

Driving Climate Actions

Project Verification Report

V3.1 - 2020

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Project Verification Report

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	COVER PAGE Project Verification Report Form (PVR)
	BASIC INFORMATION
Name of approved GCC Project Verifier / Reference No. (also provide weblink of approved GCC Certificate)	LGAI Technological Center, S.A. Certificate No: GCCV009/00 Date of Issue: 05/09/2023 GCC Verifier - LGAI Technological Center, S.A. (globalcarboncouncil.com)
Type of Accreditation	 Individual Track¹ CDM Accreditation ISO 14065 Accreditation (Active accreditation from United Nations Framework Convention on Climate Change valid till 27/11/2028 Ref no. CDM-E0032) https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0032
Approved GCC Scopes and GHG Sectoral scopes for Project Verification	GHG Sectoral Scope: Scope 1 - Energy (renewable/non-renewable sources) (CDM TA 1.1, 1.2) Scope 3 – Energy Demand (CDM TA 3.1) Scope 13 – Waste Handling and disposal (CDM TA 13.1, 13.2) GCC Scopes: Green House Gas (GHG# -ACC) Environmental No-harm (E+) Social No-harm (S+)
Validity of GCC approval of Verifier	Sustainable Development Goals (SDG+) Active accreditation from United Nations Framework Convention on Climate Change valid till 28/11/2028; Ref no. CDM-E0032 Re-approval on GCC pending from GCC. Extended based on the renewal of the CDM accreditation from 05/06/2023 to 04/01/2024 (provisional approval of the CDM Accreditation as per EB 119 th Meeting). Extended CDM Accreditation until 28/11/2028 communicated to GCC and awaiting responses about the re-approval.
Title, completion date, and Version number of the PSF to which this report applies	Bundled 7 Solar Power Project in India Version: 8.0 Dated: 20/02/2024
Title of the project activity	Bundled 7 Solar Power Project in India

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.

Project submission reference no. (as provided by GCC Program during GSC) Eligible GCC Project Type ² as per the Project Standard (Tick applicable project type)] Type A:	1 12 A3	ed CDM Projects:			
		☐ Type B1 ☐ Type ³ B2					
Date of completion of		Legal Owner	State	Site	LSC dates		
Local stakeholder consultation		MSW Processin g Plant Jaipur	Rajasth an	UltraTech Cement Limited, Unit: MSW Processing Plant, Khasra no 338, Village: Langriavas, Tehseel: Jamwa Ramgarh, Dist: Jaipur, Rajasthan - 302027	04/11/2022		
		Manikgarh Cement Works	Mahara shtra	UltraTech Cement Limited, Unit: Manikgarh Cement Works, Village: Gadchandur, Tal: Gadchandur, Dist: Chandrapur, Maharashtra - 442908.	16/06/2022		
		Ginigera Cement works	Karnata ka	UltraTech Cement Limited, Unit: Ginigera Cement Works, Village: Ginigera, Tahsil: Ginigera, District: Koppal, Karnataka - 583228	10/11/2022		
		Balaji Cement Works	Andhra Pradesh	UltraTech Cement Limited, Unit: Balaji Cement Works, Village: Budawada, Tahsil: Jaggayyapeta, District: Krishna, Andhra Pradesh -521175	18/01/2023		
Date of completion and period of Global							
stakeholder consultation. Have the GSC comments been verified. Provide web-link.	GSC Period: 23/02/2023 to 09/03/2023 https://www.globalcarboncouncil.com/global-stakeholders-consultation- 8/#:~:text=S00902,comments%20were%20received						
Name of Entity requesting verification service	Ulti	raTech Ceme	nt Limited				
(can be Project Owners themselves or							

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 B₂.

any Entity having authorization of Project Owners) Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)	Mr. Anand Prakash Bindal, Asst. General Manager (Operation & Mai UltraTech Cement Limited, 'A' Wing, Ahura Centre, 1 st Floor, Mahaka 400093 Telephone: +91-2266917400 Email: anand.bindal@adityabirla.com	
Country where project is located	India	
GPS coordinates of the Project site(s)	Latitude (N) 26°57'16.9"N (26.9546) 19°42'55.74"N (19.715484) 16°51'50.4"N (16.8640) 15°21'02.9"N (15.3508)	Longitude (E) 75°56'24.0"E (75.9400) 79°10'4.368"E (79.167880) 80°00'58.6"E (80.0162) 76°15'29.0"E (76.2580)
Applied methodologies (approved methodologies of GCC or CDM can be used) GHG Sectoral scopes	GCCM001 (Version 4.0) - Methodology fo Projects Supplying Electricity to Grid or C GHG-SS # 1 (Energy (renewable/non-rer	Captive Consumers
linked to the applied methodologies		
Project Verification Criteria: Mandatory requirements to be assessed	 ISO 14064-2, ISO 14064-3 GCC Rules and Requirements Applicable Approved Methodology Applicable Legal requirements /rule National Sustainable Development Eligibility of the Project Type Start date of the Project activity Meet applicability conditions in the activity Credible Baseline Additionality 	Criteria (if any)

	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
	Others (please mention below)
Project Verification Criteria:	Environmental Safeguards Standard and do-no-harm criteria
Optional requirements	Social Safeguards Standard do-no-harm criteria
to be assessed	United Nations Sustainable Development Goals (in additional to SDG 13)
	CORSIA requirements
Project Verifier's Confirmation:	The GCC Project Verifier [<i>LGAI Technological Center S.A.</i>], certifies the following with respect to the GCC Project Activity [Bundled 7 Solar Power Project in India].
The GCC Project Verifier has verified the GCC project activity and therefore confirms the following:	The Project Owner has correctly described the Project Activity in the Project Submission Form/10/ (version 8.0, dated 20/02/2024) including the applicability of the approved methodology [GCC approved consolidated Methodology - GCCM001 (Version 4.0) - Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers] 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 25,793 tCO₂e /year, as indicated in the PSF ^{/10/} , 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 [03] SDGs, with the following ⁴ SDG certification label (SDG ⁺): Bronze SDG Label
	Silver SDG Label
	Gold SDG Label
	Platinum SDG Label

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.

	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., v1.3 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 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	Version 02
Report, reference number and date of	Date: 21/02/2024
approval	Ref. No. A+SH_SYST_TQC_GCC_VAL_14123
Name of the	Agustín Calle de Miguel
authorised	Techniçal Manager
personnel of GCC Project Verifier and	
his/her signature	LGAUTechnological Center, S.A
with date	XX I -
	Date: 22/02/2024

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: <u>https://www.globalcarboncouncil.com/resource-centre.html</u>

1. PROJECT VERIFICATION REPORT

Section A. Executive summary

This combined project activity involves the installation of four separate solar power projects in the Indian states of Rajasthan, Maharashtra, Andhra Pradesh, and Karnataka. The project activity proposed includes a total installed capacity of 22.41 MW (DC) and 16.62 MW (AC). The project activity aims to generate clean power by using installed photovoltaic modules for captive usage to harness solar energy. This project activity consists poly crystalline cells type of panels and associated connection boxes, Inverters, transformers and other field equipment's. Thus, the project activity is estimated to generate an average of 27,704 MWh/year electricity and displacing 25,793 tCO₂e/year. In the baseline scenario the equivalent amount of electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources into the grid. The main emission source in the baseline scenario is the power plants connected to the grid and main greenhouse gas involved is CO₂. The details of project activity are provided below:

The generated green electricity will contribute to climate change mitigation efforts. This project activity is a large-scale solar power project. The Location details of each project locations with its commissioning dates are as below: --

Sr. No	Project Activity and Location	Capacity DC (MW)	Capacity AC (MW)	Date of Commissioning
01.	MSW Processing Plant Jaipur	0.25	0.22	22/02/2022
02.	Manikgarh Cement Works	15.00	10.40	11/04/2022
03.	Balaji Cement Works	4.58	4.20	28/03/2023
04.	Ginigera Cement works	2.586	1.80	08/08/2023

Sr. No	Project Activity and Location	Latitude	Longitude	Use of electricity
1.	UltraTech Cement Limited, Unit: MSW Processing Plant , Khasra no 338,Village: Langriavas, Tehseel: Jamwa Ramgarh, Dist: Jaipur, Rajasthan - 302027	26°57'16.9"N (26.9546)	75°56'24.0"E (75.9400)	Captive
2.	UltraTech Cement Limited, Unit: Manikgarh Cement Works , Village: Gadchandur, Tal: Gadchandur, Dist: Chandrapur, Maharashtra - 442908.	19°42'55.74"N (19.715484)	79°10'4.368"E (79.167880)	Captive
3.	UltraTech Cement Limited, Unit: Balaji Cement Works , Village: Budawada, Tahsil: Jaggayyapeta, District: Krishna, Andhra Pradesh - 521175	16°51'50.4"N (16.8640)	80°00'58.6"E (80.0162)	Captive

4.	UltraTech Cement Limited, Unit: Ginigera Cement Works , Village: Ginigera, Tahsil: Ginigera, District: Koppal, Karnataka - 583228	15°21'02.9"N (15.3508)	76°15'29.0"E (76.2580)	Captive
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Scope of Verification:

The verification scope is defined as an independent and objective review of the project PSF^{/10/}, the project's baseline study and monitoring plan and other relevant documents. The scope of verification is to assess the claims and assumptions made in the Project Submission Form (PSF) against the GCC criteria, including but not limited to, GCC PS, GCC VS, applied GCC methodology, Tools and other relevant rules and requirements established under Program process. The information in these documents is reviewed against all applicable GCC criteria including the approved baseline and monitoring methodology GCCM001 Version 4.0^{/12/}. The verification was based on the requirements in the Project Verification Standard, v.3.1^{/03/} for the project activity and GCC requirement. The verification is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the PSF^{/10/}.

The verification scope is given as a thorough independent and objective assessment of the project design including especially the correct application of the methodology^{/12/}, the project's baseline study, additionality justification, local stakeholder commenting process, environmental impacts and monitoring plan, which are included in the PSF^{/10/} and other relevant supporting documents, to ensure that the GCC project activity meets all relevant and applicable GCC criteria.

Verification Process:

The verification of the project consisted of the following steps:

- Desk review of the PSF^{/10/} and supporting documents submitted by the project owner
- Remote-audit, assessment, background investigation and follow-up interviews with personnel of the project owner and its representatives.
- Draft verification reporting based on the audit findings and desk review of the PSF^{/10/}.
- Resolution of corrective actions (if any).
- Final Verification report reporting based on the closure of corrective actions
- Technical review of the final verification opinion along with other documents by the independent competent technical review team,
- Final approval of the final verification opinion,

Appointment of the verification team:

According to the sectoral scope / technical area and experience in the sectoral or national business environment, LGAI Technological Center, S.A. (Applus+ Certification) has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center, S.A. (Applus+ Certification).

The composition of audit team shall be approved by the LGAI Technological Center, S.A. (Applus+ Certification) ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA)
- Auditor (A) / Auditor in Training (AiT)

- Technical Expert (TE)
- Financial Expert (FE)
- Technical Reviewer (TR)

The sectoral scope / technical area knowledge linked to the applied methodology/ies^{/12/} shall be covered by the assessment team.

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Dr. Atul Takarkhede	LA,TE & FE	Yes	Yes	Yes	Yes
Dr. N. Premjit Singh	TR (GCC Qualified)	Yes	Yes	Yes	Yes

The complete list of CVs is included as Appendix 2 of this report.

Conclusion:

The review of the PSF^{/10/}, supporting documentation and subsequent follow-up actions (remote audit and interviews) have provided LGAI Technological Center, S.A. (Applus+ Certification) with sufficient evidence to determine the fulfilment of stated criteria. LGAI Technological Center, S.A. (Applus+ Certification) is of the opinion that the project activity "Bundled 7 Solar Power Project in India" as described in the final PSF^{/10/} meets all relevant requirements of GCC and host country (legal requirements for producing power) criteria and has correctly applied the methodology GCCM001 Version 4.0.^{/12/.}

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 Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard and therefore requests GCC Steering Committee to append to this project Environmental No-net-harm Label (E+), Social No-net-harm Label (S+) to this project.

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

Additionally, the project activity has fulfilled all the requirements related to local stakeholder process, Environmental Safeguards (E+ label), CORSIA Plus⁶, Social Safeguards (S+ label) and has forecasted to contribute to 03 UN SDGs. Therefore, the project is being recommended to GCC Steering committee for request for registration.

Section B. Project Verification team, technical reviewer and approver

B.1. Project Verification team

	No.	Role	т У	Last name	First name	Affiliation	Involvement in
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⁶ Applicable only once PO submit host country approval for further verification of project activity. Also, FAR has been raised in appendix 04 of this report.

					(e.g., name of central or other office of GCC Project Verifier or outsourced entity)	Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader/ Technical Expert / Financial Expert	OR	Takarkhede	Atul	True Quality Certification Private Limited	Yes	No ⁷	Yes	Yes

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 (GCC Qualified)	IR	Singh	N. Premjit	Applus+ Certification
2.	Approver	IR	Calle de Miguel	Agustin	Applus+ Certification

Section C. Means of Project Verification

C.1. Desk/document review

The report is based on the assessment of the PSF^{/27/} undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., on site visit, and also the review of the applicable approved methodological and relevant tools, guidance and GCC decisions. 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

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

C.2. On-site inspection

	Duration of on-site	inspection: DD/M	M/YYYY to DD/M	Μ/ΥΥΥΥ
No.	Activity performed on-site	Site location	Date	Team member

In accordance with GCC Verification standard v.3.1– paragraph 29, a site visit is not mandatory for the verification, as the estimated annual average of ERs is below 100,000 tCO₂e and there is no pre-project information that is relevant to the requirements for registration of the project activity and may not be

⁷ Remote audit was conducted.

traceable after the registration since the project has been operational since 06/08/2021.

Nevertheless, the team leader adopted alternative means in order to assure that all features are in accordance with PSF and undertake independent checks. The verifier team has conducted remote audit by mean of interviewing of operators, project owners & local people on sites. The verification team also requested livestream of project sites to check their implementation as well as technical details. The technical expert received all necessary information as documentary evidence to show the facilities and equipment (e.g., Commissioning Certificate, Power Purchase Agreement, project technical specification, DPR, etc.) and team leader's notes necessary to have a clear and precise understanding of the project activity, which has been considered sufficient for the purpose of the present verification.

Therefore, for reasons provided above, and in line with verification standards v.3.1, the verification team conducted the verification for this project using alternative means as defined in the GCC Project verification standards.

The verification team applied standard auditing techniques while verifying the project details, as discussed below. Alternative means applied: Following alternative means have been used to verify the project details: 1. Interview with the Project Owner and Site in-charge confirming the implementation, project details such as installed capacity, location, monitoring, emission reduction calculation)

- 2. Legal requirements;
- 3. Employment records;
- 4. Training records and SDGs requirements;
- 5. Review of Other Documentary evidence (ER spreadsheet, IRR sheet, project documents, etc.)

	Interview					Team
No.	Last name	First name	Affiliation	Date	Subject	member
1.	Bindal	Mr. Anand	PP Representati ve (UTCL)		Project Implementation status, Project Boundary Methodology ^{/12/} , Eligibility criteria	
2.	Agrawal	Mr. Salabh	Site in charge MSW processing plant Jaipur		Host country Requirements, Monitoring Plan Project activity start date and Crediting period Roles and	Dr. Atul
3.	Choudhary	Mr. Piyush Kumar	Site In charge (Manikgarh Cement)		responsibilities of the project owner Baseline Assumptions Emission reduction calculations	Takarkhede (Team Leader/
4.	Srinivas	Mr. Diddi	Site-in charge Balaji Cement	28/02/2023 (Remote	Additionality Training to the Monitoring personnel Legal Ownership of the project	Technical Expert / Financial
5.	Shahpur	Mr. Vijay	Site Incharge Ginigera Cement	audit)	activity, Double counting/09/ of the carbon credits of the project activity E+, S+, SDG+ and	Expert)
6.	Ghosh	Mr. Abhishek	Consultant (Regent Climate)		CORSIA aspects as per the PSF ^{/10/} and GCC requirements geographical location and project boundaries, project capacities applicable legal compliances	
7.	Meena	Mr. Keval	Local Stakeholder Jaipur (Teacher)		Local Stakeholder Consultation, Local employment and benefits from the project activity, Grievances	

C.3. Interviews

	Patil	Mr. Naveen	Local stakeholder Maharashtra (Farmer)
9.	Khan	Mr. Abdul	Local stakeholder Karnataka (Driver)
10.	М.	Mr. Rajneesh	Local stakeholder Karnataka (Technician)

C.4. Sampling approach

The verification team did not apply any sampling approach for the project activity. The onsite audit was conducted for the 16.62 MW(AC) solar power project implemented in the locations/site as mentioned in the $PSF^{/10/}$.

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

Areas of Project Verification findings	Applicable to Project Types	No. of CL	No. of CAR	No. of FAR
Green House Ga	s (GHG)			
Identification and Eligibility of project type	A1, A2, B1, B2	-	-	-
General description of project activity	A1, A2, B1, B2	CL#01 CL#02	CAR#01	-
Application and selection of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂	CL#03	-	-
 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	A1, A2, B1, B2	CL#04	-	-
 Demonstration of additionality including the Legal Requirements test 	A ₁ , A ₂ , B ₁ , B ₂	CL#07	CAR#02	
- Estimation of emission reductions or net anthropogenic removals	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
- Monitoring plan	A ₁ , A ₂ , B ₁ , B ₂	CL#04	CAR#03 CAR#04	-
Start date, crediting period and duration	A ₁ , A ₂ , B ₁ , B ₂	-	CAR#05	-
Environmental impacts	A1, A2, B1, B2	-	-	-
Local stakeholder consultation	A1, A2, B1	-	CAR#06	-
Approval & Authorization- Host Country Clearance	A ₁ , A ₂ , B ₁ , B ₂	-	-	FAR#01
Project Owner- Identification and communication	A1, A2, B1, B2	-	-	-
Global stakeholder consultation	A1, A2, B1	-	-	-
Others (please specify)	A ₁ , A ₂ , B ₁ , B ₂	-	-	-
VOLUNTARY CERTIFIC		1	1	1
Environmental Safeguards (E+)	A1, A2, B1	CL#05	-	-
Social Safeguards (S+)	A1, A2, B1	CL#06	-	-
Sustainable development Goals (SDG+)	A1, A2, B1	-	-	-

Authorization on Double Counting from Host Country (only for CORSIA)	A ₁ , A ₂ , B ₁	-	CAR#07	FAR#01
CORSIA Eligibility (C+)		-	-	FAR#01
Total		07	07	01

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Proj Verification	The project is initially eligible under type A1 as the project was commissioned after 05/07/2020 as per 4(a)i, however in accordance with clarification 05, para 07 <i>"Projects which have made initial submission as A1 Type project, but could not submit request for registration before the operation start date of the project, are eligible to be submitted for the request for registration as A3 Type project."</i> Hence, Project activity now cover under type A3 project. The commissioning document of the project activity has been verified in this regard and found in order. Further following project meets the Type project category as:
	 It is not required by a legal mandate and it does not implement a legally enforced mandate as confirmed by the assessment team verification of the relevant policies pertaining to generation of energy in the host country i.e., Electricity Act 2003^{/36/}, National Electricity Policy 2005, Integrated Energy Policy 2006^{/47/}, National Action Plan on climate Change (NAPCC),2008^{/48/}, Renewable Energy Certificates (RECs), 2011^{/49/}.
	• It complies with all the applicable host country legal requirements and it ensures compliance with legal requirements. The project is a renewable energy project activity and meets the host country requirements of sustainable development criteria. Assessment team verified that, project owner has got the permission of for setting up the solar power plant for captive purpose under the rule "Regulation 32 of CEA (Measures relating of safety and electric supply) ^{/17/} . Regulation 2010 for energisation of installation, for all four locations from electricity authority of the concerned state for interconnection. Thus, accepted by assessment team. The project owner has demonstrated that required approvals and authorizations are available or being processed prior to the start of commercial operations of the project activity which is acceptable to the verification team.
	• The project also delivers real, measurable and additional emission reduction of 25,793 tCO ₂ e annually (average value over the crediting period) as compared to the baseline scenario.
	Project applies an approved CDM monitoring and baseline methodology GCCM001 - Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers, version 4.0 ^{/12/} .
Findings	No findings raised during Verification.
Conclusion	Assessment team verified that; this project activity falls under category of A3. The New A3 Type projects referred to above are sub-type of Type A project as defined in 11(a) of projects standards, which was verified from the documents ^{/13/} submitted by

the project owner. Further verification team cross checked the other GHG Programme like Clean Development Mechanism (CDM) Registry ^{/39/}, VERRA Registry ^{/40/}, Gold Standard (GS) Registry^{/41/} and voluntary non-GHG Programs like I-REC^{/43/}, Renewable Energy Certificate (REC) Mechanism ^{/42/} in India, for the information regarding the consistency of the title of the project activity , GPS coordinates, Legal Ownership of the Project activity and confirmed that the project was not submitted or registered under any other GHG programmes and voluntary non-GHG Programs. It is not required by a legal mandate and does not implement a legally enforced mandate as confirmed from the white category⁸ as per Ministry, Forest and Climate Change (MoEFCC), Government of India.

