM baseline and monitoring methodology AMS-I.D.: Grid connected renewable electricity generation, version 18/9/.</p> <p>The project activity is a small-scale project activity, having total installed capacity less than 15 MW. Further, as per the UNFCCC webpage for AMS-I. D, the version 18/9/ is the latest available and applicable version for the methodology.</p>
--------------------------------------	---

Thus, it is confirmed that project activity can apply the approved small scale methodology AMS I.D.

Para 4 to Para 11 of the applied methodology discusses the eligibility criteria of the methodology and they are checked as below.

AMS-I.D. Version 18/9/	
Applicability criterion	Assessment
<p>1. Para 4 of the applied methodology: This methodology is applicable to project activities that:</p> <p>(a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating plants/units; (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s).</p>	<p>The project activity is a grid connected green field solar power plant; the applicability criterion is met. System connection agreements/14/ of project activity were checked to confirm that the project is a greenfield project.</p>
<p>2. Para 5 of the applied methodology: 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.</p>	<p>This is not applicable to the project activity since project activity is a solar energy based renewable energy generation and is not related to Hydro energy.</p>
<p>3. Para 6 of the applied methodology: 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 component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.</p>	<p>The criterion is not applicable as project activity has only renewable component. With a capacity of less than 15 MWe. This project capacity is 13.041 Mwp.</p>
<p>4. Para 7 of the applied methodology: Combined heat and power (co-generation) systems are not eligible under this category..</p>	<p>The criterion is not applicable as the project activity is a green field project which involves only the renewable component.</p>
<p>5. Para 8 of the applied methodology: 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</p>	<p>The criterion is not applicable as the project activity is a green field project which involves electricity generation through the Solar Power</p>

	physically distinct ¹ from the existing units.	Plant. with a capacity of less than 15 MWe. This project capacity is 13.041 MWp. And project does not involve capacity addition.
	6. Para 9 of the applied methodology: 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 activity does not involve retrofit, rehabilitation or replacement.
	7. Para 10 of the applied methodology: 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 criterion is not applicable as the project activity is a green field project which involves electricity generation through the solar power plant.
	8. Para 11 of the applied methodology: In case biomass is sourced from dedicated plantations, the applicability criteria in the tool “Project emissions from cultivation of biomass” shall apply.	The criterion is not applicable as the project activity is a green field project which involves electricity generation through the solar power plant.
	Tool 07: Tool to calculate the emission factor for an electricity system, version 07/10/	
	Applicability criterion	Assessment
	1. Para 3 of the applied Tool: This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	This project involves generating electricity through solar power plant where generated electricity is delivered to the grid. Thus, the applicability criteria is found to be met.
	1. Para 4 of the applied Tool: Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in “Appendix 1: Procedures related to off-grid power generation” should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10	The project activity has chosen the option to calculate the emission factor for grid power plants only. The point has been assessed in detail under section D.3.4 of the report. The criteria is found to be met.

	<p>per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.</p>	
	<p>2. Para 5 of the applied tool: 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.</p>	<p>The project is applying registration under GCC Program which is a Middle East & North Africa (MENA) region's first voluntary carbon offsetting program. The Program permits the application of the CDM methodologies and tools however is applicable to all geographical locations. Hence, the project which is located in Türkiye an Annex I country is permitted to use the tool.</p>
	<p>3. Para 6 of the applied Tool: Under this tool, the value applied to the CO2 emission factor of biofuels is zero</p>	<p>The project does not involve biofuels in any way as the project activity is a solar plant, hence the condition is not applicable.</p>
	<p>Tool 21: Demonstration of additionality of small-scale project activities, version 13.1/28/</p>	
	<p>Para 4: The use of the methodological tool "Demonstration of additionality of small-scale project activities" is not mandatory for project participants when proposing new methodologies. Project participants and coordinating/managing entities may propose alternative methods to demonstrate additionality for consideration by the Executive Board.</p>	<p>The Project activity is a small-scale project activity and mentioned tool is applicable to the project activity.</p>
	<p>TOOL 27- Investment analysis, Version 13.0/30/</p>	
	<p>Para 2: This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", the guidelines "Non-binding best practice examples to demonstrate additionality for SSC project activities", or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.</p>	<p>The Project Owner has applied tool to demonstrate the additionality of the project, this is further discussed in additionality section of the report.</p>

Findings	CL 03, CAR 01, CAR 02, CAR 03 were raised in the PSF and were resolved accordingly.
Conclusion	The verification team confirms that. It has critically assessed each applicability condition listed in the selected methodology and the relevant information contained in the PSF/6/ against these criteria. The selected CDM methodology for the project activity is applicable. The selected version of the methodology is valid at the time of submission of the proposed GCC project activity for registration.

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

Means of Verification	Project	Since the applicability of methodology was found to be fulfilled, further clarification to the methodology was not required.
Findings		No finding was raised.
Conclusion		The verification team confirms that; It has critically assessed each applicability condition listed in the selected methodology/tool and the relevant information contained in the PSF /6/ against these criteria.

D.3.3 Project boundary, sources and GHGs

Means of Verification	Project	<p>As per the applied small scale CDM approved baseline and monitoring methodology AMS-I.D version 18.0/9/, the spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the project power plant is connected to. The components of the project boundary mentioned in the PSF/6/ were found to be in compliance with para 18 of the applied methodology.</p> <p>The assessment team has conducted a desk review of the implemented project to confirm the appropriateness of the project boundary identified. The project activity is a solar energy based which is exported to the Turkish National Grid. Thus, the project activity equipment, monitoring installation and all the power plants connected to the Turkish National Grid are correctly identified and included in the project boundary by the project owner.</p> <p>The assessment team has also checked and confirmed that all GHG sources required by the methodology have been included within the project boundary. It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology or accuracy of the emission reductions.</p> <p>The project boundary is clearly depicted with the help of a workflow diagram in section B.3 of the PSF/6/ and duly verified by the assessment team.</p>
Findings		CL 03 was raised on the Project boundary and was resolved accordingly.
Conclusion		<ul style="list-style-type: none"> The verification team was able to assess that complete information regarding the project boundary has been provided in PSF/6/ 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. <p>It could be confirmed that there are no emissions expected due to implementation of the project activity, contributing more than 1% of the overall expected average annual emission reductions, which are not addressed by the applied methodology.</p>

D.3.4 Baseline scenario

<p>Means of Project Verification</p>	<p>As per the para 19 of the applied methodology AMS-I.D. Version 18.0/9/ the baseline scenario for all greenfield projects is defined as “The baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.”</p> <p>It has been verified that the project activity is a grid connected green field solar power generation. The project activity is connected to the Turkish National Grid, and it is also confirmed that there is only one national grid in Türkiye checked from Provisional Acceptance protocol/12/, system user agreements/14/ for all 12 power plants.</p> <p>The project owner has demonstrated in the PSF /6/ through data published by the Turkish Electricity Transmission company that the energy demand in Türkiye is increasing since last decade it is expected to continue over the period. The primary source of energy is fossil-fuel based plants. If the project activity power plants are not established, the same amount of electricity would be generated through existing and newly build power plants. The details of energy pattern generation data are checked with the data sources referenced in the PSF /6/ and are found to be correct and authentic as published by Turkish government.</p> <p>Thus, the baseline scenario for the project activity is generation of same amount of electricity through operation of existing power plant connected to the Turkish national grid as well as installation of the new power plants in the Turkish national Grid. This baseline scenario is correctly identified by the project owner in the PSF/6/. The proportion of the generation through operational power plants and newly build power plants can be addressed by determining the combine margin of the grid in accordance with CDM Tool 7 version 07/10/. As only grid connected power plant is considered for emission factor calculation by Turkish Ministry of Energy and Natural Resources. The project owner has used the same approach and verification is discussed in relevant section of this report.</p> <p>Thus, it can be concluded that the baseline scenario in the PSF /6/ is reported as the supply of electricity to grid and thereby displacement of electricity from the electricity distribution system connected to the national grid. The baseline scenario applied in the PSF /6/ was compared with the requirements of the baseline described in the applied methodology and found consistent.</p>
<p>Findings</p>	<p>No finding was raised related to identification of baseline scenario</p>
<p>Conclusion</p>	<p>The verification team confirms the following.</p> <ul style="list-style-type: none"> • All assumptions and data used by the Project Owner are listed in the PSF/6/, 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/6/. <p>The verification team also concluded that the identified baseline scenario reasonably represents what would occur in the absence of the project activity in accordance with the applied baseline methodology.</p>

D.3.5 Demonstration of additionality

<p>Means of Project Verification</p>	<p>For demonstrating additionality under GCC the project activity is required to undergo the following two tests:</p> <p>As per Para 46, of Project standard, Version 03.1/2/, 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.</p> <p>The Legal requirement test has been demonstrated in section B.5 of the PSF/6/ and verified by the assessment. It is confirmed that 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.</p> <p>Legal Requirement Test: Based on the available literature it was confirmed that 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. The assessment team assessed the relevant regulations to confirm that the project meets the legal requirement test /24/:</p> <ul style="list-style-type: none"> i) Electricity Market Law ii) Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy iii) Energy Efficiency Law iv) Forest Law v) Environment Law <p>In addition to the evidence assessment, a local expert, having vast experience of climate change auditing and relevant guidelines for renewable projects in the host country is part of the assessment team and requirement was also checked with the local expert.</p> <p>It is confirmed from above assessment that there are no mandatory legal requirements for project owner to establish the solar power plants in Türkiye.</p> <p>The Assessment team has also interviewed/11/ the project owner representatives and it is declared/confirmed by them that they do not have any legal mandate to implement the project activity.</p> <p>Further, the project activity plants have received the EIA exemptions/34/ from the authority and are granted the connections to the national grid by the grid company/14/, which substantiates that project activity plants meets the applicable legal requirements and are authorised to be established and operate.</p> <p>a) Additionality Test:</p> <p>As per para 46 of GCC project standard/2/, the additionality 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</p>
---	---

	<p>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”.</p> <p>The applicability and appropriateness of the same has been verified as below:</p> <p>Applicability of Tool and its version: Para 52, of Project standard, version 3.1/2/ allows project owners to the use the applicable CDM methodologies and the tools. Thus, it is confirmed that project owner can apply the Tool 21 v13.1 /28/ for demonstration of additionality.</p> <p>Application of the Tool:</p> <p>Project Owner is required to provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:</p> <p>(a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions.</p> <p>(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.</p> <p>(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.</p> <p>(d) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.</p> <p>The project owner has applied demonstrated Investment barrier and employed Step 2: Investment Analysis as mentioned under Tool 01: Tool for the demonstration and assessment of additionality Ver 7.0/39/, which is appropriate.</p> <p>Step 2: Investment analysis Under this step, it has been demonstrated project activity is not the most economically or financially attractive. The PO has shown the economic and financial evaluation of the project in the IRR sheet/42/.</p> <p>Sub-step 2a: Determine appropriate analysis method. As the project is selling generated electricity to Turkish national grid, it will generate financial benefits other than carbon revenue related income. Hence, Simple Cost Analysis is not applicable. Investment Comparison Analysis is applicable when the alternatives have the same kind of investment, but for this project activity alternative is the supply of electricity through national grid. Hence, Option II is also not applicable. The PO has chosen to demonstrate investment analysis using Benchmark Analysis.</p> <p>All the steps followed to reach the conclusion has been assessed and the choice of analysis technique is accepted by the verification team.</p>
--	--

Sub-step 2b (Option III): Apply benchmark analysis

The Equity IRR has been chosen as the financial indicator for the demonstration of financial unviability for the proposed project activity. Since, the PO is demonstrating financial unattractiveness of the, Equity IRR is considered to be the appropriate option to indicate financial unattractiveness and found to be appropriate financial indicator by the verification team. All the input financial parameters considered for the IRR analysis are sourced from the actual purchase orders/contracts/37/. The relevant benchmark rate is calculated in line with the suggestion in “Tool 1- Tool for the demonstration and assessment of additionality” Version 07.0 This has been verified by the verification team.

As per para 15 of Investment analysis/30/, “The applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or WACC are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied by relevant national authorities are also appropriate. The DOE shall validate that the benchmarks used are applicable to the project activity and the type of IRR calculation presented.”

The PO has chosen Equity IRR as their benchmark, is found to be appropriate and in line with the applied tool 27 /30/.

The PO has chosen to apply 14.59%, which is a default value for the expected return on equity in real terms as mentioned in Information Note Default Cost of Equity for Annex I Countries of Kyoto Protocol Ver 1.0/41/. Converting the value from real term to nominal term will further increase the benchmark. The assessment team has verified all the above-said documents and confirmed that the benchmark identified to compare the financial attractiveness of the project activity is appropriate and conservative.

