GLOBAL CARBON COUNCIL

Driving Climate Actions

Project Verification Report

V3.1 - 2020

CONTENTS

COVER PAGE Project Verification Report Form (PVR)	
BASIC INFORMATION	
Name of approved GCC Project Verifier / Reference No. (also provide weblink of approved GCC Certificate)	Carbon Check (India) Private Limited. /GCCV004/01 http://globalcarboncouncil.com/wp-content/uploads/2021/10/carbon-check-india-private-limited-ccipl.pdf
Type of Accreditation	☐ Individual Track[1] ☒ CDM Accreditation Valid from 28/03/2019 to 01/06/2024 ☒ ISO 14065 Accreditation https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0052 Valid from 28/06/2021 until 27/06/2024 https://nabcb.qci.org.in//accreditation/ghg/ghg004.php
Approved GCC Scopes and GHG Sectoral scopes for Project Verification	GCC Scope • Green House Gas (GHG# - ACC) • Environmental No-harm (E+) • Social No-harm (S+) • Sustainable Development Goals (SDG+) GHG Sectoral Scope 1. Energy (renewable/non-renewable sources) (CDM TA 1.1, 1.2)
Validity of GCC approval of Verifier	08/03/2023 to 31/05/2024
Title, completion date, and Version number of the PSF to which this report applies	Kovanlık Reg. ve HES Version 10,

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

	Dated 23/08/2023
Title of the project activity	Kovanlık Reg. ve HES
Project submission reference no. (as provided by GCC Program during GSC)	S00129
Eligible GCC Project Type[2] as per the Project Standard (Tick applicable project type)	☒ **Type A:** ☐ Type A1 ☒ Type A2 ☒ Sub-Type 1 ☐ **Type B – De-registered CDM Projects:** ☐ Type B1 ☐ Type[3] B2
Date of completion of Local stakeholder consultation	19/04/2017
Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide web-link.	10/03/2022 to 24/03/2022 No comments were received http://www.globalcarboncouncil.com/global-stakeholders-consultation/
Name of Entity requesting verification service (can be Project Owners themselves or any Entity having authorization of Project Owners)	Kovanlık Enerji Üretim San. ve Tic. A.Ş.
Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)	M. Kemal Demirkol Organization name: GTE Karbon Sürdürülebilir Enerji Egitim Danışmanlık ve Ticaret A.Ş. Address: M. Kemal Mah. Barış Sitesi 2111. Sok. No: 5 06510 Çankaya / Ankara Email: kemal.demirkol@gte.com.tr Telephone: +90 312 514 63 63

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

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

<table>
<tr><td>Country where project is located</td><td>Türkiye</td></tr>
<tr><td>GPS coordinates of the Project site(s)</td><td>
<table>
<tr><th></th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>Powerhouse</td><td>40°49'56.28"
40.8323°</td><td>38°08'43.80"
38.1455°</td></tr>
<tr><td>Forebay</td><td>40°49'41.84"
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<tr><td>Transmission Tunnel Entrance</td><td>40°45'6.77"
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38.1380°</td></tr>
</table>
</td></tr>
<tr><td>Applied methodologies
(approved methodologies of GCC or CDM can be used)</td><td>ACM0002: Grid-connected electricity generation from renewable sources- Version 20.0
(The requests for registration can be submitted until 30 Jun 2023 with version 20 of the methodology)</td></tr>
<tr><td>GHG Sectoral scopes linked to the applied methodologies</td><td>Scope 1 - energy industries (renewable / non-renewable sources)</td></tr>
<tr><td>Project Verification Criteria:
Mandatory requirements to be assessed</td><td>☒ ISO 14064-2, ISO 14064-3
☒ GCC Rules and Requirements
☒ Applicable Approved Methodology
☒ Applicable Legal requirements /rules of host country
☒ National Sustainable Development Criteria (if any)
☒ Eligibility of the Project Type
☒ Start date of the Project activity
☒ Meet applicability conditions in the applied methodology
☒ Credible Baseline
☒ Additionality
☒ Emission Reduction calculations
☒ Monitoring Plan
☒ No GHG Double Counting
☒ Local Stakeholder Consultation Process
☒ Global Stakeholder Consultation Process
☒ United Nations Sustainable Development Goals (Goal No 13-Climate Change)</td></tr>
</table>

Project Verification Criteria: Optional requirements to be assessed	☒ Environmental Safeguards Standard and do-no-harm criteria ☒ Social Safeguards Standard do-no-harm criteria ☒ United Nations Sustainable Development Goals (in additional to SDG 13) ☒ CORSIA requirements
Project Verifier's Confirmation: The *GCC Project Verifier* has verified the GCC project activity and therefore confirms the following:	The GCC Project Verifier Carbon Check (India) Private Limited, certifies the following with respect to the GCC Project "Kovanlık Reg. ve HES". ☒ The Project Owner has correctly described the Project Activity in the Project Submission Form (Version 10, dated 23/08/2023) including the applicability of the approved methodology [*CDM methodology, ACM0002 version 20*] and meets the methodology applicability conditions and is expected to achieve the forecasted real and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reductions estimates correctly and conservatively. ☒ The Project Activity is likely to generate GHG emission reductions amounting to the estimated [87,947] tCO_{2e}/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. ☒ The Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, and is likely to achieve the following labels: ☒ Environmental No-net-harm Label (**E⁺**) ☒ Social No-net-harm Label (**S⁺**) ☒ The Project Activity is likely to contribute to the achievement of United Nations Sustainability Development Goals (SDGs), complies with the Project Sustainability Standard, and contributes to achieving a total of *[4]* SDGs, with the following[4] SDG certification label (**SDG⁺**): ☐ Bronze SDG Label ☐ Silver SDG Label ☒ Gold SDG Label ☐ Platinum SDG Label ☐ Diamond SDG Label ☒ The Project Activity complies with all the applicable 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., v1.1 paragraph 21-23, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions

[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.

	during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project. ☒ The Project Activity complies with all the applicable GCC rules[5] and therefore recommends GCC Program to register the Project activity with above mentioned labels.
Project Verification Report, reference number and date of approval	Reference number: CCIPL1215/GCC/VAL/KRH/20220316 Version: 03 Date of Approval: 03/11/2023
Name of the authorised personnel of GCC Project Verifier and his/her signature with date	 Vikash Kumar Singh, Compliance Officer 03/11/2023

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

1. PROJECT VERIFICATION REPORT

Section A. Executive summary

>>

GTE Karbon Sürdürülebilir Enerji Egitim Danışmanlık ve Ticaret A.Ş has appointed the DOE, Carbon Check (India) Private Ltd., to perform an independent project verification of the Project "Kovanlık Reg. ve HES" in Türkiye (hereafter referred to as "project activity"). This report summarizes the findings of verification of the project, performed on the basis of GCC rules and requirements as well as criteria given to provide for consistent project operations, monitoring and reporting. This report contains the findings and resolutions from the project verification and a verification opinion. GTE Karbon Sürdürülebilir Enerji Egitim Danışmanlık ve Ticaret A.Ş has been authorized by Kovanlık Enerji Üretim San. ve Tic. A.Ş., who has developed and owns the "Kovanlık Reg. ve HES" in Türkiye.

The proposed project activity is the installation of a new grid-connected 58.383 MWm / 57.215 MWe Hydro power plant/unit at the site where no renewable power plant was operating prior to the implementation of the project activity (It is a greenfield plant).The Project activity will generate emission reductions by generate the clean electricity from the Hydro power energy and feed the generated electricity to the Turkish national grid, which is mainly dominated by thermal/fossil fuel-based power plant. The average annual electricity supplied to grid will be of 154,130 MWh and the translating into emission reductions of around 87,947 tCO_2eq per year and a cumulative emission reduction 879,466 tCO2e for the entire crediting period of 10 years.

The project also contributes to Environmental No-net-harm Label (E+), Social No-net-harm Label (S+), CORSIA requirements (C+) and 4 United Nations Sustainable Development Goals (SDG+) i.e., SDG 7,8,9 and 13.

"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 purpose of the project verification is to have a thorough and independent assessment of the proposed Project Activity against the applicable GCC rules and requirements, including those specified in the Project Standard, applied methodology/methodological tools and any other requirements, in particular, the project's baseline, monitoring plan and the host Party criteria. These are verified to confirm that the project design, as documented, is sound and reasonable and meets the identified criteria. Verification requirement for all GCC projects activity is necessary to provide assurance to stakeholders of the quality of the Project Activity and its intended generation of Approved Carbon Credits (ACCs) and Environmental No-net-harm Label (E+), Social No-net-harm Label (S+), CORSIA requirements (C+) and 4 United Nations Sustainable Development Goals (SDG+).

Location

The project is located in Bulancak of Giresun province of Türkiye.

	Latitude	Longitude
Powerhouse	40°49'56.28" 40.8323°	38°08'43.80" 38.1455°
Forebay	40°49'41.84" 40.8283°	38°09'19.66" 38.1555°
Regulator	40°45'5.26" 40.7515°	38°08'15.47" 38.1376°
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Transmission Tunnel Entrance	40°45'6.77" 40.7519°	38°08'16.92" 38.1380°

Scope of the GCC Project verification:

The project verification scope is defined as the independent and objective review of the project submission form (PSF /1/). The PSF /1/ is reviewed against the relevant criteria (see above) and decisions by the GCC, including the CDM approved baseline methodology /B02/, CDM Methodological tool 07 /B05/, tool 01/B04/, tool 27/B07/, and tool 24/B06/. The verification team has, based on the recommendations in the GCC Project Standard, Version 3.1 /B01-1/, Program Definitions, Version 3.1, Environment and Social Safeguards Standard, Version 02.0, Project Sustainability Standard, Version 2.1 /B01-1/, Instructions in Project Submission Form (PSF)-template, Version 3.2/B03/, GCC Clarification No. 01, Version 1.3/B08/, GCC Clarification No. 02, Version 01 /B09/, GCC Clarification No. 03, Version 01/B10/ and GCC Standard on Avoidance of Double Counting V1.0 /B11/, employed a rule-based approach, focusing on the identification of significant risks for project implementation and the generation of ACCs.

The verification is not meant to provide any consulting towards the project (owner)s. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the program design.

While carrying out the verification, CCIPL determines if the PSF complies with the requirements of the applicability conditions of the selected methodology /B02/, guidance issued by the GCC and also assess the claims and assumptions made in the PSF /1/ without limitation on the information provided by the project participant.

Verification Process

Strategic risk Analysis and delineation of the GCC Project verification and sampling plan:

CCIPL employed the following GCC Project verification (termed as “Project Verification” as per GCC) process:

1. Conflict of interest review at the time of contract review;
2. Selection of Audit Team at the time of contract review;
3. Kick-off meeting with the client;
4. Review of the draft PSF listed on GCC website for public consultation;
5. Development of the GCC Project verification plan and sampling plan;
6. Desktop review and evaluation of emission reduction calculations;
7. Follow-up interaction with the client; and final statement and report development.

The GCC Project verification process has utilized to gain an understanding of the:

- Project’s design, GHG emission sources and reductions,

- Baseline determination and additionality,
- GHG monitoring plan,
- Environmental & Social impacts,
- Stakeholder's consultation,
- SD indicators integrated with the project and
- Verify the collection and handling of data, the calculations that lead to the results, and the means for reporting the associated data and results.

Development of the GCC Project verification GCC Project verification Plan:

The Audit Team formally documented its GCC Project verification plan as well as determine the data-sampling plan. The GCC Project verification plan was developed based on discussion of key elements of the GCC Project verification process during the kick-off meeting and as per the criteria of engagement. Client had the opportunity to comment on key elements of this plan for GCC Project verification. Based on items discussed above and agreed upon with the client in the signed contract, the plan identified the CCIPL audit team members based on following:

- Project level of assurance (which is reasonable as per GCC requirements),
- Materiality threshold and
- Standards of evaluation and reporting for the GCC Project verification.

It also provides an outline of the GCC Project verification process and established project deliverables. This GCC Project verification plan also included a sampling plan, which is designed to evaluate all project elements in areas of high risk of inaccuracy or non-conformance.

The project verification consists of the following four phases:

I. A desk review of the project submission form.

- A review of the data and information;
- Cross checks between information provided in the PSF /01//02/ and information from sources with all necessary means without limitations to the information provided by the project owner;

II. Follow-up interviews with project stakeholders

Interviews with relevant stakeholders in host country with personnel having knowledge with the project development;

- Cross checking between information provided by interviewed personnel with all necessary means without limitations to the information provided by the project owner;

III. Reference to available information relating to projects or technologies similar projects under verification and review based on the approved methodology /B02/ being applied of the appropriateness of formulae and accuracy of calculations.
IV. The resolution of outstanding issues and the issuance of the final verification report and opinion.

The Verification team confirms the contractual relationship signed between the CCIPL and the Project Owner. The team assigned to the GCC Project verification meets the CCIPL's internal procedures including the GCC requirements for the team composition and competence. The GCC Project verification team has conducted a thorough contract review as per GCC and CCIPL's procedures and requirements.

The report is based on the assessment of the PSF /1/ undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews and stakeholder interviews, review of the applicable/applied methodology /B02/ and their underlying formulae and calculations.

This report contains the findings (which need to be resolved by the project owner) from the verification and a verification opinion on the proposed Project Activity will be provided once all the raised findings are successfully resolved by the project owner to confirm the program design in the documents is sound and reasonable and meets the stated requirements and identified criteria.

Conclusion

The review of the PSF, supporting documentation and subsequent follow-up actions (onsite audit and interviews) have provided CCIPL with sufficient evidence to determine the fulfilment of stated criteria. CCIPL is of the opinion that the project activity “Kovanlık Reg. ve HES” in Türkiye as described in the final PSF (Version 10, dated 23/08/2023) /1/ meets all relevant requirements of GCC and has correctly applied the CDM baseline and monitoring methodology ‘ACM0002: Grid-connected electricity generation from renewable sources’ /B02/. The review of the PSF, supporting documentation and subsequent follow-up actions (onsite audit and interviews) have provided CCIPL with sufficient evidence to determine the fulfilment of the voluntary labels E+, S+ /B01-4/ and SDG+ with gold rating /B01-5/. Therefore, the project is being recommended to GCC Steering Committee for request for registration.

“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., v1.1 paragraph 21-23, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project”. Hence the project is being recommended to GCC Steering Committee for request for registration.

Section B. Project Verification team, technical reviewer and approver

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B.1. Project Verification team

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader and Technical Expert	IR	Mathew	Vijay	CCIPL	Y	Y	Y	Y
2.	Local Expert	IR	Erduran	Muhammet Ali	CCIPL	Y	Y	Y	Y
3.	Financial Expert	IR	Mathew	Vijay	CCIPL	Y	Y	Y	Y
4.	E+, S+, SDG	IR	Mathew	Vijay	CCIPL	Y	Y	Y	Y

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	C.	Indumathi	CCIPL
2.	Financial Expert	IR	C.	Indumathi	CCIPL
3.	Technical reviewer	ER	Chakraborty	Shivaji	CCIPL
4.	Financial Expert	ER	Chakraborty	Shivaji	CCIPL
5.	Approver	IR	Singh	Vikash Kumar	CCIPL

Section C. Means of Project Verification

C.1. Desk/document review

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The verification was performed primarily as a document review of the initial PSF and revised/ final PSF/01/. 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.

List of all documents reviewed or referenced during the verification is provided in Appendix-3.

C.2. On-site inspection

Duration of on-site inspection: 18/05/2022				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	Discussions and review of: • Project Design • Project Technology • Project boundary • Applicability of CDM methodology • Environmental Management Plan/ EIA • Local stakeholders meeting process • Management structure with Roles and Responsibilities • Project implementation schedule • Pre project (existing) scenario to meet the energy (heat and electricity) demand •Monitoring Plan •Socio-economic Impacts of the project activity •Sustainability aspects of the project (SDGs) • Baseline Scenarios and alternatives • Project additionality • Emission reduction calculations	Bulancak of Giresun province of Türkiye.	18/05/2022	Muhammet Ali Erduran

	• Assessment of E+, S+, SDG+ and CORSIA aspects as per the PSF and GCC requirements, Authorization on Double Counting from Host Country, the legal ownership of the project and GCC requirements.			

C.3. Interviews

No.	Interview			Date	Subject	Team member
	Last name	First name	Affiliation			
1	Tiniya	Ahmet	Kovanlık Enerji	18/05/2022	Project Description, Baseline identification, Project Boundary. project financing, Additionality, Baseline Calculation, Regulatory requirements, project status, Monitoring procedures & Calibration of meters, Operation and Maintenance, Data recording, Emergency procedures, etc. Mode of Invitation for stakeholders meeting, Stakeholders meeting consultation, advantages and disadvantages of the project, employment generation status, Double counting of the carbon credits of the project activity, E+, S+, SDG+ and CORSIA aspects as per the PSF and GCC requirements Environment and social net harm, Do-no-harm analysis etc. The legal ownership of the project and the	Vijay Mathew
2.	Gijner	Rofet	Governor of Gultepe village	18/05/2022		

					focal point relationship and ownership of ACC. Fbdgnng	
3.	Kirikogid	Evrer	Kovanlık Enerji	18/05/2022		
5.	Bayindir	Arda	Kovanlık Enerji	18/05/2022		

C.4. Sampling approach

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

Areas of Project Verification findings	Applicable to Project Types	No. of CL	No. of CAR	No. of FAR
Green House Gas (GHG)				
Identification and Eligibility of project type	A_1, A_2, B_1, B_2			
General description of project activity	A_1, A_2, B_1, B_2	CL 01	CAR 01 CAR 02 CAR 15	
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			
- Deviation from methodology and/or methodological tool	A_1, A_2, B_1, B_2			
- Clarification on applicability of methodology, tool and/or standardized baseline	A_1, A_2, B_1, B_2			
- Project boundary, sources and GHGs	A_1, A_2, B_1, B_2			
- Baseline scenario	A_1, A_2, B_1, B_2			
- Demonstration of additionality including the Legal Requirements test	A_1, A_2, B_1, B_2	CL 02	CAR 05 CAR 10 CAR 16	
- Estimation of emission reductions or net anthropogenic removals	A_1, A_2, B_1, B_2		CAR 06 CAR 07	
- Monitoring plan	A_1, A_2, B_1, B_2	CL 03	CAR 08	
Start date, crediting period and duration	A_1, A_2, B_1, B_2			
Environmental impacts	A_1, A_2, B_1, B_2		CAR 09	
Local stakeholder consultation	A_1, A_2, B_1	CL 06	CAR 14	
Approval & Authorization- Host Country Clearance	A_1, A_2, B_1, B_2			
Project Owner- Identification and communication	A_1, A_2, B_1, B_2			
Global stakeholder consultation	A_1, A_2, B_1			
Others (please specify)	A_1, A_2, B_1, B_2			
VOLUNTARY CERTIFICATION LABELS				
Environmental Safeguards (E^+)	A_1, A_2, B_1	CL 04 CL 05	CAR 11 CAR 12	
Social Safeguards (S^+)	A_1, A_2, B_1	CL 04		
Sustainable development Goals (SDG^+)	A_1, A_2, B_1		CAR 13	

Authorization on Double Counting from Host Country (only for CORSIA)	A_1, A_2, B_1		CAR 03	FAR 01
CORSIA Eligibility (C^+)			CAR 04	
Total		06	16	01

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Project Verification	Desk Review and Interviews
Findings	No findings in this section
Conclusion	The GCC Project verification GCC Project verification team reviewed the PSF /1/ and confirms that the Project Owner determines the type of proposed GCC project activity as Type A2. As per §11 of GCC Project Standard (version 03.1), "These types of projects are prompt-start and had already started their operations as of 5 July 2020. Their start date of operations shall be after 1 January 2016 but before 5 July 2022. The start date of the Crediting Period for such GCC Project Activities shall be on or after 1 Jan 2016 but not more than one year after the start date of the operations of the GCC Project Activity". Further, as per §03 (c), (iv) of GCC clarification no.01 "The deadline for submission of A2 projects has been extended. As per clarification, A2 type projects are required to make initial submission to GCC program, for uploading for global stakeholder consultation, prior to 5 July 2022". The proposed project activity has started its operations on 30/10/2020 /4/, its start date of crediting period is 30/10/2020 its global stakeholder consultation request was from 10/03/2022 to 24/03/2022. This complies with the requirement of §11 of the GCC Project Standard (version 03.1) /B01-1/ and GCC clarification no.01 /B01-6/ and § 25 (b) of GCC Project Verification Standard (version 03.1) /B01-2/.

D.2. General description of project activity

Means of Project Verification	Desk review and Interviews
Findings	CL 01, CAR 01 and CAR 02 were raised and findings are closed. Please refer to Appendix 4 for further details.
Conclusion	The description of the project activity contained in the PSF /1/ can be considered transparent, detailed and provides a clear overview of the project subject to revision in the PSF against the raised findings (please refer to Appendix 4 for further details of the findings). Its content was confirmed by means of document review (refer section C.1) and interviews to verify the accuracy and completeness of the project description. Kovanlık Enerji Üretim San. ve Tic. A.Ş.developed and owns the Kovanlık Reg. ve HES in Bulancak of Giresun province of Türkiye./4/ /5/. The purpose of the project activity is to generate electrical power using Hydro power energy. The project consists of 3 units each having 19.461 MWm / 19.07167 MWe. The total installed capacity is 58.383 MWm / 57.215 MWe., and the electricity generated is supplied to the Turkish National Power Grid. The project verification team has confirmed the same by cross verifying the commissioning report /4/, Connection Agreement /9/ and physical verification of project site /15/. The Annual generation for first year of commissioning is estimated as 154,130 MWh. The same has been confirmed from the Generation license /8/.