D.2. General description of project activity

Means The project activity is Bundle project activity installation of a 22.41 MW (DC) and 16.62 MW(AC). of Project This includes managing three solar projects with AC capacities of 0.22, 10.40, 4.20, and 1.80 in Verification the Indian states of Rajasthan, Maharashtra, Andhra Pradesh, and Karnataka. MSW and Manikgarh has used the Mono crystalline solar panel, and Balaji and Ginigera solar plant used Mono PERC (Mono crystalline Passivated Emitter & Rear Cell) type of solar panel. The assessment team verified that, MSW solar power plant has 558 nos. of solar module of Longi solar panel having capacity of 450 Wp, Manikgarh solar power plant has 13,720 nos. of solar module of 545 Wp and 13,944 nos. of 540 Wp capacity jinko solar module, In Balaji solar plant project activity has 4340 nos.. of 540 Wp & 4115 nos., of 545 Wp capacity jinko solar module, In Ginigera solar power plant there were 540 Wp of 4620 nos. of solar module used in the project activity. Mono crystalline cells type of panels used by the project owner in all project instances and further connected with connection boxes, Inverters. The technical details/15/ has been verified during document review and interview with site in-charges and found in order. The project is a greenfield project and in the absence of the same the electricity requirement would have been met from fossil fuel intensive national grid. Therefore, the grid connected power plants has been selected as the baseline appropriately. During assessment, the verification team observed that the project installation was complete, and the project installation was carried out in accordance with the detailed project report. The detailed information related to the project site's location is mentioned above in section A of this report. The location and GPS coordinated were checked during site visit with the help of GPS Software i.e., Google maps. The project activity consists of solar power plant located at different locations with different capacities. Details are as follows: -The project activity consists of Bundle solar power plant located at different state. Details are as follows: Capacity Commissioning SL Plant Name State No (MW)_{AC} Date (COD) MSW 22/02/2022 1. Processing 0.22 Rajasthan Plant Jaipur 10.40 11/04/2022 Manikgarh Cement 2. Maharashtra Works 4.20 28/03/2023 3. Balaji Cement Works Andhra Pradesh 1.80 08/08/2023 Cement Ginigera 4. Karnataka works The electricity produced by the solar power projects with AC capacities of 0.22,10.40,4.22, and 1.80 (in Rajasthan, Maharashtra, Andhra Pradesh, and Karnataka) is supplied to the UltraTech Cement Limited the plant. The operational lifetime of the solar module installed in the project

⁸ <u>https://pib.gov.in/newsite/printrelease.aspx?relid=137373</u>

activity is 25 years, Same has verified via technical specification document provided by the manufacturer^{/15/}. Technical specification of installed turbine in the project activity is provided in section A.3 of the final PSF^{/10/}. Same is verified and confirmed by verification team. The technical details of the project activity have been summarised below.

Technical specifications of each bundle solar power project are provided below;

Name of the Site	MSW	Manikgarh
Capacity	0.251 MWp (DC) / 0.22 MW (AC)	15 MWp (DC) / 10.4 MW (AC)
PV Module type (mono crystalline/ poly crystalline/ Thin File/ any other)	Mono crystalline	Mono crystalline
PV Module Make	Longi	Jinko
PV Module Rating (Wp)	450	545/540
Total Number of Module	558	13720 No's / 13944 No's
Inverter Type (Central/ String)	String	String
Inverter Make	Sungrow	Sungrow
Inverter Power (kW)	100	200
Number of Inverter	2	52
Transformer Make & Specification	Not Applicable	Transformer 1: Make Raychem (P) Ltd Spec: 9.0 MVA 11KV/0.8KV/0.8KV/0.8K V, ONAN, YNd11d11d11 OCTC with NIFPS Transformer 2: Make Raychem (P) Ltd Spec: 2.50 MVA 11KV/0.8KV, ONAN YNd11, OCTC with NIFPS
Total Number of Transformer	Not Applicable	2
DC Cable Specification	1.9kV 1C x 4 Sq.mm Flexible Copper Cable String to Inverter, XLPO	1C x 6Sq.mm Solar D0 Cable XLPO
HT/AC Cable Specification	For Inverter to LT Panel: 1R x 3.5C x120 Sq.mm Multi stranded XLPE Armd Al. Cable, FRLS. For Solar LT Panel to UTCL LT Panel: 2R x	Inverter to LT Panel: 1 F x 3C x 240 sq mm A armored, 1.9/3.3KV XLPE. LT panel 1,2 and 3 to transformer 1: 4R/PI

	3.5C x185 Sq.mm Multi stranded XLPE Armd Al. Cable, FRLS.	x1Cx630 Sq.mm Al. XLPE. Transformer 1 to RMU (HT cable): 2Rx3Cx400 Sq.mm 11kV (UE) Al Armored, XLPE, PVC Outersheathed.
		LT panel 2 to transformer 2: 4R/Ph x1Cx630 Sq.mm Al. XLPE. Transformer 2 to RMU (HT cable) :2Rx3Cx400 Sq.mm 11kV (E) Al Armored, XLPE, PVC Outersheathed. RMU to UTCL HT panel - 2Rx3Cx400 Sq.mm 11kV (UE) Al. Armored, XLPE, PVC Outersheathed.
Length of TL/ Cable from evacuation point to GSS/CSS	120 meter from Solar LT panel to UTCL LT panel	1500 meter from Solar ICOG(RMU) to UTCL HT panel
Evacuation Voltage Level	415V	11kV
Name of The Sub Station	UTCL PMCC Room	UTCL MRSS
Name of the Site	Balaji	Ginigera
Capacity	4.58 MWp (DC) / 4.2 MW (AC)	2.586 MWp (DC) / 1.8 MW (AC)
PV Module type (mono crystalline/ poly crystalline/ Thin File/ any other)	Mono PERC	Mono PERC
PV Module Make	Jinko Solar	JA Solar
PV Module Rating (Wp)	540/545	540
Total Number of Module	4340/4115	4620
Inverter Type (Central/ String)	String	String
Inverter Make	Sungrow	Sungrow
Inverter Power (kW)	200	200
Number of Inverter	21	9
Transformer Make & Specification	Make: Volt Amp, Spec: 6.6 KV/800V , 4.5MVA Dyn11 , OCTC	Make: Volt Amp Spec: 11 KV/800V, 2 MVA Dyn 11, OCTC

Total Number of Transformer	1	1
DC Cable Specification	1C x 04 Sq mm Cu XLPO	1C x 06 Sq mm Cu XLPO
HT/AC Cable Specification	AC CABLE: 1. INV To LT Panel 240sqmm X 3CX 1R FRLS/XLPE 1.9/3.3KV 2. LT Panel To IDT: 630Sqmmx 1C X 5R 1.9/3.3 KV XLPE/FRLS 3. IDT To MRSS: 400Sqmm x3C X 2R 11KV, XLPE/FRLS	AC CABLE 1. Inv to LTF 240sqmmX3CX1R FRLS/XLPE 1.9/3.3kV 2. LT to IDT 300SqmmX1Cx3R. 1.9/3. KV XLPE/FRLS 3.IDT to MRS :400sqmmX3CX2R 11kV XLPE/FRLS
Length of TL/ Cable from evacuation point to GSS/CSS	2.1 KMs From MCR To MRSS	1 KMs From MCR T MRSS
Evacuation Voltage Level	6.6 KV	11KV
Name of The Sub Station	UTCL MRSS	UTCL MRSS
erification team verified through greement ^{/16/} . Same we also cros und acceptable. ne Project Owners have fixed th	h each site's commissioning of s checked with GCC LOA ^{/40/} a he crediting period of 10 year	ttested by each legal owner.
erification team verified through greement ^{/16/} . Same we also cros und acceptable.	h each site's commissioning of s checked with GCC LOA ^{/40/} a he crediting period of 10 year	s which is in accordance wit
erification team verified through greement ^{/16/} . Same we also cros und acceptable. ne Project Owners have fixed th CC program manual ^{/01/} and w	n each site's commissioning of s checked with GCC LOA ^{/40/} a ne crediting period of 10 year rill generate an estimated 25 Type A3 and applied GCCM c methodology ^{/12/} . Ted, as it was not required by description in accordance with ies and programme of activ	the applied methodology ^{/12/} , and Fower Purch trested by each legal owner. The applied methodology ^{/12/} , the "Standard for sampling ities Version 09". In addition
erification team verified through greement ^{/16/} . Same we also cross and acceptable. The Project Owners have fixed the CC program manual ^{/01/} and we unually ^{/11/} . The project activity described as arge-scale category as per GCC to sampling approach was appli- gard to verification of project of rveys for CDM project activity enerating emission reductions the poels. Addition to generating emission ther voluntary certification labels	n each site's commissioning of as checked with GCC LOA ^{/40/} a the crediting period of 10 year rill generate an estimated 25 Type A3 and applied GCCM methodology ^{/12/} . Ted, as it was not required by description in accordance with ies and programme of activity the solar power plant also qualif in reductions the project activity	ertificate ^{/14/} and Power Purc ttested by each legal owner. s which is in accordance wit 5,793 tCO ₂ e emission reduc 4001 Version 4.0 ^{/12/} , falls inte the applied methodology ^{/12/} , a the "Standard for sampling ities Version 09". In addition ries for other voluntary certific
erification team verified through greement ^{/16/} . Same we also cross and acceptable. The Project Owners have fixed the CC program manual ^{/01/} and we unually ^{/11/} . The project activity described as arge-scale category as per GCC to sampling approach was appli- gard to verification of project of rveys for CDM project activite enerating emission reductions the bels. addition to generating emission ther voluntary certification labels /oluntary Labels	a each site's commissioning of as checked with GCC LOA ^{/40/} and the crediting period of 10 year will generate an estimated 25 a Type A3 and applied GCCM c methodology ^{/12/} . Ted, as it was not required by description in accordance with ies and programme of activity as solar power plant also qualif the reductions the project activity c - Applied by the project	ertificate ^{/14/} and Power Purc ttested by each legal owner. T s which is in accordance wit 5,793 tCO ₂ e emission reduc 4001 Version 4.0 ^{/12/} , falls inte the applied methodology ^{/12/} , a the "Standard for sampling ities Version 09". In addition ties for other voluntary certific v also qualifies for Score/label
erification team verified through greement ^{/16/} . Same we also cross and acceptable. The Project Owners have fixed the CC program manual ^{/01/} and we unually ^{/11/} . The project activity described as arge-scale category as per GCC to sampling approach was appli- gard to verification of project of rveys for CDM project activite enerating emission reductions the bels. addition to generating emission ther voluntary certification labels /oluntary Labels	a each site's commissioning of as checked with GCC LOA ^{/40/} a the crediting period of 10 year rill generate an estimated 25 a Type A3 and applied GCCM c methodology ^{/12/} . Ted, as it was not required by description in accordance with ies and programme of activity ie solar power plant also qualif a reductions the project activity c - Applied by the project ions Yes	ertificate ^{/14/} and Power Purc ttested by each legal owner. s which is in accordance wit 5,793 tCO ₂ e emission reduc 4001 Version 4.0 ^{/12/} , falls inte the applied methodology ^{/12/} , a the "Standard for sampling ities Version 09". In addition ries for other voluntary certific
erification team verified through greement ^{/16/} . Same we also cross and acceptable. The Project Owners have fixed the CC program manual ^{/01/} and we mually ^{/11/} . The project activity described as arge-scale category as per GCC to sampling approach was appli- gard to verification of project of rveys for CDM project activite enerating emission reductions the bels. The voluntary certification labels /oluntary Labels Achieving the United Nate Sustainable Developmental G SDG+) Environmental No-net harm (E+	a each site's commissioning of as checked with GCC LOA ⁽⁴⁰⁾ a the crediting period of 10 year will generate an estimated 25 a Type A3 and applied GCCM c methodology ⁽¹²⁾ . Ted, as it was not required by description in accordance with ies and programme of activity the solar power plant also qualif a reductions the project activity c:-	ertificate ^{/14/} and Power Purce ttested by each legal owner. s which is in accordance wit 5,793 tCO ₂ e emission reduce 1001 Version 4.0 ^{/12/} , falls inte the applied methodology ^{/12/} , a the "Standard for sampling ities Version 09". In addition ities for other voluntary certific v also qualifies for Score/label 03 SDGs
erification team verified through greement ^{/16/} . Same we also cross and acceptable. The Project Owners have fixed the CC program manual ^{/01/} and we inually ^{/11/} . The project activity described as arge-scale category as per GCC to sampling approach was appli- gard to verification of project of rveys for CDM project activities addition to generating emission the voluntary certification labels /oluntary Labels Achieving the United Nate Sustainable Developmental G SDG+) Environmental No-net harm (E+ Social No-Net harms (S+)	a each site's commissioning of as checked with GCC LOA ^{/40/} a the crediting period of 10 year will generate an estimated 25 a Type A3 and applied GCCM c methodology ^{/12/} . Tied, as it was not required by description in accordance with ies and programme of activity are solar power plant also qualif a reductions the project activity c - Applied by the project ions Yes oals) Yes	ertificate ^{/14/} and Power Purce ttested by each legal owner. The s which is in accordance wit 5,793 tCO ₂ e emission reduce 4001 Version 4.0 ^{/12/} , falls inter the applied methodology ^{/12/} , in the "Standard for sampling ities Version 09". In addition ities for other voluntary certific v also qualifies for Score/label 03 SDGs (Silver) +06 +04
erification team verified through greement ^{/16/} . Same we also cross and acceptable. The Project Owners have fixed the CC program manual ^{/01/} and we mually ^{/11/} . The project activity described as arge-scale category as per GCC to sampling approach was appli- gard to verification of project of rveys for CDM project activite enerating emission reductions the bels. The voluntary certification labels /oluntary Labels Achieving the United Nate Sustainable Developmental G SDG+) Environmental No-net harm (E+	a each site's commissioning of as checked with GCC LOA ^{/40/} a the crediting period of 10 year rill generate an estimated 25 Type A3 and applied GCCM methodology ^{/12/} . Ted, as it was not required by description in accordance with ies and programme of activity the solar power plant also qualif the reductions the project activity s: - Applied by the project ions Yes oals Yes	ertificate ^{/14/} and Power Purce ttested by each legal owner. The s which is in accordance wit 5,793 tCO ₂ e emission reduce 4001 Version 4.0 ^{/12/} , falls inter the applied methodology ^{/12/} , in the "Standard for sampling ities Version 09". In addition ties for other voluntary certific v also qualifies for Score/label 03 SDGs (Silver) +06

the crediting periods.

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	In the baseline scenario the main source of emission was found to be CO ₂ as electricity was generated mainly through fossil-fuel based power plants whereas in project scenario the electricity is generated by the Solar Power plant thereby reducing the CO ₂ emissions ^{/11/} . Thus, non-application of GWP in this project activity was found to be acceptable as the project boundary does not include any of the GHG emissions in the project scenario as per the applied methodology ^{/12/} .
	The Description in the PSF ^{/10/} includes sufficient details and provides clarity on the project activity Further verification team cross checked the other GHG programmes like Clean Development Mechanism (CDM) Registry ^{/23/} , VERRA Registry ^{/24/} , Gold Standard (GS) Registry ^{/25/} , and voluntary non-GHG Programs like I-REC Renewable Energy Certificate (REC) ^{/26/} Mechanism in India for the information regarding the consistency of the title of the project activity , GPS coordinates, Legal Ownership of the Project activity to determine if the project was part of any other GHG Program prior to commencement of this verification. It was confirmed that the involved project owners have not submitted the project under any other GHG program apart from GCC.
Findings	CL 01, CL 02 & CAR 01 were raised and closed successfully. Please refer to the appendix 4 for further details.
Conclusion	The project description was verified based on the review of documents. Based on the review of documents and by means of onsite verification the details provided in the PSF ^{/10/} is found acceptable and complete.

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

D.3.1 Application of methodology and standardized baselines

Means of	Project owner has applied GCC methodol	agy = GCCM001 Varian 4 $0/12/$ and no			
		by a geomotive sin 4.0 $^{12/}$ and no selow;			
Project	standardized baseline is used. Applicabilit	y of the methodology ^{ner} is verned as below,			
verification	/erification				
	Applicability criterion as per	Verifier Assessment.			
	GCCM001 Version 4.0.				
		The project involves installation of Bundle solar			
		power plant of 22.41 MW(DC) and 16.62 MW(AC)			
		by UltraTech Cement Limited ^{/13/} , The project			
		activity is a greenfield Solar PV plant is supplying			
		electricity to specific identified user with			
	system that is or would have been	contractual agreement.			
	supplied by from a national or a regional	The project activity will displace electricity from an			
	grid (grid hereafter); the following	electricity distribution system that is or would have			
	renewable energy generation	been supplied by from a national grid which his			
	technologies qualify under this	dominated by fossil fuel fired plant, by using the			
	methodology:	Solar Photovoltaic renewable energy generation			
	Solar Photovoltaic;	technology. (Thus, the project activity is projected			
	On-shore or Off-shore Wind;	on an average to generate 27,704 MWh/year/8/			
	• Tidal	electricity and is estimated to displace 25,793			
	Wave	tCO ₂ e annually over the crediting period. This was			
		verified through the documents ^{/14/16/} submitted by			
		the Project owner and confirmed the requirement.			
	The project activities can also involve	This is applicable as the project activity is the			
	setting up and implementation of a	installation of greenfield solar power plant to generate			
	BESS along with the renewable energy	electricity ^{/14/16/17/} . Thus, this criterion is not applicable,			
	generation plant.	same has been verified through the commissioning			
		certificate, issued by regional electricity board.			
		עבונוויטמנפ, וששעבע שי ובעוטוומו פופטנווטוני שטמוע.			

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The project activity wherein a BESS has been deployed, can either be a greenfield installation wherein the BESS had been conceptualized along with the renewable energy generation unit or may be retrofitted into an existing setup of renewable energy project, whether or not registered with GCC.	This is not applicable as the project activity is the installation of greenfield solar power plant to generate electricity/ ^{13/16/} .
In case the Project Owners want to claim carbon credits due to retrofit of BESS into existing renewable energy generation unit, they would need to demonstrate that historically the renewable energy unit was subject to curtailed output due to low grid stability or capacity limitation3 in the grid infrastructure for handling the increased generation. This must be through evidence of existence of technical and regulatory/commercial constraints	This is not applicable as the project activity is the installation of greenfield solar power plant to generate electricity ^{/13/16/} .
The project activities shall not involve combined heat and power (co-generation) systems.	The project activity is the installation of solar power plant to generate electricity and it does not involve switching from fossil fuels to renewable energy sources at the site of the project activity and installation of biomass fired power plant. Hence this applicability criterion is applicable or relevant for the project activity
The project activities shall not involve co-firing of fossil fuel of any kind.	This is the new installation of Solar Power Plant and not a retrofit, rehabilitations replacement or capacity additions which was verified and confirmed through onsite verification and interviewed with project owner and their representatives. Hence it is not applicable to the project activity.
The project activities may have consumption of electricity (grid on on- site generation) for site offices.	The project activity is a greenfield Solar PV plant is supplying electricity to specific identified user with contractual agreement. The project activity involves consumption of electricity (grid on on-site generation) for site offices. Hence this criterion is applicable
DPPs that supply electricity also for domestic, commercial or industrial captive purposes either wholly or in addition to supply to grid, shall demonstrate that grid connection was available on the site before the implementation of project activity.	The project activity is a greenfield Solar PV plant is supplying electricity to specific identified user with contractual agreement. The project activity is DPP supplying electricity for industrial captive purpose where grid connection was available on the site before implementation of project activity.
Under no condition would the battery storage system (BESS) be charged from the grid except in case of emergency situations like deep discharge or exceptional operational situations due to requirements from regulatory authorities in order to safeguard the safety and operational	The project activity is a greenfield Solar PV plant is supplying electricity to specific identified user with contractual agreement. The project activity involves consumption of electricity (grid on on-site generation) for site offices. Hence this criterion is applicable.

integrity of the connected grid system. BESS which consumes grid power or fossil fuel-based captive power for auxiliary load associated with BESS setup and employ cooling and/or fire suppression systems based on refrigerants or clean agents with the global warming potential (e.g. Hydrofluorocarbon (HFC) or Chlorofluorocarbon (CFC)) are not included under this methodology.	
Tool 07: Tool to calculate the emission facto Applicability criterion	or for an electricity system Assessment
 Para 3 of the applied Tool: This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g., demand-side energy efficiency projects). 	This project involves electricity generation from the solar PV modules that generate electricity and subsequently export to grid. In the absence of the project activity, the equivalent amount of power would have been drawn from the Indian grid which is dominated by fossil fuel power plants. The baseline emissions are calculated from electricity supplied to the grid by the project activity multiplied with emission factor of the National grid. The emission factor calculated using OM, BM and CM using this tool and same was explained in section D.3.4 of this report. Thus, the applicability criterion is met.
Para 4 of the applied Tool Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, the conditions specified in "Appendix 1: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity	The project activity has chosen the emission factor based on calculation performed by CEA. The same has been confirmed from CEA CO ₂ database User Guide Version 18.0 ^{/34/} further confirms that the only grid connected power plant has been considered for OM, BM and CM calculations The point has been assessed in detail under section D.3.4 of the report. The criteria were found to be met.
 3. Para 5 of the applied tool: In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country. 4. Para 6 of the applied Tool: Under this tool, the value applied to the CO₂ emission factor of biofuels is zero. 	The project is located on the host country India, which is not Annex I country, hence the criterion is not applicable. This is not applicable as the project activity is the installation of greenfield solar power plant to generate electricity/ ^{13/16/} .