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

Item	Value	Means of verification
Installed capacity	13.041 MWp	The project owner has installed 13.041 MWp (dc) of Solar PV. The modules used are of First Solar of totalling 112,680 panels of 115 Wp and 117.5 Wp. The project capacity has been cross checked from the provisional acceptance report/12/ and construction and panel agreement/37/. Therefore, project capacity considered was found acceptable.
Project Cost (\$)	14,140,944	The cost assumption was found acceptable since the cost was obtained from the actual values as mentioned in the construction agreement/37/.
Operation and maintenance cost (\$)	282,819	The cost assumption was found acceptable since the cost was obtained from the actual values mentioned in the IRR /42/. This cost includes the operation and maintenance cost, employment cost and grid fees.
Annual Generation	22,846 MWh	The generation is sourced from the Provisional Acceptance Report/12/ and hence found to be acceptable and valid.

	Electricity tariff	133.3 USD cents/MWh	<p>The Electricity Tariff is the YEKDEM tariff available for Solar PV projects for the first 10 years from the date of commissioning.</p> <p>The Tariff value has been sourced and checked from electricity spot market price/46/ which was available at the time of decision making.</p> <p>Hence it is in line with methodological tool “Investment analysis” Version 13.0/30/.</p> <p>Therefore, it is concluded by verification team that the tariff rate considered in the financial analysis is correct.</p>
	Project Life	25 years	The technical life of the project is considered as 25 years, which is the universally acceptable value.
	Investment Analysis Time Period	25 years	Considering that the YEKDEM tariff is available only for 10 years and the tariff beyond this period is 72.2 USD /46/, the PO has conducted an investment analysis only for a period of 25 years which is acceptable as per para 6 of Methodological tool: TOOL27: Investment analysis Version 13.0/30/.
	Depreciation Rate	10 %	The PO has assumed a simple SLM depreciation of 10 %, considering project life of 25 years. The verification team found that the value is acceptable in accordance with the universal accounting principle.
	Salvage value (\$)	791,892.86	The PO has assumed a simple SLM depreciation of 10 % considering project life of 25 years. Considering that the YEKDEM tariff is available only for 10 years and the tariff beyond this period is 72.20 USDcent /46/, which is acceptable as per para 6 of Methodological tool: TOOL27: Investment analysis Version 13.0/30/.
	Income tax rate (%)	20%	The PO has added back the salvage value for the remaining operational lifetime of the project which is 15 years and which converts to 791,892.86 of the project value in the 10th year. This is in accordance with para 7 of Methodological tool: TOOL27: Investment analysis Version 13.0/30/ and hence accepted.
			Tax rates applicable to a domestic company. Project owner has considered the corporate tax of 20%, in investment analysis for the project activity which was valid and available to the Project Owner at the time of investment decision making time. Applicable tax rates have been verified from:

	https://www.pwc.com.tr/kurumlar-vergisi-orani/43/																
	<p>For calculation of financial indicator, all relevant costs and revenues were found to be included in the IRR sheet/42/ provided by the PO. All assumptions and estimates used for input values were checked against the relevant sources.</p> <p>Based on the result of IRR spreadsheet/42/, post-tax equity IRR is lower than the benchmark. The input assumptions and IRR outcome are assessed and found appropriate.</p> <p>Post tax equity IRR of the proposed project activity has been calculated 5.550% for Kavak-Beypazı-Bey Solar bundles based on the parameters given without considering the carbon revenue. Project activity does not use any ODA or governmental incentive. Electricity tariff has been used as 133.3 USD cents/MWh.</p> <p>Based on the above, verification team can conclude that the project is not financially attractive and could be benefitted from the GCC's carbon revenues.</p> <p>Sub-step 2d: Sensitivity Analysis The sensitivity analysis has been carried out by the PO for a reasonable range of variations of +/- 10% of major parameters, this is found to be appropriate as per para 28 of the Investment analysis tool/30/</p> <p>The project owner has considered all the variables that constitute more than 20% of either total project costs or total project revenue i.e. PLF, O&M cost, Project Cost, and tariff rate in the sensitivity analysis and hence this is found to be in line with paragraph 27 of investment analysis tool/30/.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Variation</th> <th style="text-align: center;">-10%</th> <th style="text-align: center;">0</th> <th style="text-align: center;">+10%</th> </tr> </thead> <tbody> <tr> <td>Investment Cost</td> <td style="text-align: center;">7.578%</td> <td style="text-align: center;">5.550%</td> <td style="text-align: center;">4.259%</td> </tr> <tr> <td>Operating Cost</td> <td style="text-align: center;">6.212%</td> <td style="text-align: center;">5.550%</td> <td style="text-align: center;">4.848%</td> </tr> <tr> <td>Electricity Income</td> <td style="text-align: center;">3.10%</td> <td style="text-align: center;">5.550%</td> <td style="text-align: center;">7.594%</td> </tr> </tbody> </table> <p>Based on the above calculations, it is concluded that the benchmark for post-tax equity IRR is not reached even with +/- 10% variation in the major parameters.</p> <p>The sensitivity analysis results were found to be appropriate and was found to be calculated in-line with the methodological tool – Investment analysis/30/ as verified from the IRR sheet/42/.</p>	Variation	-10%	0	+10%	Investment Cost	7.578%	5.550%	4.259%	Operating Cost	6.212%	5.550%	4.848%	Electricity Income	3.10%	5.550%	7.594%
Variation	-10%	0	+10%														
Investment Cost	7.578%	5.550%	4.259%														
Operating Cost	6.212%	5.550%	4.848%														
Electricity Income	3.10%	5.550%	7.594%														
Findings	CL 03 and CAR 01 was raised for additionality demonstration. The issue was successfully resolved.																
Conclusion	The project activity is deemed additional.																

D.3.6 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	<p>Para 22 of the applied simplified methodology AMS-I.D (Version 18.0)/9/ demonstrates the equation for calculation of the emission reductions. The project owner has followed the same approach in line with the applied methodology for calculation of emission reductions.</p> <p>As per the applied methodology,</p>
--------------------------------------	---

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (tCO₂)

BE_y = Baseline emissions in year y (tCO₂)

PE_y = Project Emissions in year y (tCO₂)

LE_y = Leakage emissions in year y (tCO₂)

Baseline Emissions

Baseline emissions are calculated as the product of the Baseline Emission Factor ($EF_{grid,y}$ in tCO₂e/MWh) times the electricity supplied by the Project.

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

Where:

EG_y = Net electricity delivered to the grid by the project activity in year y excluding transmission losses of the grid

$EF_{grid,CM,y}$ = Combined margin CO₂ 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 (v7)".

The Net electricity supplied to the grid by the project activity is determined by calculating the difference of monitored electricity export to grid and monitored electricity import from the grid by the project activity.

Grid Emission Factor:

As per para 22 of the applied methodology, Grid emission factor can be calculated by two means.

- 1) A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the "Tool 7 to calculate the emission factor for an electricity system"/10/.
- 2) The weighted average emissions (in tCO₂/MWh) of the current generation mix. The data of the year in which project generation occurs must be used.

The project owner has chosen the approach (1) and considered determination of the combined margin emission factor of the Turkish national Grid.

Tool to calculate the emission factor for an electricity system, version 07/10/ is being used for calculation of the combined margin for the grid. The tool step by step guides for the determination of Operating Margin (OM) as well as Build Margin (BM) of any grid. Based on weightage average of OM and BM the combined margin of the grid is calculated.

Tool to calculate the emission factor for an electricity system, version 07/10/, Para 42 (a) and Para 72 (a) requires project owners to use the most recent latest data available in order to calculate the OM and BM respectively if ex-ante option is chosen.

The project owner has chosen the ex-ante option, determined and fixed the grid emission factor for the entire crediting period. So latest data for electricity generation

	<p>in the Turkish Grid needs to be used.</p> <p>The Energy Department of Turkish Government has published an official datasheet/29/ for the grid emission factor of Turkish Grid. The same has been used by the project owner and submitted to the assessment team for the verification. The datasheet is referenced as Grid Emission Factor data sheet for OM, BM and CM values calculated according to CDM Tool 7 /29/.</p> <p>Under the information for calculation methodology, the datasheet mentions and confirms the calculation of OM, BM and combined margin of the Turkish grid are done as per the guidance and step-by-step approach provided in the CDM Tool 07: Tool to calculate the emission factor for an electricity system, version 07/10/.</p> <p>It is confirmed that this the latest data available for Turkish grid as published on 20/09/2022 and prior to submission of the project to the GCC verifier is the grid emission factor values for OM and BM are taken from the official source and thus are considered authentic and correct.</p> <p>The datasheet does not provide raw data used for calculation or the step wise calculation used. However, it being published by the host country government authority, so authenticity and reliability of the data is confirmed.</p> <p>It was also noted that most of the links related to energy department and the links grid emission factor datasheet is not working or accessible for outside Turkey. The project owner has provided the copy of grid emission factor datasheet to assessment and accuracy of verified information was also checked with local expert of the team,</p> <p>Considering the weightage average factors for the OM and BM for solar power projects in accordance with the Tool 07/10/, the databased determines the combine margin of the Turkish grid as 0.6488 tCO₂/MWh.</p> <p>The Project owner has consistently applied it throughout the PSF/6/ and is found appropriate.</p> <p>Net electricity generation from the plant:</p> <p>As per the applied methodology, EGy, which is the net electricity generation by the project activity calculated based in measured values of export and imports. This will be monitored parameters and will be measured / monitored throughout the crediting period for calculation of the emission reductions.</p> <p>The total estimated generation from all 12 plants of the project activity is 22,846 MWh annually.</p> <p>Project and Leakage Emissions:</p> <p>As per the applied simplified methodology, the Project emissions PEy are considered as Zero by the project owner and the same is accepted as the project activity is solar energy based renewable power plant.</p> <p>Hence, PEy = 0</p> <p>As per the applied simplified methodology, there are no leakage emissions applicable for the project as it is green field solar power plant.</p> <p>Hence, LEy = 0</p>
--	---

	<p>Thus, ex-ante emission reductions for the project activity would be,</p> $ER_y = BE_y = EG_y * EF_{grid,CM,Y}$ $= 22,846 \text{ MWh/year} * 0.6488 \text{ tCO}_2/\text{MWh}$ $= 14,823 \text{ tCO}_2/\text{year}$ <p>The emission reduction calculations were assessed by the assessment team against the requirements of the applied methodology.</p> <p>The ex-ante estimates given in the PSF/6/ are realistic and conservative and estimated in accordance with the requirement of the applied methodology.</p>
Findings	<p>CAR 04 was raised and resolved successfully.</p> <p>It is experience of the assessment team that there are problems in real-time access to the energy department websites and it may be due to the language or technical barriers. However, all the assumption or data used in the PSF by project owner have been provided and verified by the assessment team and thus issue was closed.</p>
Conclusion	<p>The verification team confirms the following.</p> <ul style="list-style-type: none"> • All assumptions and data used by the project participants are listed in the PSF /6/, including their references and sources. • All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PSF /6/. • All values used in the PSF are considered reasonable in the context of the project activity. • The baseline methodology and the applicable tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions. <p>All estimates of the emissions can be replicated using the data and parameter values provided in the PSF.</p>

D.3.7 Monitoring plan

Means of Project Verification	<p>The project owner has correctly applied the approved monitoring methodology AMS-I.D. Version 18/9/ in the PSF/6/. The monitoring plan is included in Section B.7 of the PSF is in accordance with the applied methodology and requirements of the project activity and applied labels.</p> <p>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, version 3.0/4/, and Project-Sustainability-Standard, version 3.1/5/.</p> <p>The monitoring plan includes following parameters:</p>			
	<table border="1"> <tr> <td data-bbox="472 1693 523 2016">1.</td> <td data-bbox="529 1693 804 2016">EG_y</td> </tr> </table>	1.	EG _y	<p>Quantity of net electricity generation supplied by the project plant to the grid in year y</p> <p>The monitoring parameter will be continuously monitored by means of main meters and back-up auxiliary meters. The meters are bi-directional tri-vector energy meter of 0.5s accuracy class. The net electricity generation is measured through the monitored export and import data from the power plants meters.</p> <p>All the twelve bundle plants of the project activity have a separate metering system installed. The PO</p>
1.	EG _y			