Since, the Hydro power energy is clean energy, the project activity does not involve any fossil fuel firing and hence no greenhouse gases are involved in the project activity. The power generation from the project activity replaces the equal amount of power which otherwise would have been supplied from the fossil fuel dominated grid. Thus, project activity helps in an average annual emission reduction of 87,947 tCO_2e/year for a period of 10 years.

The project site is located in Bulancak of Giresun province of Türkiye.

The geographic co-ordinates for the project activity are as follows;

	Latitude	**Longitude**
Powerhouse	40°49'56.28" 40.8323°	38°08'43.80" 38.1455°
Forebay	40°49'41.84" 40.8283°	38°09'19.66" 38.1555°
Regulator	40°45'5.26” 40.7515°	38°08'15.47” 38.1376°
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The same was confirmed by the measurement of co-ordinates using google earth software and GPS at the project site. The other details such as district and province name of the project location are checked during the physical on-site verification /15/;

The project activity is the green field activity, which involves installation of hydro power plant at the project facility. As confirmed during the site visit and discussion with the project owner, there was no renewable energy operating prior to the implementation of the project activity. The project has been commissioned on 30/10/2020 and the project verification team confirms the commissioning date by cross verifying the commissioning report issued by Energy and natural Resources Ministry/4/. The baseline scenario is the electricity delivered to the grid by the project activity, which would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid. The same complies with the applied methodology /B-02/.

The plant summary is as per the FSR prepared /5/ and the technical specifications of the Turbines, Generator/18/, /27/. The project activity is the green field activity, as confirmed during the site visit and discussion with the project owner, there was no renewable energy operating prior to the implementation of the project activity. The project has been connected to the grid and started its first delivery to the grid on 26/07/2018 and the project verification team confirms the same from commissioning report /4/. The baseline scenario is that the electricity delivered to the grid by the project activity would be generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid. The same complies with the applied methodology /B-02/.

The project is expected to generate and feed to the connected national electricity grid of Türkiye, GHG free electricity with GHG emission reduction of 879,466 tCO_2e over 10-year period of project activity with an average of 87,947 tCO_2e GHG emission

	reduction per year. As stated in the PSF /1/, the project activity also voluntarily contributes to Environmental No-net-harm Label (E+), Social No net-harm Label (S+) and 4 United Nations Sustainable Development Goals (SDG+). The project owner has described the GHG emission-reduction activity, including schematics, specifications and a description of how the project reduces GHG emissions. This is as per §36 of Project Standard Version 03.1 and cross checked with PSF /1/. The Project Activity is a voluntary action and not mandated by law the project activity complies with all legal requirements of host country applicable to nature of the project activity same is confirmed by the verification team upon review of the PSF /1/ and on-site visit interviews. Further, The verification team has assessed the relevant regulations to confirm the project. meets the legal requirement test: 1. Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy[6], No. 5346, ratified on 10/05/2005 by Grand National Assembly of Türkiye, enacted on 18/05/2005 by President of Türkiye/51/ 2. Electricity Market Law[7], No. 6446, ratified on 14/03/2013 by Grand National Assembly of Türkiye, enacted on 30/03/2013 by President of Türkiye/50/ 3. Environment Law[8], No. 2872, ratified on 09/08/1983 by Grand National Assembly of Türkiye, enacted on 11/08/1983 by President of Türkiye/49/ 4. Forest Law[9], No: 6831, ratified on 31/08/1956 by Grand National Assembly of Türkiye, enacted on 08/09/1956 by President of Türkiye/48/ 5. EIA Regulation[10] (Ratified by President of Türkiye, enacted 25/11/2014 with Official Gazette Issue: 29186 by Official Gazette of Türkiye, authored by Ministry of Environment, Urbanization and Climate Change)/47/ 6. Energy Efficiency Law[11] (Ratified by President of Türkiye, enacted 02/05/2007 with Official Gazette Issue: 26510 by Official Gazette of Türkiye, authored by Energy Market Regulatory Authority (EMRA)/46/ In accordance with §44 of Project Standard (version 03.1) /B01-1/, the verification team has assessed the geographical boundary of the Project Activity, within which it will be implemented, and confirms that geographical boundary of the Project Activity comprises the following boundaries. • The Hydro power plant itself • The point of connection to Türkiye national grid for sale of electricity. This was as checked and confirmed by reviewing the PSF /1/, on-site visit interviews with representatives of project participant.

[6] Republic of Türkiye, Law no 5346, 10/05/2005
https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5346&MevzuatTur=1&MevzuatTertip=5

As per the PSF /1/, start date of the Project Activity is 30/10/2020 (Start date of commercial operation of the Project) /4/. The same is in accordance with requirements of §38 of Project Standard (version 03.1) /B01-1/.

Crediting period is a fixed crediting period for the Project Activity, from 30/10/2020 to 29/10/2030 i.e., of 10 years. This is cross checked by PSF /1/ and conforms the requirement of §39 and §40 of Project Standard Version 03.1 /B01-1/. Team has assessed and confirm that the Project Activity will not lead to double counting of ACCs, the project proponent has provided declaration in the PSF as well as declaration letter stating that the project activity shall not be double counted /30/.

CCIPL confirm that the description of the proposed Project Activity in the PSF is accurate and complete and it provides an understanding of the Project Activity.

Milestone	Date
Feasibility Report	12/2016
EIA Approval	22/11/2017
Construction and Hydromechanical Works Contract	30/04/2018
Zoning Plan Approval	19/06/2018
Generation License	26/07/2018
Site Delivery Protocol	15/10/2018
Connection Agreement	21/12/2018
Forest Permit	28/01/2019
Building Permit	12/08/2020
Commissioning of Unit-1	30/10/2020
Commissioning of Unit-2	13/11/2020
Commissioning of Unit-3	11/12/2020

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

D.3.1 Application of methodology and standardized baselines

Means of Project Verification	Desk Review and Interviews
Findings	No findings in this section.
Conclusion	The CDM methodology applied ACM0002, Version 20.0 /B02/. It is applicable to greenfield renewable energy power generation using hydro power. Applicability of the methodology could be confirmed by means of interviews with the project owner representatives, physical site visit and document review. The applied methodology is correctly quoted and is identical to the version available on the UNFCCC website. The applied version of the baseline and monitoring methodology /B02/ is valid at the time of submission of the PSF for global stakeholder consultation. All applicability criteria in the methodology are assessed in the below table:

Applicability criteria of the methodology (ACM0002, Version 20.0)	Justification in the PSF	GCC Verification body assessment
This methodology is applicable to grid-connected renewable power generation project activities that: (a) install Greenfield power plant; (b) involve a capacity addition to (an) existing plant(s); (c) involve a retrofit of (an) existing plant(s)/unit(s); (d) involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) involve a replacement of (an) existing plant(s)/unit(s)	Kovanlık Regulator and Hydro Power Plant is a large-scale hydro power type, greenfield, grid connected renewable electricity generation project. So, the project meets (a) Install a Greenfield power plant.	The proposed activity is a, Greenfield project, which involves the installation of a new grid- connected renewable power generation facility (i.e. 57.215 MWe Hydro power project). CCIPL project verification team confirmed the same from the contract signed by the Connection agreement signed /9/, and the commissioning certificates /4/. Hence the methodology is applicable to the proposed project activity.
The methodology is applicable under the following conditions: The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit	The project activity is installation of a new grid connected renewable energy power plant of the type of hydro power plant.	The proposed activity is a Greenfield project, which involves the installation of a new grid- connected renewable power generation (i.e., 57.215 MWe Hydro power project). CCIPL project verification team confirmed the same from the contract signed by the connection agreement /9/, and the commissioning certificates /4/. Hence the methodology is applicable to the proposed project activity.
In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the	The project does not involve a capacity addition to an existing plant, a retrofit of an existing operating plant, a rehabilitation of an existing plant, a replacement of an existing plant. Hence, this condition is N/A.	There is no capacity addition, retrofitting or replacements in the proposed project activity. The proposed activity is a Greenfield project, which involves the installation of a new grid- connected renewable power

	calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity		generation (i.e. 57.215 MWe Hydro power project). CCIPL project verification team confirmed the same during the onsite visit /15/. Hence this condition is not applicable to the proposed project activity.
	In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of reservoirs; or (b) The project activity is implemented in an existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3) is greater than 4 W/m2; or (c) The project activity results in new single or multiple reservoirs and the power density calculate equation (3), is greater than 4 W/m2. (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density of any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m2, all of the following conditions shall apply. (i) The power density calculated using the total installed capacity of the integrated project, as per equation	The project is a hydro power plant. (c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m^2.	The proposed project activity is a hydro power project. The proposed activity is a, Greenfield project, which involves the installation of a new grid- connected renewable power generation facility (i.e. 57.215 MWe Hydro power project). The project activity results in new single or multiple reservoirs and the power density calculate equation (3), is greater than 4 W/m2. CCIPL project verification team confirmed the same during the onsite visit /15/. Hence, meeting the requirement of the methodology.

	(4) is greater than 4W/m2; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2shall be: (a) Lower than or equal to 15 MW; and Less than 10% of the total installed capacity of integrated hydro power project		
	In the case of integrated hydro power projects, project proponent shall: (a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or (b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability indifferent seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows	The project is not a integrated hydro power project. Hence, this condition is N/A.	The proposed project activity is not a integrated hydro power project. The proposed activity is a Greenfield project, which involves the installation of a new grid- connected renewable power generation facility (i.e. 57.215 MWe Hydro power project). CCIPL project verification team confirmed the same during the onsite visit /15/. Hence this condition is not applicable to the proposed project activity.

	from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.		
	The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (b) Biomass fired power plants;	-The project does not involve switching from fossil fuel use to renewable energy at the site of the project activity. -The project is not a biomass fired power plant.	The proposed project activity is not fuel switch project from fossil fuels to renewable energy sources, biomass fired power plants and the hydro power plant that result in new reservoir. The proposed activity is a, Greenfield project, which involves the installation of a new grid- connected renewable power generation facility (i.e. 57.215 MWe Hydro power project). CCIPL project verification team confirmed the same during the onsite visit /15/. Hence this condition is not applicable to the proposed project activity.
	In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".	The project does not involve retrofits, rehabilitations, replacements or capacity additions. Hence, this condition is N/A.	The proposed project activity does not involve any retrofits, replacements or capacity addition. The proposed activity is a, Greenfield project, which involves the installation of a new grid- connected renewable power generation facility (i.e. 57.215 MWe Hydro power project). CCIPL project verification team confirmed the same during the onsite visit /15/. Hence this condition is not applicable to the proposed project activity.
	The GCC project verification team confirms that the project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is		

greater than 4 W/m^2.

Applicability criteria of the tool 7, Version 7.0	Justification in the PSF	GCC Verification body assessment
The tool lists the following applicability criteria: (a) 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).	The project activity supplies electricity to a grid. Hence, this condition is met.	The project activity involved the construction and operation of 57.215 MWe Hydro power project in Türkiye. The electricity thus generated is being sold to Turkish national power grid. In the absence of the project activity, the same amount of electricity (grid electricity) would be generated in the Turkish national power grid. Therefore, combined margin calculation applies to the Turkish national grid.
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, the conditions specified in "Appendix 2: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.	CO_2 emission factor for the displacement of electricity generated by power plants in an electricity system is determined by calculating the "combined margin" emission factor (CM) of the electricity system.	Project owner has calculated the emission factor applying this applicability condition. This is accepted by the project verification team.
(c) In case of CDM projects the tool is not applicable if the project electricity system is	The project electricity system is not located partially or totally in	The electricity generated from the GCC project will be

	located partially or totally in an Annex I country.	an Annex I country. Hence, this condition is N/A.	sold (100%) to Turkish National power grid. Since the project electricity system is located in Türkiye which is not an Annex I country (Date of ratification of Kyoto protocol by Türkiye on 28th May, 2009), the project verification team has accepted the application of the tool to calculate the grid emission factor.
	(d) Under this tool, the value applied to the CO_2 emission factor of biofuels is zero.	The project does not involve biofuels in any way.	CO_2 emission factor of biofuels is zero.

Applicability criteria of the tool 1, Version 7.0	Justification in the PSF	GCC Verification body assessment
The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project owners when proposing new methodologies. Project owners may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	Tool for the demonstration and assessment of additionality is applied in this project since there are no new methodologies proposed. Hence, this condition is N/A.	One alternative that would be more attractive than the project activity, has been defined in the section B.5 of the PSF. Hence, the applicability criterion was found to be met.
Once the additionally tool is included in an approved methodology, its application by project owners using this methodology is mandatory.	The additionality tool is applied using this methodology.	Project owner has applied the Tool for the demonstration and assessment of additionality, version 7, which is in line with the methodology ACM0002, version 20.
Applicability criteria of the tool 24, Version 3.1	Justification in the PSF	GCC Verification body assessment
This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", or baseline and monitoring methodologies that use the common practice test	This project activity applies the methodological tool "Tool for the demonstration and assessment of additionality". Hence, this condition is met.	The applicability criterion is met as the project activity applies the methodological tool "Tool for the demonstration and assessment of additionality."

for the demonstration of additionality.		
In case the applied approved baseline and monitoring methodology defines approaches for the conduction of the common practice test that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Common practice analysis is provided in section B.5.	The applied methodology is ACM0002, Version 20. It doesn't define approaches for the conduction of the common practice test that are different from those described in this methodological tool 24 Common Practice Analysis version 3.1.

Applicability criteria of the tool 27, Version 11	Justification in the PSF	GCC Verification body assessment
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.	This project activity applies the methodological tool "Tool for the demonstration and assessment of additionality". Hence, this condition is met.	The applicability criterion is met as the project activity applies the methodological tool "Tool for the demonstration and assessment of additionality."
In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Investmentractice analysis is provided in section B.5.	The applied methodology is ACM0002, Version 20. It doesn't contain requirements for the investment analysis that are different from those described in this methodological tool 27 Investment Analysis version 11.0.

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

Means of Project Verification	Desk Review and Interviews
Findings	N/A
Conclusion	N/A

D.3.3 Project boundary, sources and GHGs

Means of Project Verification	Desk Review and Interviews
Findings	No findings in this section.
Conclusion	According to the approved baseline and monitoring methodology "ACM0002" of "Grid connected renewable electricity generation", version 20 **/**B-02**/**, the project boundary is "the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to". The project boundary includes the project power plant (project site where the hydro power plant has been installed including the hydro power plant, power evacuation infrastructure, energy metering points, switch yards and other civil constructions) implemented in the state and all other power plants/units connected physically to the national (Turkish) grid that the project power plants is connected to. The physical boundary of the project activity identified by the Project owner has been cross verified by site visit observation /15/, commissioning report /4/ and Connection Agreement/9/. The verification team conducted a desk review of the proposed project to confirm the appropriateness of the project boundary identified. It has been confirmed that the PO. has included all the appropriate GHG emission sources that was required by the methodology in the PSF/1/. 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. In section B.3 of the PSF /01/, project boundary has been adequately stated in figure 4 and table. Hence, the project boundary includes the Hydro power project and the other power plants which connected to the related electricity system and the national grid.

D.3.4 Baseline scenario

Means of Project Verification	Desk Review and Interviews
Findings	No findings in this section
Conclusion	According to the approved baseline methodology ACM0002 /B-02/, "If the project activity is the installation of a Greenfield power plant with or without a BESS as described under paragraph 4(a) or paragraph 5(a), the baseline scenario is electricity. delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in TOOL07: Tool to calculate the emission factor for an electricity system". Project activity involves generation of electricity using Hydro power plant and selling it to Turkish national power grid as confirmed through the Connection agreement /9/ and commissioning report /4/. In the absence of this project activity, same amount of electricity would have been generated by the operation of existing/proposed grid connected fossil fuel-based power plants. The same was cross checked and

	confirmed by the data published by Ministry of Energy and Natural Resources 2019 calculations/60/. The relevant acts/ policies/ regulations are: 1. Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy[12], No. 5346, ratified on 10/05/2005 by Grand National Assembly of Türkiye, enacted on 18/05/2005 by President of Türkiye/51/. 2. Electricity Market Law[13], No. 6446, ratified on 14/03/2013 by Grand National Assembly of Türkiye, enacted on 30/03/2013 by President of Türkiye/50/. 3. Environment Law[14], No. 2872, ratified on 09/08/1983 by Grand National Assembly of Türkiye, enacted on 11/08/1983 by President of Türkiye/49/. 4. Forest Law[15], No: 6831, ratified on 31/08/1956 by Grand National Assembly of Türkiye, enacted on 08/09/1956 by President of Türkiye/48/. 5. EIA Regulation[16] (Ratified by President of Türkiye, enacted 25/11/2014 with Official Gazette Issue: 29186 by Official Gazette of Türkiye, authored by Ministry of Environment, Urbanization and Climate Change)/47/. 6. Energy Efficiency Law[17] (Ratified by President of Türkiye, enacted 02/05/2007 with Official Gazette Issue: 26510 by Official Gazette of Türkiye, authored by Energy Market Regulatory Authority (EMRA)/46/. The following ex ante parameters and assumptions were used to estimate baseline emissions of the project activity. Combined margin CO_2 emission factor for the project electricity system in year y ($EF_{grid,CM,y}$) – The value has been calculated and published by Türkiye Ministry of Energy and Natural Resources released them on 06/10/2021. The value is calculated as per the TOOL 07: "Tool to calculate the emission factor for an electricity system" (Version 07.0). This was found in accordance with the methodology. CCIPL project verification team was able to verify all the documented evidence listed above during the project verification process and can confirm that: • All the assumptions and data used by the project owners are listed in the PSF, including their references and sources; • All documentation used /4/ /5/ /9/ /15/ /16/ are relevant for establishing the baseline scenario and correctly quoted and interpreted in the PSF; • Relevant national and/or sectoral policies and circumstances are considered and listed in the PSF /1/;

[12] Republic of Türkiye, Law no 5346, 10/05/2005 https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5346&MevzuatTur=1&MevzuatTertip=5

[13] Republic of Türkiye, Law no 6446, 14/03/2013 https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6446&MevzuatTur=1&MevzuatTertip=5

[14] Republic of Türkiye, Law no 2872, 11/08/1983 https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=2872&MevzuatTur=1&MevzuatTertip=5

[15] Republic of Türkiye, Law no 6831, 31/08/1956 https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6831&MevzuatTur=1&MevzuatTertip=3

[16] Republic of Türkiye, Law no 31907, 25/11/2014 https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=39647&MevzuatTur=7&MevzuatTertip=5

[17] Republic of Türkiye, Law no 5627, 02/05/2007 https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5627&MevzuatTur=1&MevzuatTertip=5

	The approved baseline methodology ACM0002, version 20, has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed GCC project activity.

D.3.5 Demonstration of additionality

Means of Project Verification	Desk Review and Interviews
Findings	CL 02, CAR 05, CAR 10 and CAR 16 were raised and findings are closed. Please refer to Appendix 4 for further details.
Conclusion	Project owner has described the Demonstration of additionality according to the GCC Project Standard Version 03.1. In section B.5 of the PSF, two components are applied for the demonstration of additionality. (i) Legal Requirement Test: The project activity is a Type A project and requires undergoing a Legal Requirement Test. However, the projects as in the project activity are not mandated by law or regulations and are entirely a voluntary action. The project is additional as per paragraph 46 of GCC Project Standard V3.1. Legal Requirement test: 1. Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy[18], No. 5346, ratified on 10/05/2005 by Grand National Assembly of Türkiye, enacted on 18/05/2005 by President of Türkiye/51/. 2. Electricity Market Law[19], No. 6446, ratified on 14/03/2013 by Grand National Assembly of Türkiye, enacted on 30/03/2013 by President of Türkiye/50/. 3. Environment Law[20], No. 2872, ratified on 09/08/1983 by Grand National Assembly of Türkiye, enacted on 11/08/1983 by President of Türkiye/49/. 4. Forest Law[21], No: 6831, ratified on 31/08/1956 by Grand National Assembly of Türkiye, enacted on 08/09/1956 by President of Türkiye/48/. 5. EIA Regulation[22] (Ratified by President of Türkiye, enacted 25/11/2014 with Official Gazette Issue: 29186 by Official Gazette of Türkiye, authored by Ministry of Environment, Urbanization and Climate Change)/47/. 6. Energy Efficiency Law[23] (Ratified by President of Türkiye, enacted 02/05/2007 with Official Gazette Issue: 26510 by Official Gazette of Türkiye, authored by Energy Market Regulatory Authority (EMRA)/46/.