Applicability criterion The use of the "Tool for the demonstration	Assessment
and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool. Once the additionally tool is included in an	The methodology is approved in CDM and tool is included by the same appro- methodology viz., GCCM001 Version 4 Thus, the application of this tool was foun be acceptable, and the applicability criterio met. The project owner does not propose new methodologies to demonst additionality.
pproved methodology, its application by roject participants using this methodology is nandatory	tool is included by the same appro- methodology viz., GCCM001 Version 4 Thus, the application of this tool was four be acceptable, and the applicability criterio met.
Tool 24: Common Practice Version 03.1	
Applicability criterion	Assessment
project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.	demonstration and assessment additionality". Hence this tool is applicable
Tool 27: Investment analysis version 13.0	
Applicability criterion	Assessment
Depending on their specific scope, methodologies which refer to this tool should:	This tool is referred by the applied methodology i.e., GCCM001 Version 4.0 The Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr) i.e. EG _{facility, y} to determine the baseline emission of the project activity has been monitored as per procedures defined in this tool. Hence this tool is applicable.

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Paragraph 5:	The emissions from the electricity
If emissions are calculated for electricity	consumption of the project activity is not
consumption, the tool is only applicable if	calculated separately. Hence this criterion
one out of the following three scenarios	is not applicable.
applies to the sources of electricity	
consumption:	
Scenario A: Electricity consumption	
from the grid. The electricity is	
purchased from the grid only, and	
either no captive power plant(s) is/are installed at the site of	
electricity consumption or, if any	
captive power plant exists on site, it	
is either not operating or it is not	
physically able to provide electricity	
to the electricity consumer;	
Scenario B: Electricity consumption	
from (an) off-grid fossil fuel fired	
captive power plant(s). One or	
more fossil fuel fired captive power	
plants are installed at the site of the	
electricity consumer and supply the	
consumer with electricity. The	
captive power plant(s) is/are not	
connected to the electricity grid; or	
Scenario C: Electricity consumption from	
the grid and (a) fossil fuel fired captive	
power plant(s). One or more fossil fuel fired	
captive power plants operate at the site of the electricity consumer. The captive power	
plant(s) can provide electricity to the	
electricity consumer. The captive power	
plant(s) is/are also connected to the	
electricity grid. Hence, the electricity	
consumer can be provided with electricity	
from the captive power plant(s) and the	
grid.	
Paragraph 6:	This tool is referred by the applied
This tool can be referred to in methodologies	methodology i.e., ACM0002 Version 20 .0.
to provide procedures to monitor amount of	The electricity generated from the project
electricity generated in the project scenario,	activity is supplied to the grid and same has
only if one out of the following three project	been monitored as per procedures defined
scenarios applies to the recipient of the	in this tool. Hence this tool is applicable.
electricity generated:	
Scenario I: Electricity is supplied to the grid;	
Scenario II: Electricity is supplied to	
consumers/electricity consuming facilities; or Scenario III: Electricity is supplied to the	
grid and consumers/electricity consuming	
facilities	
Paragraph 7:	The project activity is the installation of solar
This tool is not applicable in cases where	power plant to generate electricity and
captive renewable power generation	supplied to the grid and there is no captive
technologies are installed to provide	renewable power technologies are installed
electricity in the project activity, in the	to provide electricity to the project activity.

	baseline scenario or to sources of leakage. Hence this criterion is not applicable for the project activity. The tool only accounts for CO2 emissions. project activity.	
Findings	No findings were raised	
Conclusion	The verification team confirms that; It has critically assessed each applicability condition listed in the selected methodology ^{/12/} and the relevant information contained in the PSF ^{/10/} against these criteria. The selected GCC methodology ^{/12/} (and tools) for the project activity is applicable	

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

Means of Project Verification	Since the applicability of methodology ^{/12/} was found to be fulfilled, further clarification to the methodology ^{/12/} were not required.
Findings	No finding was raised.
Conclusion	The verification team confirms that; It has critically assessed each applicability condition listed in the selected methodology/tool ^{/12/} and the relevant information contained in the PSF ^{/10/} against these criteria.

D.3.3 Project boundary, sources and GHGs

Means of Project Verification	As per the applied methodology GCCM001 Version 4.0 ^{/12/} , the project boundary is the spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the project power plant is connected to. The components of the project boundary mentioned in the PSF ^{/10/} were found to be in compliance with para 12 of the applied methodology ^{/12/} The verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified. The verification team conducted by the methodology ^{/12/} have been included within the project boundary. It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology ^{/12/} or accuracy of the emission reductions.
Findings	No findings were raised
Conclusion	The verification team was able to assess that complete information regarding the project boundary has been provided in PSF ^{/10/} and could be assured from the line diagram. The verification team confirms that the identified boundary, selected emissions sources are justified for the project activity.

D.3.4 Baseline scenario

Means	of	Project	As per applied methodology paragraph 13 if the project activity is the installation of a
			greenfield renewable power plant/unit, the baseline scenario is that the electricity

Verification	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
	in "TOOL07: Tool to calculate the emission factor for an electricity system". The project activity involved setting up of Solar plant to harness the power of sunlight to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the national grid, which is fed mainly by fossil fuel fired plants and by the addition of new generation sources. Hence, the baseline for the project activity is the equivalent amount of power from the Indian grid.
	The baseline scenario selected is in compliance with all applicable legal and regulatory requirements as the implementation of project activity is a voluntary initiative and is not mandatory or a legal requirement. The regulations and policies/ referred in section B.5 of the PSF does not restrict or empower any authority to restrict the fuel choice for power generation and the applicable environmental regulations do not restrict the use of solar energy and there is no legal requirement on the choice of a particular technology. All the policies and regulations which gives comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies. Hence as per CDM VVS paragraph 81(b) it can be concluded that the provincial and sectoral policies are E- policies that decrease GHG emissions. Also, these policies have been implemented since the adoption by the COP of the CDM M & P (decision 17/CP.7, 11 November 2001). Hence the project activity. Instead, the baseline scenario is based on hypothetical situation without the provincial and sectoral polices being in place. Based on the sectoral expertise of the verification team, the selection of baseline scenario by the project owner is more appropriate and acceptable.
	As per paragraph 24 of the applied methodology, baseline emissions include only CO_2 emissions from electricity generation in power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are the product of electrical energy produced by the renewable generating unit expressed in MWh multiplied by the grid emission factor in tCO_2/MWh .
	The relevant National and/or sectoral policies, regulations and circumstances such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector have been taken into account in the identification of the baseline scenario such as:
	• Electricity Act 2003 ^{/30/}
	National Electricity policy 2005/31/
	• The Electricity (Supply) Act, 1948 ^{/45/}
	• The Electricity Regulation Commission Act, 1998/46/
	Schedule 1 of Ministry of Environmental and Forest notification/28/
	• Tariff Policy 2006 ^{/22/}
	Determination of Grid Emission Factor (EF _{grid,CM,y})

	The project owner used the "Tool to calculate ^{/13/} the emission factor for an electricity
	system" to determine the emission coefficient as per 23 (a) of the indicatives simplified baseline and monitoring methodologies for selected Large scale GCC project activity GCCM001 Version 4.0 ^{/12/} methodology and "Tool to calculate the emission factor for an electricity system" ^{1/13/} states that electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations. In this case the Combined Margin (weighted average of Simple Operating Margin and Build Margin) is estimated based on three years average (2019-20, 2020-21, 2021-22) of Simple Operating Margin and Build Margin of current year (2020-21) is in line with steps of "Tool to calculate ^{/13/} the emission factor for an electricity system". Both the value of Simple Operating Margin and Build Margin are selected under ex-ante approach. The grid boundary w.r.t the connected grid is INDIAN grid.
	In accordance with "Tool to calculate the emission factor for an electricity system" ^{/13/} Dispatch Data Analysis" is the first methodological choice out of four options of calculating OM emission factor. Nevertheless the "Dispatch data analysis operating margin" is ruled out in India due to lack of necessary dispatch data of the grids. The same fact is also considered by the Central Electricity Authority ^{/28/} (Ref the user guide for CO ₂ Baseline Database for the Indian Power Sector version 18.0 ^{/34/} , December 2022)
	Out of other 3 options of calculating OM Project Owner have rightly selected simple
	OM emission factor calculation as the share of low cost / must run resources of the
	selected grid over the three most recent years (19-20, 20-21, 21-22) which is less than 50% of the gross grid generation. For wind and solar projects, "Tool to calculate the emission factor for an electricity system" ^{/13/} allows the usage of the default weights for solar project are as follows: $W_{OM} = 0.75$ and $W_{BM} = 0.25$. Using the above values, the combined margin emission factor is valued at 0.9310 tCO ₂ /MWh.
	The calculation of $EF_{grid,CM, y}$ is current and publicly available and published by the Central Electricity Authority on its web-site. The verification team is convinced of the result of the emission coefficient calculation. It is deemed to be adequate and transparent.
	The baseline scenario in the PSF ^{/10/} is reported as the supply of electricity to grid and thereby displacement of electricity from the electricity distribution system connected to the Indian Grid. The baseline scenario applied in the PSF ^{/10/} was compared with the requirements of the baseline described in the applied methodology ^{/12/} and found consistent.
Findings	No findings raised in this context
Conclusion	 The verification team confirms the following; All assumptions and data used by the project participants are listed in the PSF^{/10/}, including their references and sources; All documentation used by project participants as the basis for assumptions and source of data for establishing the baseline scenario is correctly quoted and interpreted in the PSF^{/10/}.
	 and interpreted in the PSF^{/10/}; The verification team also concluded that the identified baseline scenario reasonably represents what would occur in the absence of the project activity

D.3.5 Demonstration of additionality

Means of Projec Verification	t Project Owner has described the Demonstration of additionality according to the GCC Project Standard Version 03.1 ^{/02/} and the applied methodology GCCM001 Version 4.0 ^{/12/} and relevant methodological tools.
	In section B.5 of the PSF ^{/10/} , two components are applied for the demonstration of additionality:
	A Legal Requirement Test
	Additionality Test
	1. Legal Requirement test: The relevant national acts and regulations pertaining to generation of energy in the host country i.e., India are Electricity Act 2003 ^{/32/} , National Electricity Policy 2005 ^{/45/} , National Solar Mission ^{/50/} Integrated Energy Policy 2006, National Action Plan on climate Change (NAPCC),2008 ^{/51/} , Renewable Energy Certificates (RECs), 2011 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 verification team the project is not implemented to meet any legal requirement.
	2. An Additionality Test either based on a Positive List test or a projects-specific additionality test.
	As per the applied methodology GCCM001 (Version 4.0) ^{/12/} additionality of the project activity demonstrated and assessed by the latest version of "Tool for the demonstration and assessment of additionality", Version $7.0.0^{/13/}$.
	The Project owner has adopted the stepwise approach for demonstrating and assessing the additionality of the project activity as follows
	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. Hence not applicable.
	Step 1: Identification of alternatives to the project activity consistent with current laws and regulations.
	As per the applied methodology paragraph 9 (C) the project activity is the installation of a Greenfield power plant, and the baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid." Thus, the baseline scenario is applied as per the methodology and no alternative selection is required as per paragraph 55 of the Project standard version $3.1^{/2/}$.
	Step 2: Investment analysis.
	Under step 2, it is demonstrated that project activity is not economically or financially feasible, without the revenue from the sale of approved carbon credits. Further to conduct the investment analysis, Methodological tool: Investment analysis, version

5.0, EB 62 Report Annex $5^{9/11/}$ has been referred which is appropriate and acceptable to verification team also in line with the paragraph 97 of VVS Version $3.0^{/49/}$.

Project was envisaged for capacity of 16.62 MW_{AC} in Various states of India. Currently, Whole project activity is fully commissioned and continuously contributing towards emission reduction. Start date of the Project is 22-Feburary-2022 which is the earliest commissioning date of first solar plant. The demonstration of additionality for the proposed Project activity is being carried out in accordance with the additionality tool provided by the UNFCCC i.e., Tool 27, "Investment analysis" Version 13.0, the project proponent shall provide. PO has considered the investment decision date as 24/01/2020 which is the Board Resolution date considered as approval of PO board member for the implementation of the all the bundle project. The input parameters for the calculation of financial indicator have been taken from the Detailed project report/^{52/} available prior to investment decision date. Project owner has considered the input values from the detailed project report/^{52.}

Following are the chronological events of the project activity:

UTCL Bundle-7 Chronology							
SI	Document	MSW	Manikga	Balaji	Ginigera		
No		Processi	rh	Cement	Cement		
		ng Plant	Cement	Works	works		
		Jaipur	Works				
1	Detailed Project Report	17-12-	19-12-	20-12-	20-12-		
	(DPR)	2019	2019	2019	2019		
2	Business Resolution	24-01-	24-01-	24-01-	24-01-		
	(BR)	2020	2020	2020	2020		
3	First Purchase Order	31-12-	30-07-	30-07-	25-11-		
		2020	2021	2021	2021		
4	Power Purchase	28-01-	23-10-	23-10-	25-01-		
	Agreement (PPA)	2022	2021	2021	2022		
5	Commissioning/Chargi	22-02-	11-04-	28-03-	08-08-		
	ng Date	2022	2022	2023	2023		
6	EPC Contract for	04-06-	04-06-	04-06-	04-06-		
	Awarpur and Katni	2020	2020	2020	2020		
7	EPC Contract for the	18-05-	18-05-	30-06-	30-06-		
	Mentioned Site	2022	2022	2022	2022		
	(Ammended/ Final)						
8	O&M Contract for	04-06-	04-06-	04-06-	04-06-		
	Awarpur and Katni	2020	2020	2020	2020		

⁹ <u>https://cdm.unfccc.int/UserManagement/FileStorage/OHNFC4T6RUZEQXDL20JVG7MWK35YI1</u>

	9	O&M Contract for the	18-05-	18-05-	28-08-	28-08-				
	5	Mentioned Site	2022	2022	2023	2023				
			2022	2022	2023	2023				
		(Ammended/ Final)								
5	Sub-step 2a: Determine appropriate analysis method.									
	The project gets revenue from the sale of electricity from the project activity, hence cannot apply simple cost analysis as per Option I. Furthermore, Option II 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. Hence the project owner has applied the Option III benchmark analysis method to demonstrate the additionality of the project activity in terms of decision-making context which is acceptable to the project verification team. The project cost involves both equity and debt, Project owner has selected Post tax equity IRR as a financial indicator to demonstrate the financial unattractiveness of the project. Furthermore, the financial indicator selected by the project owner is appropriate because the tool does not limit the project owner to use either the project IRR or the equity IRR. The project owner has the discretion to choose the best indicator based on their preference to know									
a	accept	R based on their equity able to the verification tea	m.							
5	Sub-st	ep 2b (Option III): Apply	benchmarl	k analysis.						
E	Benchi	mark selection and its app	propriateness	6:						
	As per Paragraph 15 of the investment analysis version 13.0 "The applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or WACC are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied by relevant national authorities are also appropriate. The DOE shall validate that the benchmarks used are applicable to the project activity and the type of IRR calculation presented".									
c	The Project owner has chosen Post tax equity IRR as the financial indicator, base on the above the appropriate benchmark is required/expected returns on equit which is correctly chosen by the project owner and it is acceptable.									
	<i>benchi</i> <i>equity</i> <i>or by (</i> default Appen was th global	r paragraph 19 of the I mark is based on parame should be determined eith b) calculating the cost of value for expected retu dix of Tool 27- Investmen e latest version applicab stakeholder consultation considered by the project	eters that an er by: (a) sel equity using rn on equity nt Analysis (e at the tim (GSC) for a	e standard ecting the va g CAPM. Pro of 9.13 % EB 120 Anr e of submis idditionality	in the mark alues provide oject owner o as given i nex 3) Versi ision of proj demonstratio	et, the cost of ed in Appendix; has taken the n the table of on 13.0 which ect activity for on. Hence the				
		nchmark return on equity IRR calculated is in nomi								

¹⁰The verification team used the valid version of Tool 27 (Investment Analysis) version 12.0 to assess the appropriateness and correctness of the investment analysis conducted by the project owner for the project activity, and the same was referred to in the project verification report, which is in accordance with paragraph 97 of VVS Version 3.0.

Accordingly, Project owner converted the default benchmark which is in real terms into nominal terms by using the following equation:
Nominal Benchmark = {(1+Real Benchmark) *(1+Inflation rate)}-1. Verification team referenced the book 'Corporate Finance" 2nd edition, by Aswath Damodaran. In page 320 of the book, the same equation is mentioned for converting real into nominal values. Hence the assessment team considers the above equation as appropriate for converting real benchmark into nominal benchmark.
 As per paragraph 16 of the tool state that the inflation rate shall be obtained from the inflation forecast of the central bank of the host country for the duration of the crediting period, accordingly project owner has chosen the Reserve Bank of India (RBI) is Central Bank of host country (India) and it is India's monetary authority which is acceptable to the verification team. As per the latest available version of the CDM tool at the time of investment decision representing investment barrier scenario for the implementation of the project activity: Default value as per Tool 27 version 5.0, available at the time of investment decision = 10.24%¹¹
Nominal Benchmark = {(1+10.24%) *(1+4.90%)}-1
Nominal Benchmark = 15.62%
In line with the GCC specific requirements: Default value as per Tool 27 version 13.0, which is the latest available version of the tool = $9.13\%^{12}$
Nominal Benchmark = {(1+9.13%) *(1+4.90%)}-1
Nominal Benchmark = 14.48%
For conservative approach, the minimum of the two benchmarks is considered as nominal benchmark for the project activity. However, the project remains additional in both cases.
The CPI inflation forecasted by RBI for next 10 years is expected to be 4.90% as per Results of Monetary policy of April 2017-18 of Forecasters on Macroeconomic Indicators on 05-April-2018. Hence the nominal Benchmark estimated as = $(1+10.24 \%)$ * $(1 + 4.90\%)$ -1 = 15.62%. The verification team has verified the sources ¹³ and confirmed that the benchmark identified to compare the financial attractiveness of the project activity is appropriate.
Appropriateness of the input parameters:
The input parameters in the financial analysis have been taken as per the values and assumptions applicable and available at the time of decision to invest in the project activity in line with Paragraph 10, investment analysis tool version $13.0^{/11/}$. All the input values are based on the detailed project (DPR) ^{/52/} prepared by the thirdparty company Amiable Consultant Private Limited, for each solar power plant. As per Paragraph 101 a) of VVS Version $3.0^{/49/}$, where the detailed project report has been the basis of the decision to proceed with the investment in the project, i.e., that the period of time between the finalization of the detailed project report and the investment decision should be sufficiently short to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially

¹¹<u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v10.0.pdf</u> ¹²<u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v13.pdf</u> ¹³<u>https://rbi.org.in/Scripts/PublicationsView.aspx?id=18110#l1</u>

Investment dec that the input applicable at the input values of Tax/Companies according to the checking the da loan document arithmetical acc were set right. considered ap computation, the table along with to guidance giv	cision ma paramet e time o with put s Act for e require ata input s ^{/55/} , Inc curacy. With th pear to be basis, n verifica en vide IRR for	aking date (ers used in f investment blicly availal its appropri- ement agains taken from ome Tax Ac CARs and C e correction be in orc correctness tion team co paragraphs the project a	24/01/2 the d decisi- ble so iateness st VVS Detaile t, adop CLs we as havi ler. Al and ap mment baragra ctivity	een the report preparation date and the /2020), the verification team is convinced detailed project report ^{/52/} were valid and sion. The verification team cross check the ources like CERC tariff order, Income ass at the time of the investment decision S Paragraph 99. The assessment involved field Project Report ^{/52/} , purchase orders ^{/54/} , option of correct accounting principle and vere raised on non-conformities and they ving been incorporated, the input values all the input parameters considered in appropriateness thereof are given in below nts. Verification Team, therefore, conforms raph 99 and 101 of VVS version 3.0 ^{/4} . The values of investment decision comes as follows:-		
		Break-Up c	ost det	tails		
Details		MSW Solar		Manikgarh Solar		
Equity & Rese	erve (0.32 (Cr)		19.04		
Loan		0.74 (Cr)		44.42		
		Break-Up	cost d			
Details		Balaji Solar		Ginegera Solar		
Equity Infusion by Captive Consumer	n 1.51	.51		0.85		
Equity Investment by developer	, 4.31	.31		2.31		
Loan	13.5	13.58		7.39		
Verification team done detailed assessment of all the input parameters is as follows:						
Particulars	Name			Assessment		
Capacity of the project	MSW Processi ng Plant Jaipur		MW _{AC}	available at the time of investment decision and cross verified against Commissioning certificate ^{/17/} issued by State Electricity Board		
	Manikga h Cemer Works	nt MVV		and Power Purchase Agreement (PPA) ^{/16/} signed between respective offtakers and Project owner and commissioning certificate ^{/13/} of the project. Further, the same		
	Balaji Cement Works	4.20 MW		has been confirmed during interview with site in charge and document review by the verification team and found to be correct.		
Project Life	Ginigera Cement works MSW	1.80 MW	Years	s The operational life time of the project activity		
Time	Processi ng Plant Jaipur	-	rears	is sourced from DPR ^{/52/} which was available at the time of investment decision and it is crosschecked with the technical data sheet ^{/15/}		