		<p>has also provided meter details in the PSF, and details have been checked during the remote site audit and through photographs for meters provided by PO. The photographs for all twelve plant installed meters (main and check) are provided by the PO and checked (attached as Annexure to this report). The PSF mentions the serial numbers of meters correctly. For the purpose of measurement, the readings of main meter will be accounted in normal scenario but in case of failure of main meter, back up meter reading will be accounted.</p> <p>The calibration of the meters will be maintained by the authorized Grid companies according to EPDK regulations and it is not in the project owner's control. Since, it is from the official regulation, thus checked and accepted by the assessment team.</p> <p>The monitoring parameter will be recorded for emission reduction on monthly basis in accordance with the applied methodology.</p>
	2.	<p>CO₂ Emissions</p> <p>Reduction of CO₂ emissions due to implementation of project activity</p> <p>The monitoring parameter will be done monthly based on calculation from the continuously monitored electricity generation.</p> <p>The calculation procedures for the reduction in CO₂ emissions are correctly defined in the PSF/6/.</p> <p>The parameter is being monitored to assess to contribution SDG goal -13 Climate Change and also the positive environmental impact. Adequate details for monitoring/reporting/recording are defined in the PSF.</p>
	3.	<p>E-waste Pollution</p> <p>Electronic and electrical wastes as e-waste as per regulatory requirements</p> <p>The project owner has included this parameter to monitor impacts related to generation of any E-waste. As the PA is solar power plant, it is not expected to generate any significant amount of E-waste. However, the project owner shall maintain and monitor the compliance of collection and disposal of any E-waste generated during the monitoring period. The disposal records and regulatory compliance can be verified at ER verification stage.</p>
	4.	<p>Solid waste Pollution from end-of-life products</p> <p>Waste of end-of-life products</p> <p>In line with procedures identified for the damaged or replacing solar PV modules, the project owner will also monitor and comply with regulation for end-of-life PV modules.</p> <p>The modules will be discarded as per applicable regulations and can be verified at ER verification stage.</p>
	5.	<p>Solid waste Pollution from Batteries</p> <p>The PO has claimed that the battery waste produced during the operations and end of life by the Project activity will be disposed off according to "Waste Management Regulation".</p> <p>The monitoring parameter will be continuously</p>

		monitored by means of plant records. Actual plant records of project waste (if any) to be shared by the PO at the time of Emission reduction verification of the project activity.
	6.	<p>Quantitative Employment and Income Generation</p> <p>Official employment records from the state</p> <p>The project owner, in assessment of S+ label has mentioned that project activity shall generate employment for the people. The project owner has targeted that project activity shall provide employment to at least 24 persons during the project operation period. Since the project activity is type- A2 project and already implemented, as records for employment/32/ has been provided by project owner and checked.</p> <p>It is confirmed that the project activity does generate employment and there is a system in place to monitor the same. This parameter will be continuously monitored yearly by means of employment records and adequate details for monitoring/reporting/recording are defined in the PSF.</p>
	7.	<p>Employee trainings</p> <p>Trainings given to employees regarding health, safety and job-related areas.</p> <p>The project owner, in assessment of S+ label has mentioned that project activity shall provide training to the people according to GCC Environment and Social Safeguards Standard, Version 3.0 /4/</p> <p>It is confirmed that the project activity provides training to personnel and monitors the same.</p> <p>This parameter is validated by the training records which were provided by the project owner were assessed by the verification team. /47/</p>
8.	<p>Water Quality and Quantity</p> <p>Cooling water discharge prevented. The project activities replace the grid electricity, which is constituted of different fuel sources causing greenhouse gas emissions.</p> <p>The Project activity claims Wastewater avoidance (SDG6) By replacing in the consumption of these fuels, it contributes to conservation of water, thereby Amount of wastewater to be discharged to the environment is decreased.</p> <p>The monitoring parameter will be continuously monitored by means of Monthly meter readings once each MP adequate details for monitoring/reporting/recording are defined in the PSF/6/.</p>	

	The verification team confirmed that the parameters are sufficient to calculate the emission reductions in accordance with the methodology and are correctly reported in the PSF.
Findings	CAR 04 was raised and was resolved subsequently.
Conclusion	<p>The verification team confirms that: -</p> <ul style="list-style-type: none"> • The monitoring plan described in the PSF complies with the requirements of the selected methodology. • Based on detailed review, the monitoring arrangement described in the monitoring plan is feasible within the project design. The verification team confirms that the project owner will be able to implement the described monitoring plan. • The means of implementation of the monitoring plan are sufficient to ensure that the emission reduction and other voluntary labels achieved from the project activity is verifiable and thereby satisfying the requirement of Verification Standard. The monitoring plan will give an opportunity for real measurements of achieved emission reductions. <p>There are no host country requirements pertaining to monitoring of any sustainable development indicators. Therefore, there are no such parameters identified in the PSF.</p>

D.4. Start date, crediting period and duration

Means of Project Verification	<p>The start date of the project activity is 23/01/2018 which is verified from the provisional acceptance report/12/ and corresponds to commissioning of the project. Therefore, this has been accepted as the date when the project started generating emission reductions.</p> <p>A crediting period of a maximum length of 10 years has been selected by PO. The start date of the crediting period is stated as 23/01/2018, which is same as the project activity start date as thus appropriate.</p> <p>The lifetime of project activity is expected to be 25 which is verified from the technical evaluation report of the modules and the inverters installed at the 12 solar sites/16/17/18/.</p>
Findings	No findings were raised
Conclusion	Start date, crediting period start date and duration are appropriately selected and mentioned in the PSF.

D.5. Environmental impacts

Means of Project Verification	<p>The project complies with the relevant regulations and laws in Türkiye and does not have any negative impacts on the environment.</p> <p>As per the Turkish environmental regulations, the project activity does not require an Environment Impact Assessment. This has been checked with exemption letters issued by the Ministry of Environment and Urbanization/34/ for all 12 solar power plants, which confirmed that Environmental Impact Assessment (EIA) is not required for the project activity sites.</p> <p>This confirmed that Host Party through applicable Turkish regulation does not foresee any negative impacts from the project activity on the Environment.</p> <p>However, the project activity has applied for E+ Label and environmental impacts with respect to the Environment and Social Safeguard Standard, version 03.0/4/. The verification of the same is attached as separate Appendix 5 of this report.</p>
--------------------------------------	---

Findings	CL 04 was raised and resolved successfully
Conclusion	In the opinion of the assessment team, in the project activity there were no adverse environmental impacts revealed in the analysis. There are no transboundary environmental impacts associated with the project.

D.6. Local stakeholder consultation

Means of Project Verification	<p>The project activity has conducted the LSC by means of inviting feedback from various stakeholders for the project activity. LSC for the Project activity was conducted on 16/03/2022 in Beypazarı, and on 17/03/2022 in Kavak.</p> <p>The project owner has sent the evaluation forms regarding the project activity to the various stakeholders via e-mail. Also, the evaluation forms were sent to the site for local stakeholders and villagers. Copy of these emails and filled feedback forms/33/ have been provided to the assessment team and checked thoroughly. It was confirmed that the project owner had sent the project information and feedback invitations to the following stakeholders. The LSC from contained details of Positive impacts on Environment, Social, and included a section where the stakeholders can present their review about the project activity. The people who were part of the LSC process comprised of Miners, housewife, employees and farmers etc. All these information have been provided by the project owner in the Appendix 6 of the PSF/6/</p> <p>Comments Received and action taken: Feedback form received from the local stake holder are also provided as an Annex to the PSF. The Project owner has received positive comments. All the comments have been taken care of by the project owner and apprehensions were appropriately answered and justified in the PSF/6/.</p> <p>During the remote audit some of the Local Stake holders (Local villagers) were video interviewed by the assessment team. The Local Stake holders confirmed taking of their feedback by the project owner and positive opinions regarding the project activity.</p> <p>During the remote interview local stakeholders confirmed</p> <ul style="list-style-type: none"> - Employment generated by the project activity, mainly related to unskilled work like security guards and contractual labour. - Increase in local community business during the construction activity of the project. - No negative environmental impacts like waste disposal, water pollution or overuse of local resources in the localities - No negative social impacts due to project <p>It was also noted that SDG contributions claimed are related to overall national/global impacts of the project and particular assessment related SDG contribution/project level indicator with local stakeholders was not required. Local employment generation by the project activity is confirmed.</p>
Findings	CAR 06 was raised regarding the local stakeholder consultation process and were closed satisfactorily.
Conclusion	The assessment team confirms that the summary of stakeholders' comments reported in PSF is complete. In the opinion of the team, the local stakeholder consultation process was adequately conducted by the project owner considering the ongoing pandemic to receive unbiased comments from the all the stakeholders. Team also confirms that all the comments received are transparently taken care by the project owner and appropriately answered.

	The verification team confirms that the local stakeholder consultation process performed for the project activity fulfils the requirements.
--	---

D.7. Approval and Authorization- Host Country Clearance

Means of Project Verification	<p>As per the GCC program guidelines, /1/ the submission of HCLOA on double counting is required by CORSIA labelled project after 31/12/2020 as verified under section D.13 of this report. The project owner has applied for CORSIA eligibility.</p> <p>Paragraph 33(d) of GCC Program Process requires Project Owner to submit the HCLOA together with the project documentation required for submission of request for registration of the project so that project activity can be displayed as having market eligibility flag (C+) on the GCC Project website and GCC registry.</p> <p>However, Para 16 of Standard on Avoidance of Double Counting, version 1.0/25/ also allows project owners to submit the HCLOA at the time of issuance stage provided they make a declaration under the PSF under section A.5.</p> <p>Currently project owner is not able to submit the HCLOA letter and has declared under section A.5 of the PSF to provide the same at the time of emission reduction verification / issuance stage and thus accepted.</p>
Findings	<p>Since the project crediting period is beyond Pilot Phase of the CORSIA, hence in line with requirements of GCC Project Standard and GCC standard on double accounting a FAR is being raised regarding submission of Host Country Attestation during Issuance stage.</p> <p>FAR#01 was raised and is OPEN</p>
Conclusion	The verification team confirms that project owner has declared in the PSF that HCLOA shall be submitted at issuance stage and meets the requirement of Standard on Avoidance of Double Counting, version 1.0 as published by the GCC.

D.8. Project Owner- Identification and communication

Means of Project Verification	<p>The information and contact details of the representation of the project owner and project owners themselves has been appropriately incorporated in Appendix 1 of the PSF which was checked and verified by the verification team from Authorization letter/35/ signed by the project owners. All information was consistent between these documents.</p> <p>The legal ownership of the project is with İşmen Gıda Sanayi ve Ticaret Ltd. Şti. and is it is checked as discussed in section D.1 of report.</p> <p>The owner of each unlicensed electricity generation plant, having capacity ranging from 0.920 to 0.990 MWe, is referred to by different SPV names such as Kavak 1, 2,3 Beypazarı1,2,3,4,5,6 and Bey 1,2,3. These company names are included in all official documents such as provisional acceptance documents/12/ and system connection agreement/14/.</p> <p>Further the details and authenticity of letter of authorization /35/ and ownership details /20/ are also checked. The legal ownership of the signing authority of the letter of authorization is confirmed. The legal owner is also mentioned as the single project owner.</p> <p>The project activity title, legal ownership, project owner and authorised representative details as provided in the PSF, Annex 1 and in the letter of authorization are correct and consistent.</p> <p>The name of project owner, title and other details have also been checked with the GCC project page for the project activity and is found consistent.</p>
--------------------------------------	--

Findings	No findings were 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 and letter of authorization were found to be consistent and correct.

D.9. Global stakeholder consultation

Means of Project Verification	The PSF 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 was from 28 Feb 2023 - 14 Mar 2023. There were no comments received during this period.
Findings	No findings were raised
Conclusion	The PSF had been made public for receiving stakeholder feedback and no comments were raised during the GSC process.

D.10. Environmental Safeguards (E+)

Means of Project Verification	<p>The project activity consists of twelve solar PV power plants in the central anatolia region and and Black Sea Region, in the province of Ankara and Samsun of Türkiye. However, the nature of the activities and environmental impacts for the plants are identical and similar. So, a single assessment of impacts covering all sites has been done by the project owner at bundle level and accepted by assessment team as appropriate as there are no separate/different impacts identified across the sites.</p> <p>The Project Owner has chosen to apply for the Environmental No-net harm Label (E+). The assessment for the Environmental safeguard has been carried out by the PO in section E.1 of the PSF/6/. Out of all the environmental impacts, no negative impacts have been identified by the Project owner. Impacts identified by project owner and verified by assessment team are as follows.</p> <p>Positive Impacts:</p> <ul style="list-style-type: none"> - Environmental – Air - CO₂ emissions (<i>EA03</i>): The project activity being renewable power generation avoids CO₂ emissions that would have occurred in baseline due to generation in thermal power plants. The impact is being monitored through parameter 'CO2 emissions' and is verified under section D.3.7 of the report. - Solid waste Pollution from E- waste (<i>EL04</i>): - Any E-waste if generated from the plant shall be discarded in accordance with host country regulation such as the Electrical Market License and Waste Management rules. The parameter is being monitored as 'E-waste Pollution' and validated under section D.3.7 of this report. - Solid waste Pollution from end-of-life products/ equipment (<i>EL06</i>): - Waste generated from the plant after End-of-life shall be discarded in accordance with host country regulation. The parameter is being monitored as 'End-of-life Products/Equipment' and validated under section D.3.7 of this report. - Solid waste Pollution from Batteries (<i>EL05</i>): - Waste generated from Batteries shall be discarded in accordance with host country regulation along with waste management regulation. The parameter is being monitored as 'Solid waste pollution from Batteries' and validated under section D.3.7 of this report.
--------------------------------------	--