[18] Republic of Türkiye, Law no 5346, 10/05/2005
https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5346&MevzuatTur=1&MevzuatTertip=5

	verified by the assessment team. 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 of the host county to confirm the requirements and also confirmed based on the local expertise by the project verification team the project is not implemented to meet any legal requirement. (ii) Additionality Test: To cover this requirement from the GCC Project Standard 3.1, section 6.4.8, paragraph 45 and as per the applied methodology ACM0002 Version 20.0, additionality of the following project activity is demonstrated and assessed by the latest version of Tool 01: Tool for the demonstration and assessment of additionality" Version 7.0 /B-04/. The project owner has adopted the stepwise approach for demonstrating and assessing the additionality of the project activity as follows: **Sub Step 0: Demonstration whether the proposed project activity is the first-of-its-kind.** The proposed project activity is not the first of its kind as implementation of hydro power project in the State is not first of its kind. **Step 1: Identification of alternatives to the project activity consistent with current laws and regulations** **Sub-step 1a: Define alternatives to the project activity:** Alternative 1: The proposed project activity undertaken without being registered as a GCC project activity. Alternative 2: Implementation of the project is additional to the baseline scenario and therefore reduces the emission. The first alternative, which is the implementation of the project without carbon revenue is not financially attractive as discussed in investment analysis section below. The second alternative (Scenario 2) is the baseline scenario and implementation of the proposed project as a GCC project activity would be additional to this scenario. No project activity is undertaken and continuation of current scenario. In this scenario, due to increasing electricity demand new power plants should be constructed which includes mainly thermal power plants (baseline scenario). Implementation of the project is additional to the baseline scenario which is alternative 2 above and therefore reduces the emissions. Outcome of Step 1a Of the two alternatives outlined above, the first alternative is not possible as project activity is not viable without carbon credit benefits and second alternative is the baseline scenario for the project activity as per methodology and outlined in section B.4 of PSF. The project being a green field project activity the baseline scenario in line with the methodology is "the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the

combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system Version 7.0”.

Sub-step 1b: Consistency with mandatory laws and regulations:

This has been discussed in the legal requirement test above. The verification team has assessed mandatory laws and regulations and confirms that all alternatives are in compliance with mandatory laws and regulations in Türkiye.
The resultant alternatives to the project as outlined in Step 1a are in compliance with the applicable laws and regulations.

Outcome of Step 1b
Hence, both the alternatives enlisted above are found to comply with the mandatory laws and regulations taking into account the enforcement of the legislations in the region or country and EB decisions on national and/or sectoral policies and regulations. However, Alternative 2 “Continuation of the current situation” has been selected as the appropriate baseline alternative for this project activity in line with methodology.

Step 2: Investment analysis
In this section it is demonstrated that the project activity is not financially feasible without the revenue from the sale of ACCs. This is demonstrated in following sections as per TOOL 27: “Investment analysis” (Version 11.0). No public funding or ODA are associated with the implementation of this GCC project activity.

Sub-step 2a: Determine appropriate analysis method.
The project owner has chosen to apply investment analysis to demonstrate the additionality of the project activity using the benchmark analysis method. Project owner has identified post-tax equity IRR as the most suitable financial indicator. The project cannot apply simple cost analysis since the project brings revenue from the sale of electricity; also, investment comparison analysis cannot be applied as the alternative to the project activity is the electricity generated by new and existing grid connected power plants.

Sub-step 2b: Option III. Apply benchmark analysis.
Post-tax equity IRR has been used as the financial indicator for the demonstration of financial unviability for the proposed project activity. A suitable benchmark i.e., expected return on equity has been selected as benchmark comparison purposes. The source of benchmark was assessed by the verification team and the selected post-tax equity IRR and selected benchmark were found to be appropriate and in-line with the applied tools, guidelines and other supporting documents provided by the PO.

Para 20 of tool 27/29/ states “The cost of equity may be calculated using CAPM if all of the following conditions are satisfied, according to the most recent datasets from the World Federation of Exchanges and the Gross Domestic Product (GDP) from the World Bank or UNSTAT. In addition, the countries meeting the criteria (a)-(c) and (e) are also indicated in the table in the Appendix.” In line with the requirement, the cost of equity may be calculated using CAPM since the following conditions are satisfied, according to the most recent datasets from the World Federation of Exchanges and the Gross Domestic Product (GDP) from the World Bank or UNSTAT.

No.	Applicability Conditions	The Project

	1	(a) More than 10 years of existence for the stock exchange;	Istanbul Stock exchange has been founded in 1985 so existence is more than 10 years. https://www.borsaistanbul.com/tr/sayfa/27/tarihsel-gelismeler	
	2	(b) The stock market is representative of the domestic economy, i.e., ratio of stock market capitalization to GDP is in excess of 20 per cent;	Capitalization Ratio is 41.4 Reference: https://www.ceicdata.com/en/indicator/turkey/market-capitalization--nominal-gdp	
	3	(c) The average share turnover ratio over the last calendar year is in excess of 20 per cent;	Average share turnover ratio is 366% Reference: https://tradingeconomics.com/turkey/stock-market-turnover-ratio-percent-wb-data.html	
	4	(d) There are at least three domestic pure players that belong to the same sector as the project to calculate beta with at least 3 years of daily stock market data, and daily values are available;	There are many domestic investors in the energy sector. Three of them which can easily be confirmed are (Erdem Holding, Fiba Enerji and Ulusoy Elektrik) which received GS certificate for their WPPs and are also clients of PO. https://www.erdem.com.tr/ https://fibaenerji.com/ https://www.ulusoyelektrik.com.tr/	
	5	(e) There are domestic government securities labelled in the domestic	There are government bonds with 10-year maturity date.	

	currency with maturities over 10 years.	Reference: https://www.investing.com/rates-bonds/turkey-10-year-bond-yield-historical-data

The above applicability conditions are satisfied. As per the tool, article 19, for cost of equity either default values in the appendix should be used or cost of equity should be calculated using CAPM method. Since, default values are not available for Turkey in the appendix, option B has been used by PO and calculated cost of equity using CAPM method.
As per the tool,

$re=rf+\beta\times(rm-rf)$

Where;

re = Cost of equity (expected return on equity)
rf = Risk-free rate
β = Beta is adjustment factor (levered beta applied as 1.15 for emerging markets)/64/
rm = Expected market return

(rm-rf) in the formula above corresponds to “equity risk premium” and rf is the risk free rate of return which is based on long term average of rates and applied as 12.867% for April 2018 (investment decision date)/65/. Risk free rate has been chosen over a period of 10 years bond yield in Türkiye. Equity risk premium at time of investment decision has been applied as 7.96% based on the reference given in the tool 27 (New York University N.Stern School of Business)/66/ . Thus, expected return of equity has been calculated as;

re = 12.867 + 1.15×7.96
re = 22.02%

CCIPL team verified all the above said details and documents; and confirmed that the benchmark identified to compare the financial attractiveness of the project activity is appropriate.

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

For calculation of financial indicator, all relevant costs and revenues were found to be included in the IRR sheet provided by the Project Owner. All assumptions and estimates used for input values were checked against the relevant sources.

GCC project activity has a less favorable Post-tax Equity IRR than the benchmark, and hence the GCC project activity cannot be considered as financially attractive. The key data parameters used to calculate Post-tax Equity IRR are tabulated below. These parameters have been sourced from the Project Feasibility Report (prepared by ASD group /5/ which were available at the time of investment decision 30/04/2018.

Parameter	Unit	Value	Assessment and cross checking

		Total capacity	MWe	57.215	Verified against Feasibility study report (FSR) /5/ prepared by ASD group /5/. The installed capacity was also confirmed from the provisional acceptance certificate issued at the time of commissioning/4/ issued by Ministry of Energy and Natural Resources and generation license/08/ Further, the same has been confirmed during onsite visit/15/. Therefore, project capacity considered was found acceptable.
		Grid Connected output	GWh	154.130	Details on the amount of electricity supplied to the grid was verified from the FSR/05/ and is crossed checked with generation license /8/ which was issued to Kovanlık Reg. ve HES by The Türkiye Electricity Transmission Joint stock Company. The document captures the development of the project until commissioning. The same is cross verified against the final supplement list published TR ENERGY MARKET REGULATORY AUTHORITY /60/ and cross verified against connection agreement /9/ issued by T.R Energy Market Regulatory Authority. The estimated annual electricity generation is 154.130 MWh/year. Project verification team has reviewed the actual electricity generation of last year i.e., 124 MWh/year. Even with actual electricity generation/59/ the IRR value is not crossing the benchmark. Hence the project verification team has accepted the same.
		Transmission losses	%	1.7	The value used in the investment analysis has been confirmed from the electricity Statistics, “Annual Development of Electricity Generation &Consumption and Losses in Türkiye” published by TEIAS/62/ The value applied is cross verified from the data available at the Turkish Electricity Transmission Corporation open sources. Hence, the value used was found acceptable by the project verification team. The transmission losses are to be incurred by the project activity albeit these losses represent the losses that would occur after the said electricity/energy is supplied to grid. Therefore, for the

					purpose of emission reductions, the net supplied to the grid at metering point has been considered. However, for revenue purposes, the transmission losses have been subtracted from annual income. Even when the transmission losses are completely removed from the IRR calculations the resultant IRR will not cross benchmark value. Hence transmission loss considered found acceptable.
		Corporate Tax Rate	%	22	The IRR for the project has been calculated at 22% tax rate. The financial assessment in the IRR Calculation sheet has been presented on post-tax basis in all the places. The practice was found acceptable by the project verification team. Reference: https://www.gib.gov.tr/yardim-ve-kaynaklar/yararli-bilgiler/gecici-vergi-oranlari
		Depreciation	Years	15/40	The depreciation period for turbines and equipment has been taken as 15 years whereas for construction is 40 years based on the assumptions taken by the project developer. The depreciation value has been added back to the annual cash flow which has been found acceptable based on the inputs form the local expert which is an accepted practice in the host country Türkiye.
		Feed in Tariff/Market price after 10th years	$ Cents/ kWh	7.3/4.6	Electricity tariff of 7.3 $ Cents/kWh for the first 10 years of operation and 4.6 $ Cents/kWh for the next 10 years. In addition, domestic equipment incentive was added for the first five years as 1.3 $ Cent/kWh for the project as indicated in the Final Renewable Energy Sources List of Türkiye, making the electricity tariff $8.6 Cent/kWh. The value used was confirmed by studying Law on the Use of Renewable Energy Resources for the Purpose of Generating electrical energy /51/ for feed-in tariffs for electricity generated by hydro power plants. The same is also verified by checking the T.C official newspaper. https://www.resmigazete.gov.tr/eskiler/2011/01/20110108-3-1.pdf

					The estimation of 4.58 $ Cents/kWh has been based on the real selling prices of electric energy for the period 2014 – 2016 which is determined by Market Financial Settlement Centre (MFSC). The verification team independently studied the electricity tariff from the year 2011 to 2017 and observed that average yearly electricity price from 2011 (which is the earliest data available) to 2017 (investment decision time) has dropped from 80.74 USD/MWh to 46.33 USD/MWh. Based on the price trends in the country the assumption taken was found reasonable. The variation in tariff has also been covered under sensitivity analysis. Additionally, it is observed that actual tariffs are 25% lower than the estimated tariffs. Hence even with actual tariff, IRR value does not cross the benchmark.
		Operation and Maintenance Cost	**Million $**	**980**	Verified against the 3rd party Final Feasibility report prepared by ASD group /5/. The same is cross verified from the corporate tax declaration statement of Kovanlık Reg. ve HES provided by President of revenue management/26/. The project verification team observed that even with 100% variation in O & M cost in the sensitivity analysis the equity IRR is below the benchmark. Therefore, the O & M cost as per FSR is acceptable by the project verification team.
		Project cost	Million $	81,781.49	Verified against the 3rd party Final Feasibility report prepared by ASD group /5/. The same is cross verified from the corporate tax declaration statement of Kovanlık Reg. ve HES provided by President of revenue management/26/. The project activity is fully equity and Land cost is not included in the total project cost the same has been crosschecked from the corporate tax statement /26/ The project activity has been implemented and fully commissioned. The total estimated cost was cross-checked with the total cost incurred from the corporate tax report /26/. The

			total expenditure as per the report has been verified as 81,781.49 million dollars. Actual total investment cost is 79,852 million dollars. It has been analyzed by reducing the total cost by 10% and the project IRR remains at 8.67%. Hence well within the benchmark, the details are covered under the sensitivity analysis. Hence, the value is acceptable by the project verification team
Exchange rate	USD/ TRY	4.0472	The currency exchange rates were crosschecked against indicative exchange rates published by the Central bank of Turkey, and accepted. TCBM - Indicative Exchange Rates (tcmb.gov.tr)
	Euro/ TRY	4.9005	

The equity IRR calculations were provided in a spreadsheet /03/. The calculation was verified and found to be correct by CCIPL project verification team; as well as the assumptions used in the calculation were deemed to be correct. The post tax equity IRR without GCC carbon credit revenues is 9.28% which confirms that the proposed project activity in absence of the GCC carbon credit benefits and compared to the benchmark return on equity 22.02% is not financially attractive.

Sub-step 2d: Sensitivity analysis

A sensitivity analysis has been carried out for parameters contributing more than 20% revenues and costs, to demonstrate the robustness of the financial analysis. The parameters for which sensitivity analysis done are Investment Cost, Operating Cost, Electricity price, Electricity generation. Sensitivity analysis was conducted for ±15% variation. Reasonable variations for these parameters were checked by calculating the variation necessary to reach the benchmark and then discussing the likelihood for that to happen.

% Fluctuation	**-15**	**-10**	**-5**	**0**	**+5**	**+10**	**+15**
Investment Cost	11.69	10.79	9.99	9.28%	8.65	8.08	7.57
Operating Cost	9.47	9.41	9.34	9.28%	9.21	9.15	9.08
Electricity price	8.88	9.02	9.15	9.28%	9.41	9.53	9.65
Electricity Generation	6.99	7.76	8.52	9.28%	10.03	10.77	11.51

The results of sensitivity analysis /03/ show that even with a variation of ±15% in

	Investment Cost, Operating Cost, Electricity price, electricity generation, equity IRR is significantly lower than the benchmark. And it is evident from the results given above; the project remains additional even under the most favorable conditions. **Step 3: Barrier Analysis** The additionality of the project has been demonstrated by applying the investment analysis, thus no barrier analysis is carried out. **Step 4: Common Practice Analysis** The section below provides the analysis as per step 4 of the "Tool for the demonstration and assessment of additionality", version 7.0.0 and according to "Common Practice" Tool version 03.1. **Step 1: Calculate applicable capacity or output range as +/- 50% of the total design capacity or output of the proposed project activity:** The project installed capacity is 57.215 MWe. Therefore, total capacity of power plants which will be included in the analysis will be between 28.61 MWe to 85.82 MWe. **Step 2: Identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:** a) The projects are located in the applicable geographical area; **The project is located in Türkiye, and the applicable geographical area is Türkiye. All the projects in the Türkiye have been chosen for analysis.** b) The projects apply the same measure as the proposed project activity; **Renewable Energy Projects** c) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity; **Electricity generating Renewable Energy Projects** d) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g., clinker) as the proposed project plant; **The project activity produces electricity; therefore, all Renewable Energy Projects that produce electricity are candidates for similar projects.** e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1. **Range in between 28.61 MWe to 85.82 MWe**

f) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

The investment decision date (earliest date of real action of Project activity) is 30 April 2018, As Kyoto Protocol was ratified by Türkiye on 28/05/2009, and therefore projects which had started commercial operation between 28/05/2009 to 30/04/2018 have been identified.

There are 115 project meeting above criteria.

No	Name	Type	MWe	Reference
1	Adacami HES	hydroelectricity	29.3	YEK-G
2	Bağıştaş II HES	hydroelectricity	48.6	https://register.evident.global/deviceregister/BAGIHYDR001
3	Feke I HES	hydroelectricity	29.4	https://registry.verra.org/app/projectDetail/VCS/533
4	Yalnızardıç HES	hydroelectricity	41.4	https://registry.verra.org/app/projectDetail/VCS/1385
5	Özlüce (Çoruh) HES	hydroelectricity	36.4	https://evident.global/device-register/%C3%96ZLHYDR001
6	Akşar-Nazar HES	hydroelectricity	30.2	https://projects.globalcarboncouncil.com/project/1190
7	Karakuz Barajı ve HES	hydroelectricity	76.0	https://evident.global/device-register/KARAHYDR001
8	Muratlı Regülatörü ve HES	hydroelectricity	37.7	http://www.sercarbon.com/referanslarimiz/
9	Kayaköprü HES	hydroelectricity	38.6	-
10	Kale HES	hydroelectricity	29.3	https://registry.verra.org/app/projectDetail/VCS/1104
11	Düzce-Aksu HES	hydroelectricity	46.2	https://registry.verra.org/app/projectDetail/VCS/2095
12	Toros HES	hydroelectricity	50.0	https://registry.verra.org/app/projectDetail/VCS/1499
13	Büyükdüz HES	hydroelectricity	68.9	https://registry.verra.org/app/projectDetail/VCS/1322
14	Kirazlık Reg. ve HES	hydroelectricity	46.1	https://registry.verra.org/app/projectDetail/VCS/2092

15	Ebru Reg. Ve HES	hydroelectricity	30.6	https://projects.globalcarboncouncil.com/project/79
16	Bucakkışla HES	hydroelectricity	41.0	https://registry.verra.org/app/projectDetail/VCS/1127
17	Serap HES	hydroelectricity	29.0	-
18	Eğlence I HES	hydroelectricity	43.5	https://registry.verra.org/app/projectDetail/VCS/1221
19	Topçam HES	hydroelectricity	61.4	https://projects.globalcarboncouncil.com/project/194
20	Doğançay HES	hydroelectricity	30.2	https://registry.verra.org/app/projectDetail/VCS/763
21	Yamanlı II HES	hydroelectricity	81.9	https://registry.verra.org/app/projectDetail/VCS/1004
22	Doğançay Reg. ve HES	hydroelectricity	62.0	https://registry.verra.org/app/projectDetail/VCS/1003
23	Çambaşı Reg. ve HES	hydroelectricity	44.1	YEK-G
24	Alaköprü Barajı ve HES	hydroelectricity	31.6	https://registry.verra.org/app/projectDetail/VCS/1412
25	Ceyhan HES	hydroelectricity	61.7	https://registry.verra.org/app/projectDetail/VCS/810
26	Eren HES	hydroelectricity	35.2	https://registry.verra.org/app/projectDetail/VCS/1297
27	Niksar HES	hydroelectricity	40.2	https://registry.verra.org/app/projectDetail/VCS/1019
28	Çine Adnan Menderes HES	hydroelectricity	44.7	EÜAŞ
29	Balkusan HES	hydroelectricity	38.0	https://registry.verra.org/app/projectDetail/VCS/918
30	Çırakdamı Regülatörü ve Hes	hydroelectricity	49.1	https://registry.verra.org/app/projectDetail/VCS/1506
31	Dereli HES	hydroelectricity	49.2	https://registry.verra.org/app/projectDetail/VCS/1758
32	Daran HES	hydroelectricity	67.2	YEK-G

	33	Midilli HES	hydroelectricity	32.5	https://registry.verra.org/app/projectDetail/VCS/1330
	34	Ordu HES	hydroelectricity	42.0	YEK-G
	35	Kılavuzlu HES	hydroelectricity	54.0	EÜAŞ
	36	Muradiye Ayrancılar HES	hydroelectricity	41.5	https://registry.verra.org/app/projectDetail/VCS/577
	37	Murat HES	hydroelectricity	35.6	https://registry.verra.org/app/projectDetail/VCS/1344
	38	Garzan Barajı ve HES	hydroelectricity	52.0	https://register.evident.global/deviceregister/GARZHYDR001
	39	Kozbükü HES	hydroelectricity	81.1	https://projects.globalcarboncouncil.com/project/363
	40	Darıca II HES	hydroelectricity	74.2	YEK-G
	41	Adıgüzel II HES	hydroelectricity	30.1	https://registry.verra.org/app/projectDetail/VCS/1427
	42	Akıncı (Kayabeyi) HES	hydroelectricity	84.7	https://registry.verra.org/app/projectDetail/VCS/1380
	43	Arpa HES	hydroelectricity	32.4	https://register.evident.global/deviceregister/ARPAHYDR002
	44	Umut Reg. Ve HES	hydroelectricity	42.3	https://registry.goldstandard.org/projects/details/1165
	45	Tuna HES	hydroelectricity	37.2	https://registry.verra.org/app/projectDetail/VCS/668
	46	Koçlu HES	hydroelectricity	36.3	https://registry.verra.org/app/projectDetail/VCS/2094
	47	Tepekışla Barajı ve HES	hydroelectricity	69.6	https://registry.verra.org/app/projectDetail/VCS/2097
	48	Burçak HES	hydroelectricity	66.3	-
	49	Köprübaşı HES	hydroelectricity	74.0	https://register.evident.global/deviceregister/K%C3%B6PHYDR001

	50	Söke-Çatalbük RES	wind	30.0	-
	51	Airres-4 RES	wind	55.0	https://registry.goldstandard.org/projects/details/1801
	52	Aksu RES	wind	80.0	https://registry.goldstandard.org/projects/details/92
	53	Kurtkayası RES	wind	45.0	https://registry.goldstandard.org/projects/details/401
	54	Uşak RES	wind	61.5	https://registry.goldstandard.org/projects/details/127
	55	Yalova RES	wind	54.0	https://registry.goldstandard.org/projects/details/188
	56	Söke RES	wind	45.0	https://registry.goldstandard.org/projects/details/525
	57	Mordoğan RES	wind	30.8	https://registry.goldstandard.org/projects/details/13
	58	Yahyalı RES	wind	82.5	https://registry.goldstandard.org/projects/details/868
	59	Kürek Dağı RES	wind	32.5	https://projects.globalcarboncouncil.com/project/135
	60	Balabanlı RES	wind	60.5	https://registry.goldstandard.org/projects/details/190
	61	Bereketli RES	wind	30.0	https://registry.goldstandard.org/projects/details/1634
	62	Bergres RES	wind	70.0	https://registry.goldstandard.org/projects/details/931
	63	Kıyıköy RES	wind	44.0	https://registry.goldstandard.org/projects/details/227
	64	Zeytineli RES	wind	49.5	https://registry.goldstandard.org/projects/details/1221
	65	Karova RES	wind	30.0	https://registry.goldstandard.org/projects/details/528
	66	Kavaklı RES	wind	50.0	https://registry.goldstandard.org/projects/details/467