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	Manikgar h Cement Works Balaji Cement Works Ginigera Cement works			provided by the project owner and found in line with DPR value. Incidentally, this is also cross checked with the operating life given by Central Electricity Regulatory Commission Tariff order number: 1/21/2017-Reg.Aff. /(RE- Tariff-2017-20)/CERC (Suo-Motu) dated 17.04.2017 ^{/48/} . Hence, the value considered by project owner is correct and appropriate for the project. The assessment team confirmed that the most recent guideline available for confirming the reliability of solar power plants is the 2017 CERC guideline.
Plant Load Factor	MSW Processi ng Plant Jaipur	23.65 %	%	The PLF is considered as provided here which is sourced from all four Detailed Project Report (DPR) ^{/52/} which was available at the time of investment decision. "The assessment team verified that it has checked the generation details of the solar power plant and verified that, the achieved PLF is given in table below average of the PLF, which is
	Manikgar h Cement Works	26.20 %		given in table, is compatible with the findings of the third party DPR.". The calculation is based on the average of the PLF of all four plants. Hence the value considered by the project owner for demonstrating additionality of the project is deemed acceptable to the verification team and also in line with paragraph 3 (b) of "Guidelines for the
	Balaji Cement Works	20.22 %		reporting and Validation of Plant Load Factors" (Annex 11 of EB 48) ^{/55/} . Further it is noted that Central Electricity Regulatory Commission Tariff order number: 1/21/2017- Reg.Aff. / (RE-Tariff - 2017-20)/CERC (Suo- Motu) dated 17.04.2017 ^{/48/} which is crosschecked 19.00% for the tariff determination for the solar PV projects.
	Ginigera Cement works	27.10 %		Actual PLF is given below: -Project LocationPLF LocationMSW Processin g Plant JaipurManik Ceme nt WorksBalaji Ceme ra Ceme nt WorksGinige ra Ceme nt Works20.32% %22.95 %19.35 %19.70 %Hence the value considered by the project owner in the investment analysis is
				conservative and acceptable to the verification team. Also, verification team crosschecked the actual electricity generation achieved by the solar plant for the operational year March-2022 to March-2023 and found that the average PLF achieved is only approximately 19.00%, which is less than the figure achieved in sensitivity analysis with a +10% variation. Verification team carried out its own an independent assessment, which reveals that the project would become non additional if PLF goes up higher than the value given in sensitivity analysis which translates the PLF value of which is unlikely scenario.
Annual Degradation		2.5% in 2 nd year & 0.6	%	This value is sourced from Detailed Project Report which was available at the time of investment decision. Further, verification team has cross verified with the NERL report

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		year from 3 rd year		on Photovoltaic Degradation Rates - An Analytical Review ¹⁴ . The report covers nearly 2000 degradation rates all across the globe and degradation rates has a mean of 0.7% per year. Also, normally most of the PV panels manufacture ¹⁵ guaranteed 2-3% degradation in first year and 0.6% on each year up to 10 years, assessment team verified that, degradation factor is found consistent with, PV module are different make it contains Jinko solar, JA Solar, Longi solar. So, the value considered in the investment analysis is conservative compared to the above referred values and acceptable to the verification team, even total removal of the value does not render the project non-additional. VVB team verify that, PO has taken the annual degradation of the solar module as per the technical specification of the solar panel, Moreover VVB team compare it with NEPL guideline and CERC guideline and found it consistent and accepted.
Project cost	MSW Processi ng Plant Jaipur	10.60	INR Million	The assessment team verified that the total capacity of the Bundle solar plants is 16.62 MW_{ac} . Identical has been verified with the DPR. The project cost taken to demonstrate the additionality is based on the Detailed Project Report (DPR) ^{52/} which is the available data at the time of investment decision to the project owner. However, as an additional
	Manikgar h Cement Works	634.70		check, the verification team cross checked actual cost incurred by the project owner for the project activity through purchase orders ^{/44/} placed to the major equipment suppliers, balance sheets ^{/20/} of the company and chartered accountant certificate ^{/20/} evidence for the investment as per the requirements set forth by VVS paragraph 99. Consequently, it was found that that the actual
	Balaji Cement Works	194.02		project cost incurred by the project owner is same in the DPR. Project capacity & location Actual cost (As per EPC Contract) in INR Million MSW Processing Plant Jaipur (0.22 MW) 10.6
	Ginigera Cement works	109.41		ManikgarhCement634.9Works (10.40 MW)Balaji194.05(4.20 MW)194.05(4.20 MW)Ginigera Cement works105.52(1.80)105.52
				Hence the consideration of project cost from the actual cost as against the DPR project cost still results in the post-tax equity IRR remaining below the benchmark. Also, verification team has crosschecked the Central Electricity Regulatory Commission (CERC) Tariff order number: $1/21/2017$ - Reg.Aff. /(RE-Tariff - 2017-20)/CERC (Suo- Motu) dated 17.04.2017 ^{/42/} recommended the project cost 69.10 million/ MW _{AC} for the tariff determination for the solar PV projects which is higher than the cost considered by the project owner. A threshold analysis

https://www.nrel.gov/docs/fy12osti/51664.pdf
 https://www.solarquotes.com.au/blog/solar-panel-degradation/

			was carried out and found that the project would become non-additional only if project cost goes down by following value:- MSW Processing Plant Jaipur (0.22
			MW) Manikgarh Cement -203.00% Works (10.40 MW)
			Balaji Cement -37.31% Works (4.20 MW)
			Ginigera Cement -37.52% works (1.80)
			However, reduction in project cost is not a likely scenario in the verification team's opinion, as the project has been already commissioned and also actual cost incurred by the project owner which is supported by the purchase orders ^{/44/} placed to the major equipment suppliers balance sheets ^{/51/} of the company which was issued based on the verification of books and records maintained by the project owner. Taking into consideration all these factors and based on the local and sectoral expertise, the verification team concludes that the project cost is reliable and appropriate for the project activity.
Debt	70.0%	%	The debt equity ratio is based on the DPR ^{/52} which was available at the time of investment
Equity	30.0%	%	decision. The actual financing pattern/ ⁵³ yields a gearing of 70:30 same for all the project, which is based on actual loan sanctioned to the project activity by the bank. This applied value is in line with the Central Electricity Regulatory Commission (CERC) Tariff order number: 1/21/2017-Reg.Aff. /(RE- Tariff - 2017-20)/CERC (Suo-Motu) dated 17.04.2017 ^{/42/} which is prevailing at the time of decision-making. Therefore, the debt equity ratio of the project is considered to be in order. Hence the debt equity ratio considered is acceptable
Interest rate	11.75%	%	The interest rate is based DPR ^{/52/} which was available at the time of investment decision. But as per the loan sanction letter ^{/55/} the actual cost of debt for the project activity loan is 7.34%. The interest rate determined in Central Electricity Regulatory Commission Tariff order number: 1/21/2017-Reg.Aff. /(RE-Tariff - 2017-20)/CERC (Suo-Motu) dated 17.04.2017 ^{/42/} , is 12.76% which is higher than the interest rate considered in the IRR sheet. However, even with the actual interest rate of 7.34% is lower thus, there is no major impact on IRR and it is well below the benchmark. VVB team verified that, the PO has taken the insurance cost. The fixed insurance cost taken from CERC data base, VVB team further verified that, it is more conservative than actual.
Debt Repayment tenure	20	Years	Loan Tenure is based on the Detailed Project Report ^{/52/} which was available at the time of investment decision. The loan tenure
Moratorium	1	Years	suggested in the Central Electricity Regulatory Commission Tariff order number SM/004/2015 (Suo-Motu) dated 31.03.2015 ^{/42/} is 7 years with 0-year moratorium and 7 years repayment. Hence the project considers conservative value in

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	n			
Operation and Maintenance	MSW Processi ng Plant Jaipur Manikgar h Cement Works Balaji Cement Works	1.22 1.18 1.18	INR Million	both moratorium period (1 years) and repayment period (15 years). Verification team also verified the loan sanction letter ^{/55/} and found that the actual repayment period is same as per the values considered in the DPR. Thus, the repayment period considered is on par with the actual period. Hence, the repayment period & moratorium period considered for IRR calculation is found to be appropriate. The assessment team concluded that the project activity's overall O&M cost is 86.80 INR Mill. It is stated in the summary IRR sheet which reflects the entire cost of the operation and maintenance of all four solar plants. The O&M cost and its escalation is based on the Detailed Project Report ^{/52/} which was available at the time of investment decision. The O&M cost suggested in the Central Electricity Regulatory Commission Tariff
	Ginigera Cement works	1.18		order number: 1/21/2017-Reg.Aff. /(RE-Tariff - 2017-20)/CERC (Suo-Motu) dated 17.04.2017 ⁽⁴²⁾ is also in line with the values
Escalation in O & M		5.72%	%	considered in the DPR.The actual operation and maintenance cost: -Project capacity & locationActual O&M cost (As per O&M contract) in INR MillionMSW Processing Plant Jaipur0.080Manikgarh Balaji26.00Cement WorksBalaji Cement 10.50BalajiCement WorksGinigera Cement works0.45VVB team verified that, the operation and maintenance cost of the project activity is inclusive of the service tax. Moreover, VVB team provided the comparison with the actual cost and CERC guideline as well.It is observed that O&M cost is not a critical factor at all in as much as more than 100% reduction in O&M cost (which in effect means free O&M service) would render the project non-additional. FurtherProject Name Manikgarh Cement Balaji Ginigera Cement ent-367.00% WorksGinigera Cement orks-452.80% WorksGinigera Cement Ginigera Cement ent-452.80% ent entWorksGinigera Cement entGinigera Cement Works-452.80% ent entManikgarh Cement works-367.00% ent entWorksGinigera Cement ent entGinigera Cement works-452.80% ent entWorksGinigera Cement ent entManikgarh Cement works-452.80% ent ent entManikgarh Cement works-452.80% ent e
Debt	MSW Processi	7.42	INR Mill.	The source of proportion of debt and equity is considered from detailed project report.

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	ng Plant Jaipur Manikgar	444.29		However, the actual loan agreement. Same is found consistent with the actual debt to equity ratio as per the loan agreement letter. The			
	h Cement Works	105.01	-	value considered is appropriate and found satisfactory.			
	Balaji Cement Works	135.81		VVB team has provided the debt-to-equity ratio, interest rate and repayment period, compare it with the actual interest rate also			
	Ginigera Cement works	76.59		compare with CERC guideline, assessment team found it consistent.			
Equity	MSW Processi ng Plant Jaipur	3.18	INR Mill.				
	Manikgar h Cement Works	190.41					
	Balaji Cement Works	58.21					
	Ginigera Cement works	32.82					
Period of assessment of financial analysis		25	Year	The period of assessment of financial year has been considered as 25 years and sourced from the DPR. The period of assessment of the financial analysis is also same as the entire period of PPA and project life. Hence, it is found appropriate and acceptable			
Tariff	MSW Processi ng Plant Jaipur	3.65	Rs/kWh	The tariff base rate is based on the power purchase agreement (PPA) signed between PO and power utilizer which was available at the time of decision making and is fixed			
	Manikgar h Cement Works	2.86		without any escalation for 25 years. Hence, the tariff considered in the investment analysis is acceptable and found to be appropriate. Further increase in tariff is the			
	Balaji Cement Works	3.01		unlikely scenario as the tariff is fixed without any escalation for 25 years from the commercial operation date of the unless extended by the parties as per the Power Purchase Agreement. Verification team also			
	Ginigera Cement works	3.30		verified the actual invoices ^{/28/} raised by the project owner to VSV onsite private limited and found the actual tariff is as follows:- MSW Processing 3.95 Plant Jaipur 3.95			
				Manikgarh Cement 4.30 Works			
				Balaji Cement 4.45 Works			
				Ginigera Cement 3.30 works			
				as per PPA. Hence tariff rate considered in the investment analysis is deemed appropriate and acceptable to the verification team.			
Interest on Working Capital	MSW Processi ng Plant Jaipur	10.75	%	The working capital requirements is based on the Detailed Project Report (DPR) ^{/52/} which was available at the time of investment decision. The working capital requirement for			
	Manikgar h Cement Works	10.75		solar PV projects suggested in the Central Electricity Regulatory Commission Tariff order number: 1/21/2017-Reg.Aff. /(RE-Tariff			

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	Balaji Cement Works	10.75		- 2017-20)/CERC (Suo-Motu) dated 17.04.2017 ^{/42/} is Interest on working Capital is 13.20%, No of Days receivable is one month.
	Ginigera Cement works	11.75		Even with the interest rate of 10.75% & 11.75%, there is no major impact on IRR and it is well below the benchmark. Also, the
No of Days Receivables		60	Days	working capital has been added back to the cash inflow in calculation of the post-tax equity IRR of the project activity which is in line with paragraph 14 of the applied Tool 27 ^{/13/} . Hence values considered in the investment analysis is conservative and acceptable to the verification team.
Residual Value	MSW Processi ng Plant Jaipur	1.59	INR Million	The Residual Value is based DPR ^{/52/} which was available at the time of investment decision. The residual value is taken as 10% of the Depreciable cost in the project cost +
	Manikgar h Cement Works	95.21		Cost of land, which is in conformity with the best international practices and local accounting principles Also the same is in line
	Balaji Cement Works	29.10		with Salvage value provided in the Central Electricity Regulatory Commission Tariff order number: 1/21/2017-Reg.Aff. /(RE-Tariff - 2017-20)/CERC (Suo-Motu) dated
	Ginigera Cement works	16.41	-	17.04.2017 ^{/42/} which was available at the time of investment decision. Further verification team cross checked from Section 205 (2b and c) of Companies Act 1956, which allows a depreciable cost of ninety five percent which implies a consideration of 5% of salvage value as a standard accounting practice. This can be verified from the below link https://taxguru.in/company-law/rates-
				depreciation-companies-act-2013.html As required by Tool 27 ^{/13/} the expected realisation on the sale of assets at the end of the operating life has been taken as residual value in the terminal year in the cash inflow in calculation of the post-tax equity IRR. The principle adopted conforms to the accepted accounting and taxation principles. Hence the salvage value considered in the project owner is appropriate and conservative.
IT Depreciation Rate	MSW Processi ng Plant Jaipur	7.69	%	The IT depreciation is based on the DPR ^{/52/} available at the time of investment decision. The project owner considered the IT depreciation rate 80.00% for power
	Manikgar h Cement Works	7.69 7.69		generating units. This is as per Income Tax Act 1961 stipulated for income tax calculation which is as per accounting practices followed in the host country.
	Balaji Cement Works Ginigera	7.69	-	VVB team conform that, depreciation for each year complies with standard accounting procedures. Same is found consistent with
	Cement works			profit and lost statement The following web link has been verified and found correct. <u>https://incometaxindia.gov.in/charts%20%20t</u> <u>ables/depreciation%20rates.htm</u>
Effective Income tax rate		30%	%	The corporate tax payable is calculation based on the base corporate tax, Surcharge & educational cess given in the Union budget analysis for the year 2016-17 which was available at the time of investment decision. The calculation based on the following values Base corporate tax- 30% Surcharge – 10% of corporate tax Educational Cess- 3% of corporate tax. The corporate tax value considered is correct and applicable to the project activity. The

			same has been verified in the following weblink and found to be correct. <u>https://taxguru.in/income-tax/income-tax-</u> <u>rate-chart-assessment-year-201516-</u>
Effective MAT rate	18.50%	%	financial-year-201415.html The MAT payable based on the value given in the Union budget analysis for the year 2016- 17 which was available at the time of investment decision. The calculation based on the following values Minimum Alternate- Tax – 18.50% Surcharge – 12% of corporate tax Educational Cess- 4% of corporate tax Hence the MAT value considered is correct and applicable to the project activity. https://www.taxmanagementindia.com/web/V iew_discussions_detail.asp?ID=112402
Service Tax Rate	12	%	The rate is based on the Service Tax rate applicable to the financial year 2016-17, i.e., the year in which investment decision was taken. The same has been cross checked with the following web link https://incometaxmanagement.com/Pages/T ax-Tutorial/25-AMT-Alternative-Minimum- Tax-Tax-Rates.html Hence the Service tax rate is correct and appropriate.
Tax holiday	10	Years	As per Sec. 80IA of the Income Tax Act, infrastructure companies (under which the project activity falls) are entitled to claim tax holiday for any 10 consecutive years in the first 15 years of operation. Hence, the assumption and computation of tax liability are correct and appropriate.

Financial calculation and conclusion

The Post tax equity IRR calculations were provided in a spreadsheet. The calculation was verified and found to be correct by project verification team; as well as the assumptions used in the calculation were deemed to be correct. The Post tax equity IRR without carbon credit revenues is 7.99% which confirms that the proposed project activity in absence of the carbon credit benefits and compared to the benchmark return on equity 15.59% is not financially attractive.

Sub Step 2d: Sensitivity Analysis:

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

Variation %	-10%	Normal	10%
Tariff (INR/KWh)	5.12%	7.99%	10.82%
PLF (%)	8.60%	7.99%	7.37%

Project Cost (Mn INR)	10.50%	7.99%	5.98%				
O&M Cost (Mn INR)	5.12%	7.99%	10.82%	-			
The results of sensitivity a PLF, project cost, and O&I benchmark. And it is evid additional even under th variations for these parame to reach the benchmark an	M cost, Post Tax ed dent from the resu ne most favourab eters were checked	quity IRR is signi lts given above le conditions. <i>A</i> l by calculating th	ficantly lower than ; the project rema Also, the reasona ne variation necess	the ains ible			
The project becomes non-additional only if cost of project is reduced by -25.32% which is an unlikely scenario since the project is commissioned and actual cost (Rs 3,509.99 million) incurred by the project owner 2% higher than the project cost (Rs 3,455.00 million) considered in the investment analysis. The actual cost incurred by the project participant is supported by purchase orders ^{/44/} placed to the major equipment suppliers & balance sheets of the plants.							
Also, tariff increases 27.2 as considered from letter o purchase agreement has was determined for the life	f Intent issued befo been executed for	re investment de the project activ	ecision and also pov	wer			
The O & M costs coming project activity where inflat			likely scenario for	the			
The IRR reaches the bench PLF value of 23.89% which actual electricity generation 2016-17 to 2021-22 and for 17.31%. Hence further inc	h is unlikely scenar on achieved by the ound that the averag	io. Verification te solar plant for ge PLF achieved	eam crosschecked the operational ye is only approximat	the ear			
All the four scenarios highly hypothetical and impossible. Verification Team has arrived at the conclusion that the project scenario is not economically feasible without benefits from carbon benefits.							
Step 3: Barrier Analysis							
The additionality of the pro analysis, thus no barrier a			plying the investm	ent			
Step 4: Common Practic	e Analysis						
The section below provided demonstration and asses "Common Practice" Tool v	sment of additiona	ality", version 7.					
Step 1: Calculate applicab capacity or output of the p			0% of the total des	<u>ign</u>			
The project installed capa plants which will be include							
<u>Step 2: Identify similar pr</u> <u>following conditions:</u> a) The projects are lo b) The projects apply	ocated in the applic	able geographic	al area;	<u>the</u>			

	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 project activity;
	d)	The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g.,
	e)	clinker) as the proposed project plant; The capacity or output of the projects is within the applicable capacity range for the chosen projects.
	f)	The projects started commercial operation before the PSF is published for global stakeholder consultation or before the start date of project activity, whichever is earlier for the project activity.
	g)	Identification of the similar projects (CDM and non-CDM) is carried out as
	h)	per sub-steps of Step as follows: The applicable geographical area is the states Maharashtra in India because each state has different tariff structures for renewable energy
		projects, thus each state has a different investment climate for renewable energy projects. Therefore, projects located in Andhra Pradesh have been chosen for analysis.
	i)	The project activity is a greenfield solar power project and uses measure (b) "Switch of technology with or without change of energy source including energy efficiency improvement as well as use of renewable energies". Therefore, projects applying the same measure (b) are candidates for similar projects.
	j)	The energy source used by the project activity is solar so only solar
	k)	energy projects have been considered for analysis. The project activity produces electricity, therefore, all power plants that
	I)	produce electricity are candidates for similar projects. The project activity is a captive solar power plant, therefore, all captive solar power plants that produce electricity are candidates for similar projects.
	m)	The capacity range of the similar projects shall fall within the applicable capacity range from 8.31 MW to 24.93 MW.
	n)	We have considered the project above from 4.5 MW for common practice.
	projects conside geogra connec 20/03/2 by And evident is befor as sim verifica	art date of the concerned project activity is expected on 22/02/2022. Therefore s, which have started commercial operation before 22/02/2022, have been ered for analysis. There is one projects identified in the applicable phical area. The same has been verified through the list of statewise grid ted solar power projects commissioned published by CEA ¹⁶ as on 2020 and list of projects commissioned in the Andhra Pradesh state published hra Pradesh Generation and Distribution Corporation. From the list it was that start date of commercial operation date of all identified seven projects are the start date of the project activity. Hence these projects are considered ilar projects by the project owner is appropriate and acceptable to the tion team.
		ment team has reviewed the CEA database a third party resource guideline and that there were no similar projects of capacity found in the respective
	register registra Verifica	: within the projects identified in Step 2, identify those that are neither red CDM/VCS/GS4GG project activities, project activities submitted for ation, nor project activities undergoing CDM/VCS/GS4GG /GCC Project ation. Note their number, Nall.
	N _{solar} = 0	

¹⁶ <u>https://cea.nic.in/wp-content/uploads/2020/04/Plant-wise-details-of-RE-Installed-Capacity-merged.pdf</u>

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	As per the tool on Common Practice, the project activities have been separated from the different technologies on the basis of point (d) Investment climate on the date of the investment decision, (iv) Legal regulations. The project activity is established on group captive model and selling their electricity to off-takers (power purchaser) according the signed PPA with respective off-takers. The tariff is regulated/governed by the respective PP investment analysis. As per the tool on Common Practice, the project activities have been separated from the different technologies on the basis two criteria:
	 Size of Installation – Since project activity is large scale project, small and micro scale projects are considered as different technology project. Based on these criteria, there are no any different technology project out of similar identified projects. Investment climate on the date of the investment decision – The solar projects developed under different phases and different batches of National Solar Mission (NSM) can considered as different technology projects. For project activity, there are no any different technology project considered out of similar identified projects.
	Hence, projects where either of the conditions is satisfied those projects are counted for calculating N_{diff} projects.
	N _{diff} = 0
	Step (5): calculate factor F=1-Ndiff/Nall 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 project activity.
	Calculate $F = 1 - N_{diff}/N_{all}$ F = 1 - (0/1) = 1
	N_{all} - $N_{diff} = 0 - 0 = 0$
	Since the proposed project activity would be common practice only both of the following conditions apply. F = 0.2 and Nall - N _{diff} = 0 For the concerned project, F = 0.2 and N _{all} - N _{diff} = 0, therefore, the proposed project is not a common practice within the applicable geographical area. Hence, the proposed project is additional.
Findings	CL 07 & CAR 02 were raised and successfully closed. Please refer to the appendix 4 for further details.
Conclusion	The information mentioned in the PSF ^{/10/} is duly supported by evidence quoted herein. The verification team has described all steps taken, and sources of information used to cross-check the information contained in the PSF ^{/10/} . The verification team determined that the evidence assessed is credible, where appropriate.