	<ul style="list-style-type: none"> - Generation of wastewater (EW03)- Cooling water discharge prevented. The project activities replace the grid electricity, which is constituted of different fuel sources causing greenhouse gas emissions. By replacing the consumption of these fuels, it contributes to conservation of water. The amount of wastewater to be discharged to the environment is decreased. The parameter is monitored. - Replacing fossil fuels with renewable sources of energy (ENR07)- The generated electricity by the project activity will be continuously measured and the related CO₂ emission reduction will be calculated according to the applied methodology. The project is expected to supply the respective 22,846 MWh annual clean energy. <p>Impacts identified as ‘Harmless’ as regulatory complied OR mitigated:</p> <ul style="list-style-type: none"> - No such impacts identified. <p>Harmful Impacts:</p> <ul style="list-style-type: none"> - No negative impacts identified or verified for the project activity, which cannot be mitigated. <p>An appropriate monitoring plan has been put in place for the impacts identified. The total score for E+ is verified as 6.</p> <p>The detailed matrix has been included in appendix 5 of the report.</p>
Findings	CAR 05 was raised for the assessment of Environmental Safeguard (E+) and resolved.
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 Project Verification	<p>The project owner has chosen to apply for the Social No-net harm Label (S+). The assessment for the social safeguard has been carried out by the PO in section E.2 of the PSF/6/.</p> <p>The project activity consists of twelve solar PV power plants at three different locations. However, the nature of the activities and their social impacts are similar. So, a single assessment of impacts covering all sites has been done at bundle level and accepted.</p> <p>Out of all the social impacts, no negative impacts have been identified by the Project owner. Impacts identified by project owner and verified by assessment team are as follows.</p> <p>Positive Impacts:</p> <ul style="list-style-type: none"> - Long-term employment created - The impact is being monitored throughout the crediting period by parameter ‘Quantitative Employment’ and is verified under section D.3.7 of the report. - Sources of income generation increased- Same is monitored throughout crediting period by parameter ‘Quantitative Employment’ and is verified under section D.3.7 of the report. - Reducing / increasing accidents/Incidents/fatality (SHS03) -The PA provides on the job training which is monitored throughout crediting
--------------------------------------	---

	<p>period by parameter 'Employee trainings'/47/ and is verified under section D.3.7 of the report.</p> <ul style="list-style-type: none"> - Specialized training / education to local personnel (SE01) – The PA provides training to the personnels, which is monitored throughout crediting period by parameter 'Employee trainings'/47/ and is verified under section D.3.7 of the report. <p>Impacts identified as 'Harmless' as regulatory complied OR mitigated:</p> <ul style="list-style-type: none"> - No such impacts identified. <p>Negative Impacts:</p> <ul style="list-style-type: none"> - No negative impacts identified or verified for the project activity. <p>An appropriate monitoring plan has been put in place for the impacts identified. The total score for S+ is verified as 4. The detailed matrix has been included in appendix 6 of the report.</p>
Findings	CL 04 and CL 05 was raised and resolved.
Conclusion	The verification team confirms that the project activity is not likely to cause any negative impacts on the society but would have a positive impact, hence, is eligible to achieve additional S+ certificates

D.12. Sustainable development Goals (SDG+)

Means of Project Verification	<p>The assessment of the contribution of the project activity on United Nations Sustainable Development Goals has been carried out in section F of the PSF/6/. Out of the 17 Goals project activity has no adverse effect on any of the goal and contribute to 4 SDGs:</p> <ul style="list-style-type: none"> - <u>SDG 6 Energy:</u> SDG Target 6.3 “By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally”. The project activity contributes towards this goal as it is renewable energy project, project activity does not consume any water for cooling purposes like fossil fuel energy plants, therefore it contributes the water consumption avoidance. The contribution towards SDG goal is being monitored by the parameter Water Quality and Quantity by the project activity in the monitoring plan and is found adequate. This is discussed under section D.3.7 of the report. - <u>SDG 7 Energy:</u> SDG Target 7.2 “By 2030, increase substantially the share of renewable energy in the global energy mix”. The project activity contributes towards this goal by replacing the generation of fossil fuel dominated grid in baseline by renewable solar-based power generation. The contribution towards SDG goal is being monitored by the parameter monitoring of net electricity generated by the project activity in the monitoring plan and is found adequate. This is discussed under section D.3.7 of the report. - <u>SDG 8 Economic Growth:</u> The project creates direct and indirect employment opportunities during construction and operation phases, so
--------------------------------------	--

	<p>it contributes to SDG Target 8.5 “By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities and equal pay for work of equal value”. The contribution towards SDG goal is being monitored by the parameter ‘Quantitative Employment’ in the monitoring plan and is found adequate. This is discussed under section D.3. 7 of the report.</p> <ul style="list-style-type: none"> - <u>SDG 13 Climate Change</u>: SDG Target 13.3 “Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”. The contribution towards SDG goal is being monitored by the parameter ‘CO2 Emissions’ in the monitoring plan and is found adequate. This is discussed under section D.3. of the report. <p>An appropriate monitoring plan has been put in place to monitor the elements. The detailed matrix has been included in appendix 7 of the report</p>
Findings	CAR 05 was raised and resolved
Conclusion	Based on the documentation review the verification team can confirm that Project Activity is likely to contribute to the four United Nations Sustainable Development Goals and would have a positive impact, hence, is eligible to achieve additional Gold SDG+ certification

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

Means of Project Verification	<p>A declaration under section A.6/A.5 of the PSF has been included for offsetting the approved carbon credits (ACCs) for the entire crediting period from 23/01/2018 to 22/01/2028.</p> <p>This is as per Para 16, Standard on Avoidance of Double Counting, version 1.0/25/, which allows the project owner to opt for this option.</p>
Findings	<p>Since the project crediting period is beyond Pilot Phase of the CORSIA, hence in line with requirements of GCC Project Standard and GCC standard on double accounting a FAR is being raised regarding submission of Host Country Attestation during Issuance stage.</p> <p>FAR#01 was raised and is OPEN</p>
Conclusion	The project owner has clarified the intent of use of carbon credits for CORSIA hence no double counting will take place.

D.14. CORSIA Eligibility (C+)

Means of Project Verification	<p>As per the GCC clarification No 01, version 1.3/21/, the project owners shall meet the following requirements at the registration stage.</p> <ul style="list-style-type: none"> a. The start of Project Activity operation and the start of crediting period shall be on or after 1 January 2016 and complies with all the applicable GCC rules and requirements. <p>The project activity has start date of 23/01/2018. The project activity also meets all the applicable GCC rules and requirements as verified under various sections of this report.</p>
--------------------------------------	--

	<p>b. The Project Activity is likely to result in GHG emission reductions as a result of implementation of the registered GCC project activity.</p> <p>The project activity is a solar power plant which is a clean technology and do results in the GHG emission reductions as compared to the baseline.</p> <p>c. The Project Activity has not caused any net harm to the environment and/or society and therefore achieves Environmental No-net-harm Label (E+) and Social No-net-harm Label (S+);</p> <p>It is demonstrated under section E of PSF and verified during the verification that project activity has not cause any harm to the environment and/or society.</p> <p>d. The Project Activity has made contributions for achieving United Nations Sustainable Development Goals (SDGs) and has contributed to achieving at least four SDGs and therefore targets to achieve gold SDG certification label (SDG+);</p> <p>The section F of PSF sufficiently demonstrates contribution to the at least 4 UN SDG Goals and same has been verified with project achieving Gold certification label.</p> <p>e. The project meets all the requirement of the CORSIA Eligible Emissions Units required for GCC projects and does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes.</p> <p>The project activity does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes and meets the CORSIA Eligible Emissions Units requirements for GCC projects.</p> <p>The HCLOA on double counting is required for ACCs beyond 31/12/2020 and the project owner has declared in PSF/6/ to comply with the same at issuance stage.</p>
Findings	<p>Since the project crediting period is beyond Pilot Phase of the CORSIA, hence in line with requirements of GCC Project Standard and GCC standard on double accounting a FAR is being raised regarding submission of Host Country Attestation during Issuance stage.</p> <p>FAR#01 was raised and is OPEN</p>
Conclusion	<p>The project owner has clarified the intent of use of carbon credits for CORSIA hence no double counting will take place. The project activity meets the CORSIA Label (C+) eligibility requirements of project verification.</p>

Section E. Internal quality control

>> After the closer of findings, a draft verification report is prepared by the assessment team. The draft report is reviewed by an independent Technical Review team to confirm if the internal procedures established and implemented by ESPL were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable GCC rules/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 were independent of the verification team.

The technical review process may accept or reject the verification opinion or raise additional findings in which case these must be resolved before requesting for registration. The technical review process is recorded in the internal documents of ESPL, and the additional findings gets included in the report. The

final report approved by the technical reviewer is authorized by Technical Manager and issued to PO and/or submitted for request for registration, as appropriate on behalf of ESPL.

Section F. Project Verification opinion

>> ESPL is contracted by Gaia Climate Finansal Danışmanlık Hizmetleri ve Tic. A.Ş for project verification of the project activity “Kavak Beypazarı Bey 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 14,823 tCO₂e annual, 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 small scale CDM approved baseline and monitoring methodology AMS-I.D. version 18.0/9/ and is assessed against latest valid Project Standard /2/, Verification Standard and Environment and Social Safeguards Standard /3/, Project-Sustainability-Standard /5/ and/or other applicable ICAO/GCC/CDM Decisions/Tools/Guidance/Forms/clarifications.

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 14,823 tCO₂e/year over the 10 years crediting period starting from 23/01/2018.

ESPL has informed the project owners of the verification outcome through the draft verification report and final verification report. The final verification report contains the information with regard to fulfilment of the requirements for verification, as appropriate.

ESPL applied the following verification process and methodology using a competent verification team:

- the desk review of documents and evidence submitted by the Project Owner in context of the reference GCC rules and guidelines issued,
- undertaking/conducting remote site visit, interview or interactions with the representative of the project owner,
- reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate
- preparing a draft verification opinion based on the auditing findings and conclusions.
- technical review of the draft verification opinion along with other documents as appropriate by an independent competent technical review team
- finalization of the verification opinion (this report)

Earthood Services Private Limited (ESPL) has verified and hereby certifies that the GCC project activity “Kavak Beypazarı Bey Solar Power Plant Bundle.”

- Has correctly described the Project Activity in the Project Submission Form (Version 06 dated 21/02/2024) including the applicability of the small scale CDM approved baseline and monitoring methodology AMS-I.D. Version 18.0 and meets the methodology applicability conditions, is additional and is expected to achieve the forecasted real and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reduction estimates correctly and conservatively;
- Is likely to generate GHG emission reductions amounting to the estimated 14,823 tCO₂ per annum 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 ISO 14064-3, 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 Sustainability Development Goals (SDGs), comply with the Project Sustainability Standard, and contribute to achieving a total of 4 SDGs, which is likely to achieve the Gold 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., v1.3 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 all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project. The written attestation from the Host country on double counting shall be submitted by the project owner at ACCs issuance stage. A FAR remains open regarding the same.

Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits
AM	Approved Methodology
AMS	Approved Methodology for SSC Projects
BE	Baseline Emission
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
CM	Combined Margin
CO ₂	Carbon dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CP	Crediting Period
DR	Desk Review
EIA	Environmental Impact Assessment
ESPL	Earthood Services Private Limited
FAR	Forward Action Request
GHG	Green House Gas
GW	Giga Watt
GWh	Giga Watt hour
HCLOA	Host Country Letter of Authorization (on double counting)
ICAO	International Civil Aviation Organization
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
N ₂ O	Nitrous Oxide
OM	Operating Margin
PSF	Project Submission Form
PE	Project Emission
PLF	Plant Load Factor
PO	Project Owner
PS	Project Standard
RFR	Request for Registration
SDG	Sustainable Development Goal
tCO ₂ e	Tons of Carbon dioxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
V	Version
VS	Verification Standard
Project Specific	
SPP	Solar Power Plant
TEİAŞ	Turkish Electricity Transmission Corporation (Türkiye Elektrik İletim A. Ş.)