	67	Sarpıncık RES	wind	32.0	https://registry.goldstandard.org/projects/details/24
	68	Sadıllı RES	wind	33.0	https://registry.goldstandard.org/projects/details/146
	69	Demircili RES	wind	40.0	https://registry.goldstandard.org/projects/details/23
	70	Fatma RES	wind	70.0	https://registry.verra.org/app/projectDetail/VCS/1587
	71	Kanije RES	wind	48.0	https://registry.goldstandard.org/projects/details/373
	72	Samurlu RES	wind	43.9	https://registry.goldstandard.org/projects/details/971
	73	Kozbeyli RES	wind	34.6	https://registry.goldstandard.org/projects/details/1404
	74	Tire RES	wind	50.0	https://registry.goldstandard.org/projects/details/1703
	75	Edincik RES	wind	77.4	https://registry.goldstandard.org/projects/details/223
	76	Kartaldağı RES	wind	63.0	https://registry.goldstandard.org/projects/details/1637
	77	Killik RES	wind	85.0	https://registry.goldstandard.org/projects/details/1269
	78	Kayadüzü RES	wind	75.0	https://registry.goldstandard.org/projects/details/1272
	79	Umurlar RES	wind	36.4	-
	80	Dağpazarı RES	wind	39.0	https://registry.goldstandard.org/projects/details/31
	81	Şenköy RES	wind	29.8	https://registry.goldstandard.org/projects/details/32
	82	Kınık RES	wind	50.0	https://registry.verra.org/app/projectDetail/VCS/1732
	83	Mut RES	wind	50.0	https://registry.goldstandard.org/projects/details/414
	84	Fuatres RES	wind	30.0	https://registry.goldstandard.org/projects/details/1633

85	Koru RES	wind	50.0	https://registry.goldstandard.org/projects/details/413
86	Harmanlık RES	wind	50.0	https://registry.goldstandard.org/projects/details/412
87	Gökres-2 RES	wind	35.0	https://fotonplatform.com/santraller/
88	Kırkağaç RES	wind	45.0	https://fotonplatform.com/santraller/
89	Geres RES	wind	30.0	https://registry.goldstandard.org/projects/details/219
90	Atik RES	wind	30.0	https://register.evident.global/deviceregister/ATIKWIND001
91	Hasanbeyli RES	wind	50.0	https://registry.goldstandard.org/projects/details/117
92	İçdaş Biga RES	wind	60.0	https://registry.goldstandard.org/projects/details/372
93	Sarıtepe RES	wind	50.0	https://registry.goldstandard.org/projects/details/583
94	Metristepe RES	wind	40.0	https://registry.goldstandard.org/projects/details/52
95	Kapıdağ RES	wind	34.9	https://registry.goldstandard.org/projects/details/1277
96	Uluborlu RES	wind	60.0	https://registry.goldstandard.org/projects/details/606
97	Bağarası RES	wind	46.0	https://registry.goldstandard.org/projects/details/234
98	Manastır-Esenköy RES	wind	30.5	https://projects.globalcarboncouncil.com/project/133
99	Poyraz RES	wind	30.0	https://fotonplatform.com/santraller/
100	Poyraz RES	wind	66.9	https://registry.goldstandard.org/projects/details/1008
101	Çanta RES	wind	50.0	https://registry.goldstandard.org/projects/details/144

102	Yahyalı RES	wind	52.5	https://registry.goldstandard.org/projects/details/381
103	Silivri RES	wind	45.0	https://registry.goldstandard.org/projects/details/729
104	Süloğlu RES	wind	60.0	https://registry.goldstandard.org/projects/details/493
105	Amasya RES	wind	42.0	https://registry.goldstandard.org/projects/details/66
106	Ödemiş RES	wind	42.0	https://registry.goldstandard.org/projects/details/235
107	Poyrazgölü RES	wind	42.0	https://register.evident.global/deviceregister/POYRWIND002
108	Çerçikaya RES	wind	57.0	https://registry.verra.org/app/projectDetail/VCS/1667
109	Çelikler Pamukören	geothermal	67.5	https://registry.goldstandard.org/projects/details/1715
110	Melih JES	geothermal	33.0	https://register.evident.global/deviceregister/MELIHJES
111	Maren Santrali	geothermal	44.0	https://registry.goldstandard.org/projects/details/1229
112	Dora III JES	geothermal	34.0	https://registry.goldstandard.org/projects/details/103
113	Kızıldere II JES	geothermal	80.0	-
114	Alaşehir Jes	geothermal	45.0	https://registry.goldstandard.org/projects/details/1716
115	Mutlular Enerji	Biomass	30.0	https://register.evident.global/deviceregister/MUTLTHER001

Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing project verification. Note their number, N_{all}.

There have been identified some of the projects that meet the conditions/ and is given in the table below. Hence N_{all} =6. The exclusions are confirmed from by checking the websites of other voluntary mechanisms viz. VCS, Gold standard, The international RECs etc. General Directorate of Energy Affairs and EMRA Electricity Production License Database have been used as a main resource for identification of projects.

1	Serap HES	Hydroelectricity	29.0
2	Burçak HES	Hydroelectricity	66.3
3	Kayaköprü HES	Hydroelectricity	38.6
4	Söke-Çatalbük RES	Wind	30.0
5	Umurlar RES	Wind	36.4
6	Kızıldere II JES	Geothermal	80.0

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number N_{diff}.

Projects with technologies different to technology applied in the proposed project activity were identified as N_{diff} = 3.

1	Söke-Çatalbük RES	Wind	30.0
2	Umurlar RES	Wind	36.4
3	Kızıldere II JES	Geothermal	80.0

Step 5: calculate factor F= 1 – (N_{diff}/N_{all}) representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.

The factor F was found to be in line with Tool 24
F = 1 – (N_{diff}/N_{all}) = 1 – (3/6) = 0.5
N_{all} – N_{diff} = 6– 3 = 3

As,

i. F = 0.5
ii. N_{all}-N_{diff} = 3; which is not greater than 3

The project activity satisfy the condition N_{all}-N_{diff} is not greater than 3. Hence, project activity is not a common practice in the geographical area.

D.3.6 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	Desk Review and Interview
Findings	CAR 06 and CAR 07 was raised and findings are closed. Please refer to Appendix 4 for further details.
Conclusion	**Baseline Emission** According to ACM0002 methodology, emission reductions related to project activities is estimated as follows:

$$BE_y = EG_y \times EF_y$$

Where:
EG_y = Net electricity delivered to the grid by the project activity in year y excluding transmission losses of the grid (data is gathered from energy yield assessment report of the project which is 154,130 MWh)
EF_y = Emission factor calculated according to selected methodology (Combined margin value was calculated by using nationally accepted emission factors. Republic of Türkiye Ministry of Energy and Natural Resources released them on 06/10/2021)[24]

Since the electricity generation values differ between years as explained in A.1, annual average electricity generation over the crediting period has been calculated and given in ER Sheet /02/. According to ER Sheet, $EG_{facility,y}$ is 154,130 MWh/yr. Emission factor calculated according to selected methodology (Combined margin value was calculated by using nationally accepted emission factors. Republic of Türkiye Ministry of Energy and Natural Resources released them on 06/10/2021).
The emission factor ($EF_{grid,CM,y}$) could be used as 0.5706 tCO_2/MWh.

Therefore,
BE_y = 154,130 MWh × 0.5706
BE_y = 87,947 tCO_2e

Project Emissions (PE_y)
As the project activity is a Hydro power plant-based power generation, the project emissions are not applicable to the project activity as per the methodology ACM0002/B02/.

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$$

The proposed project activity involves the generation of electricity by a hydro power plant, therefore parameter $PE_{GP,y}$ is not applicable. According to the applied methodology: “For all renewable energy power generation project activities, emissions due to the use of fossil fuels for the backup generator can be neglected.” Since the project is classified as a renewable energy project, parameter $PE_{FF,y}$ is neglected.

According to the applied methodology, if the power density of the project activity is greater than 10
W/m^2, $PE_{HP,y}$ = 0

Cap_{PJ} = 57,215,000 W
A_{PJ} = 3,548.30 m

PD = (57,215,000-0) / (3,548.30-0) = 16,124.6 W/m^2

Since the power density of the project activity is greater than 10 W/m^2,
$PE_{HP,y}$ = 0

Hence, PE_y = 0

Therefore,

[24] https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi_Formu_Web_Sitesi_2019_202110071443.pdf

	Leakage (LE_y) As per ACM0002 /B02/, no leakage emissions are considered. Therefore, $LE_y = 0$. **Emission Reductions** Based on the data above, the emission reduction value for the project activity is: $ER_y = BE_y - PE_y - LE_y$ $ER_y = BE_y - 0 - 0$ $ER_y = BE_y =$ **87,947** tCO_2e

D.3.7 Monitoring plan

Means of Project Verification	Desk Review and Interviews
Findings	CL 03 and CAR 08 were raised and findings are closed. Please refer to Appendix 4 for further details.
Conclusion	The approved baseline and monitoring methodology "ACM0002" version 20 /B02/ has been applied. The monitoring plan is in accordance with the monitoring methodology; the monitoring plan will give opportunity for real measurement of achieved emission reductions. CCIPL project verification team has checked all the parameters presented in the monitoring plan against the requirements of the methodology; no deviations relevant to the project activity have been found in the plan. CCIPL confirms that the monitoring arrangements described in the monitoring plan are feasible within the project design, and the means of implementation of the monitoring plan are sufficient to ensure the emission reductions achieved by/resulting from the proposed GCC project activity can be reported ex post and verified. Parameters available at the time of project verification (ex-ante) (Mention under section B.6.2 of the PSF) are: P

Parameter	Value	Unit	Assessment
Combined Margin CO_2 emission factor in year y of Turkish National Grid ($\mathbf{EF_{grid,CM,y}}$)	0.5706	tCO_2e/MWh	The value is calculated considering 50% operating margin and 50% build margin as per the "tool to calculate the emission factor for an electricity system" Version 07.0.0 /B05/.

Parameters that will be monitored (ex-post) (Mention under section B.7.1 of the PSF are:

Parameter	Value	Unit	Assessment
$EG_{facility,y}$ (Net Electricity generated and delivered to the grid by the power plant in	154,130	MWh	The estimated net electricity generated is given, however, the value for the parameter will be verified through review of on-site meter reading records.

	year y); and Replacing fossil fuels with renewable sources of energy			There are two meters 0.2s accuracy class (main meter and spare meter) bidirectional meters are installed at the substation to measure and record the net electricity supplied to the grid. The meters are of brand, EMH, TYPE LZQJ-XC. The serial numbers of the meters are identified as 8923701, 8923702, 8923703, 8923704, 8923705, 8923705, 8923706 and located at 154 kV Kovanlık Havza TM Substation. This is verified by onsite visit /15/. The calibration of the meters is being performed as per the requirements of TEIAS /14/. Which is calibration and verification for 3 phase meters need to be conducted atleast once in 10-year. The same is consistent with the PSF/1/. The same has been confirmed during the onsite visit /15/. The same will be contributing toward the sustainable development goal SDG 9.
	Cap_{PJ}	57,215,000	W	The installed capacity of the hydro power plant after the implementation of the project activity, can be confirmed from equipment labels. The project verification team has confirmed the same during onsite visit/15/.
	APJ	3,548.30	m^2	The area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full. The same can be confirmed using the topographical survey details or maps.
	Solid Waste Pollution from Hazardous Wastes	At actual record	Count of the wastes (in tonne)	The project activity may generate Hazardous waste during the operation of the project activity. The hazardous wastes will be handled according to the national regulations: Regulation on Waste Management /36/; the same will be treated and disposed as per the law. The actual records will be maintained.
	Solid Waste Pollution from E-Wastes	At actual record	Count of the wastes (in tonne)	The project activity may generate E-waste during the operation of the project activity. The E-wastes will be handled according to the national regulations: Regulation on Control of Waste Electrical and Electronic waste control /35//58/; the same will be treated and disposed as per the

				law. The actual records will be maintained.
	Solid Waste Pollution from end-of-life products/equipment	At actual record	Count of the wastes (in tonne)	The project activity may generate waste viz. any equipment at the end of the operation of the project activity. The wastes will be handled according to the national regulation on Electrical and Electronic Waste Control, and Regulation on Battery and Accumulator Wastes /35//57/ the same will be treated and disposed as per the law. The actual records will be maintained.
	Environment – Natural Resources; Protecting/ enhancing species diversity	At actual record	Fish may be affected by the project activity	The project activity may affect the fishes. The fishes will be protected as per Water Utilization Rights Protocol published by State Water Works (DSİ)/55/. The actual records will be maintained. The project is run-type, so there will not be any change in the amount of water that the fish requires to live in. There are also fish passages which allows them to pass through downstream. The amount of lifeline water is also monitored by . the State Hydraulic Works
	CO_2 emission reduction	87,947	tCO_2e/Year	The project activity will result in emission reduction. The same will be contributing toward the sustainable development goal SDG 13. The parameter will be verified through emission reduction calculation sheet.
	CO_2 emission per unit of value added	26.07	tCO_2/billion TL	The project activity will generate electricity per year corresponding to 0.16% electivity consumption by the industry and 0.06% of the total electric consumption by Türkiye. The project will reduce electricity related emission by 0.08% for consumers, including the industry. The parameter will be calculated and the same could be verified through the confirmation of electricity generation from the plant and relating with the total electricity consumption of Türkiye.
	Reducing / increasing accidents	6 people	Number of trained staff during operation	The project owner will provide trainings to the staffs. A minimum of 6 people are employed by the project activity, which can be confirmed from employment records/23/ The same can be

				verified from the training attendance list and/or certificates. No accidents have been reported until now and In case of any accident, the same will be recorded and shared by PO along with the resolution.
	Long term job opportunities created during the operation due to the project activity.	At least 6 people to be employed	Numbers	Project will generate local employment. This will be an indicator against sustainable development goal SDG 8. The parameter will be verified through employment records/23/.
	Reliability/ accessibility of water supply	-	-	The amount of lifeline water is also monitored by the State Hydraulic Works. Minimal flow for lifeline will be released continuously for aquatic habitat and fish passage will be built. Therefore, no harm to aquatic life is expected. The water used for electricity generation is released back to the river , since the project activity is run type, hence no relocation is needed.
	Quantitative employment	6 people	Numbers	The project activity creates employment. This will be an indicator against sustainable development goal SDG 8. The parameter will be verified through employment records/23/.
	Solid wastes from construction	Actual records	-	The construction waste will be handled according to national regulations, Regulation on Handling and Disposal of Construction Waste HAFRİYAT TOPRAĞI, İNŞAAT VE YIKINTI ATIKLARININ (mevzuat.gov.tr) The waste is reused for road levelling during construction. The parameter verified from onsite visits/15/.
	Generation of waste water	Actual records	-	The wastewater generated at the site is collected in a septic tank and then discharged by sewage truck periodically. Limited amount of wastewater will be formed due to domestic consumption. Wastewater will be collected by trucks and send to municipality facilities. The same can be verified by Onsite visits /15/ Law followed: The Water Pollution Control Regulation SU KİRLİLİĞİ KONTROLÜ YÖNETMELİĞİ (mevzuat.gov.tr)

	Sanitation and waste management	Actual record	Count of the wastes	Waste might be generated due to domestic consumption. All management and disposal processes will be applied according to the law and regulations. No harm is expected to be caused due to domestic waste generated on site. Law: Regulation on Waste Management published in Official Gazette dated 02/04/2015 numbered 29314, with regulation number 20644
	Community and rural welfare	Actual records	Dust may be expected during construction	Dust is expected during construction period. Irrigation was carried out in order to prevent dust formation due to construction works and vehicle movements within the project area and 20 m^3 of water will be used to prevent dusting. The same is verified by checking the EIA report /53/. The personnel will wear the occupational safety and protective equipment required for the job, and it will be assured that they operate in conditions that comply with the health and occupational safety laws. As a result, no risk is anticipated.
	The monitoring plan content has been checked in the project activity and compared against the requirements of the monitoring methodology /B-02/. It has been confirmed by the verification team that the monitoring plan, procedures, roles and responsibilities provided in the PSF is deemed to be feasible.			

D.4. Start date, crediting period and duration

Means of Project Verification	Desk review and Interviews
Findings	No findings in this section
Conclusion	The start date of the project is 30/10/2020, which is the commissioning date of unit 1 and the start date of commercial operation of the project /4/. Crediting period has been chosen as fixed 10 years from 30/10/2020 to 29/10/2030. A fixed crediting period of length of 10 years has been selected by project owner. Therefore, the duration of the crediting period is from 30/10/2020 to 29/10/2030.Technical lifetime for the project activity is 49 years /05/. The project verification team concludes that the duration of the proposed project activity is in conformance with the requirements of §39 and §40 of GCC Project Standard, version 03.01 /B01-1/.

D.5. Environmental impacts

Means of Project Verification	Desk review and Interviews
Findings	No findings in this section
Conclusion	It has been indicated in the section D.2 of the PSF/1/ that an environmental impact assessment dated 08/11/2017 was prepared in order to assess the environmental effects of the project activity/53/. The report has been prepared in accordance with Türkiye's national standards. It has been approved by the Ministry of Environment and Urbanization on 22/11/2017 /54/. The project verification team has confirmed that the Environmental and Social Impact Assessment report was submitted and approved by the respective authorities. EIA Final report, No. 48331039-220.01-E.18747, prepared by ALMER ÇEVRE DENETİM MÜŞ. MÜH.İŞ SAĞ. VE GÜV. PROJE TİC. LTD. ŞTİ. /53/ was issued to the project activity. The project will benefit the local people by engaging them in construction, operation and maintenance activities during the project. The verification team also confirm that the project owner has taken all the necessary legal approvals from the government and other parties to implement the project activity.

D.6. Local stakeholder consultation

Means of Project Verification	Desk Review and Interview
Findings	CL 06 and CAR 14 were raised and finding is closed. Please refer to Appendix 4 for further details.
Conclusion	It has been indicated in the PSF /1/ that the local stakeholder consultation has been done for the project activity on 19/04/2017 in Giresun Province, Bulancak District, Kovanlık Town, Kovanlık Municipality Wedding Venue.That is before the Global consultation period of the project activity. The meeting announcement was done was done on 06/04/2017 in Giresun Öncü Gazette (local) and Dünya Gazette (national). The same covers meeting location, date, time, and contact information/24/. A summary of comments has been provided by project owner in the PSF/1/ and it is found that no adverse comment was received for the project activity. This has also been verified by CCIPL project verification team during site visit /15/. Further, the interviews confirmed that there was no adverse comment about the project and this project will lead to employment generation and better environmental conditions. CCIPL considers the local stakeholder consultation carried out adequately and can confirm that the process is in line with the requirements of GCC.

D.7. Approval and Authorization- Host Country Clearance

Means of Project Verification	Desk Review, Interview
Findings	No findings in this section
Conclusion	The verification team confirms that no HC approval is required by the CORSIA labelled project activity till 31/12/2020, and the HCA will be required during the first or subsequent verification.

D.8. Project Owner- Identification and communication

Means of Project Verification	Desk review and Interviews
Findings	No findings in this section
Conclusion	

Organization name	Kovanlık Enerji Üretim San.ve Tic. A.Ş.
Country	Türkiye

Address	Gültepe Köyü No: 53/1 Bulancak / GİRESUN
Telephone	+90 (454) 335 20 25
Fax	
E-mail	arda.bayindir@kovanlikenerji.com.tr
Website	https://www.kovanlikenerji.com.tr/
Contact person (primary contact)	Arda Bayındır

Organization name	GTE Karbon Sürdürülebilir Enerji Egitim Danışmanlık ve Ticaret A.Ş.
Country	Türkiye
Address	M. Kemal Mah. Barış Sitesi 2111. Sok. No: 5 06510 Çankaya / Ankara
Telephone	+90 312 514 63 63
Fax	-
E-mail	kemal.demirkol@gte.com.tr
Website	http://www.gte.com.tr/
Contact person (primary contact)	M. Kemal Demirkol

This is in compliance with the Para 10 (i) of the Project Standard Version 3.1. 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 signed by the project owners. All information was consistent between these documents. The project verification team has reviewed the company registration certificate/12/ of Kovanlık Enerji Üretim San.ve Tic. A.Ş. Lisans number: EU/7975-1/03994/8//9/ and Kovanlık Enerji Üretim San. ve Tic. A.Ş. has the legal ownership of the project. The project verification team has reviewed COD from the Kovanlık Enerji Üretim San. ve Tic. A.Ş.
/4/. The registration number mentioned in the letter and the company incorporation certificate is same. The project verification team thus confirmed the legal ownership of the solar project activity. The project verification team has checked the LOA /44/ submitted by the client and confirms that Kovanlık Enerji Üretim San. ve Tic. A.Ş. is the authorized representative and the developer of the proposed project activity.

D.9. Global stakeholder consultation

Means of Project Verification	Desk Review, Interview
Findings	No comments were raised
Conclusion	The process for global stakeholder consultation was conducted in accordance with the requirements of section 3.2.4 of the Verification Standard (version 03.1) /B01-2/. The PSF was published for global stakeholder consultation from 10/03/2022 to 24/03/2022. During the above period no Global stakeholders' comments were received.