D.3.6 Estimation of emission reductions or net anthropogenic removal

Means	of	Project	The verification team checked whether the equations and parameters used to
Verificat	tion		calculate GHG emission reductions or net anthropogenic GHG removals for PSF is
			in accordance with applied methodology. Verification team checked section B.6 of

	nulae to calculate baseline emissions, project plied in line with the underlying methodology.				
Baseline Emissions: The baseline emissions as discussed in B.6.1 mentioned that the emission would have occurred in the absence of the project activity. The emission reduction calculation has been done as per the Large-scale Consolidated Methodology GCCM001., Version 4.0 ^{/12/}					
The baseline emissions of the project applied methodology is,	ct activity according to the paragraph 39 of the				
$BE_{y} = EG_{PJ,y} \times EF_{grid,y}$					
GCC project activity in year y (MWh/ $EF_{grid,y}$ = Combined margin CO ₂ emis	splaced as a result of the implementation of the /year) ssion factor for grid connected power generation t version of the "Tool to calculate the emission				
As per paragraph 41 of the applic installation of a greenfield power plan	ed methodology, If the project activity is the nt $EG_{PJ,y}$				
Where $EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh)					
MWh (annual average over the creater emission factor based on the Too emission value will be 25,793 tCO _{2e} . The basis for electricity generation f	city generation from the project activity is 27,704 diting period) and calculated combined margin I is 0.9310 tCO ₂ e/MWh. Hence the baseline (annual average over the crediting period). from the project activity is calculated based on				
the values of PLF for each of solar p	roject is as follows: -				
Plant Name	PLF				
MSW Processing Plant Jaipur	23.65%				
Manikgarh Cement Works	26.20%				
Balaji Cement Works	20.22%				
Ginigera Cement works	27.10%				
An annual degradation of 2.50% for	r 2 nd year and 0.60% from third year onwards.				
Which is sourced from the Detailed Project Report (DPR) ^{/52/} & 2% as per records					
historical data available. The same was prepared by the third-party company Amiable					
Consultant Private Limited Hence the value considered by the project owner for to					
arrive the ex-ante emission reductions of the project is deemed acceptable to the					
	paragraph 3 (b) of "Guidelines for the reporting prs" (Annex 11 of EB 48) ^{/55/} . Hence the value				
considered by the project owner for	determining the ex-ante emission reductions in				
the PSF is deemed acceptable to the	verification team and also in line with paragraph				

	3 (b) of "Guidelines for the reporting and Validation of Plant Load Factors" (Annex 11			
	of EB 48). Hence the value considered for the calculation of emission reductions for the project activity is reasonable and appropriate. For ex-post, this parameter (EG _{PJ,y}) is being calculated as difference of electricity exported to the grid by the project activity and electricity imported from the grid by the project activity and those are being measured by energy meters of accuracy class 0.2s.			
	<u>Project emissions:</u> As per paragraph 35 of the applied methodology, For most renewable energy project activities, $PE_y = 0$. Since Solar power is a GHG emission free source of energy project emission considered as Zero for the project activity.			
	Leakage Emissions: As per the paragraph 61 of the applied methodology, there are no emissions related to leakage in this project.			
	Emission reductions As per Paragraph 62 of the applied methodology, emission reductions are calculated as follows			
	$ER_y = BE_y - PE_y$			
	Where: ER _y = Emission reductions in year y (tCO ₂ e/y) BE _y = Baseline Emissions in year y (t CO ₂ /y)			
	$PE_y = Project$ emissions in year y (t CO_2/y)			
	Based on the above estimation $ER_y = BE_y$, Hence the annual emission reductions based on the ex-ante parameters is 25,793 tCO ₂ e (Annual Average over the crediting period).			
Findings	-			
Conclusion	Verification team confirm that the algorithms and formulae proposed to calculate project emissions, baseline emissions, and emission reductions in the PSF ^{/10/} is in line with the requirements of the selected methodology GCCM001 Version 4.0 ^{/12/} For ex-ante calculation, the assessment team confirms that			
	 All assumptions and data used by the project participants are listed in the PSF^{/10/} including their references and sources. All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PSF^{/10/} 			
	 All values used in the PSF^{/10/} are considered reasonable in the context of the proposed project activity The baseline methodology^{/12/} and the applicable tool(s) have been applied 			
	correctly to calculate project emissions, baseline emissions, leakage and emission reductions;			
	 All estimates of the emissions can be replicated using the data and parameter values provided in the PSF^{/10/}. All calculations are complete and without any omissions. 			

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Means of Verification	Project	project activity. The more requirements of the appl GCC Environment and a Standard v.3.1. The assessment team h the requirements of t parameters are applied in the context of the assessment team thro monitoring personnel. T confirm that the propose relevant points of mon Specifically, these poin and the quality assuran context of the project. monitoring plan and the verified. The parameters that are Build Margin Emiss factor ($EF_{grid, BM, y}$) Operating Mar emission factor ($EF_{grid, M, y}$) Combined Margin C emission factor ($EF_{grid, CM, y}$)			Value Source sion 0.8687 tCO ₂ /MWh Based on latest CO ₂ rgin 0.9518 tCO ₂ /MWh the Indian Power Sector the Indian Power Sector User Guide, Version 18.0, December 2022 December 2022				
		S.n	Monitoring	Ass	sessment				
		о.	Parameter						
		1.	EG _{pj,y} (SDG 7)	The pren con delir che or n the of n PSF cha revi elec con of th stat Elec	antity of net electricity dis e electricity generation from mises consumers involved i tinuously monitored by meal rgy meter of 0.2s accurace very point of individual pro- ck meter provided in all the nultiple metering locations in requirement and meter deta netering arrangements are which is verified during rges and same was found of ew. The monitoring parare ctricity displaced in year is dings of all the energy meter sumers involved in the projone meters has been carried of e electricity officials as per ctricity Authority (Installation nendment) Regulations, 207	n the project activity will be ns of bi-directional tri-vector cy class which is located ject plant and there is no locations. There are single n each installation based on ails and single line diagram provided in Annex 5 of the the interview with site in- consistent during document neter i.e. Quantity of net calculated by adding the ers installed on premises of ect activity. The calibration but once in five years by the er provision in the Central n and Operation of Meters)			

		frequency mentioned in the power purchase agreement and it stated that calibration will be carried out as per Metering regulations followed by CERC. Hence the Project owner has followed the CERC metering regulations
		regarding calibration of energy meters is appropriate and acceptable to the project verification team. The monitoring parameter will be recorded for emission reduction on monthly basis. The Joint Meter Readings (JMR) taken every month from each meter are added up to arrive at the net value of electricity supplied by solar plant to consumers of the project activity. The monthly value metered energy forms the basis for VSV Onsite private limited to raise monthly invoices to the UTCL. Hence Net electricity supplied to the grid by the project activity will be cross checked with the monthly invoices submitted by the VSV Onsite private limited to UTCL. All data collected as part of monitoring will be archived electronically and be kept at least for 2 years after the end of the crediting period or till the last issuance of ACCs for the project activity whichever occurs later.
		The monitoring parameter will be continuously monitored by means of bi-directional tri-vector energy meter (Mentioned in Appendix 08) of 0.2s accuracy class. For the purpose of measurement, the readings of main meter will be accounted in normal scenario but in case of failure of main meter, check meter and standby meter reading will be accounted. The calibration of the meters will be maintained by respective state utility. The monitoring parameter will be recorded for emission reduction on monthly basis. Value for electricity generation will be calculated as per the calculation method mentioned in table 3 of Section B.7.1 of PSF. Cross check mechanism also will be in line with the mechanism mentioned in the same section. This was confirmed by interviewing the monitoring personnel of the project activity during on site visit and verifying documents submitted by the project owner The monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
2.	Local Employment Generation (SDG 8)	This parameter is continuously monitored based on the total number of persons working in the project activity along with details of female-male break up, age and role and persons with disabilities, if any. The project owner ensures that at least five employments will be provided from the project activity. This will be verified using the employment records and payroll records of the employees who worked on the project activity. This was confirmed by interviewing the monitoring personnel of the project activity during on site visit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
3.	Climate Action (SDG 13)	The parameter is calculated based on the net electricity generation from the project activity and grid emission factor. Reduction of CO ₂ emissions due to implementation of project activity that would otherwise been emitted by

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		thermal power plants. The monitoring parameter will be continuously monitored by means of energy meters as mentioned above monitoring parameter EGPJ,y.
4.	Long-term jobs (> 10 year) created/ lost (SJ01)	This parameter is monitored based on the number of jobs created by the project owner in the long-term basis and ensures that at least five employments will be provided from the project activity. This will be verified using the HR and payroll records of the employees who worked on the project activity. This was confirmed by interviewing the monitoring personnel of the project activity during on site visit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
5.	Specialized training / education to local personnel (SE01)	The parameter will record the employee provide job related training in order to increase the knowledge and monitored via no training records.
6.	CO2 emissions (EA03)	The parameter is calculated based on the net electricity generation from the project activity and grid emission factor. Reduction of CO2 emissions due to implementation of project activity that would otherwise be emitted by thermal power plants. The monitoring parameter will be continuously monitored by means of energy meters as mentioned above monitoring parameter EGPJ,y.
7.	Replacing fossil fuels with renewable sources of energy (ENR07)	The parameter is calculated based on the net electricity generation from the project activity. The monitoring parameter will be continuously monitored by means of energy meters as mentioned above monitoring parameter EG,facility,y.
8.	Solid waste Pollution from Hazardous wastes	The PO has claimed that the hazardous waste produced during the operations and end of life by the Project activity will be regulated and disposed to the waste handlers. The waste management plan and waste management policy of the company have been verified by the assessment team and found to be in compliance with the local laws. The monitoring parameter will be continuously monitored by means of plant records. Actual plant records of project waste (if any) to be shared by the PO at the time of Emission reduction verification of the project activity.
9.	Solid waste Pollution from E- wastes (EL04)	As per monitoring plan E-waste generated from the project activity shall be stored and disposed-off as per the guidance of E-waste management and Handling Rules in the host country. As per the guidance the E-waste generated from the project activity will be collected by the dealer of producer or dismantler or recycler or through the designated take back service provider of the producer to authorized dismantler or recycler. This will be monitored by means of the records by the project owner in the installation site when E waste will be disposed of or sent for refurbishment. This was confirmed by interviewing the monitoring personnel of the project activity during on site visit and the monitoring practices followed by the project

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		owner is appropriate in relation to the project activity and its acceptable to the assessment team.
	IO. End of life products/ equipment (EL06)	This parameter is monitored on continuous basis based on the solar PV modules after ending lifecycle or damaged/defunct solar PV modules which could not be reused in the project activity. There is no prevailing law in place in regard to how the ending lifecycle or damaged/defunct solar PV modules shall be stored or replaced in the host country. The project owner is in the process of devising an internal policy for the same based on the best practice followed domestically/internationally. In the meantime, if regulation or guideline of the host country is released, it shall be ensured that the same is adhered to. This was confirmed by interviewing the monitoring personnel of the project activity during on site visit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
	1. Women empowerme nt	The Project Activity provides opportunity to employment to women in project operations and managerial role as well. The data will be based on the employment record and payroll record. This was confirmed by interviewing the monitoring personnel of the project activity during on site visit and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
	12. Reducing / increasing accidents/Inc idents/fatality (SHS03)	The PO will provide the health and safety training to all the workers during both construction and operational phase of the project activity, which in lines the measures taken in the ESIA report. The training records will be maintained of the training imparted to the employees, the same will be checked during the emission reduction verification of the project. The training will be monitored through parameter 'Quality of employment.
	 Water Consumption from ground and other sources (EW02) 	The parameter will record the consumption of water due to the project activity. The data will be monthly recorded and can be checked through plant records. Since, the power plant is implemented in a dessert land, this parameter is implemented to analysis the consumption of water due to the project activity and as an environmental safeguarding. The PO has claimed that since, the project activity will use robotic dry cleaning, the parameter will remain insignificant throughout the crediting period The quantity of water consumed for solar panel cleaning as well as its source is recorded in the log sheet maintained at the site. water tankers received at project site and their capacity shall be maintained in the log sheet. No monitoring equipment is used at site for this.
be pr m im	een reviewed to che ocedures, rules and entioned in the PSF.	ne operation, maintenance and data monitoring. The PSF has eck that the procedures for data uncertainty, emergency responsibility, operational and management structure are The monitoring plan completely describes all measures to be oring all parameters required and applicable to all activities project activity.

	The verification team confirmed that the parameters are sufficient to calculate the emission reductions including the environmental and social safeguards in accordance with the methodology and are correctly reported in the PSF.
Findings	CL 04, CAR 03, CAR 04, FAR 02 & FAR 03 were raised and successfully closed.
	Please refer to the appendix 4 for further details.
Conclusion	The verification team confirms that,
	 The verification team confirms that the monitoring plan based on the approved monitoring methodology^{/12/} is correctly applied to the PSF^{/10/}. The monitoring plan will give opportunity for real measurements of achieved emission reductions. The verification team considers that monitoring arrangements described in the monitoring plan is feasible within the project design. The means of implementation of the monitoring plan are sufficient to ensure that the emission reduction and other voluntary labels achieved from the project activity is verifiable and thereby satisfying the requirement of Verification Standard^{/03/}. The monitoring plan will give opportunity for real measurements of achieved emission reductions. There are no host country requirements pertaining to monitoring of any sustainable development indicators. Therefore, there are no such parameters identified in the PSF^{/10/}.

D.4. Start date, crediting period and duration

Means of Project Verification	The Start date of the project activity is 22/02/2022 which is earliest date of the one solar project in bundle solar power project activity ^{/14/} . The Commissioning certificates ^{/14/} of the installation of the project activity has been verified and confirmed start date as per PSF is found correct and acceptable to verification team. A crediting period of a maximum length of 10 years has been selected by project owner. The start date of the crediting period is stated as 22/02/2022, which is appropriate as per paragraph 40(b) of the Project Standard version 03.1 ^{/02/} . The crediting period is therefore from 22/02/2022 – 21/02/2032.
Findings	CAR 05 has been raised and successfully closed. Please refer to the appendix 4 for further details.
Conclusion	The start dates and the crediting period type & length have been verified and found to be in accordance with GCC project standard version 03.1. ^{/02/}

D.5. Environmental impacts

Means of Project Verification	Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India (GOI) under Environmental Impact Assessment notification 14/09/2006 ^{/39/} . The Solar Photovoltaic Power Projects are not covered under the ambit of EIA Notification, 2006 and does not require environmental clearance from MoEF (Annexure-II MOEF&CC, OM on J-11013/41/2006-IA II (I) dated 7th July 2017) ¹⁷ , hence the NO EIA required as per host country legislation. The project activity is implemented on the barren lands and there is no forest land or any protected land involved in the project activity. Also, necessary approvals have been obtained by the project owner before implementation and of the project activity. This has been evident from the verification of the documents and during onsite site by the verification team. The project was already implemented and there is no possibility of any negative impact during operation phase of the project activity.
Findings	No findings were raised
Conclusion	In the opinion of the assessment team, in the project activity environmental impacts is not significant as per host country legislation. Further analysis not required in this context.

D.6. Local stakeholder consultation

Means of Verification	Project		activity is bundle solar power project, project of the solar project, which are as follows: -
		Project Location	Date of local stakeholder
		MSW Processing Plant Jaipur	04/11/2022
		Manikgarh Cement Works	16/06/2022
		Balaji Cement Works	18/01/2023
		Ginigera Cement works	10/11/2022
		no Host country requirement to converification team confirms that the loperformed by the project owner before the stakeholder consultation. The objective out to comply with GCC requirements are be required to be addressed by project through phone calls followed by error distribution company officials, equipment the project were invited through invitation the public has been informed about the public places, including the public place villages. As detailed in the stakeholder corroject to stakeholders, also explained a sustainable development goal impacts of was asked to provide feedback on the public have a positive, negative, or no impacts.	At the requirement of the GCC since there are induct consultation for such projects. The bocal stakeholder consultation process was the submission of the project activity for global of the local stakeholder consultation carried and identify the comments/concerns that might towner. The local stakeholders were invited mails and official letters. Further regional at suppliers, Officials, Contractors involved in on letters and/or telephone calls. In addition, the LSC Meeting through pamphlets posted in the sin and around the project activity locations consultation report, the representative of GCC cts and GCC mechanism & its requirement of about Social, Environmental benefits and UN of the project. Furthermore, the project owner project activity, including whether the project acts The stakeholder consultation responses in. The verification team confirmed by review

¹⁷ https://mnre.gov.in/img/documents/uploads/4912cd8c044042cf80b00c4e756e16b2.pdf

	of the stakeholder responses that the summary of stakeholders' comments reported in PSF was accurate. There was no negative feedback received. The list of the relevant stakeholders who were requested for feedback is also provided in the PSF.
Findings	CAR 06 was raised in this section and closed successfully. Kindly refer appendix 04 for more information.
Conclusion	The verification team confirms that the summary of stakeholders' comments reported in PSF ^{/10/} is complete. In the opinion of the team, the local stakeholder consultation ^{/17/} process was adequately conducted by the project participant considering the ongoing pandemic to receive unbiased comments from the all the stakeholders. The verification team confirms that the local stakeholder consultation ^{/17/} process performed for the project activity fulfils the requirements.

D.7. Approval and Authorization- Host Country Clearance

Means of Project Verification	As per the GCC program guidelines the submission of HCA on double counting ^{/09/} is required by CORSIA labelled project after 31/12/2020 as verified under section D.13 of this report. For carbon credits issued during 01/01/2016 to 31/12/2020 the HC approval is not required. Thus, for this project activity Host country clearance ^{/27/} is not required at the time of project verification.
Findings	FAR 01 was raised in this section and closed successfully. Kindly refer appendix 04 for more information.
Conclusion	The verification team confirms that no Host Country approval is required by the CORSIA labelled project activity and the HCA will be required during the first or subsequent verification, when the issuance of carbon credit is considered beyond 1 st Jan 2021.