Appendix 2. Competence of team members and technical reviewers

>>

Competence Statement	
Name	Jinesh Amlani

Project Verification Report

Education	M.Sc. Energy Systems B.Sc. Physics		
Experience	8+ years		
Field	Climate Change & Environment		
Approved Roles			
Team Leader	NO		
Validator	YES		
Verifier	YES		
Methodology Expert	NO		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	YES (TA 1.2)		
Reviewed by	Shifali Guleria (Quality Manager)	Date	21/04/2023
Approved by	Deepika Mahala (Technical Manager)	Date	21/04/2023

Competence Statement			
Name	Shreya Garg		
Country	India		
Education	M.Sc. (Climate Science & Policy), TERI University		
Experience	9 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS.I.A., AMS.I.C., AMS.I.D., AMS.I.F., AMS.II.D., AMS.II.G., AMS.II.J., AMS.III.AV., AMS.III.BL, ACM0002, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.1, TA 1.2, TA 3.1, TA 13.1)		
Reviewed by	Shifali Guleria	Date	21/12/2022
Approved by	Deepika Mahala	Date	21/12/2022

Competence Statement	
Name	Ashok Gautam
Country	India
Education	M. Sc. (Environmental Sciences) M. Tech. (Energy & Environmental Management)
Experience	16 Years +
Field	Energy, Climate Change & Environment

Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS-I.A., AMS-I.C., AMS-I.E, AMS-II.D., AMS-II.G., AMS-III.E., AMS-III.H., AMS-III.Q, AMS-III.Z., AMS-III.AV., AMS III.AR, AM0029, AM0025, AM0056, ACM0001, ACM0002, ACM0004, ACM0012, ACM0006, AM0018, ACM0017, ACM0009, AM0034, AMS.I.B, ACM0016, AMS-III.BL, AMS-II.L, AMS-I.I., AMS-III.A.O., ACM0010, ACM0025		
Local expert	YES (India)		
Financial Expert	YES		
Technical Reviewer	YES		
TA Expert	YES (TA 1.1, TA 1.2, TA 3.1, TA 13.1)		
Reviewed by	Shifali Guleria	Date	06/03/2023
Approved by	Deepika Mahala	Date	06/03/2023

Competence Statement			
Name	Kubra Agriman		
Education	BS Environmental Engineering		
Experience	2 years		
Field	Environmental Engineering		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Methodology Expert	NO		
Local expert	Yes (Turkey)		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Trainee	Yes		
Reviewed by	Shifali Guleria, Quality Manager	Date	27/12/2022
Approved by	Deepika Mahala, Technical Manager	Date	27/12/2022

Competence Statement			
Name	Nitish Mishra		
Education	CA Intermediate B.Com Accounts		
Experience	6+ years		
Field	Accounts		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Local expert	NO		
Financial Expert	YES		
Technical Reviewer	NO		

Project Verification Report

TA Expert (X.X)	NO		
Reviewed by	Shifali Guleria (Quality Manager)	Date	28/12/2023
Approved by	Deepika Mahala (Technical Manager)	Date	28/12/2023

Competence Statement			
Name	Shifali Guleria		
Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	3+ year		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	YES (AMS-I.A., AMS-II.G., AMS-II.E., AMS-III.A.V., AMS-I.D, ACM0002)		
Local expert	YES		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (1.2, 3.1)		
Reviewed by	Deepika Mahala	Date	18/02/2022
Approved by	Ashok Gautam	Date	18/02/2022

Competence Statement			
Name	Diyotima Karfa		
Education	B.Tech. Biotechnology M.Sc. Biotechnology TERIs		
Experience	1 year		
Field	Climate Change		
Approved Roles			
Team Leader	NO		
Validator	YES		
Verifier	YES		
Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Reviewed by	Shifali Guleria (Quality Manager)	Date	09/02/2024
Approved by	Deepika Mahala (Technical Manager)	Date	09/02/2024

Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
No.	Author	Title	References to the document	Provider
1	GCC	GCC-Program-Manual	Ver. 4.0	Others
2	GCC	Project Standard	Ver. 3.1	Others
3	GCC	Verification Standard	Ver. 3.1	Others
4	GCC	Environment-and-Social-Safeguards-Standard	Ver. 3.0	Others
5	GCC	Project Sustainability-Standard	Ver 3.1	Others
6	İşmen Gıda Sanayi ve Ticaret Ltd. Şti. Gaia Climate Finansal Danışmanlık Hizmetleri ve Tic. A.Ş. (Focal Point)	Project Submission Form (PSF) webhosted for GSC Project Submission Form (PSF)	Version 3.0 dated 27/02/2023 Version 6.0 dated 21/02/2024	Project Owner
7	GCC	Project Submission Form (PSF) -Template	Ver. 4.0	Others
8	Project Owner	ER Sheet (revised/final)	Corresponding to PSF, version 6.0	Project Owner
9	UNFCCC	Approved Small-Scale Baseline and Monitoring Methodology: AMS-I.D., Available at: https://cdm.unfccc.int/methodologies/DB/W3TINZ7KKWCK7L8WTXFQQOFQQH4SBK	Ver. 18.0	Others
10	UNFCCC	Tool to calculate the emission factor of an electricity system	Version 7.0	Others
11	ESPL	Remote audit and Interviews conducted for the verification of project activity details, implementation, monitoring and local stake holder's consultation by assessment team through video meeting interface	16/08/2023	ESPL
12	Türkiye	Provisional Acceptance certificate for all 12 Solar power plants.	-	Project Owner
13	Project Owner	Photos of project activity site consisting of Panel installations and name plates, Inverters, meters and project location (Geotagged)	-	Project Owner
14	Project Owner	Distribution System Connection Agreement	-	Project Owner
15	Project Owner	Turkish Trade registry Gazette	24/03/2022	Project Owner
16	FIRST SOLAR	FIRST SOLAR Thin Film (115 Wp)	-	Project Owner
17	FIRST SOLAR	FIRST SOLAR Thin Film (117.5 Wp)	-	Project Owner
18	ABB Inverter	PVS800-57-0875kw-B & PVS800-57-1000KW-C	-	Project Owner
19	UNFCCC	Standard: Sampling and surveys for CDM	Version 9.0	Other

Project Verification Report

		project activities and programmes of activities		
20	PO	Ownership details (signed transfer documents of PO)	-	Other
21	GCC	Clarification No. 01	Version 1.3 - 2022	Other
22	GCC	Clarification No. 02	Version 1.0 - 2022	Others
23	GCC	Clarification No. 03	Version 1.0 - 2022	
24	Turkie	Legal Requirement Test (<ul style="list-style-type: none"> i) Electricity Market Law ii) Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy iii) Energy Efficiency La iv) Forest Law v) Environment Law 	-	others
25	GCC	Standard on Avoidance of Double Counting	Version 1.0 - 2022	Others
26	BASKENT Elektrik Dagitim A.S.	First Index Protocol of Meters for all 12 plants	-	Project Owner
27	Project Owner	Declaration for NO ODA and non-participation in any other GHG Program	17/05/2023	Project Owner
28	UNFCCC	Tool 21: Demonstration of additionality of small-scale project activities	Version 13.1	Others
29	Turkey Energy and Natural Resource Ministry / Government of Turkey	Grid Emission Factor data sheet for OM, BM and CM values calculated according to CDM Tool 7	Published on 20/09/2022	Project Owner
30	UNFCCC	Tool 27: Investment Analysis	Version 13.0	Other
31	UNFCCC	Tool 32- Positive lists of technologies	Version 4.0	Other
32	Project Owner	Employment records Social security records	26/09/2018	Project Owner
33	Project Owner	<ol style="list-style-type: none"> 1. Feedback / evaluation forms received from the local stakeholders 2. Signed attendance form for feedback submission 	Various	Project Owner
34	Ministry of Environment and Urbanization	EIA exemption letters For Kavak 1-2-3 Bey 1-2-3 Beypazarı 1-2-3-4 Beypazarı 5-6	10/11/2015 22/04/2015 28/04/2015 28/04/2015	Project Owner
35	Project Owner	Letter of Authorization	26/05/2022	Project Owner
36	Project Owner	Location of 12 solar plants-	-	Project Owner
37	Project Owner	Construction and Panel Agreement	-	Project Owner
38	Project Owner	Single Line Diagram and Plant Layout	-	Project Owner

39	UNFCCC	Tool 1- Tool for the demonstration and assessment of additionality	Version 7.0	Other
40	Turkish Electricity Transmission Corporation (Türkiye Elektrik İletim A. Ş. (TEİAŞ))	Electricity Market Law Link: https://www.epdk.gov.tr/Detay/Icerik/3-0-0-2256/kanunlar To verify the feed in tariff	Last Accessed: 17/12/2023	Project Owner
41	GCC	Default Cost of Equity for Annex I Countries of Kyoto Protocol	Version 1.0	Other
42	Project Owner	IRR sheet (final)	Corresponding to PSF, version 6.0	Project Owner
43	PwC Türkiye	2023 Kurumlar Vergisi Oranı PwC Türkiye	Last Assessed on 17-12-2023	Other
44	Türkiye	EPC contract	-	Türkiye
45	BEU journal of science	https://dergipark.org.tr/en/download/article-file/1654895	2021	BEU journal of science
46.	Excel sheet	Electricity spot market price average	-	PO
47.	PO	Training records	-	PO

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

Table 1. CL from this verification

CL ID	01	Section no.	Date : 19/09/2023
Description of CL			
Issue:			
<ol style="list-style-type: none"> 1. Project Owner is requested to clarify how have they estimated the annual electricity generation for each of the Project sites and provide necessary documents to support the claim. 2. Under section A.1 of PSF, "Purpose and general description of the Project Activity", PO is requested to provide the reason for applicability of SDG 6, "Clean Water and Sanitation". Since, water in any solar plant will be used for cleaning the equipment and panels. It is mentioned that there is no Water Consumption from ground and other sources, PO is kindly requested to explain how the PV panels are cleaned to function properly. And kindly share the relevant document and evidence substantiating the same. 			
Action Item: Clarification requested.			
Project Owner response			Date : 09/10/2023
<ol style="list-style-type: none"> 1. Evidence of Actual Generations has been provided as a proof. Generations for each facility can be seen in the document provided. 2. "Water is essential for the construction and operation of solar power plants. Solar panels and other solar equipment require water to clean and maintain." statement has been added to Section A.1. For that SDG 6, the description is "Wastewater discharge prevented. The project activities replace the grid electricity, which is constituted of different fuel sources causing greenhouse gas emissions. By replacing in the consumption of these fuels, it contributes to conservation of water. Amount of wastewater to be discharged to the environment is decreased." 			

Project Verification Report

<p>So, the calculation method is “The net electricity generation of the Project will be multiplied with the cooling water discharge intensity.”. For evidence, amount of net electricity generation will be used to calculate estimated amount of avoided wastewater discharge by project activity. Also, PO states that there is no PV waste yet.</p>	
<p>Documentation provided by Project Owner</p>	
<p>Revised PSF</p>	
<p>GCC Project Verifier’s Assessment</p>	<p>Date: 27/12/2023</p>
<ol style="list-style-type: none"> 1. The GGC assessment team verified the annual electricity generation for each of the Project sites through the documents submitted by the Project owner- Generation data spreadsheet. 2. The assessment team reviewed the net electricity generation to calculate the estimated amount of avoided wastewater discharge by project activity. This was verified. 	
<p>CL 01 is closed.</p>	

CL ID	02	Section no.	(ER Sheet)	Date : 19/09/2023
<p>Description of CL</p>				
<p>Issue:</p> <ul style="list-style-type: none"> • Under section A.1, PO is kindly requested to provide the reference for the data collected for each PM 2.5 and PM 10 and how it is being monitored. <p>Action Item: Clarification requested and updating of the PSF.</p>				
<p>Project Owner response</p>				<p>Date : 09/10/2023</p>
<p>SDG 11 related PM2.5 and PM10 has been deleted from whole PSF.</p>				
<p>Documentation provided by Project Owner</p>				
<p>GCC Project Verifier’s Assessment</p>				<p>Date: 27/12/2023</p>
<p>The GCC assessment team verified the revised PSF which is now in line with the Project standard requirements and applied methodology.</p> <p>CL 02 is closed.</p>				

CL ID	03	Section no.	B.2 & B.3 & B.5.	Date : 19/09/2023
<p>Description of CL</p>				
<p>Issue:</p> <ol style="list-style-type: none"> 1. PO have mentioned “As per AMS-I.D methodology Section 2.2.9 , the applicability conditions included in the tools used shall also be discussed.”. Project owner is kindly requested to address which section are they referring to because Section 2.2.9 doesn’t exist as such in AMS ID methodology. 2. The justification provided for point number 2 of the Applicability conditions of TOOL07 is not in line with the applicability clause. PP is requested to clarify whether they have opted for option I or option II. 				