D.10. Environmental Safeguards (E+)

Means of Project Verification	Desk review and Interviews
Findings	CL 04, CL 05 and CAR 11 were raised and finding is closed. Please refer to Appendix 4 for further details.

Conclusion	The Project owner has chosen to apply for the Environmental No-net-harm Label (E+). The assessment of the impact of the project activity on the environmental safeguards has been carried out in section E.1 of the PSF. Out of all the safeguards no risks to the environment due to the project implementation were identified and the following environmental impacts were considered for the project activity. **Positive Impacts:** (a) Environment – Air; CO_2 emissions The project is expected to reduce the CO_2 emission throughout the crediting period. Therefore, DO NO Harm Risk assessment is evaluated as harmless. However, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. **Positive Impacts identified as 'Harmless' as regulatory complied OR mitigated:** (a) Environment – Land; Solid waste Pollution from Hazardous wastes The project owner has identified that the project activity may generate hazardous waste viz. transformer oil. The project owner will dispose the hazardous waste through the licensed hazardous waste vendor for recycling purpose. The same is confirmed during the onsite assessment /15/. The parameter is being monitored and validated under section D.3.7 of this report. The hazardous wastes will be handled according to the national regulations: Regulation on Waste Management published in Official Gazette dated 02/04/2015/58/, Regulation on Waste Oil Manageme nt published in Official Gazette dated 21 /12/20 1 9 numbered 30985, with regulation number 34051.Though it is categorized as harmless, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. (b) Environment – Land; Solid waste Pollution from E-wastes The project owner has identified that the project activity may generate E-waste during its maintenance operation. The parameter is being monitored and validated under section D.3.7 of this report. The project owner will dispose the E-waste through the licensed vendor in compliance to the Regulation on Control of Waste Electrical and Electronic Equipment, published in Official Gazette dated 22/05/2012/56/. Therefore, it is categorized as harmless, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. (c) Environment – Land; Solid waste Pollution from end-of-life products/ equipment The project owner has identified that the project activity may generate solid waste from end-of-life products/ equipment at the end of the technical lifetime. The parameter is being monitored and validated under section D.3.7 of this report. The project owner will dispose the same through the licensed vendor at the end of life of products/equipment's in compliance to the Regulation on Electrical and Electronic Waste Control, and Regulation on Battery and Accumulator Wastes/57/. Therefore, it is categorized as harmless, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. (d) Environment – Natural Resources; Protecting/ enhancing species diversity The project owner has identified that the Fishes may be affected by the project activity. The parameter is being monitored and validated under section D.3.7 of this report. The fishes will be protected as per Water Utilization Rights Protocol published by State Water Works (DSİ). Therefore, it is categorized as harmless, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. (e) Environment – Water ; Generation of waste water

	The project owner anticipates the generation of waste water, due to the domestic consumption. The wastewater generated at the site is collected in a septic tank and then discharged by sewage truck periodically and PO follows the water pollution Control Regulation [25]. Therefore, it is categorized as harmless, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. (f) Environment – Land; Solid waste Pollution from construction Solid wastes from construction is anticipated by the project owner. The waste is handled according to the rules and regulations and is reused for road levelling during construction. The parameter is being monitored and validated under section D.3.7 of this report. PO follows the Regulation on Handling and Disposal of Construction Waste[26] for handling of the wastes. Therefore, it is categorized as harmless, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. **Negative Impacts:** No negative impacts identified or verified for the project activity, which cannot be mitigated. An appropriate monitoring plan has been put in place for the elements marked positive. The verification team confirm that the project activity will not cause any net harm to the environment and net score for project activity comes out to be +7.

D.11. Social Safeguards (S+)

Means of Project Verification	Desk Review and Interviews
Findings	CL 04 and CAR 12 were raised and finding is closed. Please refer to Appendix 4 for further details.
Conclusion	The Project owner has chosen to apply for the Social No-net-harm Label (S+). The assessment of the impact of the project activity on the social safeguards has been carried out in section E.2 of the PSF. Out of all the safeguards no risks to the Society due to the project implementation were identified and the following have been indicated as positive impacts. The verification team based on the review of the PSF and the supporting document/15/ confirms that the social impacts mentioned in the section E.2 of the PSF is applicable to the Project activity and the monitoring procedures of the parameters are provided. **Positive Impacts:**(a) Social Jobs – Long term jobs (> 1 year) created/lost. The project activity leads to employment generation in long term over a period of 10 years people were given employment, atleast 6 people will be employed. Employment records can be verified during the issuance verification. The same could be verified with the human resource records of the project owner during issuance verification. (b) Reducing/increasing accidents The project activity leads to the Regular training on maintenance and occupational health and safety, electric power plants training and safe working at the site will be provided to staff those responsible for maintenance and repair of the equipment. All

[25] SU KİRLİLİĞİ KONTROLÜ YÖNETMELİĞİ (mevzuat.gov.tr)
[26] HAFRİYAT TOPRAĞI, İNŞAAT VE YIKINTI ATIKLARININ (mevzuat.gov.tr)

	trainings are done according to the national “occupational health and safety” law. The same could be verified from the training attendance list or certificates. No accidents have been reported until now and In case of any accident, the same will be recorded and shared by PO along with the resolution. (c) Social; Health and safety; Sanitation and waste management Project owner anticipates the generation of wastes due to domestic consumption. The project owner will comply with the law and regulations in handling domestic waste generated on site that might cause sanitation problems, viz, Regulation on Waste Management published in Official Gazette dated 02/04/2015 numbered 29314. No harm is expected to be caused due to domestic waste generated on site. Therefore, it is categorized as harmless, based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. (d) Social- welfare; Community and rural welfare Project owner anticipates dust during construction period. Dust is expected during construction period. Irrigation was carried out in order to prevent dust formation due to construction works and vehicle movements within the project area and 20 m^3 of water will be used to prevent dusting. The same is verified by the project verification by checking the EIA report /53/. Based on the monitoring approach adopted by the project owner, the scoring is +1. This is accepted by the project verification team. **Impacts identified as ‘Harmless’ as regulatory complied OR mitigated:** No negative impacts identified or verified for the project activity. **Negative Impacts:** No negative impacts identified or verified for the project activity, which cannot be mitigated. An appropriate monitoring plan has been put in place for the elements marked positive. Verification team will be able to confirms that Project activity will not cause any net harm to the society and net score for project activity comes out to be +4.

D.12. Sustainable development Goals (SDG+)

Means of Project Verification	Desk Review and Interviews
Findings	CAR 13 was raised and finding is closed. Please refer to Appendix 4 for further details.
Conclusion	The Project owner has chosen to apply for the United Nations Sustainable Development Goals (S+). The assessment of the impact of the project activity on the SDG’s has been carried out in section F of the PSF. The project is expected to contribute 4 SDGs which are SDG 7, 8, 9 and 13. The verification team confirms that the SDG chosen by the project owner is in compliance with the GCC Project sustainability standard V.2.1 and is applicable to the Project activity and the monitoring procedure of each SDG is given in section F and B.7.1 of the PSF. UN- level SDGs **(a) Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all** The project activity that commissioned on 30/10/2020 continues to provide clean energy to the global energy mix, thereby complying with the SDG target 7.2.

	(b) Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. The project activity will create a permanent job for women and men in the renewable power sector with safe and secure working environment. At least 6 number of people are employed by the project activity. Complying to the SDG target 8.5. **(c) Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation** Proposed project will generate 154.13 GWh electricity per year corresponding to 0.16 % of electricity consumption by the industry and 0.06% of total electricity consumption by Türkiye. Considering that electricity feed to the grid will be consumed by all users, it can be assumed that project will reduce electricity related emissions by 0.08% for consumers, including the industry. In terms of GHG emissions /GDP, project will cause 26.07-ton CO_2/billion TL in as per the 2019 figures which corresponds to almost 0.08% reduction in emission intensity of GDP. Project owner operates the plant since October 2020 and complies with targeted SDG 9.4 so far. (d) **Goal 13. Take urgent action to combat climate change and its impacts.** The project activity reduces greenhouse gas annually by 87,947 t CO_2 meeting the SDG target 13.2.

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

Means of Project Verification	Desk review and interview
Findings	CAR 03 was raised and findings are closed. Please refer to Appendix 4 for further details.
Conclusion	A declaration under section A.5 of the PSF has been included for offsetting the approved carbon credits (ACCs) for the entire crediting period from 30/10/2020 to 29/10/2030. The host country attestation is yet to be obtained for authorization on double counting. The project activity is neither registered nor seeking registration in any carbon offsetting program; hence the approved carbon credits (ACCs) from this project activity shall not be double counted.

D.14. CORSIA Eligibility (C+)

Means of Project Verification	Desk review and interview
Findings	CAR 04 have been raised and finding is closed Please refer to Appendix 4 for further details.
Conclusion	The project activity meets the CORSIA Eligibility since the crediting period is after 30/10/2020 and the project is applying for registration under GCC which is one of the approved programmes for eligibility. It was also confirmed that the project activity does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes. The project activity meets the CORSIA Label (C+) eligibility: a) The Project Activity complies with all the requirements for the Emission Unit Criteria of CORSIA. b) A written attestation from the host country's national focal point on double counting is not required for Emission units till 31st December 2020; c) The project meets all the requirement of the Emission Unit Criteria of CORSIA required for projects under GCC and therefore can be issued a CORSIA Label (C+) certification.

	d) The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.2 paragraph 21-23, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project. e) 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 will achieve Environmental No-net-harm Label (E+), Social No-net-harm Label (S+) for this project activity The Project Activity is likely to contributes to the achievement of United Nations Sustainable Development Goals (SDGs), complies with the Project Sustainability Standard and will achieve UN SDG Certification Labels (Silver SDG+ Label) for this project activity.

Section E. Internal quality control

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The Final project verification report prepared by the verification team was reviewed by an independent technical review team to confirm if the internal procedures established and implemented by CCIPL 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 is recorded in the internal documents of CCIPL, and the additional findings gets included in the report. The final report passed by technical reviewer is approved by the authorized personal of Carbon Check and issued to PO and/or submitted for request for registration, as appropriate on behalf of CCIPL.

Section F. Project Verification opinion

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CCIPL was contracted by GTE Karbon Sürdürülebilir Enerji Egitim Danışmanlık ve Ticaret A.Ş for project verification of the project activity "Kovanlık Reg. ve HES" in Türkiye. The project verification was performed based on rules and requirements defined by GCC for the project activity.

The project activity is a Hydro power project, which results in reductions of CO_2e emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario and the emission reductions attributable to the project are, hence, additional to any that would occur in the absence of the project activity. The project correctly applies the approved CDM baseline and monitoring methodology ACM0002 "Grid-connected electricity generation from renewable sources", Version 20.0 and is assessed against latest valid PS, VS and Environment and Social Safeguards Standard, Project-Sustainability-Standard and/or other applicable GCC/CDM Decisions/Tools/Guidance/Forms.

The project activity is likely to achieve the anticipated emission reductions stated in the PSF provided the underlying assumptions do not change. The expected emission reductions (annual average) from the project activity are estimated to be 879,466 tCO_2e over the 10 years crediting period starting from 30/10/2020.

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

CCIPL 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 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 project verification opinion along with other documents as appropriate by an independent competent technical review team.
- Finalization of the project verification opinion (this report)

CCIPL confirms that the project verification process has met with a reasonable level of assurance, which was decided during the planning process.

Carbon Check (India) Private Limited (CCIPL) has verified and hereby certifies that the GCC project activity “Kovanlık Reg. ve HES” in Türkiye

a. Has correctly described the Project Activity in the Project Submission Form including the applicability of the approved CDM methodology ACM0002, version 20.0 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.

b. Is likely to generate GHG emission reductions amounting to the estimated 879,466 tCO_2e over the 10 years crediting period as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 and ISO 14064-3, and therefore requests the GCC Program to register the Project Activity;

c. 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 Nonet-harm Label (E+) and the Social No-net-harm Label (S+); and

d. 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+)

e. is likely to contribute to CORSIA Eligible Emission Units and has CORSIA Label (C+) certification valid till 31 December 2020. A written attestation from the Host country on double counting is not required until 31 December 2020 and the project was found meeting the applicable requirements prescribed by ICAO.

Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits
ACC+	Approved Carbon Credit Label
BM	Build Margin
CAR	Corrective Action Required
CCIPL	Carbon Check India Private Limited
CDM	Clean Development Mechanism
CL	Clarification Request
CM	Combined Margin
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
DPP	Distributed Power Plants
DR	Document Review
E+	Environmental No net harm Label
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
EPC	Engineering Procurement and Construction
ERVR	Emission Reduction Verification Report
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Greenhouse Gas
GORD	Gulf Organization for Research and Development
GPS	Global Positioning System
GV	GCC Verifier
GWP	Global Warming Potential
HCA	Host Country Approval
I	Interview
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
LCMR	Low Cost Must Run
MENA	Middle East & North Africa
OM	Operating Margin
DPR	Detailed project Report
PPA	Power Purchase Agreement
PS	Project Standard
PSF	Project Submission Form
PVR	Project Verification Report
S+	Social No- net harm Label
SCADA	Supervisory Control And Data Acquisition
SDG+	United Nation Sustainable Development Goal Label
UNFCCC	United Nations Framework Convention on Climate Change
USPP	Utility Scale Power Plant
VB	Verification Body
VS	Verification Standard

Appendix 2. Competence of team members and technical reviewers

>>

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vijay Mathew

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☒ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☒ SDG+	☒ Social no-harm(S+)	☒ Environment no-harm(E+)	☐ CCB Expert
☒ Financial Expert	☒ Local Expert for India		

in the following Technical Areas:

☐ TA 1.1	☒ TA 1.2	☐ TA 2.1	☒ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☒ TA 13.1	☒ TA 13.2
☐ TA 14.1	☐ TA 15.1			

Issue Date
1st January 2023

Expiry Date
31st December 2023

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Muhammet Ali ERDURAN

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☐ Validator	☐ Verifier	☐ Team Leader	☐ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☐ SDG+	☐ Social no-harm(S+)	☐ Environment no-harm(E+)	☐ CCB Expert
☐ Financial Expert	☒ Local Expert for Turkey		

in the following Technical Areas:

☐ TA 1.1	☐ TA 1.2	☐ TA 2.1	☐ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☐ TA 14.1	☐ TA 15.1			

Issue Date
03rd May 2023

Expiry Date
02nd May 2024

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Ms. Indumathi C

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☒ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☒ SDG+	☒ Social no-harm(S+)	☒ Environment no-harm(E+)	☐ CCB Expert
☒ Financial Expert	☒ Local Expert for India and Sri Lanka		

in the following Technical Areas:

☒ TA 1.1	☒ TA 1.2	☐ TA 2.1	☒ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☒ TA 13.1	☒ TA 13.2
☐ TA 14.1	☐ TA 15.1			

Issue Date
1st January 2023

Expiry Date
31st December 2023

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Shivaji Chakraborty

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☐ Validator	☐ Verifier	☐ Team Leader	☒ Technical Expert
☒ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☒ SDG+	☒ Social no-harm(S+)	☒ Environment no-harm(E+)	☐ CCB Expert
☒ Financial Expert	☒ Local Expert for India		

in the following Technical Areas:

☒ TA 1.1	☒ TA 1.2	☐ TA 2.1	☒ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☐ TA 14.1	☐ TA 15.1			

Issue Date

1st January 2023

Expiry Date

31st December 2023

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	PSF: Kovanlık Reg. ve HES	Version 10, Dated 23/08/2023.	Project Owner
2.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Emission reduction calculation spread sheet	23/08/2023.	Project Owner
3.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Financial analysis worksheet, IRR-Kovanlık Reg. ve HES	23/08/2023.	Project Owner
4.	Energy and natural Resource Ministry	Commissioning Certificate of Kovanlik Regulator and Hydroelectric Power Plant 19,461MWm/19,07167 MWe – Unit 1 19,461MWm/19,07167 MWe – Unit 2 19,461MWm/19,07167 MWe – Unit 3	Unit 1- 30/10/2020 Unit 2- 13/11/2020 Unit 3- 11/12/2020	Project Owner
5.	ASD Group	Project Feasibility report for KOVANLIK REGULATOR AND HEPP	December, 2016	Project Owner
6.	Ministry of Environment and Urbanization, Türkiye	Environment Impact Assessment approval for the project Mutlu Yeniköy WPP		Publically available
7.	Ser Carbon Sustainable Emission Reduction	Common Practice Reference https://erranet.org/member/emra-turkiye/ - EMRA General Directorate of Energy Affairs (EIGM) - Turkey		Publicly available
8.	Energy Market Regulatory Authority	Generation License(First and Final version)	26/07/2018	Project Owner
9.	TEİAŞ- Turkish Electricity Transmission Corporation	Connection Agreement	21/12/2018	Project Owner
10.	The business professor	https://thebusinessprofessor.com/en_US/business-personal-finance-valuation/levered-beta-definition). Levered beta	13/08/2020	Project Owner
11.	Regional Directorate of Forestry	Forest permission	28/01/2019	Project Owner
12.	Ministry of Agriculture and Forestry	Final Forest Permission	28/01/2019	Project Owner
13.	Directorate of Reconstruction and urban Development	Zoning Permit documents	19/06/2018	Project Owner
14.	Kovanlık Enerji	Building License	12/08/2020	Project

	Üretim San.ve Tic. A.Ş.			Owner
15.	CCIPL	Onsite visit documents dated		CCIPL
16.	Ministry of Agriculture and Forestry	E-Construction Start date- (site Delivery report_S	15/11/2018	Project Owner
17.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Kovanlık HEPP- Meter Due Diligence and First Index ProtocolUnit-1 Unit-2 Unit -3	27/07/2020	Project Owner
18.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Technical Details of Turbines, Generator, Governor motor		Project Owner
19.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Fish Passage photographs		Project Owner
20.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Single Line Diagram		Project Owner
21.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Diesel Consumption details of diesel generator		Project Owner
22.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Reservoir Area Photographs		Project Owner
23.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	1) Employment details related to the project activity 2) Salary details of employees associated with the project activity 3) Training details of employees related to the project activity.		Project owner
24.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Supportive documents on local stakeholder consultation		Project owner
25.	TEIAS	Calibration regulations https://www.teias.gov.tr/en-US https://www.mevzuat.gov.tr/anasayfa/MevzuatFihristDetayIframe?MevzuatTur=7&MevzuatNo=6381&MevzuatTertip=5		Publicly available
26.	President of revenue management	Corporate Tax declaration Statement	30/04/2022	Project owner
27.	Laws Türkiye	General tariff Law On Utilization Of Renewable Energy Sources For The Purpose Of Generating Electrical Energy. http://www.lawsTürkiye.com/law/law-on-utilization-of-renewable-energy-sources-for-the-purpose-of-		Publicly available

		generating-electrical-energy-5346		
28.	Republic of Türkiye Ministry of Energy and Natural Resources	National grid emission factors were published by Republic of Türkiye Ministry of Energy and Natural Resources Bilgi_Formu_Web_Sitesi_2019_20211 0071443.pdf (enerji.gov.tr)		Publicly available
29.	UNFCC CDM SD tool	Sustainable Development Co-Benefits of their projects and programmes of activities https://www4.unfccc.int/sites/sdcmicro site/Pages/SD-Reports.aspx		Publicly available
30.	ICAO	CORSIA eligibility https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx		Publicly available
31.	Türkiye's Energy outlook	Peak Load and consumption projection for Turkish electricity system between 2020-2029 Türkiye, Generation Capacity Projection, 2020-2024. TEIAS.		Publicly available
32.	TEIAS	Electricity Market Law http://www.teias.gov.tr/eBulten/makale ler/2009/okulyeni2/elektrik/elektrik_piy asalari_kanunu.pdf		Publicly available
33.	Presidency of the Republic of Türkiye	https://www.mevzuat.gov.tr/mevzuat? MevzuatNo=6381&MevzuatTur=7&Me vzuatTertip=5 Metering regulations		Publicly available
34.	Energy Market Regulatory Authority	Grid fee, O & M fee https://www.epdk.gov.tr/Detay/Icerik/3 -0-56/faaliyet-raporlari		Publicly available
35.	Presidency of the Republic of Türkiye	Regulation on Electrical and Electronic Waste Control https://www.mevzuat.gov.tr/mevzuat? MevzuatNo=16159&MevzuatTur=7& MevzuatTertip=5		Publicly available
36.	Presidency of the Republic of Türkiye	Hazardous waste management rule https://www.mevzuat.gov.tr/mevzuat? MevzuatNo=20644&MevzuatTur=7&M		Publicly available

		evzuatTertip=5		
37.	VERRA	VERRA – VCS project registry https://registry.verra.org/app/search/VCS/All%20Projects		Publicly available
38.	Ministry of Finance	Turbine depreciation https://www.mevzuat.gov.tr/anasayfa/MevzuatFihristDetayIframe?MevzuatTur=9&MevzuatNo=10941&MevzuatTertip=5		Publicly available
39.	UNFCCC – CDM	CDM Project and PoA database https://cdm.unfccc.int/Projects/projsearch.html		Publicly available
40.	T C President of the republic Legislation Information System	Construction depreciation https://seffaflik.epias.com.tr/transparency/piyasalar/gop/ptf.xhtml		Publicly available
41.	TEIAS	Transmission loss factor https://webapi.teias.gov.tr/file/512cbf1d-0ca3-4492-b901-3722c7b682f7?download		Publicly available
42.	iREC	International iREC Standard https://fotonplatform.com/santraller/		Publicly available
43.	Gold Standard	Gold Standard Impact Registry https://registry.goldstandard.org/projects		Publicly available
44.	Kovanlık Enerji Üretim San.ve Tic. A.Ş.	Letter of Authorization of Project Owners and Project Representatives		Project owner
45.	Energy Markets Management Company (EPIAS)	Transparency Platform (for electricity price) https://seffaflik.epias.com.tr/transparency/piyasalar/gop/ptf.xhtml		Publicly available
46.	Energy Market Regulatory Authority (EMRA)	Energy Efficiency Law www.mevzuat.gov.tr/mevzuat?MevzuatNo=5627&MevzuatTur=1&MevzuatTertip=5		Publicly available
47.	Ministry of Environment, Urbanization and Climate Change	EIA Regulation https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=39647&MevzuatTur=7&MevzuatTertip=5		Publicly available
48.	Presidency of the Republic of Türkiye	Forest Law https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6831&MevzuatTur=1&MevzuatTertip=3		Publicly available
49.	Presidency of the	Environment Law		Publicly