D.8. Project Owner- Identification and communication

Means of Project Verification	The information and contact details of the project owner and project owners themselves has been appropriately incorporated in Appendix 1 of the PSF ^{/10/} which was checked. The Authorization letters signed by the project owners has been verified and also the company registration documents and project owner valid KYC document have been checked. The project owner of the project is UltraTech Cement Limited. and same to be demonstrated by the project legal owner through the commissioning certificates ^{/14/} power purchase agreement ^{/16/} and invoices ^{/33/} of the UltraTech Cement Limited. All information were consistent in these documents and acceptable to the verification team
Findings	No Findings were raised
Conclusion	The verification team confirms that the information of the project owners has been appended as per the template and the information regarding the project owners stated in the PSF ^{/10/} and authorization letter were found to be consistent

D.9. Global stakeholder consultation

Means of Project Verification	The PSF ^{/10/} was made available through the dedicated interface on the GCC website. The duration of the period for submission of comments for the global stakeholder consultation was from 23/02/2023 to 09/03/2023. There were no comments received during this period
Findings	No findings were raised.
Conclusion	The PSF ^{/10/} had been made public for receiving stakeholder feedback and two comments were raised during the GSC process, which was addressed in the validation report and addressed successfully.

D.10. Environmental Safeguards (E+)

	_		
Means of Verification	Project	(E+) ^{/04/} safegua safegua implem impacts	oject owner has chosen to apply for the Environmental No-net-harm Label . The assessment of the impact of the project activity on the environmental ards has been carried out in section E.1 of the PSF ^{/10/} . Out of all the ards no risks were identified to the environment due to the project mentation and operation. And the following have been indicated as positive s: - re Impacts: Environmental – Air - CO₂ emissions (EA03) : The project activity being renewable power generation avoids CO2 emissions that would have occurred in baseline scenario due to the electricity generation in thermal power plants. The impacts are being monitored through parameter 'CO ₂ emissions' and is verified under section D.3.7 of this report. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring was found acceptable by the team.
		ii.	Environmental - Replacing fossil fuels with renewable sources of energy (ENR07) : - Amount of electricity generated renewable sources that would be generated through fossil fuel. The parameter is being monitored with $EG_{pj,y}$ and validated under section D.3.7 of this report. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring was found acceptable by the team.
		Impact	ts identified as 'Harmless' as regulatory complied OR mitigated;
		iii.	Environmental - Solid waste Pollution from end-of-life products/ equipment (EL06): The damaged solar panel components may cause soil pollution if not stored and disposed-off as per the national/local law. Improper disposal of generated equipment may create soil contamination. To mitigate/reduce an environmental impact identified as harmful in the risk assessment and to develop a Program of Risk Management Actions plan to address the risk. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring was found acceptable by the team.
		iv.	Environmental - Solid waste Pollution from Hazardous wastes (EL 02): Improper disposal of generated hazardous waste may create soil contamination Program of Risk Management Actions for Solid waste Pollution from Hazardous wastes. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring was found acceptable by the team.
		v.	Environmental - Solid waste Pollution from E-wastes: Any E-waste if generated from the plant shall be discarded in accordance with the host country regulations. The parameter is being monitored as 'Solid Waste Pollution from E-waste and batteries' and validated under section D.3.7 of this report. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring was found acceptable by the team.
		vi.	Environment–I - Reliability/ accessibility of water supply: During on- site visit, water tanks were inspected which are to be used for solar panel cleaning. Logbooks are maintained for the consumption and it was checked. An appropriate monitoring plan has been put in place to monitor

	 the parameter for the impact, hence the scoring was found acceptable by the team Negative Impacts: No negative impacts identified or verified for the project activity, which cannot be mitigated. Environmental land solid waste pollution from hazardous waste, E-waste and end of-life products has been identified and proper mitigation action has been implemented for waste management^{/32/}, which is found to be acceptable. The appropriate monitoring plan has been put in place to monitor the elements marked positive and risks identified due to implementation of the project activity. Also, the parameter compliance with local regulations/laws i.e., Waste generated from the project activity will be also monitored to ensure the compliance of the laws during the crediting period. The detailed matrix has been included in appendix 5 of the report
Findings	CL 05 has been raised and successfully closed. Please refer to the appendix 4 for further details.
Conclusion	Based on the documentation review the verification team can confirm that Project Activity is not likely to cause any negative harm to the environment but would have a positive impact, hence, is eligible to achieve additional E+ certifications/04/

D.11. Social Safeguards (S+)

Means of Proj Verification	The Project owner has chosen to apply for the Social No-net-harm Label (S+) ^{/04/} . The assessment of the impact of the project activity on the social safeguards has been carried out in section E.2 of the PSF ^{/10/} . 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: - Impacts identified as 'Harmless' as regulatory complied OR mitigated:
	i. Social: Long-term Jobs: The impacts being monitored throughout crediting period by parameter "Long-term jobs (> 10 year) created/ lost (SJ01)" and is verified under section D.3.7 of this report.
	ii. Social: Educational services improved or not (SE02): The impacts being monitored throughout crediting period by parameter The employee provide job related training in order to increase the knowledge and monitored via number training and records.
	iii. Social: Health & Safety: Reducing / increasing accidents/Incidents/fatality (SHS03): The impacts being monitored throughout crediting period by parameter 'Reducing / increasing accidents/incidents" and is verified under section D.3.7 of this report.
	iv. Specialized training / education to local personnel (SE01): This parameter is monitored on yearly basis based on the number of trainings provided by the project owners; this will be verified using the training records registers maintained in the project site. During the interview VVB team checked the evidence and found the records error free and consistent. Trained engineers are employed for working in the live electrical components also in the operation of cranes and other mechanical lifting equipment. Hence, mitigation measures for Occupational Health and Safety are evident to be implemented properly.
	V. Women's empowerment (SW06) (human rights): - The project activity provides opportunity, women the chance to be employed in organizational positions within the project in accordance with Ultra Tech Cement Limited (UTCL) which is

	 adopted at all project sites of UTCL. This parameter will be monitored through the employment record, payroll/^{43/} and verified under section D.3.7 of this report. 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 to monitor the elements. The detailed matrix has been included in appendix 6 of the report.
Findings	CL 06 & FAR 03 has been raised and successfully closed. Please refer to the appendix 4 for further details.
Conclusion	Based on the documentation review the verification team can confirm that Project Activity is not likely to cause any negative harm to the society but would have a positive impact, hence, is eligible to achieve additional S+ certifications

D.12. Sustainable development Goals (SDG+)

Meene of	Drainat	The approximate of the contribution of the project activity on United Nations
Means of Verification	Project	 The assessment of the contribution of the project activity on United Nations Sustainable Development Goals has been carried out in section F of the PSF/^{10/}. Out of the 17 Goals project activity has no adverse effect on any of the goal and contribute to 4 SDGs: Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all: SDG Target 7.2, The project activity contributes towards this goal by replacing the generation of fossil fuel dominated grid in baseline by renewable solar-based power generation. The contribution towards SDG goal is being monitored by the parameter 'EGr_{acility.y'}, quantity of net electricity generation supplied by the project plant/ unit to the grid in the monitoring plan and is found adequate. This has been discussed under section D.3.7 of this report. II. Goal 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all: SDG Target 8.5, The contribution towards SDG goal is by providing local employment: jobs for the project activity. This is being monitored by the parameter 'Local Employment Generation' in the monitoring plan and is found adequate. Further, it has been found that before the project activity, there were no such employment opportunity targeting to the local residents, but after the implementation of the project activity, technical skills training and employment were provided to local persons as well. This has been discussed under section D.3.7 of this report. III. Goal 13. Take urgent action to combat climate change and its impacts: SDG Target 13.2, The contribution towards SDG goal is being monitored by the parameter "Co2 emission (SDG 13)" in the monitoring plan and is found adequate. This has been discussed under section D.3.7 of this report.
		An appropriate monitoring plan has been put in place to monitor the elements. The
		detailed matrix has been included in appendix 7 of the report
Findings		No findings were raised.
Conclusion		Based on the documentation review the verification team can confirm that Project activity is not likely to contribute to the United Nations Sustainable Development Goals and would have a positive impact, hence, is eligible to achieve additional SDG+ certifications.

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

Means of Project Verification	A declaration under section A.5 of the PSF ^{/10/} has been included for offsetting the approved carbon credits (ACCs) for the entire crediting period from 22/02/2022 to 21/02/2032.
Findings	CAR 7 has been raised and successfully closed. Please refer to the appendix 4 for further details.
Conclusion	The project owner has clarified the intent of use of carbon credits for CORSIA. hence no double counting ^{/09/} will take place.

D.14. CORSIA Eligibility (C+)

Means of Project Verification	The project activity meets the CORSIA Eligibility since the crediting period is after 01/01/2016 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 does not cause any net harm to the environment and/or society and therefore achieves Environmental No-net-harm Label (E+) and Social No-net-harm Label (S+) as per the Environmental and Social Safeguards Standard also make contributions for achieving United Nations Sustainable Development Goals (SDGs) to achieving at least three SDGs as per Project Sustainability Standard to achieve SDG+ Label.
Findings	FAR 01 is raised. Please refer to the appendix 4 for further details.
Conclusion	 The project activity meets the CORSIA Label (C+) eligibility: The Project Activity complies with all the requirements for the Emission Unit Criteria of CORSIA A written attestation from the host country's national focal point on double counting^{/09/} is not required for Emission units till 31 December 2020; 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.

Section E. Internal quality control

The draft 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 LGAI Technological Center S.A. (Applus+ Certification) were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable GCC rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team were independent of the verification team.

The technical review process may accept or reject the verification opinion or raise additional findings in which case these must be resolved before requesting for registration. The technical review process is recorded in the internal documents of LGAI Technological Center S.A. (Applus+ Certification) and the additional findings gets included in the report. The final report approved by the admin reviewer and issued to PO and/or submitted for request for registration, as appropriate on behalf of LGAI Technological Center S.A. (Applus+ Certification).

Section F. Project Verification opinion

LGAI Technological Center S.A. (Applus+ Certification) has performed a verification of the "Bundled 7 Solar Power Project in India". The verification is performed on the basis of GCC criteria project verification standard, Version 3.1^{/03/} for the project activity, GCC guideline and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The review of the final version of GCC PSF^{/10/} and the subsequent Onsite audit has provided Applus+ Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project meets all relevant GCC project standard^{/2/} requirements for the GCC. The project will hence be recommended by LGAI Technological Center S.A. (Applus+ Certification) for registration with the GCC.

By displacing fossil fuel-based electricity with electricity generated from a renewable source, the project results in reductions of CO_2 emissions that are real, measurable and give long-term benefits to the mitigation of climate change. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of annual emission reductions of 25,793 tCO₂e per year^{/11/}.

The verification has been performed following the requirements of the latest version of GCC verification standard, Version $03.1^{/03/}$, GCC Project Standard, version $03.1^{/02/}$ and on the basis of the contractual agreement.

In detail the conclusions can be summarized as follows:

- The project does not result in negative social, environmental and/or economic impacts.
- The project contribution to Environment, Social Development and Economic and technological development
- The project additionality is sufficiently justified in the GCC PSF^{/10/}.
- Conservative assumptions were applied in the project description.
- The monitoring plan of SDG parameters is transparent and adequate.
- The project meets the local stakeholder consultation/17/ requirements.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the verification.

Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits

ACM	Approved Consolidated Methodology
BE	Baseline Emission
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
СМ	Combined Margin
СРСВ	Central Pollution Control Board
CO ₂	Carbon dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
СР	Crediting period
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GHG	Green House Gas
GW	Giga Watt
GWh	Giga Watt hour
IPCC	Intergovernmental Panel on Climate Change
kW	Kilo Watt
kWh	Kilo Watt hour
LSC	Local Stakeholder Consultation
MoV	Means of Verification
MP	Monitoring Plan
MW	Mega Watt
MWh	Mega Watt hour
OM	Operating Margin
PA	Project Activity.
PSF	Project Submission Form
PE	Project Emission
PLF	Plant Load Factor
PO	Project Owner
PS	Project Standard
SDG	Sustainable Development Goal
tCO ₂ e	Tonnes of Carbon dioxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
VS	Verification Standard

Appendix 2. Competence of team members and technical reviewers

 Dr. Atul Takarkhede is Ph.D. (Environmental Sciences) from Institute of Science, RTM Nagpur University, Nagpur, and he has already published different technical papers related to environmental sciences. He counts with more than 11 years of experience in field of Environmental Auditing, consulting, and accreditation. He is an expert in ISO 9001-14001, CO2/GHG Reporting, Carbon Foot Print, Energy, Water and Waste Management /32/ reporting for organizations' environmental performance. His professional portfolio is mainly related with carrying out EIA, conducting QA/QC of EIA Reports; conducting environmental/water audits; NABET requirements appliance, functional area expert in Water Pollution & Solid & Hazardous Waste management /32/ among others. Furthermore, he counts with solid experience on CDM/VCS-GS consultancy and auditing. Currently he is associated with True Quality Certifications Private Limited and empanelled with Applus+ Certification to carry out GHG audits in the aforementioned schemes. Dr. Atul Takarkhede is based in Nagpur, India. Dr. Atul Takarkhede participates as part of the Audit Team as the Lead Auditor and Technical Expert for the assessment.

Dr. N Premjit Singh has a PhD in Mechanical Engineering (Thesis: Design and development of a square parabolic dish system with a concentrated photovoltaic (CPV) module for performance improvement) from the Indian Institute of Technology (IIT) Madras, Chennai, India, awarded in 2021. M.Tech in Energy Technology, Tezpur University, Napaam, India (2007), and B.Tech in Mechanical Engineering (2005), NERIST, Nirjuli, India. He has extensive experience of about 7 years with DOEs, including UNFCCC CDM and other carbon related schemes (e.g., VCS, GS, GCC), and 5 years + in research projects, renewable energy, and energy audits. In Applus+ since March 2023, he has been the Product Assurance Manager for CDM/VCS/GS4GG/GCC Department to ensure the quality of the performance of different assessments, coordinate the global team for technical reviews, and identify the training needs for the auditors and technical reviewers to improve the quality of reports. He holds experience as a Lead Auditor, Validator and Verifier for GHG mitigation projects and programmes of activities in Sectoral Scope 1.2 (Renewables) and 3.1. (Energy Demand) and is qualified as per Applus+ procedures as Lead Auditor, Validator, Verifier, Technical Expert for SS/TA 1.2. and Technical Reviewer. Dr. N Premjit Singh is based in Gurugram, India. Dr. N Premjit Singh participate as part of the Audit Team as Technical Reviewer.

Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1	GCC	GCC Program Manual	Version 03.1	Project Owner
2	GCC	Project Standard	Version 03.1	Project Owner
3	GCC	Verification Standard	Version 03.1	Project Owner
4	GCC	Environment-and-Social - Safeguards-Standard	Version 03.0	Project Owner
5	GCC	Project-Sustainability-Standard	Version 03.1	Project Owner
6	GCC	Project Submission Form	Version 04.0	Project Owner

7	GCC	Clarification 01	Version 01.3	Project Owner
8	GCC	Clarification 02	Version 01.0	Project Owner
9	GCC	Standard on avoidance of double counting	Version 01.0	Project Owner
10	Project Owner	Webhosted PSF	Version 2.0, Dated 10/02/2023 Version 7.0 dated	Project Owner
		PSF Final PSF	07/02/2024 Version 8.0 dated 20/02/2024	
11	Project Owner	Webhosted ER sheet	Version 2.0, Dated 10/02/2023	Project Owner
		Final ER sheet	Version 4.0 dated 07/02/2024	
12	UNFCCC	Methodology: GCCM001.	version 4.0	Project Owner
13	UNFCCC	 Tool to calculate the emission factor Version 7.0 Investment analysis Tool 27 (Version 10.0 & 13) 3. 	1. Version 07.0 2. Version 13.0	Project Owner
14	Southern Power Distribution Co. Of Andhra Pradesh Limited (APSPDCL)	Commissioning Certificates: -	05/06/2021	Project Owner
15	Hanwha Q Cells (Qidong) Co. Limited	Technical Details of Solar Modules installed in the PA. Invertors	-	Project Owner
16	Southern Power Distribution Co. Of Andhra Pradesh Limited (APSPDCL)	Power Purchase Agreements	-	Project Owner
17	Project Owner	local Stakeholder Consultation documents like invitation, Notes on LSC, Meeting Photos	-	Project Owner
18	Project Owner	Employee Records / HR Records		Project Owner
19	Project Owner	CSR Policy of the Project Owner Recruitment & Selection Policy POSH Policy – sexual harassment of women at workplace-Reg		Project Owner
20	Project Owner	EPC contract and O&M contract	-	Project Owner
21	SLDC	REA Statement		Project

				Owner
22	Government of	Electricity Act 2003 National	Dated 26/05/2003	Publicly
	India	Electricity Policy 2005	Dated 12/02/2005	available
23	CDM	CDM Website	-	Publicly
		https://cdm.unfccc.int/Projects/proj		available
0.4		search.html		D LEL
24	VERRA	Verra Registry	-	Publicly
		https://registry.verra.org/app/searc		available
25	Cold Chandord	h/VCS/All%20Projects		Dublich
25	Gold Standard	GS Website:		Publicly
		https://registry.goldstandard.org/pr ojects?g=&page=1		available
26	I-REC Standard	International REC Standard (I-	-	Publicly
20	I-REC Stanuaru	REC)	-	available
		https://www.irecstandard.org/regis		available
		tries/		
27	Government Of	local body approvals	-	Project
21	India		-	Owner.
28	Project Owner	IRR Sheet.	Version 1.0, Dated	Project
20		introneet.	10/02/2023	Owner
			10/02/2020	Owner
			Version 2.0 dated	
			07/02/2024	
			01/02/2021	
			-	
29	Government Of	Income Tax Act 1961	-	Publicly
	India			Available
30	Government Of	Companies Act 1956	-	Publicly
	India			Available
31	Government Of	National Tariff Policy	-	Publicly
	India	_		Available
32	Company Policies	1. CORPORATE SOCIAL	-	Project
		RESPONSIBILITY (CSR)		Owner
		DOLICY		
		POLICY		
		POLICY 2. E Waste Management		
		2. E Waste Management		
		 E Waste Management Policy - Gender Diversity & 		
		 E Waste Management Policy - Gender Diversity & Inclusion Policy 		
		 E Waste Management Policy - Gender Diversity & Inclusion Policy Health & Safety Policy 		
		 E Waste Management Policy - Gender Diversity & Inclusion Policy Health & Safety Policy Human Rights Policy 		Desised
33	Project Owner	 E Waste Management Policy - Gender Diversity & Inclusion Policy Health & Safety Policy 	-	Project
		 E Waste Management Policy - Gender Diversity & Inclusion Policy Health & Safety Policy Human Rights Policy Sales Invoices 	-	Owner
33 34	Government Of	 E Waste Management Policy - Gender Diversity & Inclusion Policy Health & Safety Policy Human Rights Policy Sales Invoices CEA Database 	- Version.18	Owner Publicly
		 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy Sales Invoices 	https://cea.nic.in/cdm-	Owner Publicly
	Government Of	 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy 5. Sales Invoices CEA Database <u>CDM - CO2 Baseline Database - Central Electricity Authority</u> 	https://cea.nic.in/cdm- co2-baseline-	Owner Publicly
34	Government Of India	 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy 5. Sales Invoices CEA Database CDM - CO2 Baseline Database - Central Electricity Authority (cea.nic.in) 	https://cea.nic.in/cdm-	Owner Publicly Available
	Government Of India Government Of	 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy Sales Invoices CEA Database <u>CDM - CO2 Baseline Database - Central Electricity Authority</u> (cea.nic.in) The Electricity Regulation	https://cea.nic.in/cdm- co2-baseline-	Owner Publicly Available Publicly
34 35	Government Of India Government Of India	 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy Sales Invoices CEA Database <u>CDM - CO2 Baseline Database - Central Electricity Authority</u> (cea.nic.in) The Electricity Regulation Commission Act, 1998	https://cea.nic.in/cdm- co2-baseline- database/?lang=en -	Owner Publicly Available Publicly Available
34	Government Of India Government Of India Government Of	 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy Sales Invoices CEA Database <u>CDM - CO2 Baseline Database - Central Electricity Authority</u> (cea.nic.in) The Electricity Regulation	https://cea.nic.in/cdm- co2-baseline-	Owner Publicly Available Publicly Available Publicly
34 35 36	Government Of India Government Of India Government Of India	 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy 5. Human Rights Policy Sales Invoices CEA Database CDM - CO2 Baseline Database - Central Electricity Authority (cea.nic.in) The Electricity Regulation Commission Act, 1998 The Electricity (Supply) Act, 1948 	https://cea.nic.in/cdm- co2-baseline- database/?lang=en -	Owner Publicly Available Publicly Available Publicly Available
34 35	Government Of India Government Of India Government Of	 2. E Waste Management Policy - 3. Gender Diversity & Inclusion Policy 4. Health & Safety Policy 5. Human Rights Policy Sales Invoices CEA Database <u>CDM - CO2 Baseline Database - Central Electricity Authority</u> (cea.nic.in) The Electricity Regulation Commission Act, 1998	https://cea.nic.in/cdm- co2-baseline- database/?lang=en -	Owner Publicly Available Publicly Available