<ol style="list-style-type: none"> 3. Para 23 of the instructions for filling out the PSF says: In addition to the table, where possible, present a pictorial depiction of the project boundary based on the description provided in section A.3. Include in the flow diagram all the facilities, systems, and equipment, and flows of mass and energy described in that section. In particular, indicate in the diagram the emission sources and GHGs included in the project boundary and the data and parameters to be monitored. The PO is requested to rectify Figure 7 illustrating the project boundary to clearly demonstrate the energy meter locations (main and backup), substation, inverter and electricity flow for the project 4. PO is requested to provide justification for the statement, “How the project is not enforced by law?”. However, with reference to Law No. 5346 YEKDEM on utilization of renewable energy sources, since this law aims to expand the utilization of renewable sources for generating electric energy and offer incentives to persons involved in generating electricity based on renewable energy resources in Turkey and support the generation of electricity based on renewable energy resources. PO shall clarify how the incentives provided by the government are accounted for the generation of electricity through renewable energy resources (solar PV). 5. Under the section B.5., Sub-step 2b: Option III. Apply benchmark analysis, PO is requested to provide the proper reference to substantiate the value used for tariff here. 6. As per section B.5 of the PSF, “Sub-step 2c. Calculation and comparison of financial indicators”, PO is requested to specify why the input values of all financial analysis are based on the year 2017, It doesn’t justify the investment date decided as per 05/12/2016. Therefore, PO is kindly requested explain the chronology of events that have occurred from the project investment decision to the implementation of the project activity. 7. As per section B.5 of the PSF, “Sub-step 2c. Calculation and comparison of financial indicators”, PO is requested to specify the relevant literature articles that have been used to consider 2% of CAPEX value. 8. The PO shall also clarify why module degradation factor is not considered while calculating the energy generation. 9. PO is requested to prove supporting evidence on the claim of Electricity tariff being considered as 22.5 \$c/kWh <p>Action Item: Clarification requested.</p>
--

Project Owner response	Date : 09/10/2023
<ol style="list-style-type: none"> 1. Revised. 2. Revised. 3. <i>Workflow diagram has been added which PO supplied.</i> 4. “Law No. 5346 YEKDEM does not require the use of solar PV systems for electricity generation. Therefore, the project is not enforced by law. However, the law does provide incentives for individuals and organizations to generate electricity from renewable resources. This means that the project is still necessary, even though it is not required by law. Overall, the government’s incentives for solar PV systems make it more financially attractive and feasible to generate electricity from solar PV. This is why the project is still necessary, even though it is not required by law.” Statement has been added to Section B.5. 5. Statement has been revised as “For the proposed project, in order to reach this equity IRR values, average electricity tariff must be above current YEKDEM tariffs in the absence of carbon revenue and assuming that initial investment figures are realized so that the investment will become reasonable.” 	

6. Even though the report was officially released in 2017, the information presented within it corresponds to years predating the publication, indicating that the data's timeframe predates the report's release year.
7. Related references are given in each calculation line under the IRR excel file.
8. Here is the references:
 - *Economic Analysis of Solar Power Plant Investment:
http://www.makalesistemi.com/panel/files/manuscript_files_publish/e61942b4897972dd6a60f8037db34c7c/d4bd8b5a39ef8a8417637e1ed535e17d/22cbbf2abb5234a.pdf
 - *Sustainable Energy Handbook Module 6.1:
https://europa.eu/capacity4dev/file/29381/download?token=Yp_EN2wg
9. The degradation factor on the solar PV panels is not studied or specified in the technical brochure, regarding that it is just foreseen according to the average first 3 year generation and fixed until the end of life. This is a conservative method; even if we include the degradation factor, production will be lower; thus, revenue will be lower, so the IRR will be lower at the end. This means there will be no change in the Benchmark comparison situation with or without degradation in PV.

Documentation provided by Project Owner

GCC Project Verifier's Assessment

Date: 27/12/2023

1. The verification team reviewed the revised PSF and found the applicability conditions As per AMS-I.D methodology revised.
2. The verification team reviewed the revised PSF and found the point number 2 of the Applicability conditions of TOOL07 is in line with the applicability clause.
3. The PO has rectified Figure 7 illustrating the project boundary to clearly demonstrate the energy meter locations (main and backup), substation, inverter and electricity flow for the project.
4. The GCC assessment team reviewed the revised PSF and found For the proposed project, in order to reach this equity IRR values, average electricity tariff must be above current YEKDEM tariffs in the absence of carbon revenue and assuming that initial investment figures are realized so that the investment will become reasonable.”incentives provided by the government are accounted for the generation of electricity through renewable energy resources (solar PV).
5. Under the section B.5., Sub-step 2b: Option III. Apply benchmark analysis, Related references are given to substantiate the value used for tariff here in the IRR sheet .
6. The assessment team reviewed the information presented within it corresponds to years predating the publication, indicating that the data's timeframe predates the report's release year.
7. As per section B.5 of the PSF, “Sub-step 2c. Calculation and comparison of financial indicators”, The assessment team reviewed the relevant literature articles that have been used to consider CAPEX value through the IRR sheet.
8. The assessment team reviewed the module degradation factor and verified while calculating the energy generation.
9. The assessment team reviewed the latest PSF and found the evidence on the claim of Electricity tariff correctly put in the IRR sheet.

CL 03 is closed.

CL ID	04	Section no.	E	Date : 19/09/2023
Description of CL				

Issue:	
<ol style="list-style-type: none"> 1. PO is kindly requested to give the well-maintained record for the e waste management and further clarify on the method adopted for the PV modules and battery waste management. 2. Also, the methods that have been used to manage the land degradation or land pollution caused by the disposal of PV modules. 3. For Social Aspect “<i>Long-term jobs (> 10 year) created/ lost (SJ01)</i>” PO is requested to provide evidence indicating that 08 people have been employed during operation of the PA which are Long Term. Also, it is to be mentioned that the number of people employed indicated here with the value provided in Sec B.7.1 Data &Parameters to be monitored Ex-Post- Table 8 and in SDG goal 8 of section F, PO shall clarify on the exact number of people employed for PA 	
Action Item: Clarification requested and updating of the PSF.	
Project Owner response	Date : 09/10/2023
<ol style="list-style-type: none"> 1. PO stated that there are no batteries are used in storage and they currently have no Pv module waste. 2. PO states that “In order to reduce land degradation and pollution, before starting the solar energy project, expert geologists in the field; As filling material, GW –SW type material should be used for the capping layer. If it is considered to use leveled material in the study area in order to reduce costs, samples should be taken from the field and CBR and Proctor tests should be performed in the laboratory.” Added to Data / Parameter Table 5. 3. Employment records has been provided. 	
Documentation provided by Project Owner	
GCC Project Verifier’s Assessment	Date: 27/12/2023
<ol style="list-style-type: none"> 1. PO has given the well-maintained record for the e waste management and further clarify on the method adopted for the PV modules and battery waste management was achieved by the assessment team, so the finding is closed. 2. The assessment team reviewed the revised PSF and found the justification apt and also the Data / Parameter Table 5. Added which would be monitored. 3. Aspect “Long-term jobs (> 10 year) created/ lost (SJ01)” The assessment team reviewed the Employment records that has been provided and was found satisfactory. 	
CL 04 is closed.	

CL ID	05	Section no.	F	Date : 19/09/2023
Description of CL				
For SDG 07 “ <i>Ensure access to affordable, reliable, sustainable, and modern energy for all</i> ”, PO is requested to define the monitoring method by which they ensure Goal 7 is met and also mention about the frequency of monitoring approach they are undertaking in Monitoring column of the table				
Project participant response				Date : 09/10/2023
<i>Electricity generation data is recorded by two electricity meters. According to them, the invoices of the electricity are provided to TEIAS. The quantity of electricity supplied by the project area to the grid and the quantity of electricity delivered to the related area from the grid are measured. Internal consumption from electricity is subtracted from the delivered electricity to calculate net generation.</i>				
Documentation provided by project participant				
VVB assessment				Date: 27/12/2023

The assessment team reviewed the justification and found the revised PSF in line as per SDG 7 as it was removed.

CL 05 is closed.

Table 2. CAR from this verification

CAR ID	01	Section no.		Date	: 19/09/2023
Description of CAR					
Issue:					
<p>On the Cover Page of the PSF:-</p> <ul style="list-style-type: none"> PO is requested to adhere with the latest version of TOOL 27 "Investment Analysis". <p>As per the PSF template V 4.0, Under section A. 3, PO is kindly requested to mention the following:</p> <ul style="list-style-type: none"> Short summary of the facilities, systems, and equipment in the baseline scenario along with location of the monitoring equipment's and arrangement of the facility. Information on the age and average lifetime of the equipment based on the manufacturer specializations and industry standards. Reference to the mentioned provisional acceptance certificate to substantiate the mentioned information for installed capacity and the no. of panels. we kindly ask the project owner to furnish comprehensive technical specifications for the installed solar modules, inverters, and transformers associated with each instance of the project activity. <p>Action Item: Clarification requested and updating of the PSF.</p>					
Project Owner response					Date : 09/10/2023
<ol style="list-style-type: none"> TOOL 27 version has been updated. Added to A.3. Added to A.3. "Commissioning dates are provided from Provisional Acceptance Certificates." Statement has been added under Table 2. Number of Panel knowledges has been taken from Provisional Acceptance Certificates. It is written as footnote on PSF. We have already provided relevant provisional acceptance forms which has the installed capacity and number of panels. Again provided. Added to Section A.3. 					
Documentation provided by Project Owner					
GCC PROJECT VERIFIER assessment					Date: 27/12/2023
<ol style="list-style-type: none"> After assessment of the revised PSF the verification opinion is that the tool 27 is now correctly applied with the latest version. 					

Project Verification Report

<p>2. As per the PSF template V 4.0, Under section A. 3, Short summary of the facilities, systems, and equipment in the baseline scenario is added along with location of the monitoring equipment's and arrangement of the facility. (closed)</p> <p>3. Information on the age and average lifetime of the equipment based on the manufacturer specializations and industry standards were applied correctly. (closed)</p> <p>4. Provisional acceptance certificate to substantiate the mentioned information for installed capacity and the no. of panels were received and verified the values from the PSF.</p> <p>5. Comprehensive technical specifications for the installed solar modules, inverters, and transformers associated with each instance of the project activity were verified by the assessment team in the revised PSF.</p> <p>CAR 01 is closed.</p>

CAR ID	02	Section no.	B	Date : 19/09/2023
Description of CAR				
Issue:				
<ul style="list-style-type: none"> Under section B.1, "Reference to methodology (ies) and tools applied in the project", PO shall mention the CDM tool numbers for all the tools referred for the project activity. 				
Action Item: Kindly review and revise the same.				
Project Owner response				Date : 09/10/2023
Revised as requested.				
Documentation provided by Project Owner				
GCC PROJECT VERIFIER assessment				Date: 27/12/2023
<ul style="list-style-type: none"> The assessment team reviewed the revised PSF and found the Reference to methodology (ies) and tools applied in the project", for all the tools referred for the project activity accurately added and described in the PSF. 				
CAR 02 is closed.				

CAR ID	03	Section no.	B	Date : 19/09/2023
Description of CAR				
Issue:				
<ol style="list-style-type: none"> Under Section B.2 of PSF, PO is also kindly requested to provide the load factors and efficiency of the equipment, along with their forecasted installed capacity. Project owner is requested to address both the applicability clause for TOOL 21 and also provide appropriate justification for each applicability conditions. 				
Action Item: Kindly review and revise the same.				
Project Owner response				Date : 09/10/2023
Information have been added to Section B.2.				
Documentation provided by Project Owner				

Related documents have been provided under “Technical Specification of Plant and Equipment’s Installed” folder.	
GCC PROJECT VERIFIER assessment	Date: 27/12/2023
<ol style="list-style-type: none"> 1. The assessment team reviewed the revised PSF and the load factors and efficiency of the equipment, along with their forecasted installed capacity has been assessed and verified. (closed) 2. The applicability conditions of TOOL 21 are provided along with appropriate justification for each in the revised PSD which was verified by the assessment team. <p>CAR 03 is closed.</p>	

CAR ID	04	Section no.	B	Date : 19/09/2023
Description of CAR				
<ol style="list-style-type: none"> 1. Under section, B.7.1.” Data and parameters to be monitored ex-post”, (data/parameter table 2), <ol style="list-style-type: none"> a) location of the energy meters are not well specified, and at which end of the substation it is installed for monitoring. PO is kindly requested to revise and update the section as per the following requirement. b) PO is also kindly requested to provide the details of Energy meter calibration date, validity, Reference No. of Calibration Certificate and Calibration Status and location for both main and check meter. 2. For Data/Parameter Table 3 CO2 emissions:- <ol style="list-style-type: none"> 1. PO is requested to adhere with the Active version of Environment-and-Social-Safeguards-Standard.as per GCC Resource Centre. 2. PP shall provide information on QA/QC procedures for calculating CO2 emissions. 1. As per Document No. ETKB-EVÇED-FRM-039 Rev.02 released on 02.09.2022, PO is requested to revise the values of Operating Margin and Build Margin emission factor and then accordingly re-calculate the value of Combined Margin Emission factor, Baseline Emissions and further the Emission reductions. PO shall also update the values of OM, BM, CM, BE_y, and ERY in the entire PSF as well as the ER sheet with the new revised values. <p>Action Item: As per the latest version of the PSF template the PO is requested to revise the current PSF as per the requirements mentioned above.</p>				
Project Owner response				Date : 09/10/2023
<p>Under section, B.7.1.” Data and parameters to be monitored ex-post”, (data/parameter table 2),</p> <ol style="list-style-type: none"> 1. Location of meters added. Information taken from PO has been added to Data/Parameter Table 2 QA/QC Procedures. 2. Related docs have been provided under “Kavak_meters” file. Calibration is performed once every ten years, and since the meters were manufactured in 2017, there is no calibration certificate available. <p>For Data/Parameter Table 3 CO2 emissions:-</p>				