	Republic of Türkiye	https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=2872&MevzuatTur=1&MevzuatTertip=5		available
50.	Presidency of the Republic of Türkiye	Electricity Market Law https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6446&MevzuatTur=1&MevzuatTertip=5		Publicly available
51.	Presidency of the Republic of Türkiye	Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5346&MevzuatTur=1&MevzuatTertip=5		Publicly available
52.	Environment and Urban Ministry	EIA positive letter	22/11/2017	Project Owner
53.	KOVANLIK ENERJİ ÜRETİM SAN VE TİC. A.Ş.	EIA Report	08/11/2017	Project Owner
54.	Ministry of Environment and Urbanization	EIA Certificate Kovanlık Reg. ve HES	22/11/2017	Project Owner
55.	State Water Works (DSİ)	Protocol on Water Utilization Rights		
56.	Presidency of the Republic of Türkiye	Regulation on Electrical and Electronic Waste Control https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=16159&MevzuatTur=7&MevzuatTertip=5		Publicly available
57.	Presidency of the Republic of Türkiye	REGULATION ON CONTROL OF WASTE BATTERIES AND ACCUMULATORS https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=7118&MevzuatTur=7&MevzuatTertip=5		Publicly available
58.	Presidency of the Republic of Türkiye	Regulation on Waste Management https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20644&MevzuatTur=7&MevzuatTertip=5		Publicly available
59.	TEİAŞ- Turkish Electricity Transmission	Electricity generation report		Publicly available

	Corporation	https://seffaflik.epias.com.tr/transparency/uretim/gerceklesen-uretim/uevm.xhtml		
60.	Energy Market Regulatory Authority	Final Supplement list https://www.epdk.gov.tr/Detay/DownloadDocument?id=4ETVkLvlwO0=		Publicly available
61.	Ministry of Energy and Natural Resources	Ministry of Energy and Natural Resources (MENR) Strategic Energy Plan 2015-2019 caluculations		Publicly available
62.	TEİAŞ- Turkish Electricity Transmission Corporation	"Annual Development of Electricity Generation &Consumption and Losses in Türkiye" https://www.teias.gov.tr/tr-TR/turkiye-elektrik-uretim-iletim-istatistikleri		Publicly available
63.	Kovanlik Energy Generation Industrial and Trade INC	Works Agreement between OZKA INSAAT ANONIM AIRKETI and Kovanlik Regulator and HEPP project	30/04/2018	Project owner
64.	New York University N.Stern School of Business	Beta, Unlevered beta and other risk measures https://pages.stern.nyu.edu/~adamodar/pc/archives/betaemerg17.xls		Others
65.	World Government Bonds	http://www.worldgovernmentbonds.com/bond-historical-data/Türkiye/10-years/		Others
66.	New York University N.Stern School of Business	Country Risk Premiums https://pages.stern.nyu.edu/~adamodar/pc/archives/ctryprem17.xls		
B01	GCC	1. GCC Project Standard, version 3.1 2. GCC Verification Standard, version 3.1 3. GCC Program Manual, version 3.1 4.Environment-and-Social-Safeguards Standard, version 2.0 5. Project-Sustainability-Standard, version 2.1		Others
B02	UNFCCC	CDM Methodology: ACM0002 Grid-connected electricity generation from renewable sources, ver 21.0		Others
B03	GCC	PSF template version 3.2		Others
B04	UNFCCC	Methodological tool 01: Tool for the demonstration and assessment of additionality Version 07.0		Others
B05	UNFCCC	Methodological tool 07: Tool to calculate the emission factor for an electricity system, version 07.0		Others
B06	UNFCCC	Methodological tool 24: Common practice, version 03.1		Others
B07	UNFCCC	Methodological tool 27: Investment analysis, version 11		Others

B08	GCC	GCC Standard on Avoidance of Double Counting V1.0		Others
B09	GCC	GCC Clarification no. 1 V1.3		Others
B10	GCC	GCC Clarification no. 2 V1.0		Others
B11	GCC	GCC Clarification no. 3 V1.0		Others

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

Table 1. CLs from this Project Verification

CL	01	**Section no.**	D.2	**Date:** 30/06/2022
Description of CAR				
As per the PSF the annual electricity generation is mentioned as 197.39 GWh. However, the same is not inline with the feasibility report. As per feasibility report the annual generation is only 154.13 GWh. PO is requested to clarify the source of the value used for the electricity generation.				
Project Owner's response				**Date:** 07/11/2022
According to generation license, annual electricity production is expected to be 197,390,000 kwh (197.39 GWh). This explanation is also given in page 9, line 19.				
Documentation provided by the Project Owner				
5-Generation License\Amended-Final\Generation License Final.pdf				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
Project owner is requested to provide the actual generation data for last one year. Hence, CL 01 is open.				
Project Owner's response				**Date:** 13/02/2023
The one-year generation is provided to VVB. The last year's annual generation was recorded as 124 GWh which is less than the projected generation in the PIF report. This means that the Considered generation levels are conservative for the ER calculation and financial analysis.				
GCC Emission Reduction Verifier's assessment				**Date:** 24/02/2023
The evidence provided by the PO found appropriate. Therefore, project verification team has accepted the same. Hence CL01 is closed.				

CL	02	**Section no.**	D.3.5	**Date:** 30/06/2022
Description of CAR				
PO has chosen pre-tax equity IRR as the benchmark for demonstrating the additionality of the project activity. PO is requested to clarify how the same is conservative and appropriative benchmark, considering the tool for investment analysis.				
Project Owner's response				**Date:** 12/12/2022
As per section 6 of the tool 27 "Required/expected returns on equity are appropriate benchmarks for an equity IRR.". The document referred shows the threshold IRR hence, it completely matches with the sentence in the tool defined above. This document has been published by WB (which is referred as a reputable source in several section of the tool) and used in many GS, VCS and GCC projects. VVB can see that there are many projects registered as per the standards, which uses the same benchmark.				
GCC Emission Reduction Verifier's assessment				**Date:** 07/01/2023
As per the report, page no.40, Equity IRR % for the project activity is mentioned. However, the report is mainly focusing only on projects like small Hydro, Wind, Geothermal, Biomass steam, Biomass thermal, Solar thermal, Solar PV and EE. The report doesn't have any specific references related to the equity IRR benchmark related to large scale Hydro project activities. Further, the report is not very clear on whether the Equity IRR mentioned is post tax or pre-tax EIRR. Project owner is requested to provide clarity on the same. Hence CL 02 is open.				
Project Owner's response				**Date:** 14/01/2023
Pre-tax IRR is calculated in revised IRR sheet. Hence, even in pre-tax scenario, IRR is below benchmark. Report refers to several plants which include large scale hydro and have similar sizes compared to the proposed project. See table 3.12 for large hydro investment cost and table 3.10 for cost/MW values. Proposed project has significantly lower unit cost (1.429 USD/kW) compared to all or only large hydro power plants in				

the report in tables referred above. IRR shows the expectation of investors for return on their investment regardless. Normally, larger investments mean higher risks and higher expectation for IRR. Hence, if a separate IRR should be defined for large hydro power plants, it should be more than 15% due to higher risk premium expectation.

Documentation provided by the Project Owner

GCC Emission Reduction Verifier's assessment	**Date:** 31/01/2023

PP is requested to demonstrate the conservativeness using other methods mentioned in the CDM tool 27 (please refer paragraph 19 of the CDM tool 27).
Also, PO is requested to demonstrate that even with actual values (of main parameters), the IRR doesn't breach the benchmark or within the sensitivity limit Hence, CL 02 is open.

Project Owner's response	**Date:** 13/02/2023

For benchmark analysis, CAPM method has been applied which uses expected return on equity as benchmark. As per the tool,

$re=rf+\beta\times(rm-rf)$

Where;
re=Cost of equity(expected return on equity)

Rf = Risk-free rate
β = Beta is adjustment factor (no adjustment factor is applied as per the tool)

rm = Expected market return.

(rm-rf) in the formula above corresponds to "equity risk premium" and rf is the risk free rate of return which is based on lending and deposit interest27 rates and applied as 3% for June 2019 (investment decision date). Country risk premium has been applied as 17.16% based on the reference given in the tool 27 (New York University N.Stern School of Business)28 .

Thus, expected return of equity has been calculated as ;

re = 17.16 + 3
re = 20.16%

Expected returns on equity for similar type of (energy industries) type of projects is therefore considered as 20.16% which is also in line with tool.

Project owner has submitted the corporate tax declaration, further the details are mentioned in the sensitivity analysis.

GCC Emission Reduction Verifier's assessment	**Date: 24**/02/2023

Project owner has presented the actual project cost in the corporate tax declaration, further, the details of the other parameters are discussed in the sensitivity analysis. Further, the supportive documents are submitted. Hence this part of the CL is closed.

As per paragraph 21 of tool 27, Risk free rate- rf shall be based on local sovereign debt and shall have a maturity date close to the project lifetime (at least 10 years) and sufficient liquidity. The latest (rather than the average over a time horizon) sovereign debt data available at the time of the investment decision should be used, whereas the new calculation provided in PSF, Version 7 refers to the link where it is related to the short term lending and deposit rates, i.e., for interest rates for uninsured credits with 180 days of maturity, Weighted averages of deposit rates of the related month (flow data). The same is not complying to the requirements

[27] https://www.sbb.gov.tr/wp-content/uploads/2019/08/13-faiz_orani-1.xls
[28] https://pages.stern.nyu.edu/~adamodar/New_Home_Page/home.htm

mentioned in Tool 27.

In the tool 27 appendix 'Appendix. Default values for cost of equity (expected return on equity)', mentions about the values used by EB to derive the Default values for cost of equity for different countries. For the purpose EB not used Beta adjustment factor for the Group 1 projects in the countries mentioned in the appendix. However, nowhere in the tool it is mentioned that it is a default value for Beta adjustment factor for the Group 1, 2 & 3 projects in all the countries. Since, in the tool 27 the value for Türkiye is not calculated, PO is requested to justify the appropriateness of not using the Beta adjustment factor for the calculation of CAPM.

PO has used total equity rate premium rate as 17.16% in calculation which is sourced from New York University N.Stern School of Business. However, for the parameter ($rm-rf$) PO has sourced the value from the source mentioned in the tool 27 i.e. from, New York University N.Stern School of Business, which is 17.16% (total equirty risk Premium). PO has used the formula $re=rf+\beta\times(rm-rf)$ for the calculation of CAPM benchmark. PO is to clarify that the parameter ($rm-rf$) which is sourced from the New York University N.Stern School of Business, has also used the value of rf as used in the benchmark calculation of the PSF (which is 3%) to derive the value 17.16%. Since, the value of rf is used in two parts of the equation and the same needs to be consistent.

PO has sourced the value equity risk premium from the source New York University N.Stern School of Business. However, the data mentioned is of 1st January, 2023. PO has taken rf value based on investment decision date which is mentioned as June 2019 in the project owner's response the same is not consistent with the actual investment date of this project. The investment decision making of the Project activity is on 30/04/2018. PO needs to clarify how, this data was valid and applicable at the time of the investment decision taken by the project participant.

Hence the CL 02 is open.

Project Owner's response	**Date: 06/03/2023**

1. Calculation updated using equity risk premium available at time of investment decision
2. (rm-rf) in the formula above corresponds to "equity risk premium" and rf is the risk free rate of return which is based on long term average of rates and applied as 12.867% for April 2018 (investment decision date) as per the figure below). Risk free rate has been chosen over a period of 10 years bond yield in Türkiye.

Equity risk premium at time of investment decision has been applied as 7.96% based on the reference given in the tool 27 (New York University N.Stern School of Business) available at time of investment decision . Thus, expected return of equity has been calculated as;

re = 12.867 + 1.06×7.96
re = 21.30%

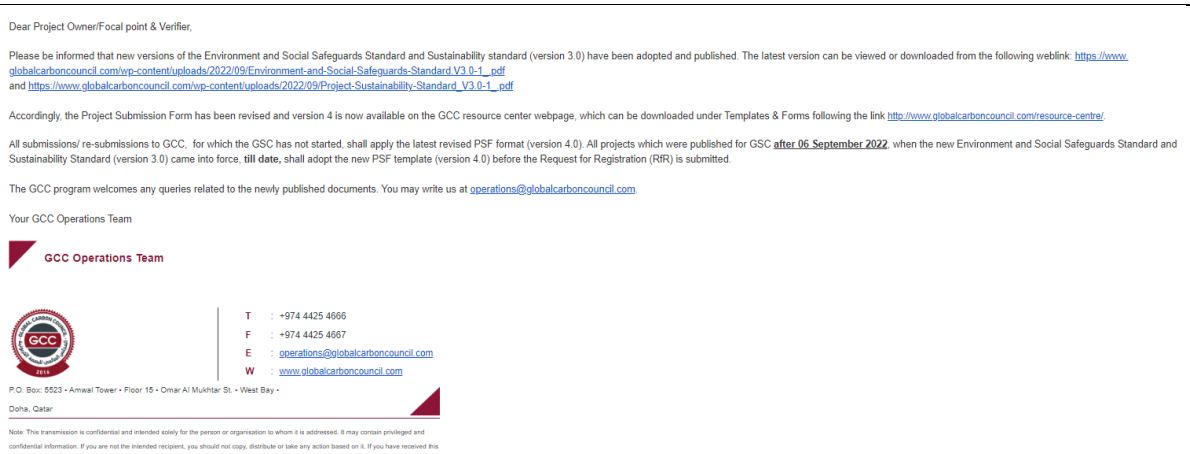
Expected returns on equity for similar type of (energy industries) projects are therefore considered as 21.30% which is also in line with tool.
3. Beta value applied as 1.06 as per the tool for emerging markets.

GCC Emission Reduction Verifier's assessment	**Date: 01**/03/2023

The justification of PO is found to appropriate by the Project verification team. The provided references were checked and the calculation of return on equity is acceptable. hence, CL 02 is closed.

CL	03	Section no.	D.3.7	Date: 30/06/2022
Description of CL				
PO is requested to provide the national regulation/standard with respect to calibration frequency of the energy meters. The footnote weblink regarding the same is not working.				
Project Owner's response				**Date:** 07/11/2022
The footnote weblink is working but the national regulation/standard with respect to calibration frequency of the energy meters is also provided with revised documents.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The footnote weblink is not found accessible. Further, the calibration frequency supportive document is submitted and found appropriate. Hence, CL 03 is closed.				

CL	04	Section no.	D.10 / D.11	Date: 30/06/2022
Description of CL				
PO is requested to provide documents viz. legal requirement, monitoring records related to Environmental, social safeguards.				
Project Owner's response				**Date:** 07/11/2022
The documents are provided in the file named "Credible evidences on implementation and monitoring of SDGs 7,8,9 and 13. " with revised documents.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The supportive document folder 21 is found empty. PO is requested to submit the same and PO is requested to follow the latest Environment and Social Safeguards Standard V3. Hence, CL 04 is open.				
Project Owner's response				**Date:** 12/12/2022
The documents are re-provided in the file named "Credible evidence on implementation and monitoring of SDGs 7,8,9 and 13. "with revised documents.				
GCC Emission Reduction Verifier's assessment				**Date:** 02/01/2023
In SDG 7, it has been mentioned as "by the utilization of biomass as a renewable energy source". In SDG 13 and 9, it is mentioned that project uses wind energy. PO is requested to clarify the same. Also, Commissioning documents folder provided is found to be empty in SDG 7 & 9. *No employment records of women were found in the credible evidence of SDG 8. Further, PO is requested to follow the latest Environment and Social Safeguards Standard V3. Hence, CL 04 is open.*				
Project Owner's response				**Date:** 07/01/2023
The sentences for SDG 7-8-9 are revised. *The folders are not empty: See folder 21- SDG 7-8-9-13 are separately provided.* *The employment of women is not mandatory. The parameter indicates any "Long term employment "The SDG 8 mentions women but does not necessarily mean that the PO should employ women. These kinds of projects were already approved by GCC and this has never been an issue. Also, when you say "woman employment" you actually refer to Environmental and Social Safeguard V3.0. However, at the time this project is listed, Environmental and Social Safeguards V2.0 was applied and it will keep like this as GCC allows. (See the email screen shot):*				



Dear Project Owner/Focal point & Verifier,

Please be informed that new versions of the Environment and Social Safeguards Standard and Sustainability standard (version 3.0) have been adopted and published. The latest version can be viewed or downloaded from the following weblink: https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Environment-and-Social-Safeguards-Standard_V3.0-1_.pdf
and https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Project-Sustainability-Standard_V3.0-1_.pdf

Accordingly, the Project Submission Form has been revised and version 4 is now available on the GCC resource center webpage, which can be downloaded under Templates & Forms following the link http://www.globalcarboncouncil.com/resource-centre/.

All submissions/ re-submissions to GCC, for which the GSC has not started, shall apply the latest revised PSF format (version 4.0). All projects which were published for GSC **after 06 September 2022**, when the new Environment and Social Safeguards Standard and Sustainability Standard (version 3.0) came into force, **till date,** shall adopt the new PSF template (version 4.0) before the Request for Registration (RfR) is submitted.

The GCC program welcomes any queries related to the newly published documents. You may write us at operations@globalcarboncouncil.com.

Your GCC Operations Team

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Specify the request. List the missing parameters

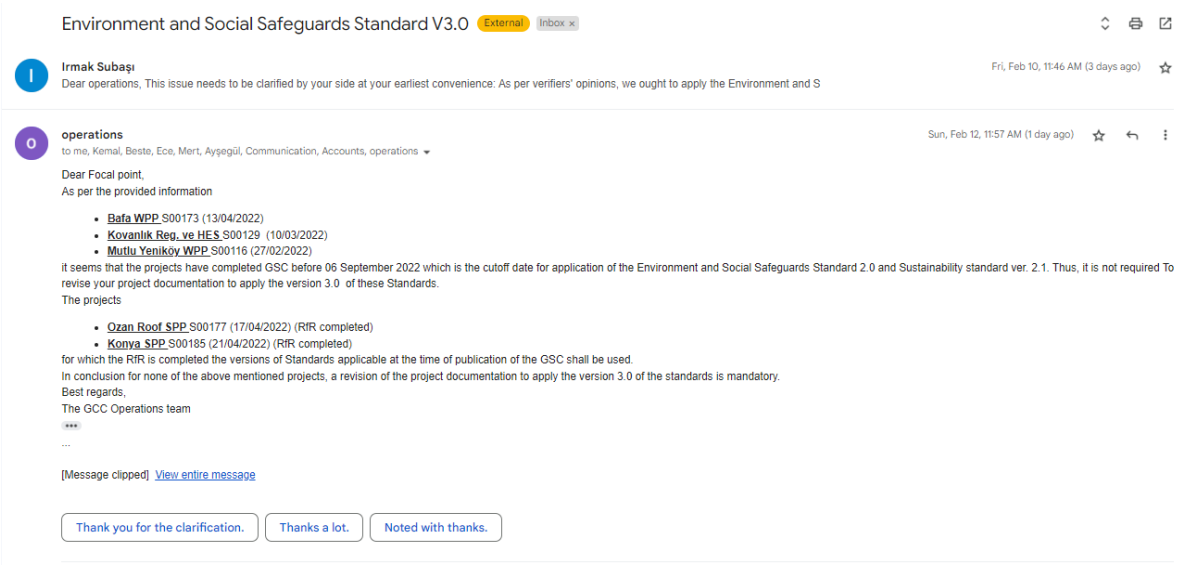
Documentation provided by the Project Owner

GCC Emission Reduction Verifier's assessment	**Date:** 31/01/2023

PO is requested to use the latest version of Environment and Social Safeguards Standard, V3.0 and as per the standard., PO is requested to address all the Key environmental impacts and Key social impacts as per the Indicative list of project types and corresponding Environmental and Social aspects and impacts which shall be assessed at a minimum, . Hence, CL 04 is open.

Project Owner's response	**Date:** 13/02/2023

GCC was consulted on this issue and in return they clarified that the projects already published for GSC are not obliged to involve V3. The key environmental impacts were already discussed. E-wastes, battery wastes, wastewater, protecting species etc. The E.1 and E.2 table are again corrected as per the impacts assessed and the monitoring parameters are re-evaluated.