	India	2015		Available
39	Government Of	Schedule 1 of Ministry of	-	Publicly
	India	Environmental and Forest		Available
		notification		
40	Project Owner	GCC Letter of authorization	-	Project
		signed between legal owners &		Owner
		external representative		
41	Project Owner	EPC Contracts of site.	-	Project
				Owner
42	CERC	CERC Data (2015)	https://cercind.gov.in/20	Project
			15/orders/SO4.pdf	Owner
43	Project Owner	O & M Contract	-	Project
				Owner
44	Project Owner	Board Resolution Letter for each	-	Project
	,	site covered under project activity		Owner
45	Government Of	National Electricity policy 2005 ¹⁸	-	Publicly
	India			Available
46	Central Electricity	Renewable Energy tariff	https://cercind.gov.in/20	Publicly
-	Regulatory	Regulation, 2020	20/regulation/159 reg.p	Available
	Commission		df , Page No. 05	
47.	Government Of	Integrated Energy Policy, 2006	-	Publically
	India			available
48.	RBI	Inflation forecast		Publicly
			-	Available
49.	Govt. Of India	Renewable Energy Certificate	-	Publically
				available
50.	Govt. Of India	Jawaharlal Nehru National Solar	-	Publicall
		Mission (JNNSM) 2010		available
51.	Govt. Of India	National Action plan on climate	-	Publically
		change 2008		available
52.	Amiable Consultant	Detailed Project Report	-	Project
	Private Limited			Owner
53.	Project Owner	Letter of Authorization	-	Project
				Owner
54.	Purchase Order	Jinko Solar, JA Solar	-	Project
				Owner
55.	Project Owner	Loan Agreement	-	Project
	,	5		Owner
56.	GCC	Clarification 05	Version 01.0	Project
-			_	Owner

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

Table 1. CLs from this Project Verification				
CL ID	01	Section no.	D.2	Date: 28/06/2023
Description of CL				
1. PO requested to clarify the any open comments raised during GCC completeness check and GSC				
period. Moreover, also submit evidence for the same.				
Project Owner's response Date: 12/07/2023				

¹⁸ <u>https://powermin.gov.in/en/content/national-electricity-policy</u>

DO has now shared the series what of the CCC Dortal				
PO has now shared the screenshot of the GCC Portal				
Documentation provided by Project Owner				
1. Screenshot of the GCC Portal	D _1100/44/0000			
GCC Project Verifier assessment	Date: 28/11/2023			
Verification find that, evidence is missing in submitted documents, CL is still ope				
Project Owner's response	Date: 05/01/2024			
1. PO has now submitted the screenshot of the GCC Portal for the proof if	there are any open comments			
raised during GCC completeness check and GSC period.				
Documentation provided by Project Owner				
1. The screenshot of the GCC Portal				
GCC Project Verifier assessment	Date: 28/11/2023			
Assessment team verified that; PO has submitted the evidence for the commen				
GCC completeness check. Question asked at the time of the completeness wer	e mention in below CL.			
Thus, accepted CL is closed.				
CL ID 02 Section no. D.2	Date: 28/06/2023			
Description of CL				
1. VVB team found that, PP has not submitted the PPA signed between P	P and electricity authority and			
net metering agreement for rooftop solar plant is missing.				
2. PO requested to submit the 2 geo-tagged images of each solar plant.				
3. Solar Module Layout for all the Site along with Electrical Single Diagram,	As built - Solar Module Layout			
for Sites along with Single Line Diagram is missing. Kindly submit.				
4. Module Performance warranty Certificate (to validate applied plant degra	adation factor – 0.7%) for both			
the installed modules. Kindly submit the same.				
Project Owner's response	Date: 12/07/2023			
1. PO has now submitted the PPA signed between PO and electricity auth				
2. PO has now submitted the net metering agreement signed between P	O and electricity authority for			
rooftop solar plant.				
3. PO has now submitted the 2 geo-tagged images of each solar plant				
4. PO has now submitted the Solar Module Layout for all the Site along wi				
5. PO has now submitted the Solar Module Performance Warranty Certificates for all the plants				
Documentation provided by Project Owner				
1. PPA signed between PO and electricity authority.				
2. Net metering agreement signed between PO and electricity authority for	r rooftop solar plant			
3. 2 geo-tagged images of each solar plant				
4. Solar Module Layout for all the Site along with Electrical Single Diagram	1			
5. Solar Module Performance Warranty Certificates for all the plants	D (00/44/0000			
GCC Project Verifier assessment	Date: 28/11/2023			
2. Verification team observed that, PO submit the PPA, VVB team found it	consistent and error free, thus			
accepted, CL is closed.				
3. Geo-tagged image is missing in submitted document. CL is open.	ala strical single line discrem			
4. Project Owner has submitted the solar module layout for each site, with				
5. Project Owner submit the module performance warranty certificate to th	e verification team, VVB team			
found it consistent and error free.	Data 05/04/0004			
Project Owner's response	Date: 05/01/2024			
2. PO has now submitted the 2 or more geo-tagged images of each solar	plant			
Documentation provided by Project Owner				
2. Geo-tagged images of each solar plant				
GCC Project Verifier assessment	Date: 28/11/2023			
Assessment team observed that, Geocoordinates of the two SPV is still not trac	e actual positioning of the			
solar plant. Thus, CL 2 is open.				
Project Owner's response	Date: 25/01/2024			
PO has now submitted geo-tagged images of each solar plant to trace actual po	ositioning of the solar plant.			
Documentation provided by Project Owner				
Geo-tagged images of each solar plant				

GCC Project Verifier assessment

Assessment team verified that, project proponent has updated the geo-tagged image of the each solar power					
plant in updated project submission form same is found accepted by assessment team. Thus, CL is closed.					
CL ID		Section no.	D.3.2	Date: 28/11/2023	
	ption of CL				
				ity is supplied by the project plant to	
			anism, kindly cla	rify the applicability of the applied	
	dology in project activi	ty.		Detec 05/04/0004	
	t Owner's response	field color power gone	viction plant and	Date: 05/01/2024	
				hence, according to the applied d for captive use by the project activity.	
	nentation provided b		inversed to the grid	The project activity.	
	ed PSF Version 5.0 Da				
	Project Verifier asses			Date: 10/01/2024	
			v for project activ	vity is found applicable and fulfil the	
				brough the grid interface, thus accepted.	
	closed.	,	,	5 5 7 1	
CL ID		Section no.	D.3.7	Date: 10/01/2024	
Descri	ption of CL				
1.		observed that, PO has	s not calculated	the degradation factor as per national	
_	standards practice.		_		
2.			arameter, there w	vere many parameters which are not justify	
Dusias		er the GCC guidelines.		D _tas 05/04/0004	
	t Owner's response	ad the degradation for	<u>ter ee ner netien</u>	Date: 25/01/2024	
		ed the degradation fac			
۷.	guidelines.	u the monitoring paran	neter, which are	justified and calculated as per the GCC	
Docun	nentation provided b	v Project Owner			
		n 6 Dated 25/01/2024			
	Updated IRR Version				
	Updated ER Version				
GCC P	GCC Project Verifier assessment Date: 30/01/2024				
01	01. Assessment team verified that, project owner has updated the degradation factor as per the NEPL				
01		been updated in PSF a			
	guidenne and it has i	Jeen upualeu in FOF a		well, thus accepted.	
02	. Assessment team for	ounds that, monitoring	parameter are	found inconsistent with environment and	
	social safeguard principle, thus CL is open.				
Projec	t Owner's response			Date: 01/02/2024	
Monitoring parameter are now corrected and consistent with environment and social safeguard principle.					
Docun	nentation provided b	y Project Owner			
	/ersion 7 Dated 01/02/				
GCC Project Verifier assessment Date: 08/02/2024					
				lated project submission form, details of pted by assessment team. CL is closed.	
CL ID		Section no.	D.10	Date: 10/01/2024	
	ption of CL				
	Assessment team observed that, Environment parameter is found inconsistent and not inline with GCC E+				
templa	template guideline, thus PO is requested to update the PSF.				

Date: 25/01/2024

Date: 30/01/2024

Date: 30/01/2024

PO has now updated the PSF in which the Environment parameter is now made consistent and in line with GCC E+ template guideline.

Documentation provided by Project Owner

Updated PSF Version 6 Dated 25/01/2024 GCC Project Verifier assessment

Date: 30/01/2024

Date: 25/01/2024

Date: 30/01/2024

Project Owner has updated the environment safeguarding principle in section E.1 in the updated project submission form. **Thus, accepted CL is closed.**

CL ID	06	Section no.	D.11	Date: 10/01/2024
Description of CL				

Assessment team observed that, Social Safeguarding parameter is found inconsistent and not inline with GCC S+ template guideline, thus PO is requested to update the PSF.

Project Owner's response

PO has now updated the PSF in which the Social Safeguarding parameter is now made consistent and in line with GCC S+ template guideline.

Documentation provided by Project Owner

Updated PSF Version 6 Dated 25/01/2024

GCC Project Verifier assessment

Verification team verified that, project owner has updated the social safeguarding principle in section E.2 of the project submission form, thus accepted **CL 06 is closed.**

CL ID	07	Section no.	D.3.5	Date: 17/01/2024
Description of Cl				

Observations for Ginigera cement work :

1. The date of the board resolution cannot be cross-verified as the board resolution is not provided.

2. The project has a lifespan of 25 years, which starts on August 8, 2023. Therefore, the project should end on August 8, 2048, as 25 years will end on August 8, 2048. However, all the calculations in the IRR sheet are only given up to March 2048.

3. The source link (i.e. CERC order) for escalation in the Operational expenses, Total cost, Loan amount, and Equity investment is not given in the assumption tab.

4. In the Assumption tab, for Income tax purposes, FY 2023-24 is considered as the financial year, which is wrong.

5. The residual value should include the cost of land along with the salvage value.

6. Working capital is not considered in the P&L Sheet.

7. For projecting inflation, the Wholesale Price Index (WPI) should be used instead of the Consumer Price Index (CPI).

8. In the calculation of benchmark default value should be taken as per investment analysis, tool-27-Version 13.0 (latest version) instead of Version 12.0

Observations for MSW processing unit:

1. The project has a lifespan of 25 years, which starts on February 22, 2022. Therefore, the project should end on February 22, 2047, as 25 years will end on February 22, 2047. However, all the calculations in the IRR sheet are only given up to March 2046.

2. In the Assumption tab, for Income tax purposes, FY 2021-22 is considered as the financial year, which is wrong.

3. For projecting inflation, the Wholesale Price Index (WPI) should be used instead of the Consumer Price Index (CPI).

4. Working capital is not considered in the P&L Sheet.

5. In the calculation of benchmark default value should be taken as per investment analysis, tool-27-Version 13.0 (latest version) instead of Version 12.

Observations for Manikgarh cement works:

1. The source link (i.e. CERC order) for escalation in the Operational expenses, Total cost, Loan amount,

and Equity investment is not attached in the assumption tab.

2. The residual value should include the cost of land along with the salvage value.

3. In the Assumption tab, for Income tax purposes, FY 2022-23 is considered as the financial year, which is wrong.

4. In the calculation of the benchmark, the default value should be taken as per investment analysis, tool-27-Version 13.0(latest version) instead of Version 12.0.

5. For projecting inflation, the Wholesale Price Index (WPI) should be used instead of the Consumer Price Index (CPI).

6. Working capital is not considered in the P&L Sheet

Observations for Balaji Cement works:

1. The source link (i.e. CERC order) for escalation in the Operational expenses, Total cost, Loan amount, and Equity investment is not given in the assumption tab. (Refer Cell E23, E26, E27,E29)

2. In the Assumption tab, for Income tax purposes, FY 2022-23 is considered as the financial year, which is wrong.

3. Working capital is not considered in the P&L Sheet.

. In the calculation of benchmark default value should be taken as per investment analysis, tool-27-Version 13.0 (latest version) instead of Version 12.0.

Project Owner's response

Responses for Ginigera cement work :

1. The board resolution is now provided.

2. The project has a lifespan of 25 years, which starts on August 8, 2023. Thus, all the calculations in the IRR sheet are now updated up to August 8, 2048.

3. The source link (i.e. CERC order) for escalation in the Operational expenses, Total cost, Loan amount, and Equity investment is now corrected and correct reference for the same is provided in the assumption tab.

4. In the Assumption tab, for Income tax purposes, the financial year is now updated with FY 2020-21.

5. The residual value now includes the cost of land along with the salvage value.

6. Working capital is now considered in the P&L Sheet.

7. For projecting inflation, correct value is used now.

8. In the calculation of benchmark default value is now taken as per investment analysis, tool-27-Version 13.0 (latest version).

Responses for MSW processing unit:

1. The project has a lifespan of 25 years, which starts on February 22, 2022. Thus, all the calculations in the IRR sheet are now updated up to February 22, 2047.

2. For projecting inflation, correct value is used now.

3. In the loan repayment statement, interest is calculated correctly now.

4. Working capital is now considered in the P&L Sheet.

5. In the calculation of benchmark default value is now taken as per investment analysis, tool-27-Version 13.0 (latest version).

Responses for Manikgarh cement works:

1. The source link (i.e. CERC order) for escalation in the Operational expenses, Total cost, Loan amount, and Equity investment is now corrected and correct reference for the same is provided in the assumption tab. 2. The residual value now includes the cost of land along with the salvage value.

3. In the Assumption tab, for Income tax purposes, the financial year is now updated with FY 2020-21.

4.In the calculation of the benchmark, the default value is now taken as per investment analysis, tool-27-Version 13.0(latest version).

5. For projecting inflation, correct value is used now.

6. Working capital is now considered in the P&L Sheet

Responses for Balaji Cement works:

Date: 25/01/2024

1. The source link (i.e. CERC order) for escalation in the Operational expenses, Total cost, Loan amount, and Equity investment is now corrected and correct reference for the same is provided in the assumption tab.

In the Assumption tab, for Income tax purposes, the financial year is now updated with FY 2020-21.
 In the calculation of benchmark default value is now taken as per investment analysis, tool-27-Version 13.0

Documentation provided by Project Owner

- 1. Updated PSF Version 6 Dated 25/01/2024
- 2. Updated IRR Version 2 Dated 25/01/2024
- 3. Updated ER Version 2 Dated 25/01/2024
- 4. DPRs
- 5. Board Resolution

GCC Project Verifier assessment

Date: DD/MM/YYYY

Ginigera cement work :

- 1. Assessment team verified that, project owner has submitted the board resolution to the assessment team, it is found consistent thus accepted.
- 2. Assessment team found that, project owner has updated the IRR calculation sheet, the end date of the calculation is updated to August 8, 2048. Thus accepted.
- 3. Project Owner has updated the CERC guideline for operation and maintenance cost in the updated IRR sheet, thus accepted.
- 4. Project owner has corrected the financial year, in the income tax calculation.
- 5. The residual value had included the salvage value of the land cost in the revised IRR sheet.
- 6. Project Owner has considered the working capital for project activity.
- 7. Investment analysis latest version has been updated the calculation is updated as per latest calculation.

MSW processing unit:

1. Assessment team verified that, all the calculations in the IRR sheet are now updated up to February 22, 2047.

- 2. In the Assumption tab, for Income tax purposes, the financial year is now updated with FY 2020-21.
- 3. Assessment team verified that; PO has updated the inflation rate. Thus, accepted.
- 4. PO has used the correct interest rate. Thus, accepted.
- 5. Project owner has considered the working capital in the P&L Sheet.

6. Assessment team verified that, investment analysis calculation of benchmark default value is now taken as per investment analysis, tool-27-Version 13.0, thus accepted.

Manikgarh cement works:

1. Project Owner has updated the source link (i.e. CERC order) for escalation in the Operational expenses, thus accepted.

2. Project Owner has considered the residual value which includes the cost of land along with the salvage value. Thus, accepted.

3. Project owner has updated the financial year used for income tax it is now found consistent.

4. Assessment team verified that. Project owner has updated the calculation of the benchmark, the default value is updated as per investment analysis, tool-27-Version 13.0.

- 5. Assessment team verified that; inflation rate has been updated in the IRR sheet. Thus accepted.
- 6. Project owner has considered the working capital in the P&L Sheet, thus, accepted.

Responses for Balaji Cement works:

1. The source link (i.e. CERC order) for escalation in the Operational expenses, Total cost, Loan amount, and Equity investment is updated.

2. Assessment team verified that, In the Assumption tab, project owner has updated the financial year for Income tax.

3. Assessment team verified that. Project owner has updated the calculation of the benchmark, the default value is updated as per investment analysis, tool-27-Version 13.0.

Thus, CL is closed in this section.

Table 2. CARs from this Project Verification

			Rs from this Project Ve			D _100/00/0000
	RIC			Section no.	D.2	Date: 28/06/2023
			of CAR			
1.				has not subm	tted the detailed project repo	ort for project activity, PO
	requested to submit the DPR. PO shall submit the commissioning certificate to the assessment team.					
3.				ide detailed loc	ation of meter & equipment i	n section A.3. Correction
4			r the same.	alast standard	"Drain at Oursana aball provid	le de cum ontem (cuiden ce
4.					"Project Owners shall provid g by virtue of a statutory, pro	
						eductions and is accorded to
					vide signed Authorization lett	
			on provided in Appendix		Nue signed Authonzation lett	
5.					nentary evidence to verify the	e date of buying the
0.		chiner			nemary evidence to verify the	e date of buying the
6.				LOA & LOI is i	not submitted by project own	ier.
			er's response	20/10/20110		Date: 12/07/2023
				PRs for all the	Plants included in Project Ac	
					g certificates to the assessm	
					neters and the equipment's i	
			•		ion letters to confirm the info	
			ndix 1 of the PSF			·
	5. PO has now submitted the documentary evidence i.e. PO of the Plants to verify the date of buying					
	the machinery.					
	6.	PO h	as now submitted the L	OA & LOI		
Do			ion provided by Projec			
			s for all the Plants inclue	led in Project A	ctivity.	
			ted PSF Version 4			
			e Ccommissioning certil		ssessment team	
			signed Authorization lett			
			as now submitted the L	OA & LOI		
GC			Verifier assessment			Date: 28/11/2023
	1.					as not submitted the detailed
	0		ct report to the verification			last and it is found consistent
	Ζ.					lant and it is found consistent
	2		accepted by verification			not provide complete detaile
	3.					not provide complete details
			cation team. CAR is ope		lease submit the remaining	calibration certificate to the
	4.				project activity, thus accepted	ed by the VVB team
	4. 5.				project activity, thus accepted	
Pro	-		er's response			Date: 05/01/2024
				etailed project r	eport to the verification team	
						also submitted the remaining
			ation certificate to the v			
	Do		tation provided by Proje			
	20					

	Detailed Project Reports	:fiente=			
2.	3			D-1- 40/04/2004	
	roject Verifier assessment		and the first second second	Date: 10/01/2024	
1.		d-party detailed	project report to the assess	ment team and it is found	
0	consistent and accepted.		Manufacture and the second state of the second		
2.			nitted the calibration for all the	SPV and assessment team	
	found it consistent and acc	epted. Thus, CA	IR IS Closed.		
	02	Section no.	Dac	Dete: 20/00/2022	
CAR IE		Section no.	D.3.5	Date: 28/06/2023	
	ption of CAR	dord \/ 2.1			
	para 62, of GCC project star		approach CA partificate and at	har aupporting degument to	
1.		an sanction agr	eement, CA certificate, and ot	her supporting document to	
2	the assessment team.	d that DO has a	becap the IME and world han	for colculating the inflation	
Ζ.			hosen the IMF and world banl	k for calculating the initiation	
3.	rate, PO need clarify the sa		sen is missing, kindly provide	the specific link from PRI to	
Э.	verify the same. Corrective		sen is missing, kindly provide	The specific link from RBI to	
4.			ocumentary evidence to verify	the date of buying the	
ч.	machinery.		ocumentary evidence to verify	the date of buying the	
5.		nnoiect sites is	s mentioned in section B.5 of	the PSE kindly submit the	
5.	evidence to verify the same			the ror, kindly submit the	
6			ig to verify the deduction rate,	GST Cess & surcharges in	
0.	PSF. Kindly update.				
Projec	t Owner's response			Date: 12/07/2023	
	para 62, of GCC project star	ndard V 3 1		Dute: 12/01/2020	
			greement, CA certificate, and o	other supporting documents	
	to the assessment team	iouri ouriouori u		strier supporting accumente	
2		specific link and	reference from RBI to for cal	culating the inflation rate in	
	IRR Sheet and PSF			colating the initiation rate in	
3.		ence/link for the	inflation rate, from RBI to verif	v the same	
4.			idence i.e. PO of the Plants to		
	machinery	,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
5.		or understanding	g the total cost of the complete	e project sites mentioned in	
	section B.5 of the PSF				
6.		epartment are n	low provided to verify the de	duction rate, GST, Cess &	
	surcharges in PSF	•	. ,		
Docum	nentation kindly provided b	y Project Own	er		
1. The	loan sanction agreement, CA	A certificate, and	l other supporting documents		
	ated PSF Version 4				
	ated IRR Sheet Version 2				
4. PO c	of the Plants to verify the dat	e of buying the r	nachinery		
			otal cost of the complete project		
	roject Verifier assessment			Date: 28/11/2023	
Will be	reviewed by financial expert	, after submissio	on of the DPR for each project	instances.	
Projec	t Owner's response			Date: 05/01/2024	
1.					
Docum	entation provided by Project	Owner			
	DPR for each project instar				
	roject Verifier assessment			Date: 10/01/2023	
Assessment team verified that, Project owner has submitted the third party make detailed project report for					
all project instances, assessment team found it consistent and thus, accepted. CAR is closed.					
Table			· •		
CAR IE		Section no.	D.3.7	Date: 28/06/2023	
	ption of CAR				