<ol style="list-style-type: none"> 1. It has already been used the last version for Environment-and-Social-Safeguards-Standard V3.0 (https://www.globalcarboncouncil.com/standards/environment-and-social-standard/) <ol style="list-style-type: none"> a. Kindly clarify. 2. Added.
Documentation provided by Project Owner
GCC Project Verifier’s Assessment
Date: 27/12/2023
<ol style="list-style-type: none"> 1. Under section, B.7.1.” Data and parameters to be monitored ex-post”, (data/parameter table 2), <ol style="list-style-type: none"> a) location of the energy meters is added and as well specified, and at which end of the substation it is installed for monitoring. This was verified by the assessment team. b) The details of Energy meter calibration, validity, Reference No. of and Calibration Status and location for both main and check meter were added and verified. 2. For Data/Parameter Table 3 CO2 emissions <ol style="list-style-type: none"> a) Environment-and-Social-Safeguards-Standard.as per GCC Resource Centre was adhered. b) QA/QC procedures for calculating CO2 emissions were added and verified by the assessment team. 3. the values of Operating Margin and Build Margin emission factor, accordingly re-calculate the value of Combined Margin Emission factor, Baseline Emissions and further the Emission reductions were updated, the values of OM, BM, CM, BE_y , and ER_y in the entire PSF as well as the ER sheet with the new revised values were verified by the assessment team. <p>CAR 04 is closed.</p>

CAR ID	05	Section no.	E	Date : 19/09/2023
Description of CAR				
<p>Under section E.1, “Environment safeguards”. PO is requested to provide the:</p> <ol style="list-style-type: none"> 1. The reference to the threshold limit used for the Sox and NOx emission data. Also, provide the applicability for the same. 2. Reference to the added limit range for CO emissions. 3. Justification to the non-applicability for Suspended Particulate Matter since the project has been filled for Platinum SDG label which has SDG 11 a part of it. PO has also applied related indicator 11.6.2 which defines Annual mean levels of fine particulate matter (e.g., PM2.5 and PM10) in cities (population weighted). Therefore, the non-applicability of SPM contradicts the usage of SDG 11 in the PSF. <p>Action Item: As per the latest version of the PSF template the PO is requested to revise the current PSF as per the requirements mentioned above.</p>				
Project Owner response				Date : 09/10/2023
<ol style="list-style-type: none"> 1. Threshold limits have been revised as “N/A” for SOx and NOx emission parameters. 2. Threshold limit has been revised as “N/A” for CO emission parameter. 3. SDG 11 has been deleted from all project. 				
Documentation provided by Project Owner				

Project Verification Report

GCC PROJECT VERIFIER assessment	Date: 27/12/2023
<ol style="list-style-type: none"> 1. The GCC assessment team verified the revised as “N/A” for SOx and NOx emission parameters and found it aptly applied. 2. CO emission parameter has been revised and added limit range for CO emissions as per the PSF template. (closed) 3. Justification to the non-applicability for Suspended Particulate Matter was revised in the revised PSF as the Parameter is removed is now in line with the applied methodology. 	
CAR 05 is closed.	

CAR ID	06	Section no.	G	Date : 27/12/2023
Description of CAR				
Project owner is requested to append photos of LSC meeting conducted in the revised PSF				
Project participant response				Date : 04/01/2024
Added.				
Documentation provided by project participant				
VVB assessment				Date: 06/01/2024
The assessment team verified the revised PSF and reviewed the mails and feedback forms of the LSC conducted and verified the LSC photos in the PSF.				
CAR 06 is closed.				

Table 3. FAR from this verification

FAR ID	01	Section No.	H	Date : 19/09/2023
Description of FAR				
As per Project Standard v3.1, para 14(c), Project Owner is requested to submit the host country attestation on no double counting of the ACC to be eligible under CORSIA.				
Project Owner response				Date : 09/10/2023
<i>As per the guideline available in this regard, submission of Host Country Attestation (HCA) on Double Counting as and when required by CORSIA. For carbon credits issued during 1st Jan 2016 to 31st Dec 2020, HCA is not required for CORSIA labeled credits. The HCA will provide during the first or subsequent verification, when the issuance of carbon credit is considered beyond 1st Jan 2021.</i>				
Documentation provided by Project Owner				
Kavak_Beyges_Bundled SPP_ PSF_V06				
GCC PROJECT VERIFIER assessment				Date: DD/MM/YYYY
FAR 01 is open.				

Appendix 5. Environmental safeguards assessment

Impact of Project Activity on	Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards									Project Owner's Conclusion		GCC Verifier's Conclusion	
	Description of Impact (positive or negative)		Legal/ voluntary corporate requirement / regulatory/ voluntary corporate threshold Limits	3 rd Party Audit			Risk Mitigation Action Plans for aspects marked as Harmful		Performance indicator for monitoring of impact	Ex-ante scoring of environmental impact	Explanation of the Conclusion	3 rd Party Audit	
				Not Applicable	Harmless	Harmful	Operational Controls	Program of Risk Management Actions				Monitoring parameter and frequency of monitoring	Ex- Ante scoring of the environmental impact (as per scoring matrix Appendix-02)
<p>Environmental Aspects on the identified categories⁵ indicated below.</p>	<p>Indicators for environmental impacts</p>	<p>Describe and identify anticipated and actual significant environmental impacts, both positive and negative from all sources (stationary and mobile) during normal and abnormal/emergency conditions, that may result from the construction and operations of the Project Activity, within and outside the project boundary, over which the Project Owner(s) has/have control.</p>	<p>Describe the applicable national regulatory requirements /legal limits / voluntary corporate limits related to the identified risks of environmental impacts.</p>	<p>If no environmental impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicable</p>	<p>If environmental impacts exist but are expected to be in compliance with applicable national regulatory /stricter voluntary corporate requirements and will be within legal/ voluntary corporate limits by way of plant design and operating principles, then the Project Activity is unlikely to cause any harm (is safe) and shall be</p>	<p>If negative environmental impacts exist that will not be in compliance with the applicable national legal/ regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause harm (may be un-safe) and shall be indicated as Harmful</p>	<p>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 at least to a level that is in</p>	<p>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 or eliminate the risk of impacts that have been identified as Harmful.</p>	<p>Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless or harmful. The frequency of monitoring to be specified as well including the data source.</p>	<p>-1 0 +1</p>	<p>Confirm the score of environmental impact of the project with respect to the aspect and its monitored value in relation to legal /regulatory limits (if any) including basis of conclusion.</p>	<p>Describe how the GCC Verifier has assessed that the Project Activity has adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to cause any harm.</p>	<p>Confirm whether the Project Activity is expected to manage risks of negative environmental impacts to levels that are unlikely to cause any harm (Mark +1 for Yes or -1 for No)</p>

Project Verification Report

					indicated as Harmless /if the project has a positive impact on the environment mark it as "harmless" as well.		compliance with applicable legal/regulatory requirements or industry best practice or stricter voluntary corporate requirements							
Reference to paragraphs of Environmental and Social Safeguards Standard		Paragraph 12 (a)	Paragraph 13 (c)	Paragraph 13 (d) (i)	Paragraph 13 (d) (ii)	Paragraph 13 (d) (iii)	Paragraph 13 (e) (i)	Paragraph 13 (e) (ii)	Paragraph 12 (c) and Paragraph 13 (f)	Paragraph 22				
Environment - Air	SO _x emissions (EA0 1)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
	NO _x emissions (EA0 2)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
	CO ₂ emissions (EA0 3)	The project reduces CO ₂ emissions since it reduces the amount of fossil fuel used. In case of "no project", stated amount of electricity would be generated from fossil fuels and cause air pollution	N/A	N/A	-	-	N/A	N/A	Electricity generated by the power plant will be used to calculate emission reductions achieved by the project.	+1	In the baseline scenario some of the fossil fuel power plants may have emitted CO ₂ emissions, which has been calculated by the combined margin emission factor. Therefore emission	The project activity reduces CO ₂ emissions by displacement of same amount of electricity generation through fossil fuel-based plants in baseline. The CO ₂ emission reductions are being monitored	+1	

Project Verification Report

											reductions are expected to be reduced which will be regularly monitored and verified ex -post and therefore is eligible to be scored.		
	CO emissions (EA04)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	Suspended particulate matter (SPM) emissions (EA05)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	Fly ash generation (EA06)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	Non-Methane Volatile Organic Compounds (NMVOCs) (EA07)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	Odor (EA08)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	Noise Pollution (EA09)	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
Environment - Land	Solid waste Pollution	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		

Project Verification Report

<i>n from Plastics (EL-01)</i>													
<i>Solid waste Pollution from Hazardous wastes (EL02)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
<i>Solid waste Pollution from Bio-medical wastes (EL03)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
<i>Solid waste Pollution from E-wastes (EL04)</i>	<p>No e-waste pollution is expected from the project activity. If any e-waste is generated, they will be handled according to national regulations. In Türkiye, solar power plant operators must report and responsibly manage electronic waste (E-waste) according to regulations such as the Electrical Market License and Waste Management rules. They need to work with authorized waste firms for collection and transportation to licensed facilities for recycling or disposal.</p>	<p>Regulation on Waste Management⁷, Regulation on Electrical and Electronic Waste Control⁸, and Regulation on Battery and Accumulator Wastes⁹.</p>	N/A	Harmless.	-	N/A	N/A	If any e-waste is generated, disposal records will be present	+1	<p>In any case of problems, the panels are returned to the manufacturer and further handling of the wastes are done by the manufacturer.</p> <p>However, project owner will discard any such waste if generated and shall keep and monitor records for the same.</p>	<p>Project owner does not foresee any major E-waste generation from the plant.</p> <p>Assessment team also do not expect any major E-waste generation based on the equipment installed and operation of project.</p>	+1	

Project Verification Report

<p><i>Solid waste Pollution from Batteries (EL05)</i></p>	<p>No battery pollution is anticipated during the operation of the project. It will be disposed in the future according to "Turkish Waste Management Regulation".</p>	<p>Waste Management Regulation¹⁰</p>	<p>-</p>	<p>Harmless</p>	<p>-</p>	<p>N/A</p>	<p>N/A</p>	<p>In case of formation of Solid wastes pollution from batteries at the project site, documentation of its disposal will be provided to GCC Verifier during the future emission reduction verification procedures within this crediting period.</p>	<p>+1</p>	<p>The project owner undertakes to manage battery in compliance to the prevailing laws and regulations.</p>	<p>In line with batteries installed at the solar power plant, the discarded batteries will be properly managed as per National regulations of Türkiye. The project owner has confirmed the procedures to appropriately discard the same in line with applicable regulations and this parameter will be monitored.</p>	<p>+1</p>
<p><i>Solid waste Pollution from end-of-life products/equipment (EL06)</i></p>	<p>Solar PV modules at site might have negative environmental impacts if not managed well after their end-of-life.</p>	<p>Regulation for Waste Management¹¹</p>	<p>N/A</p>	<p>Harmless</p>	<p>-</p>	<p>N/A</p>	<p>N/A</p>	<p>The details of damaged and returned solar PV modules will be maintained in records and to be submitted to GCC verifiers during the ER verification.</p>	<p>+1</p>	<p>The project owner undertakes to Manage e-waste in compliance to the prevailing laws and regulations</p>	<p>In line with damaged panels. The panels after end of the life shall also have any negative impacts. The project owner has confirmed the procedures to appropriately discard the same in line with applicable regulations and this parameter will be monitored</p>	<p>+1</p>
<p><i>Soil Pollution from</i></p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>-</p>	<p>-</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>0</p>	<p>N/A</p>		

Project Verification Report

	<i>Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07)</i>													
	<i>land use change (change from cropland /forest land to project land) (EL08)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
Environment - Water	<i>Reliability/ accessibility of water supply (EW01)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
	<i>Water Consumption from ground and other sources (EW02)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
	<i>Generation of wastewater (EW03)</i>	Avoidance wastewater discharge to the environment SDG 6: Clean Water and Sanitation: The project contributes SDG Target 6.3 "By 2030, improve water quality by reducing	Water Pollution Control Regulation ¹²	N/A	Harmless	-	N/A	N/A	Amount of net electricity generation, which is calculated by monthly settlement notifications	+1	Cooling water discharge prevented. The project activities replace the grid electricity,	The project's substitution of grid electricity, derived from varied fuel sources, reduces greenhouse gas emissions,	+1	

Project Verification Report

		pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.							of OSF forms based on monthly meter readings, will be used to calculate estimated amount of avoided wastewater discharge by project activity.		which is constituted of different fuel sources causing greenhouse gas emissions. By replacing the consumption of these fuels, it contributes to conservation of water. The amount of wastewater to be discharged to the environment is decreased.	conserving water by preventing cooling water discharge and decreasing wastewater discharge, positively impacting environmental sustainability. This parameter is monitored in verification	
<i>Waste water discharge without/with insufficient treatment (EW04)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A	N/A		
<i>Pollution of Surface, Ground and/or Bodies of water (EW05)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A	N/A		
<i>Discharge of harmful chemical</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A	N/A		