Environment and Social Safeguards Standard V3.0 External Inbox ×

Irmak Subaşı Fri, Feb 10, 11:46 AM (3 days ago)
Dear operations, This issue needs to be clarified by your side at your earliest convenience: As per verifiers' opinions, we ought to apply the Environment and S

operations Sun, Feb 12, 11:57 AM (1 day ago)
to me, Kemal, Beste, Ece, Mert, Ayşegül, Communication, Accounts, operations

Dear Focal point,
As per the provided information

- Bafa WPP S00173 (13/04/2022)
- Kovanlık Reg. ve HES S00129 (10/03/2022)
- Mutlu Yenikőy WPP S00116 (27/02/2022)

it seems that the projects have completed GSC before 06 September 2022 which is the cutoff date for application of the Environment and Social Safeguards Standard 2.0 and Sustainability standard ver. 2.1. Thus, it is not required To revise your project documentation to apply the version 3.0 of these Standards.
The projects

- Ozan Roof SPP S00177 (17/04/2022) (RfR completed)
- Konya SPP S00185 (21/04/2022) (RfR completed)

for which the RfR is completed the versions of Standards applicable at the time of publication of the GSC shall be used.
In conclusion for none of the above mentioned projects, a revision of the project documentation to apply the version 3.0 of the standards is mandatory.
Best regards,
The GCC Operations team

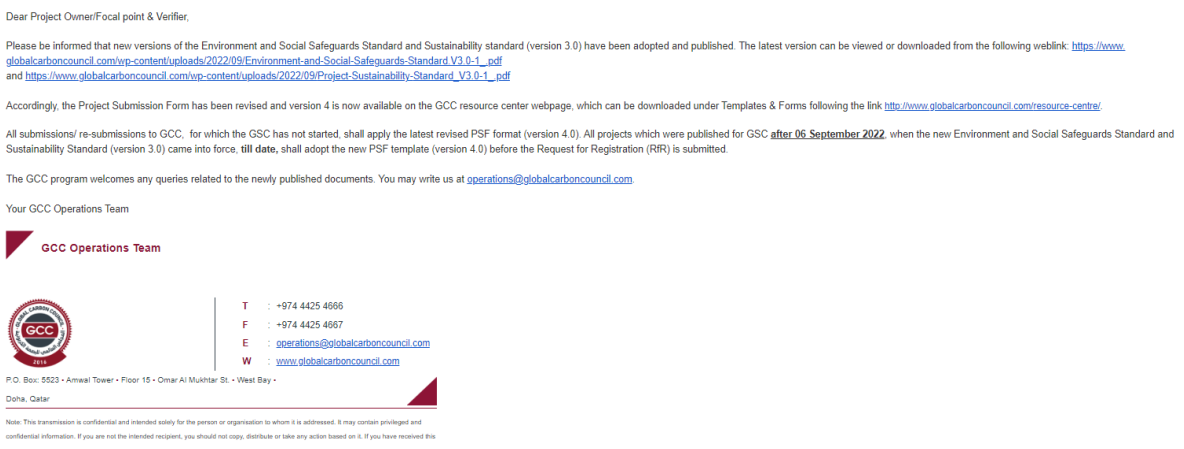
[Message clipped] View entire message

Thank you for the clarification. Thanks a lot. Noted with thanks.

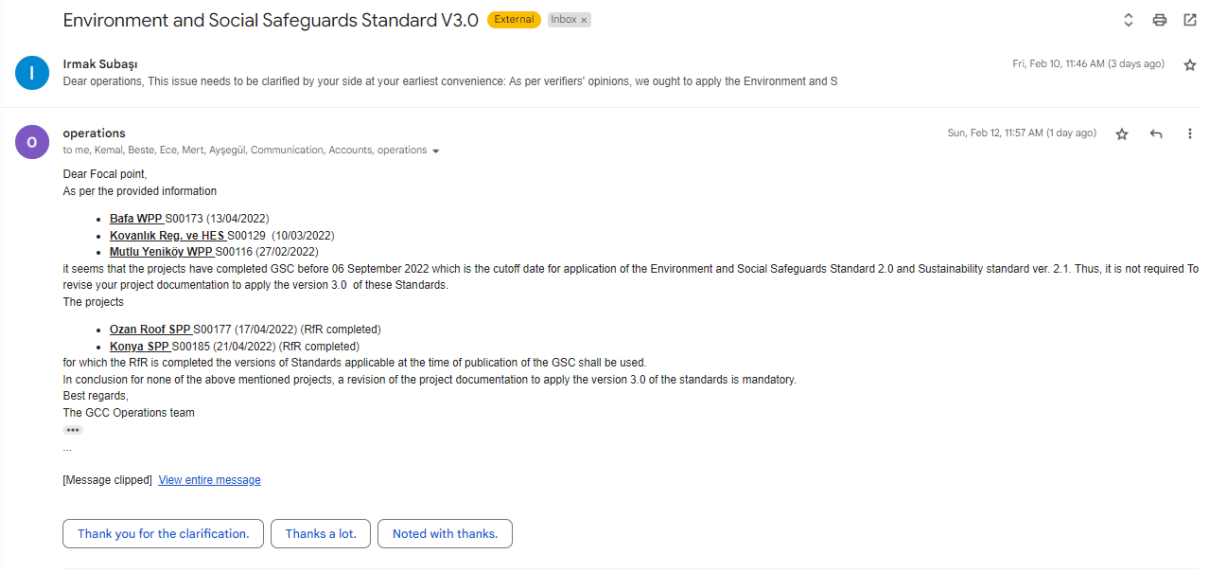
GCC Emission Reduction Verifier's assessment	**Date:** 24/02/2023

The justification of PO is found to appropriate by the Project verification team and hence, CL 05 is closed.

CL ID	05	**Section no.**	D.10	**Date:** 30/06/2022

Description of CL	
PO has not identified the following impacts; *- E-waste related to the project activity.* *- Hazardous wastes generation with respect to transformer oil replacement, oil soaked cotton waste etc.* *- Batteries usage* *- Decommission of the project activity*	
Project Owner's response	**Date:** 07/11/2022
For e-waste and hazardous wastes, monitored parameters are added to section B.7.1. Data and parameters to be monitored. Also, in this section, it is mentioned that there is no battery usage in the facility. Also, these added parameters are mentioned in Section E.1.Environmental safeguards. Decommission of the project activity impact is irrelevant for this type of project.	
Documentation provided by the Project Owner	
GCC Emission Reduction Verifier's assessment	**Date:** 28/11/2022
PO is requested to follow the latest Environment and Social Safeguards Standard V3. Hence, CL 04 is open.	
Project Owner's response	**Date:** 12/12/2022
The safeguards, scores and the monitoring parameters are revised in E.1. and B.7.2.	
GCC Emission Reduction Verifier's assessment	**Date:** 07/01/2023
Project verification team identified that PO has not followed the latest standard for Environmental and Social Safeguards and is requested to comply to the requirements of latest Environment and Social Safeguards Standard V3. Hence, CL 05 is open.	
Project Owner's response	**Date:** 14/01/2023
At the time this project is listed, Environmental and Social Safeguards V2.0 was applied and it will keep like this as GCC allows. (See the email screen shot):  Dear Project Owner/Focal point & Verifier, Please be informed that new versions of the Environment and Social Safeguards Standard and Sustainability standard (version 3.0) have been adopted and published. The latest version can be viewed or downloaded from the following weblink: https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Environment-and-Social-Safeguards-Standard_V3.0-1_.pdf and https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Project-Sustainability-Standard_V3.0-1_.pdf Accordingly, the Project Submission Form has been revised and version 4 is now available on the GCC resource center webpage, which can be downloaded under Templates & Forms following the link http://www.globalcarboncouncil.com/resource-centre/. All submissions/ re-submissions to GCC, for which the GSC has not started, shall apply the latest revised PSF format (version 4.0). All projects which were published for GSC **after 06 September 2022**, when the new Environment and Social Safeguards Standard and Sustainability Standard (version 3.0) came into force, **till date,** shall adopt the new PSF template (version 4.0) before the Request for Registration (RfR) is submitted. The GCC program welcomes any queries related to the newly published documents. You may write us at operations@globalcarboncouncil.com. Your GCC Operations Team GCC Operations Team T : +974 4425 4666 F : +974 4425 4667 E : operations@globalcarboncouncil.com W : www.globalcarboncouncil.com P.O. Box: 5523 • Amwal Tower • Floor 15 • Omar Al Mukhtar St. • West Bay • Doha, Qatar Note: This transmission is confidential and intended solely for the person or organisation to whom it is addressed. It may contain privileged and confidential information. If you are not the intended recipient, you should not copy, distribute or take any action based on it. If you have received this
Documentation provided by the Project Owner	
GCC Emission Reduction Verifier's assessment	**Date:** 31/01/2023
PO is requested to provide procedure for hazardous waste handing, disposal of battery waste and end of the life of equipment. Hence, CL 05 is open.	
Project Owner's response	**Date:** 13/02/2023

These parameters are already assessed. Please clarify the issue in a more specific way. Also as per GCC this project is not obliged to include V3 assessment:



GCC Emission Reduction Verifier's assessment	**Date:** 24/02/2023
The justification of PO is found to appropriate by the Project verification team and hence, CL 05 is closed.	

CL ID	06	**Section no.**	D.6	**Date:** 30/06/2022
Description of CL				
PO is requested to provide supportive documents/evidences related to Local stakeholder consultation.				
Project Owner's response				**Date:** 07/11/2022
The photographs from local stakeholder meeting are provided.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
PO is requested to demonstrate how the peoples are invited, Feedback from the meeting, Minutes of the meeting and attendance of the Participants. Hence, CL 06 is open				
Project Owner's response				**Date:** 12/12/2022
Means of invitation are given in G.1. *Minutes of meeting summary and the feedback summary are given in G.2*				
GCC Emission Reduction Verifier's assessment				**Date:** 07/01/2023
The minutes of the meeting and attendance of the participants have not been provided in section G.2. Hence, CL 06 is open.				
Project Owner's response				**Date:** 14/01/2023
The summary in G.1. and G.2. is from THE EIA REPORT -THE STAKEHOLDER CONSULTATION MEETING PART REALISED ON 06/04/2017. There is no additional "minutes of meeting" that is applied in the stakeholder consultation meetings regulated by the government. The Section G includes all the details stated in the EIA (APPROVED BY THE GOVERNMENT) report such as pictures, comments summary, the SDG targeted labels and all information provided. Please re-consider the content and please evaluate it thoroughly before keep the CAR open.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 31/01/2023

The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CL 06 is closed.

Table 2. CARs from this Project Verification

CAR ID	01	**Section no.**	D.2	**Date:** 30/06/2022
Description of CAR				
1. GHG sectoral scope category name may be provided int the basic information sheet of the PSF. *2. Further, footnote 8, footnote 14, footnote 15, footnote 16 and footnote 23 weblinks are not working. Footnote 24 is not available.* *3. PO is requested to use comma to separate the values instead of decimal separator (eg. in section B.6.4)* *The address and other contact details of Kovanlık Enerji Üretim San.ve Tic. A.Ş. is not provided.*				
Project Owner's response				**Date:** 07/11/2022
1.The sectoral scope category name is defined as 01: Energy (renewable/non-renewable sources) in the basic information sheet. *2.Footnotes are revised.* *3. They are fixed.* *4.The address and other contact information is provided.*				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 01 is closed.				

CAR ID	02	**Section no.**	D.2	**Date:** 30/06/2022
Description of CAR				
1. The section A.3 of the PSF has not been completed complying to the PSF completing guidelines, the section A.3 doesn't cover details viz. PLF, brief on monitoring (Monitoring equipment and their locations in the systems), Baseline scenario, Age and average lifetime of the equipment - based on the manufacturer's spec and industry std., and technology transfer (if applicable). Further, technical details to be more detailed by covering details viz. gross/net head, turbine efficiency, generator details, water flow, length of penstock etc *2. The energy transmission line value mentioned in the PSF is not consistent with the feasibility report.*				
Project Owner's response				**Date:** 07/11/2022
1. The section A.3 of PSF is revised. *2. Transmission line is changed as 9.5 km w.r.t. feasibility report.*				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
First point of CAR 02 is not fully addressed. Hence, CAR 02 is open.				
Project Owner's response				**Date:** 12/12/2022
The section includes: Lifetime of the system The monitoring equipment Technology specific technical details (generators, regulators, turbines) are already given as a first respond to the CAR02. Baseline scenario does not belong to this section. The baseline scenario is explained in B.4. So please re-evaluate the section and specify the missing point exactly to be comprehended better.				
GCC Emission Reduction Verifier's assessment				**Date:** 07/012023
The justification of PO is found to appropriate by the Project verification team and hence, CAR 02 is closed.				

CAR ID	03	Section no.	D.13	Date: 30/06/2022
Description of CAR				
PO is requested to indicate the intended use of ACCs from the project activity in the section A.5 of the PSF.				
Project Owner's response				**Date:** 07/11/2022
Section A.5 is revised.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 03 is closed.				

CAR ID	04	Section no.	D.14	Date: 30/06/2022
Description of CAR				
The PO is requested to demonstrate, how the project activity is meeting the CORSIA requirements under section A.6 of the PSF.				
Project Owner's response				**Date:** 07/11/2022
The required clarification is added to Section A.6.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 04 is closed.				

CAR ID	05	Section no.	D.3.5	Date: 30/06/2022
Description of CAR				
1. As per the para 33 and 34 of the PSF guidelines PO is requested that all the data used, all the relevant assumptions and parameters used in the analysis to be mentioned in the PSF. *2. A few cells in the ER Sheet is showing error.* *3. Foot note weblink 27 is not working*				
Project Owner's response				**Date:** 07/11/2022
1. All relevant assumptions and parameters are added as per the para 33 and 34 of the PSF guidelines. *2. Errors are fixed.* *3. Footnote 27 is working.*				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
1. All major input parameters used for investment analysis to be mentioned in PSF with their respective references. *2. Project Owner has performed IRR analysis only for 19 years. As per feasibility report, Chapter 9, Economic life is around 50 years. So, PO is requested to clarify how the project activity is complying to the requirements of paragraph 6 of CDM Tool 27.* *3. Fair value of project activity is not calculated and the same is not added back in the cashflow at the end of investment period.* *4. Project Owner is requested to comply to paragraph 7 of CDM tool 27.* *5. Project Owner has not considered depreciation rate while calculating the tax. Further, the PO is requested to comply to the requirements of paragraph 9 of CDM tool 27.* *6. As per paragraph 33 of PSF filling guidelines, PO is requested to "Present in a transparent manner, in the form or in a separate appendix, all data used (variables, parameters, data sources, etc.) and how the additionality of the Project Activity is demonstrated); and 34 "Where investment analysis is used, list all relevant assumptions and parameters used in the analysis. Where benchmark analysis is used, clearly*				

indicate the benchmark. Where cost comparison is used, describe the scenarios compared". Further PO is requested to demonstrate how they have complied to requirements of paragraph 10 of CDM tool 27. *7. Project Owner is requested to conform the investment decision date and requested to provide its supportive documents.* *8. Project Owner is requested to provide supportive documents related to the exchange rate and appropriateness of value selected during the time of investment decision date. Further, the PO is requested to clarify the how exchange ratio cells are connected to total project cost mentioned in 1000 Dollars. PO is also requested to clarify why two exchange ratios (€ to YTL), ($ to YTL) provided in the investment analysis sheet.* *9. Some errors are identified in reference cells A4 to A15 in the IRR Sheet.*
Project Owner's response **Date:** 12/12/2022
IRR sheet revised with the necessary references such as capital cost, operational cost, depreciation years, electricity price, exchange rates. The references are supported in PSF as well, if necessary. The IRR analysis is performed as the other approved projects in GCC portal (i.e. Alibey WPP, Ova HEPP). Please Re-evaluate the given references and notes in the IRR sheet and PSF.
GCC Emission Reduction Verifier's assessment **Date:** 07/01/2023
Capital investment cost in PSF seems to be inconsistent with that of feasibility report. Average annual generation not consistent with that of feasibility report in some pages. Footnote 35 couldn't find) Justification to points 2,3, 5,8 not provided.
Project Owner's response **Date:** 14/01/2023
The OPEX and CAPEX prices are revised as in the table 8-2 and 9-4 in the report. Please check the notes of the excel sheet for references. Please see the links provided or the PIF report in the folder "3: IRR" for Table 8-2 and 9-4. *Footnote 35 is referring to the excel sheet. Please check the document over clear copy, not track change copy. It might be confusing in TC mode.* *Average annual generation was revised as in PIF report.* *2: The analysis is carried out for 20 years (1 year investment + 19 years operation). In the guidance for investment analysis, min 10 years is required, and residual value is requested to be added if a shorter period than lifetime is chosen. We have calculated residual value and added as income to the last year (see cell U41 please)* *3: Fair value was already added please see Y36-U41 in Cash Flow Sheet* *5: It was considered already. Depreciation is subtracted from income in cells G8 to Y8. Depreciation is added again in line 30 (G30 to Y30).* *8: Exchange rate is from central bank website. Screenshot is available in excel file (exchange rates) . Link is also available in the same spreadsheet. Please open "notes" or "show notes" the cells have their explanations and links.*
Documentation provided by the Project Owner
GCC Emission Reduction Verifier's assessment **Date:** 31/01/2023
1)The values of electricity generation taken is not in-line with the values in the PSF. *2) The IRR value taken for the sensitivity analysis is not in-line with the actual IRR values in the calculation sheet as well as in the PSF.* *3)project owner is requested to provide the reference for operating cost & source for depreciation of the Turbine.* *4) PO is requested to clarify why the corporate tax is not consider for the calculation.* *5) PO is requested specify the O&M cost(annually/monthly) in sub-section 2b of the section B.5 in the PSF.* *Project owner is requested to correct the above points and give justification for the same. Hence CAR 05 is open.*
Project Owner's response **Date:**
1) The electricity generation was changed to the value in PIF. This issue was raised by the verifier above. The electricity generation was taken as 154.130 in the feasibility report. Hence, IRR

analysis was performed according to that value to be consistent with the O&M and capital investment values that are also given in feasibility report. *2) 2. The sensitivity analysis in PSF and in IRR is consistent. Please re-evaluate the latest IRR sheet provided to the VVB.* *3) These sources are already given. Please re-evaluate IRR calculation sheet and supporting **links and notes** given in the sheets of this excel file.* *4) Because the given in world bank document referenced in both PSF and in IRR sheet is for IRR equity* *5) Added*
Documentation provided by the Project Owner
GCC Emission Reduction Verifier's assessment **Date:**
PO is requested to provide the reference for all the input parameters in the PSF viz. total estimated operational cost, total estimated operational cost, equity ratio etc. Further, PO is requested to provide evidence for actual project cost (including breakup of the cost), annual generation at-least for last once year, actual tariff received, actual O&M cost, and actual cost related to the other major input values. Hence CAR 05 is open.
Project Owner's response **Date:** 13/02/2023
Annual generation, and actual tariff, actual OPEX and CAPEX are given in the IRR sheet. Necessary references are also provided in the supporting documents. The IRR is re-calculated according to the actual values and found to be 3%.
GCC Emission Reduction Verifier's assessment **Date:** 24/02/2023
The reference document provided by the PO is found appropriate therefore, project verification team have accepted the same. Hence CAR 05 is closed.

CAR ID	06	**Section no.**	D.3.6	**Date:** 30/06/2022
Description of CAR				
1. As per the methodological tool 7: tool to calculate the emission factor for an electricity system version 7, PO shall apply the six steps with respect to baseline methodology procedure. PO is requested to demonstrate how the step has been applied in the section B.6.1 of the PSF. *2. The footnote 28 weblink is not working.*				
Project Owner's response				**Date:** 07/11/2022
1. This part is revised. *2. Footnotes 28 is changed.*				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 06 is closed.				

CAR ID	07	**Section no.**	D.3.6	**Date:** 30/06/2022
Description of CAR				
1. PO is requested to provide the title and version of the methodology reference in the Data / Parameter Table of section B.6.2. and B.7.1. *2. Further, the tables in the PSF should not be modified or delete tables and their columns in this form. As per the 14 para of instructions for completing PSF.* *3. The footnotes 29 and 30 weblink are not working.* *4. The data and parameter table for the parameter $EF_{grid,CM,y,}$ the explanation for measured/calculated/default is not provided.*				
Project Owner's response				**Date:** 07/11/2022
1.The version and title of methodology are added. *2.The blanks is signed as "N/A".*				

3.Footnotes 29 and 30 is changed. *4. $EF_{grid,CM,y}$ is defined as calculated/ default in Section B.6.2.*
Documentation provided by the Project Owner
GCC Emission Reduction Verifier's assessment **Date:** 28/11/2022
CAR 07 will be closed subjected to the closure of CAR 11.
Project Owner's response **Date:** 13/02/2023
Please See CAR 11
GCC Emission Reduction Verifier's assessment **Date:** 24/02/2023
CAR 07 is closed w.r.t to the closure of CAR 11

CAR ID	08	**Section no.**	D.3.7	**Date:** 30/06/2022
Description of CAR				
1. Source of data AP_J is note clearly mentioned. *2. Measuring/reading/recording frequency of CapPJ, APJ doesn't seems correct.* *3. CO2 emission parameters mentioned that it is a calculated value. However, in the section Measurement/Monitoring equipment is mentioned. PO is requested to clarify the same.*				
Project Owner's response				**Date:** 07/11/2022
1. Source of APj is defined to the document named "Kovanlık Regülatörü Göl Alanı" in file named reservoir area. It is also given as Footnotes 13. *2. Measuring/reading/recording frequency part of CapPJ, APJ is changed.* *3. CO2 emissions are calculated with respect to electricity generation values. The emissions are not monitored. So, this parameter is removed from Section B.7.1.*				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 08 is closed.				