Project Verification Report

	<i>als like marine pollutants / toxic waste (EW06)</i>												
Environment – Natural Resources	<i>Conserving mineral resources (ENR01)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	<i>Protecting/enhancing plant life (ENR02)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	<i>Protecting/enhancing species diversity (ENR03)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	<i>Protecting/enhancing forests (ENR04)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		
	<i>Protecting/enhancing other depletable natural resources (ENR05)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A		

Project Verification Report

	<i>Conserving energy (ENRO 6)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
	<i>Replacing fossil fuels with renewable sources of energy (ENRO 7)</i>	The project replaces fossil fuels with renewable sources of energy since it is a solar power plant. In this way project decreases the dependence on the fossil fuels.	There is no such legal limit.	N/A	-	-	N/A	N/A	The electricity generated from solar power will be monitored throughout the crediting period.	+1	The generated electricity by the project activity will be continuously measured and the related CO ₂ emission reduction will be calculated according to the applied methodology. The project is expected to supply the respective 22,846 MWh annual clean energy.	Project activity replaces the fossil fuel-based generation to renewable clean solar energy.	+1	
	<i>Replacing ODS with non-ODS refrigerants (ENRO 8)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	0	N/A			
Net Score:		+6											+6	

Project Verification Report

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

Appendix 6. Social Safeguards Assessment

Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards										Project Owner's Conclusion		GCC Verifier's Conclusion	
		Description of Impact (both positive and negative)	Legal requirement /Limit	Do-No-Harm Risk Assessment			Risk Mitigation Action Plans		Do-No-Harm Residual Risk Assessment		Self-Declaration		3 rd Party Audit		
				Not Applicable (No actions required)	Harmless (No actions required)	Harmful (Actions required)	Operational Controls	Program of Risk Management Actions	Re-evaluate Risks	Monitoring	Explanation of Conclusion	The Project Activity will not cause any harm	Verification Process	Will the Project Activity causes any harm?	
Social impacts on the identified categories ¹³ indicated below.	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 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 in compliance 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 be adopted 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	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 GCC Verifier has assessed that the Project Activity has adopted Risk Mitigation Action Plans to mitigate the risks of negative social impacts to levels that are unlikely to cause any harm.	Confirm whether the Project Activity is likely to manage risks of negative social impacts to levels that are unlikely to cause any harm (Mark +1 for Yes or and -1 for No)	

¹³ sourced from the CDM SD Tool and the sample reports are available (<https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx>)

Project Verification Report

					required)	required).				as Harmless (No actions required)					for No)
Social Safeguards															
Social - Jobs	<i>Long-term jobs (> 1 year) created/lost</i>	<i>The project creates long term job opportunities during operation.</i>	All employment is done according to the national employment regulations.	N/A	-	-	N/A	N/A	N/A	Records of People employed by the project will be maintained.	N/A	+1	Being a commercial power plant, the project activity is expected to create the employment for both Skilled and unskilled persons. The employment generated is being monitored by the help of employment records. Thus the scoring is accepted	+1	
	<i>New short-term jobs (< 1 year) created/lost</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	The project activity must have generated short term jobs during the construction phase as many types or labor and one type of work is	-	

Project Verification Report

													required.	
	<i>Sources of income generation increased / reduced</i>	The project increases income by creating job opportunities.	All payments and right comply with the Labor Law ¹⁴ .	N/A	-	-	N/A	Records of People employed by the project will be maintained	N/A	The project increases income by creating job opportunities.	All payments and right comply with the Labor Law ¹⁵ .	+1	The project activity does creates new job opportunities. The employment records have been checked by assessment team and it confirmed that project activity generates new income sources. Thus, the scoring is accepted.	+1
Social - Health & Safety	<i>Disease prevention</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
	<i>Reducing / increasing accidents</i>	There may be occupational accidents at the site. In Türkiye, unlicensed Solar Energy Power Plants don't require specific investor training, unlike licensed	All trainings and precautions are being completed according to the HSE Law to reduce accidents.	-	Harmless	-	N/A	Records of People employed by the project will be maintained. Work permits of responsible employees at the power plant has been taken as monitoring equipment.	All trainings and precautions are being completed according to the HSE Law to reduce accidents.	N/A	There may be occupational accidents at the site.	+1	The PA provides training and that has been verified via the training records. The score is accepted.	+1

Project Verification Report

	projects. Evidence like government-issued work permits for responsible employees demonstrates technical competency, ensuring staff quality.						5 employee have Certificate of Mastery for this project.							
<i>Reducing / increasing crime</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
<i>Reducing / increasing food wastage</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
<i>Reducing / increasing indoor air pollution</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
<i>Efficiency of health services</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
<i>Sanitation and waste management</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment	-

Project Verification Report

													team	
Social - Education	<i>Job related training imparted or not</i>	In Turkey, for unlicensed Solar Energy Power Plants, there is typically no requirement for investors to provide specific training. Unlike licensed SPP projects, which may involve more stringent regulations and educational prerequisites for investors, unlicensed solar energy projects in Turkey generally have a simpler process. Evidence documents included the work permits of accountable staff members at the power plant, granted by the government to experts eligible for electrical work in power plants. These permits serve as validation for the technical competence of the	-	N/A	-	-	Work permits of responsible employees at the power plant were presented as evidence documents. These permits are granted by government for the experts who are eligible working at the electrical works at the power plants. These permits justify the technical competency of the employees thus quality of the staff is ensured.	In Turkey, unlicensed Solar Energy Power Plants usually do not necessitate investors to undergo specific training, in contrast to licensed SPP projects, which might impose more rigorous regulations and educational prerequisites on investors. Unlicensed solar energy initiatives in Turkey typically follow a more straightforward process, with less stringent requirements compared to their licensed counterparts.	-	Periodic reviews, stakeholder feedback, and a commitment to continuous improvement will contribute to the effectiveness of this QA/QC procedure, ensuring transparency and adherence to established standards.	In Turkey, for unlicensed Solar Energy Power Plants, there is typically no requirement for investors to provide specific training. Unlike licensed SPP projects, which may involve more stringent regulations and educational prerequisites for investors, unlicensed solar energy projects in Turkey generally have a simpler process. Evidence documents included the work permits of accountable staff members at the power plant, granted by the government to experts eligible for electrical work in power plants. These	+1	The project owner envisages to impart job and safety related trainings to employees, This is monitored parameter and has been verified by the assessment team, Thus, the scoring is accepted.	+1

Project Verification Report

		employees, ensuring the overall quality of the staff.										permits serve as validation for the technical competence of the employees, ensuring the overall quality of the staff.			
	<i>Educational services improved or not</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
	<i>Project-related knowledge dissemination effective or not</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
Social - Welfare	<i>Improving/deteriorating working conditions</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
	<i>Community and rural welfare</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
	<i>Poverty alleviation (more people above poverty level)</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-

Project Verification Report

	<i>Improving / deteriorating wealth distribution/ generation of income and assets</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
	<i>Increased or / deteriorating municipal revenues</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
	<i>Women's empowerment</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
	<i>Reduced / increased traffic congestion</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	Not Applicable / No risk or negative impact identified by assessment team	-
<p>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 society. Score is obtained after adding the individual scores in each of the rows in the last column of the above table.</p>														
Net Score:		+4											+4	
Project Owner's Conclusion in PSF:		The Project Owner confirms that the Project Activity will not cause any net harm to society.												
GCC Project Verifier's Opinion:		The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to society.												

Appendix 7. United Nations Sustainable Development Goals (SDG) Assessment

UN-level SDGs	UN-level Target	Declared Country-level SDG	Defining Project-level SDGs					GCC Project Verifier's Conclusion	
			Project-level SDGs	Project-level Targets/Actions		Contribution of Project-level Actions to SDG Targets	Monitoring	Verification Process	Are Goal/Targets Likely to be Achieved?
<p>Describe UN SDG targets and indicators</p> <p>See: https://unstats.un.org/sdgs/indicators/indicators-list/</p>	Describe the UN-level target(s) and corresponding indicator no(s)	Has the host country declared the SDG to be a national priority? Indicate Yes or No	Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope or creating a new indicator(s). Refer to previous column for guidance.	Define project-level targets/actions in line with nee project level indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s).		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	Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG indicator and its corresponding target, frequency of monitoring and data source	Describe how the GCC Verifier has verified the claims that the Project Activity is likely to achieve the identified project-level SDG targets	Describe whether the project-level 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
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		
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		

Project Verification Report

<p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p> <p>The project's substitution of grid electricity, derived from varied fuel sources, reduces greenhouse gas emissions, conserving water by preventing cooling water discharge and decreasing wastewater discharge, positively impacting environmental sustainability. This parameter is monitored in verification</p>	<p>N/A</p>
<p>Goal 5. Achieve gender equality and empower all women and girls</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>		<p>N/A</p>
<p>Goal 6. Ensure availability and sustainable management of water and sanitation for all</p>	<p>SDG 6 Clean Water and Sanitation: The project contributes SDG Target 6.3 "By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally."</p>	<p>Yes</p>	<p>Since it is renewable energy project, project activity does not consume any water for cooling purposes like fossil fuel energy plants. Therefore, this project provides a significant water use avoidance and thus protects the environment.</p>	<p>Wastewater avoidance is 564.3 (x1000 m³/year) for the baseline annually.</p>	<p>6.3.1 Proportion of domestic and industrial wastewater flows safely treated.</p>	<p>Since it is renewable energy project, project activity does not consume any water for cooling purposes like fossil fuel energy plants, therefore it contributes the water consumption avoidance.</p>	<p>Check annual avoided Wastewater.</p>		<p>Yes</p>

Project Verification Report

<p>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</p>	<p>SDG Target 7.2 "By 2030, increase substantially the share of renewable energy in the global energy mix" Indicator 7.2.1 Renewable energy share in the total final energy consumption.</p>	<p>Yes</p>	<p>Increase the share of renewables in the total installed power capacity connected to the national grid.</p>	<p>Provide 22,846 MWh clean energy annually</p>	<p>Enhance the share of installed electricity generation capacity from renewable energy sources.</p>	<p>The project increases the renewable energy share in Türkiye's energy production mix. It provides 22,846 MWh annual clean energy to the grid.</p>	<p>Calculate the share of installed capacity from renewable energy.</p>	<p>Project owner operates the plant since 2018 and complies with targeted SDGs so far.</p>	<p>Yes</p>
<p>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p>	<p>SDG Target 8.5 "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities and equal pay for work of equal value". Indicator 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities.</p>	<p>Yes</p>	<p>Generated job opportunities and income.</p>	<p>Provide a minimum number of 24 employment opportunities. All employees are local employees.</p>	<p>Provide employment opportunities and income.</p>	<p>The project created job opportunity for both construction and operation period. It created long term employment directly working at the site. Employment of 24 people from the SSI reports.</p>	<p>Check employment records.</p>	<p>Project Owner Provides employment following Labor Law in Türkiye. Social security provisions are also conducted regularly.</p>	<p>Yes</p>
<p>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<p>Goal 10. Reduce inequality within and among countries</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Project Verification Report

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goal 12. Ensure sustainable consumption and production patterns	N/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 institutional capacity on climate change mitigation, adaptation, impact reduction and early warning". Indicator 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions.	Yes	Eliminates 14,823 tCO ₂ annually	Commission 22,846 MWh renewable energy plant.	Reduce greenhouse gas emissions by 14,823 tonnes annually.	Since the project uses solar energy, there is no GHG emissions related to the project activity. It eliminates 14,823 tCO ₂ annually.	Calculate avoided GHG emissions every year.	Project owner operates the plant since 2018 and complies with targeted SDGs so far.	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
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse	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, accountable and inclusive	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

Project Verification Report

SUMMARY	Targeted	Likely to be Achieved	Project verifier's conclusion on likely to be Achieved
Total Number of SDGs	4	4	4
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF	Gold	Gold	Gold

Appendix 8. Sample Photographs from Sites





Project Verification Report



DOCUMENT HISTORY

Version	Date	Comment
V 3.1	31/12/2020	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ Revised version released on approval by the Steering Committee as per the GCC Program Process; ▪ Revised version contains the following changes: <ul style="list-style-type: none"> ○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC); ○ Considered and addressed comments raised by the Steering Committee: <ul style="list-style-type: none"> ➤ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and

Project Verification Report

		<ul style="list-style-type: none"> ➤ electronic consultations EC01-Round 04 (17.08.2020 – 22.08.2020). ▪ Feedback from the Technical Advisory Board (TAB) of ICAO on GCC submissions for approval under CORSIA¹⁶;
V 2.0	25/06/2019	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ Initial version released for approval by the GCC Steering Committee under GCC Program Version 1

¹⁶See ICAO recommendation for conditional approval of GCC at https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf



www.globalcarboncouncil.com