CAR ID	09	**Section no.**	D.5	**Date:** 30/06/2022
Description of CAR				
PO is requested to provide summary of environmental impact analysis in the section D.1 of the PSF. Further, a brief on mitigation requirements identified during the operation with respect to the identified impacts may be provided in section D.2 of the PSF.				
Project Owner's response				**Date:** 07/11/2022
Section D.1 is revised.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The section CAR is not fully addressed as well as the D.2 is not revised. Hence, the CAR 09 is open.				
Project Owner's response				**Date:** 07/11/2022
The D.2 is revised. The assessment for both sections is on the same line. Pleas re-evaluate and specify/list the missing.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 12/12/2022

The justification provided by the project owner found appropriate, further the PSF is revised. Therefore, the project verification team have accepted the same. Hence, CAR 09 is closed.

CAR ID	10	**Section no.**	D.3.5	**Date:** 30/06/2022
Description of CAR				
1. The table 6 of the common practice analysis mentioned about wind power plant. *2. Step 2 of the common practice analysis page no.26 mentions that the project which apply the same measure as the proposed project have been determined and wind energy projects are selected as the same energy source type of the project. This statement is wrong as the project activity is Hydro electric power generation.*				
Project Owner's response				**Date:** 07/11/2022
1. It is revised as "Table 6. Operational hydro electric power plants". *2. It is revised.*				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2023
The revised details are not sufficient. So, Po is request to provide the documents that supports to common practice. Hence, CAR 10 is open.				
Project Owner's response				**Date:** 12/12/2022
Common practice analysis is revised and the necessary excel sheet is provided to VVB.				
GCC Emission Reduction Verifier's assessment				**Date**: 07/01/2023
PO is requested to to justify the basis of selection of Nall. PO is requested to justify why the solar power technology is not selected while demonstrating common practice analysis since renewable energy projects are considered while doing the same. It is mentioned that common practice version 03.1 has been used. PO is requested to clarify the same. Hence, CAR 10 is open.				
Project Owner's response				**Date:** 14/01/2023
The nall selection is clearly presented in the PSF and in the EXCEL SHEET (CP-common practice). No solar power plants for that installed capacity range and for THAT INVESTMENT DECISION DATE are found by the YEKDEM search engine (The first sheet on the excel). Hence only the list provided is found for the range and the proper category of the tool. There is no problem seen in our versions of PSF. Please read the document in clear copy mode. TC mode might be confusing.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 31/01/2023
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 10 is closed.				

CAR ID	11	**Section no.**	D.10	**Date:** 30/06/2022
Description of CAR				
1. As per the Environment and Social Safeguards Standard v02, Project Owner shall conduct a Net-harm Assessment and complete the PSF as stipulated in the following eight-step procedure. The section E.1 of the PSF against the impacts viz. NOx emissions, SOx emissions, CO emission, etc are identified as not applicable; however, applicable Legal requirement / Limit has been identified by the PP, which is not consistent with the requirement of the Environment and Social Safeguards Standard v02. *2. The specific legal requirement with respect to Reliability/accessibility of water supply and protecting/ enhancing species diversity is not mentioned in the PSF.* *3. PO is has not mentioned the monitoring process related to the identified environmental aspects.*				

Project Owner's response	**Date:** 07/11/2022
1. *Because PSF against the impacts viz. NOx emissions, SOx emissions, CO emission, etc are identified as not applicable, legal requirements/ limits are removed.* 2. *In section E, the legal requirements about Reliability/accessibility of water supply and protecting/ enhancing species diversity is clarified.* 3. *Monitoring process for protecting/ enhancing species diversity is added.*	
Documentation provided by the Project Owner	
GCC Emission Reduction Verifier's assessment	**Date:** 28/11/2022
As per paragraph 13 d(v) of section 4.2 of the Environment and Social Safeguard, Version 3.0; "All aspects which are assessed to have a positive impact on the environment and society shall list the monitoring parameters under section B.7.1 of the PSF. All those aspects which are assessed to have a negative impact on the environment and society, irrespective of whether they have been assessed to be "harmless" or "harmful", shall include the monitoring parameters under section B.7.2 of the PSF document." Project owner shall provide the same. Hence, CAR 11 is open.	
Project Owner's response	**Date:** 13/02/2023
There is no impact assessed as harmful.	
GCC Emission Reduction Verifier's assessment	**Date:** 24/02/2023
As per the GCC response found at CL 05 the project activity which have completed GSC before 06 September should not required to follow Environmental and social safeguards version 3. Therefore, project verification team has accepted the same. Hence, CAR 11 is closed.	

CAR ID	12	**Section no.**	D.11	**Date:** 30/06/2022
Description of CAR				
PO has identified Legal requirement/Limit for the aspects 'Long-term jobs (> 1 year) created/ lost' for the project activity. However, the legal requirement/ limit is not clearly mentioned in the PSF.				
Project Owner's response				**Date:** 07/11/2022
There is not any legal requirement/ limit for this parameter. This is also mentioned in E.1. Social Safeguards.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The project verification team has accepted the response provide by the project owner. However, the evidence w.r.t to employment is requested to submit. Hence, the CAR 12 is open.				
Project Owner's response				**Date:** 12/12/2022
Records for employment are provided in the file 24				
GCC Emission Reduction Verifier's assessment				**Date:** 07/01/2023
The project verification team has accepted the response provide by the project owner. However, the evidence w.r.t to employment is requested to submit. Hence, the CAR 12 is closed.				

CAR ID	13	**Section no.**	D.12	**Date:** 30/06/2022
Description of CAR				
The PO is requested to provide credible evidences w.r.t. the monitoring of SDG 7,8,9 and 13				
Project Owner's response				**Date:** 07/11/2022
The documents are provided in the file named "Credible evidences on implementation and monitoring of SDGs 7,8,9 and 13. "with revised documents.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
The supportive document folder 21 is found empty. PO is requested to submit the same and PO is				

requested to follow the latest Project Sustainability Standard V3. Hence, CAR 13 is open.
Project Owner's response **Date:** 12/12/2022
The documents are re-provided in the file named "Credible evidence on implementation and monitoring of SDGs 7,8,9 and 13. "with revised documents.
GCC Emission Reduction Verifier's assessment **Date:** 07/01/2023
In SDG 7, it has been mentioned as "by the utilization of biomass as a renewable energy source". In SDG 13 and 9, it is mentioned that project uses wind energy. PO is requested to clarify the same. Also, Commissioning documents folder provided is found to be empty in SDG 7 & 9. *No employment records of women were found in the credible evidences of SDG 8. Hence, CAR 13 is open.*
Project Owner's response **Date:** 14/01/2023
The sentences for SDG 7-8-9 are revised. *The folders are not empty: See folder 21- SDG 7-8-9-13 are separately provided.* *The employment of women is not mandatory. The parameter indicates any "Long term employment "The SDG 8 mentions women but does not necessarily mean that the PO should employ women. These kinds of projects were already approved by GCC and this has never been an issue. Please re-evaluate the query. Specify the request. List the missing parameters*
Documentation provided by the Project Owner
GCC Emission Reduction Verifier's assessment **Date:** 31/01/2023
PO needs to justify the suitability of goal 9 as goal 9.4.1 corresponds to value added per unit of GDP. Hence CAR 13 is open.
Project Owner's response **Date:** 13/02/2023
SDG 9 is corrected. The corresponding value of SDG 9.4.1 is calculated dividing annual estimated CO2 reduction to Türkiye's SDG which is 819 billion US Dollar. The reference is also provided in the PSF.
GCC Emission Reduction Verifier's assessment **Date:** 24/02/2023
To claim SDG 9 the indicator 9.4.1 corresponds to value added per unit of GDP to be monitored. *In the PSF PO just divided the PSF with tCO2e/GDP. However, this is not the value added per unit of GDP. Further, the monitoring of Calculate avoided GHG emissions every year is not appropriate with respect to the required indicator to claim 9.4.1. Hence CAR 13 is open.*
Project Owner's response **Date:** 06/03/2023
SDG 9.4.1 indicator is defined as emission per unit value added. (https://unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.33/2019/mtg2/S2_2_Ind_9_4_1_CO2_EN.pdf) *As per the energy balance tables of Türkiye in 2021, Industry has consumed 113,344 GWh of electricity in 2019 (investment decision year) which corresponds to 37% of electricity consumption . Reference (https://enerji.gov.tr//Media/Dizin/EIGM/tr/Raporlar/Ulusal_Enerji_Denge_Tablolari/2019.xlsx) Cell AH30 divided by Cell AH80. Ithe same year, electricity related emissions of Türkiye has been calculated as 138,272.8 million ton as per the national GHG inventory of Türkiye (https://unfccc.int/documents/461898 , File name : TUR_2022_2019_14042022_045540.xlsx, Sheet Table1s1, Cell B10). Hence, electricity consumption by industry is responsible for 37% of 138,272 million which corresponds to around 51.571 million tons of CO2 emissions.* *In 2019, GDP of Türkiye has been 4,320 billion TL of which, 19% has been from industry as per Turkstat. (https://data.tuik.gov.tr/Bulten/Index?p=Yillik-Gayrisafi-Yurt-Ici-Hasila-2019-33671). Hence, GDP created by industry is 60.8 billion TL in 2019.* *CO2 emission for unit GDP created in Türkiye in 2019 is calculated as 32008 t CO2 /billion TL.* *Proposed project will generate* 154.13 GWh *electricity pe year corresponding to 0.16 % of electricity consumption by the industry and 0.06% of total electricity consumption by Türkiye. Considering that electricity feed to the grid will be consumed by all users, it can be assumed that project will reduce electricity related emissions by 0.08% for consumers, including the industry. In terms of GHG emissions /GDP, project will cause 26.07-ton CO2/billion TL in as per the 2019 figures which corresponds to almost 0.08%*

reduction in emission intensity of GDP. Details of the calculation are given in excel file submitted to VVB.
GCC Emission Reduction Verifier's assessment **Date:** 01/02/2023
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 13 is closed.

CAR	14	**Section no.**	D.6	**Date:** 30/06/2022
Description of CL				
The section G of the PSF is not in line with the requirements of the para 71, 72, 73, 74, 75, 76, 77 and 78 of the instruction to fill the PSF has been complied.				
Project Owner's response				**Date:** 07/11/2022
The section G is filled according to the requirements of the para 71, 72, 73, 74, 75, 76, 77 and 78 of the instruction.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 28/11/2022
PO is requested to demonstrate how the peoples are invited, Feedback from the meeting, Minutes of the meeting and attendance of the Participants. Hence, CAR 14 is open				
Project Owner's response				**Date:** 12/12/2022
Means of invitation are given in G.1. *Minutes of meeting summary and the feedback summary are given in G.2*				
GCC Emission Reduction Verifier's assessment				**Date:** 07/01/2023
The Project verification team could not find Minutes of the meeting summary and feedback summary in Section G.2 of the PSF and the PO is requested to add the same in mentioned section. Hence, Car 14 is open.				
Project Owner's response				**Date:** 14/01/2023
The summary in G.1. and G.2. is from THE EIA REPORT -THE STAKEHOLDER CONSULTATION MEETING PART REALISED ON 06/04/2017. There is no additional "mom" application (minutes of meeting) that is applied in the stakeholder consultation meetings regulated by the government. The Section G includes all the details stated in the EIA (APPROVED BY THE GOVERNMENT) report such as pictures, comments summary, the SDG targeted labels and all information provided. Please re-consider the content and please evaluate the content thoroughly before keep the CAR open.				
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				**Date:** 31/01/2023
The justification provided by the project owner found appropriate, therefore the project verification team have accepted the same. Hence, CAR 14 is closed.				

CAR ID	15	**Section no.**		**Date:** 01/08/2023
Description of CAR				
1. *All the pages of the LOA shall be prepared on the legal owner's letter head. LOA Form shall be printed on the official/business letter head paper that includes its name, address, contact details and registration number and dated, signed with seal (please see instruction no 6 for filling LOA form. The legal owner mentioned in para (c) of the LOA shall also sign in page 3 of LOA.The name of project owner who has explicit rights on the ownership of ACCs shall be included in para 8 of the LOA. The LOA is being attached along with the observations mentioned as comments.* *Further, GTE Carbon is shown as Project owner in para 3(b) of LOA, which is not reflecting in GCC portal. More over if GTE is identified as PO and focal point, GTE carbon cannot be shown as external reprepresentative. PO is requested to correct the same.*				

2. *In cover page and section A.2 of the PSF, the geo-coordinates of the exact location of the project activity shall be provided. PSF shall clearly state the implementation timeline of all the important activities under the project including but not limited to Board Resolution date, PPA signing date, EPC contract date, Commissioning date, etc. in order to verify the project implementation schedule and Investment decision date. Further, the energy meter serial number of main and check meter mentioned in Table 2 in section A.3 of PSF is inconsistent with the section B.7.1 of PSF. For the monitoring parameter "Cappj", kindly clarify how the energy meters could be appropriate to measure the capacity of the hydro power plant (refer "measurement/monitoring equipment" row in the monitoring parameter table.*
3. *Aspects including, but not limited to, 'solid waste pollution from hazardous waste', 'E-waste' and 'End of life products/equipment', which may have a negative impact on the environment and society, irrespective of whether they have been assessed to be "harmless" or "harmful", shall be included under section B.7.2 of the PSF. PO is requested to comply to the same.*
4. *The social aspect "Long term jobs" is assessed and scored as +1 in section E.2 but not monitored in section B.7.1 of the PSF. In section E.1 of PSF, the do-no-harm risk assessment for the environmental aspects "CO_2 emissions", "Solid waste pollution from hazardous waste" and "Solid waste pollution from E-waste". Further, PO is requested to address all the plausible risks of environmental impacts resulting from the Project Activity have been identified in the PSF (refer para 19 (a) of Environment and Social Safeguards Standard (version 02).*
5. *In section E.2 of PSF, the do-no-harm risk assessment shall be done for the social aspects "Long term jobs" and "Reducing/increasing incidents". Further, the "explanation of conclusion" shall be provided for the social aspect "Long term jobs". Further, For "Reducing/increasing accidents", training records alone are not sufficient to ensure health and safety of employees and society. Procedures for monitoring and reporting of accidents and their resolution shall be included in the PSF. PO is requested to comply to the same.*
6. *PO is requested to clarify why the social aspects "Child labour /forced labour", "Threatened livelihood", "Communal Harmony", "Sanitation/health issues" and "Women empowerment" that are relevant to hydro projects are not assessed and monitored for ex-post compliance.*
7. *The UN level indicator and project level indicator mentioned for SDG 8 in section F of PSF are not consistent. Please also confirm how the employment of 5 persons are additional as per the subgoal selected and over and above the necessity to run the plant operation. The UN SDG target 9.4 focus on "upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies" but the project activity is a greenfield project. Kindly clarify how SDG target 9.4 applies to the project.*

Project Owner's response	**Date:** 22/09/2023

1. LoA has been revised. GTE will be removed as an external representative from the portal. GTE will be added as a project owner on the portal. Necessary revisions will be made.
2. Exact location of the regulator has been provided and checked from the EIA report. Further, Milestones table has been included in Section A.1 of PSF. Accuracy class of the meters can be checked from the first index protocol as 0.2S/0.5S. Inconsistency between the sections has been fixed. Measurement/ Monitoring equipment of Cappj has been revised.
3. Parameters marked as "Harmless" have been included in Section B.7.2.
4. Long term jobs have been monitored in B.7.1. Do-no-harm risk assessment has been provided for mentioned parameters. PSF has revised and the risks of environmental impacts are identified.

5. Do-no-harm risk assessment has been done for “Long term jobs” and “Reducing/increasing incidents”. The “explanation of conclusion” has been provided for “Long term jobs. Procedures for monitoring and reporting of accidents have been provided in Section B.7.1 and E.2 of PSF for Reducing/increasing accidents. 6. These indicators are mandatory for Environment and Social Safeguards Standard v.3.0. Kovanlık Reg. ve HES was published for GSC on 10/03/2022. GCC Operations Team was consulted on the issue. It was decided that it is not required to revise the project documentation to apply version 3.0. Thus, standard parameters that are monitored for hydro projects have been included in the monitoring plan which complies with the minimum requirements of Environment and Social Safeguards Standard 2.0. 7. Inconsistency has been fixed. Baseline is absence of the project and supply of electricity with grid connect plants. Project is additional to the baseline scenario in terms of emission reductions and similarly for new job opportunities created. In the absence of project activity there will no need to employ those people, subcontract companies for construction, maintenance etc. SDG 9 is relevant to the project activity since this is a renewable hydro power plant, a clean and environmentally sound technology. PO have recently verified SDG 9 in "Alibey WPP" and "Ova Hydro" projects on GCC following the same approach. All our references are provided transparently with official documents/websites.
Documentation provided by the Project Owner
Revised PSF.
GCC Emission Reduction Verifier’s assessment **Date:** 20/10/2023
1. The same is found to be complied and accepted by the verification team. 2. The inconsistencies related to the location has been fixed. Measurement details are also revised, which is accepted by the Project verification team. 3. The Project verification tewam has reviewed the same and accepted. 4. PSF has been revised after the incorporation of mentioned changes. Hence, the same is justifiable. 5. The Do-no-harm risk assessment has been done properly and procedures for reporting of accidents has been provided in PSF. 6. The PO has used the Environment and Social Safeguards Standard 2.0., and in the document, the mentioned parameters are not mandatory, which is justifiable. Even though, in PSF, the PO has addressed some of the mentioned parameters and the same is accepted by the project verification team. 7. The project verification team has checked the mentioned projects which is already been registered in the GCC, which use SDG 9.4 and the justification provided by the PO is accepted.

CAR	16	**Section no.**	B.5	**Date:**
Description of CL				
1. The explanation for the compliance of the condition stated in para 20 of the CDM tool 27 shall be provided in section B.5 of PSF. *2. PO is requested to clarify how the appropriateness of the applied tariff for the first 10 years in the investment analysis is determined as no bonus tariff for local equipment is applied. As per the publicly available information, the project activity is already getting additional incentive for local equipment usage.* *3. PO is requested to confirm how the actual tariff calculation as provided in the IRR sheet is correct as the project is already getting the fixed tariff rate for first 10 years* *4. PO is requested to clarify, how the estimation of 4.58 $ Cents/kWh tariff after 10 years is*				

appropriate and correct based on real selling prices of electric energy for the period 2014 – 2016. The project activity has commissioned in 2020, so how it is suitable to estimate the tariff after 2030, based on the 2014-2016 data with consideration of global trend in escalation in fuel/energy prices and inflation in the host country.

5. *Sensitivity analysis shall be conducted separately on the tariff rate and electricity generation considered in the project. Further, the sensitivity analysis values are hardcoded and hence, the formulae behind the calculations could not be cross-checked, PO is requested to correct the same.*
6. *Only one IRR sheet in confidential mode is submitted during the RFR request. If the project owner wishes to keep certain data, the two versions of the IRR sheets should be submitted in public and confidential version.*

Project Owner's response	**Date:** 22/09/2023

1. There is no default value for Turkey. Therefore, as defined in the tool, CAPM method has been used. Values used in each step are provided in PSF with references. PO has used the same page (stern) as referred in the tool.
2. Domestic equipment incentive has been added for the first five years as 1.3 $ Cent/kWh for the project as indicated in the Final Renewable Energy Sources List of Türkiye, making the electricity tariff $8.6 Cent/kWh. This has been indicated in B.5 as well.
3. Actual tariff is calculated based on the official balance sheet and tax declaration of the company. Simply, total sales revenue in Turkish Lira (TL) is divided by electricity generation and converted to USD. Although the tariff is seen as fixed, in practice, calculation is more complex. Grid operator deducts grid losses, system imbalance costs etc. from payments to generation company. Also, settlement records are published by mid-next months and payments are made in TL in following month of settlement records. Hence, in practice the net tariff is lower than the guaranteed price.
4. Electricity selling price estimation has been done for the period of 2015-2018. Since the investment decision has been taken in 2018, it is assumed that the PO looked back to the prices of recent years. There were no distinct fluctuations in these years. Please check the "Electricity Price" sheet. Thus, our approach is conservative for a calculation based on estimations. Besides, sensitivity analysis is conducted to cover these variations.
5. Sensitivity analysis has been conducted separately on the tariff rate and electricity generation. Formulae behind the calculations can be checked by tracing dependents in the Excel. Values provided in the sensitivity analysis can be checked by entering the fluctuation in Cells B48-B51.
6. Both confidential and public IRR sheets have been submitted.

Documentation provided by the Project Owner

Revised PSF

GCC Emission Reduction Verifier's assessment	**Date:** 20/10/2023

1.PO has used the CAPM method used as per the requirements in the tool. Values are also crosschecked by the project verification team and accepted the same.
2. The project verification team has checked the same and is acceptable.
3. The project verification has crosschecked the Settlement records provided by the PO.
4. Th e approach used is conservative and hence accepted by the project verification team.
5. The PSF is revised by adding the mentioned changes in the sensitivity analysis.
6. Both the IRR has been crosschecked by the project verification team.

Table 3. FARs from this Project Verification

FAR ID	01	**Section no.**	D.13/D.14	**Date:** 24/10/2023
Description of FAR				
The GCC Verifier has raised FAR 1 which confirms that Project shall demonstrate the compliance to CORSIA requirements for the credits claimed beyond 31 December 2020 with respect to double counting and HCLOA requirements and also future CORSIA requirements applicable time to time for the project activity.				
Project Owner's response				**Date:**
Documentation provided by Project Owner				
GCC Project Verifier assessment				**Date:** DD/MM/YYYY

DOCUMENT HISTORY

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

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

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