	During document review verification team observed that; CA certificate is missing to verify that the O&M					
	cost and project cost. Correction sought for the same.					
	Project Owner shall provide the energy meter details in revised project standards form, Correction sought for the same.					
	oject Owner shall submit the Operation & Maintenance details in PSF and	agreement shall be				
su	bmitted to verification team, for further verification.	-				
	D shall provide the copy of training details in revised PSF.					
	O request to submit the sample copy of the JMR and invoice to the VVB te					
	oject Owner requested to provide the employment generation details as pe	er GCC sustainability				
	andards v.3.					
	D shall provide details about cleaning & drying procedure of solar panel.	the terms from the terms for the				
	oject Owner is requested to submit the generation records of all the project	t instances from start date of				
	mmissioning/operation. CAR is raised for the same.	Date: 12/07/2023				
	CA certificate is submitted to verify that the O&M cost and project cost	Date. 12/01/2023				
	PO has now provided the energy meter details in PSF					
3.		agreement is submitted to				
0.	verification team	agroomont lo cabinition to				
4.	PO has now provided details of training PSF					
5.						
6.	PO has now provided the employment generation details as per GCC su	ustainability standards v.3.				
7.	PO has now provided details about cleaning & drying procedure of solar	panels				
Docur	nentation provided by Project Owner					
1.						
2.						
3.						
4.	0					
5.	Sample copy of the JMR and invoices					
	 Employment generation details Details about cleaning & drying procedure of solar panels 					
	Project Verifier assessment	Date: 28/11/2023				
	VVB team observed that, project owner has submitted the CA certifica					
	cost of the project activity. Thus, accepted by VVB team.	te to further verify the actual				
2.		meter. CAR is open				
3.						
	consistent and error free. Thus, accepted.					
4.	Project Owner has provided the technical records to verify the training by	y the PO.				
5.	PO has provided the sample copy of the JMR to the VVB team, accepted	d by VVB team.				
6.	Employment generation records are still found missing, thus request to	submit the same. CAR is still				
	open.					
7.						
	t Owner's response	Date: 05/01/2024				
1.		er.				
2. 3.	Project owner has now submitted the employment generation records. Project owner has now submitted the details of the cleaning and drying	process in monitoring plan of				
3.	the project activity.	process in monitoring plan of				
	ocumentation provided by Project Owner					
1.	Calibration Certificates					
2.	Employment generation records					
3.	Cleaning and drying process of the project activities.					
4.	Actual data generation records.					
	Project Verifier assessment	Date: 10/01/2024				

Assessment team found that, project owner has submitted the following document: -

- 1. PO has submitted the complete monitoring meter details in the revised project submission form.
- 2. Assessment team verified that; employment generation records has been submitted.
- 3. Cleaning procedure agreement and procedure is now provided by the project owner to the assessment team and found accepted.
- 4. Project Owner has submitted the actual generation data to the assessment from the date of the commissioning, and same is found consistent with generation bills.

Thus, CAR	is closed.		-	
Table 3.				
CAR ID	04	Section no.	D.3.7	Date: 28/06/2023
Description				
			bserved that; pro	ject owner has not provided
	umentary evidence to v	•		
	M cost of project activi			
	riff rate decided during	the final meeting	g at the time of sig	jning PPA.
	signed PLF			
	ner's response			Date: 12/07/2023
		Operation & Ma	intenance agreem	nent and CA Certificate for O&M cost of
	ect activity			
		documents whi	ch includes the inf	formation about Tariff Rate of each plant
	e project activity			
	Rs stating the PLF for de		lence to verify des	signed PLF
	tion provided by Proje			
	Operation & Maintenar	nce agreement		
	Certificate			
3. PPA 4. DPF	and other supporting	documents		
	t Verifier assessment			Data: 28/11/2022
			intononoo ogroom	Date: 28/11/2023 nent, CA certificate, of the project activity.
	s, accepted by VVB tea		intenance agreen	ient, CA certificate, of the project activity.
	has submitted the PPA		n team	
				or all the project instances, thus CAR is
	open, till document is si		cport is missing i	of all the project instances, thus OAR is
	ner's response			Date: 05/01/2024
	has now provided the th	nird party PLF re	port for all the pro	
	entation provided by Pro		•	
	R for all the project insta			
	t Verifier assessment			Date: 10/01/2024
			ubmitted the deta	iled project report and third party PLF
	o found accepted thus (
CAR ID	05	Section no.	D.4	Date: 28/06/2023
Description	of CAR			
PO requeste	ed to submit supporting	document for th	e Start Date of the	e project activity. Kindly submit.
	ner's response			Date: 12/07/2023
		esolution as sup	porting documen	t for the start date of the project activity
Documenta	tion provided by Proje			
1. Boa	rd Resolution			

GCC Project Verifier assessment Date: 28/11/2023 VVB team observed that, project owner has submitted the commissioning certificate of the project activity, moreover board resolution is still not submitted by the project owner. Thus, CAR is open. Project Owner's response Date: 05/01/2024 PO has now submitted the board resolution for the project activities.

Documentation provided by Project Owner

Board Resolution.				
GCC Project Verifier assessment	Date: 30/01/2024			
Assessment team verified that, project owner has subr				
assessment team found it accepted thus CAR is close				
	· M :			
CAR ID 06 Section no. D	.6 Date: 28/06/2023			
Description of CAR	.0 Date: 20/00/2023			
PO requested to submit all supporting documents for t	na Local Stakeholders Consultation conducted			
including invitations, and MoMs of the meetings, meeting				
submit.	ngs photos & outcomes of the meetings. Rindry			
Project Owner's response	Date: 12/07/2023			
PO has now submitted all the supporting documents for				
including invitations, and MoMs of the meetings, meeti				
Documentation provided by Project Owner	ngs photos & outcomes of the meetings			
 News Paper Ads Attendance Sheets 				
4. Feedback Forms				
5. Photos				
6. MOMs				
GCC Project Verifier assessment	Date: 28/11/2023			
VVB team observed that, details of local stakeholder n				
English and regional Language during the local stakeh	older meeting is not renecting in project submission			
form. Thus, CAR is open.	Dete: 05/04/2024			
Project Owner's response	Date: 05/01/2024			
The details of local stakeholder meetings and the ques				
Language during the local stakeholder meeting is now provided and reflecting in project submission form				
Documentation provided by Project Owner				
Updated PSF Version 5.0 Dated 09/01/2024	D-1- 40/04/0004			
GCC Project Verifier assessment	Date: 10/01/2024			
	location question in regional language and English as			
well as per Guidelines. Thus, CAR is open.				
Project Owner's response	Date: 25/01/2024			
PO has now provided Maharashtra location question in	regional language and English as well as per			
Guidelines				
Documentation provided by Project Owner				
LSC Documents for Maharashtra Location				
GCC Project Verifier assessment	Date: 30/01/2024			
Assessment team verified that, as per GCC guideline,	PO has updated the PSF, the details of the local			
stakeholder question were asked during LSC in update	ed in English and regional language as well. Thus,			
accepted CAR is closed.				
	.7 Date: 28/06/2023			
Description of CAR				
	rated from the project will not be double counted in any			
other mechanism as GCC is the only program to which	project activity has been applied". Thus, CAR is raised.			
Project Owner's response	Date: 12/07/2023			
PO has now submitted the declaration stating that, ACC's generated from the project will not be double				
counted in any other mechanism as GCC is the only program to which project activity has been applied				
Documentation provided by Project Owner				
1. No Double Counting Declaration				
GCC Project Verifier assessment	Date: 28/11/2023			
VVB team verified that, PO has submitted the no doub				
ACCs generated from the project will not be double co	unted in any other mechanism CAR is closed			

ACCs generated from the project will not be double counted in any other mechanism. CAR is closed.

Table 3. FARs from this Project Verification												
FAR ID	01	Section no.	D.7 , D.13 D.14	Date: 07/02/2024								
Description	of FAR											
			CORSIA requirements for the									
			and HCLOA requirements and	d also future CORSIA								
requirements	applicable time to time	e for the project	activity".									
Project Own	er's response			Date: DD/MM/YYYY								
-												
Documentat	ion provided by Proje	ect Owner										
-												
GCC Project	Verifier assessment			Date: DD/MM/YYYY								
-												

FAR ID	02	Section no. D.10 and D.3.7 Date: 07/02/2024									
Description	of FAR										
GCC verifier	shall verify the impleme	entation of the me	onitoring plan for the following	environmental safeguarding							
parameters;											
a) Environme	ent – Air; Suspended pa	articulate matter	(SPM) emissions (EA03)								
			sil fuels with renewable source	of energy (ENR07).							
	nt – End of life product										
	ent - Solid waste Polluti										
e) Environme	ent - Solid waste Polluti	on from Hazard	ous wastes								
Project Own	er's response			Date:							
Documentat	ion provided by Proje	ect Owner									
GCC Project	Verifier assessment			Date: DD/MM/YYYY							

FAR ID	03 Section no. D.11 and D.3.7 Date: 07/02/2024												
Description of FAR													
GCC verifier shall verify the implementation of the monitoring plan for the following social safeguarding													
parameters achieved by the project activity;													
a) Social - Jobs; Long term job (>1 year created/ lost)													
c) Social - Specialized training / education to local personnel (SE01)													
g) Social - A	voiding discrimination v	when hiring peop	le from different race, ge	ender, ethnics, religion,									
marginalized	groups, people with di	isabilities (SJ04)	_	-									
h) Social - Re	educing / increasing ac	cidents/Incidents	s/fatality (SHS03)										
j) Social - Pro	ovisions of resettlemen	nt and human set	ttlement displacement (S	SW 14)									
	ducational services imp		E02)										
I)Social - Wo	men's empowerment (SW06)											
(human right	s)												
Project Own	er's response			Date:									
Documentat	ion provided by Proj	ect Owner											
GCC Project	Verifier assessment			Date: DD/MM/YYYY									

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

Impact of Proje on	ect Activity	Information on In	npacts, Do-No	o-Harm Ri	isk Assessmer	nt and Establis	shing Safe	guards		Project Owner's	Conclusion	GCC Project Verifier's Conclusion (To be included in Project Verification Report only)
		Description of Impact (positive or negative)	Legal/ voluntary corporate requirement		rm Risk Assessm er is applicable)	ent (choose	Risk Mitig Plans for marked as		Performance indicator for monitoring of impact	<i>Ex-ante</i> scoring of environmental impact	Explanation of the Conclusion	3 rd Party Audit
			requirement / regulatory/ voluntary corporate threshold Limits		Harmless	Harmful	Operatio nal Controls	Program of Risk Managem ent Actions	Monitoring parameter and frequency of monitoring	Ex- Ante scoring of the environmental impact (as per scoring matrix Appendix-02)	Ex- Ante description and justification/explanation of the scoring of the environmental impact	Verification Process
Environmental Aspects on the identified categories ¹⁹ indicated below.	Indicators for environmental impacts	Describe and identify anticipated and actual significant environmental impacts, both positive and negative from all sources (stationary and mobile) during normal and abnormal/emergency conditions, that may result from the construction and operations of the Project Activity, within and outside the project boundary, over which the Project Owner(s) has/have control.	Describe the applicable national regulatory regulatory requirements /legal limits / voluntary corporate limits related to the identified risks of environmental impacts.	If no environ mental impacts are anticipat ed, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applica ble	If environmental impacts exist but are expected to be in compliance with applicable national regulatory /stricter voluntary corporate requirements and will be within legal/ voluntary corporate limits by way of plant design and operating principles, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Harmless /If the project has a positive impact on the environment mark it as "harmless" as well.	If negative environmental impacts exist that will not be in compliance with the applicable national legal/ regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause harm (may be un- safe) and shall be indicated as Harmful	Describe the operation al controls and best practices, focusing on how to implemen t and operate tha Project Activity, to reduce the risk of impacts that have been identified as 'Harmful at least to a level that is in complian ce with applicabl e legal/regu latory requirem ents or industry best practice or stricter voluntary corporate	Describe the Program of Risk Manageme nt Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce or eliminate the risk of impacts that have been identified as Harmful .	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmful. The frequency of monitoring to be specified as well including the data source.	-1 0 +1	Confirm the score of environmental impact of the project with respect to the aspect and its monitored value in relation to legal /regulatory limits (if any) including basis of conclusion.	Describe how the GCC Verifier has assessed that the impact of the Project Activity against the particular aspect and in case of 'harmful impacts'' how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to cause any harm as well as the net positive impacts of the project with respect to the most likely baseline alternative.

¹⁹ sourced from the CDM SD Tool and the sample reports are available (<u>https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx</u>)

							requirem					
							ents					
Reference to paragraphs of Environmental and Social Safeguards Standard		Paragraph 12 (a)	Paragraph 13 (c)	Paragra ph 13 (d) (i)	Paragraph 13 (d) (ii)	Paragraph 13 (d) (iii)	Paragrap h 13 (e) (i)	Paragraph 13 (e) (ii)	Paragraph 12 (c) and Paragraph 13 (f)	Paragraph 22		Paragraph 24 and Paragraph 26 (a) (i)
Environment - Air	SO _x emissions (EA01)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	NO _x emissions (EA02)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	CO ₂ emissions (EA03)	In absence of the project activity the stated amount of generated electricity would be generated by the operation of grid - connected power plants. The caused CO2 emissions by the grid - connected power plants is expressed as grid emission factor, i.e. t CO2/MWh generated grid electricity, due to fossil fuel based grid power plants. Therefore, the non - fossil fuel, zero emission - generated electricity by the project activity will substitute the grid electricity and related CO2 emissions, i.e. CO2 emission reduction = generated electricity by the	The baseline activity generates CO ₂ emission and the anticipate emissions will be accordance with the Air (Prevention & Control of Pollution) Act 1981stipulat e s thresholds for both ambient air quality as well as stack emissions.	Not Applica ble as the project does not create any emissio ns	Harmless As the overall impact is positive with respect to baseline alternative	Not Applicable	Not Applicab le	No action required	Monitoring parameter is GHG emission reductions per year. tCO2/year. This parameter is calculated from the quantity of net electricity generated and supplied to the grid multiplied by the combined margin emission factor sourced from the CEA database. Net electricity will be monitored through the energy meters installed at the substation. This parameter will be continuously monitored and reported on annual basis. Please refer to	+1	With reference to the CPCB modified direction No. B29012/ESS (C PA)/2015- 16; dated March 07, 2016 (Appendix A) solar power project falls in White category and it is mentioned in the notification that there shall be no necessity of obtaining the Consent to Operate" for White category of industries. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted CO ² emissions, which has been calculated by the combined margin emission factor as mentioned in the PSF. Therefore, emission reductions are expected to be reduced which will be regularly monitored and verified ex-post and therefore is eligible to be scored.	The project will have a positive impact by Reducing measurable amount of CO ₂ emissions. This amount of emission reduction will be monitored as per monitoring plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project Verification Report.

	-	·										
		project activity x grid emission factor (Positive impact)							the section B.7.1 for more detail			
	CO emissions (EA04)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Suspended particulate matter (SPM) emissions (EA05)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Fly ash generation (EA06)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Non- Methane Volatile Organic Compounds (NMVOCs) (EA07)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Odor (EA08)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Noise Pollution (EA09)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (EA10)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required and correspondin g notation with EA as prefix)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
		Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Environment - Land	Solid waste Pollution from Plastics (EL-01)	Not Applicable	Plastic Waste (Manageme nt and Handling) Rules, 2016	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	There will be no major plastic waste generated due to the project activity. Project owner has a waste management plan which has been assessed and found to be inline with the ESIA and related waste policy.
	Solid waste Pollution from Hazardous wastes (EL02)	Project anticipates generating hazardous waste like transformer oil disposal at the end of lifetime (and it is	Hazardous and waste manageme	Not applica ble	All kinds of the solid wastes generated during the project	Not Applicable	The Project owner will follow and	Not applicable	Hazardous waste quantity generated and disposed will be continuously	+1	Project Owner ensures (through ESMS) proper disposal of Hazardous Waste through actual user, waste collector or operator of the disposal facility, in	The Transformer oil or any other hazardous waste will be disposed as per applicable laws and regulations in the host country. Hence there is no impact considered for the project activity

Solid waste	monitored following hazardous waste management rule, 2016.(Negative impact but monitored)	nt rules 2016 ²⁰	Not	activity will be collected, sorted, stored and disposed to the licensed vendor as per the regulation pertaining to the respective hazardous waste management rules of state and central pollution control board whichever precedes. Hence the impact is deemed harmless Not	Not	impleme nt the national rules formulat ed by CPCB to ascertai n best practice prevailin g in the industria I practice s.	Not	and monitored and recorded in the hazardous waste with register annual monitoring	Not Applicable	accordance with the Central Pollution Control Board guidelines. Moreover, though not covered under the rule, the broken part of the solar plant is recommended to be sent back to the manufacturer or an authorized recycler. The parameter will therefore be eligible to score	however to ensure to compliance of the laws and regulations the project owner monitored the same throughout the crediting period by means of records of oil disposed //replaced from the project activity. The monitoring plan provided in section B.7.2 is appropriate and acceptable to the project verification team.
Pollution from Bio- medical wastes (EL03)	Not Applicable	Applicable	Applica ble	Applicable	Applicable	Applicab le	Applicabl e	Not Applicable			
Solid waste Pollution from E- wastes (EL04)	E- waste generation from the Solar Power Project in terms of damaged equipment, electronic equipment wires and computer auxiliary etc. can be recycled or imported by vendors based on the E waste management amendment rule 2018 and Hazardous waste management rule 2016(Positive impact)	E-Waste Manageme nt Amendment rules, 2018 ²¹ . As per the section D of hazardous waste rule, the metal waste under category B can be imported subjected to conditions specified	Not applica ble subject to CPCB conditio ns	All kinds of the E-wastes generated during the project activity will be collected, sorted, stored and disposed to the authorized vendor for the recycling as per the regulation pertaining to the respective E- waste management rules of state and central pollution control board whichever precedes.	Not Applicable	Not Applicab Ie	Not Applicabl e	O&M team continuously monitors the hazardous waste generated at the project site on monthly basis and recorded in the plant log books. Following parameters will be monitored 1. Electronic components 2. Computer accessories 3. Any other E- waste components These parameters will be monitored	+1	The Project Owner will collect, store all E- waste generation from the Solar Power Project in terms of damaged equipment, electronic equipment wires and computer auxiliary etc. and dispose compliance E- Waste Management Amendment rules, 2018.	The project will have a positive impact by managing E-waste in an appropriate manner and in compliance to the prevailing laws and regulations. This amount of managing E-waste will be monitored as per monitoring plan in the PSF section B.7.2 and assessment of the same is provided section D.3.7 of the Project Verification Report.

²⁰ <u>https://cpcb.nic.in/rules/</u>
 ²¹ <u>https://cpcb.nic.in/uploads/Projects/E-Waste/e-waste_amendment_notification_06.04.2018.pdf</u>

				Hence the impact is deemed harmless				and recorded in the plant log books. Data will be monitored on monthly basis. Please refer to the section B.7.2 for more details on monitoring			
Solid waste Pollution from Batteries (EL05)	No battery waste is anticipated through the operation of the project. However, action plan has been proposed for management of e- waste if any.	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	No risks identified
Solid waste Pollution from end-of- life products/ equipment (EL06)	The project activity may create solid waste from end-of- life products/ equipment will be generated. Project activity may result in the E-waste from the panels and other electronic products at the end of its lifetime. (Negative but monitored)	Solid waste manageme nt rules, 2018	Not Applica ble	The average life of the transformers and PV modules are considered as 25 years. Transformers will be sent back to the manufacturer or recycler for the recycling and reuse of usable component at the end of the lifetime of the transformer. project owner will dispose the recyclable material to the recyclable materials to the third-party vendors or return to manufacturer s in compliance with the	Not Applicable	Not Applicable	Not Applicabl e	Project Owner will monitor the no of transformers and PV modules failed and sent back to the manufacture r on yearly basis during the lifetime of the project. Records of the equipment disposed to the vendors or manufacture rs at the end of life-time will be monitored and recorded. A self – attested declaration mentioning that the equipment waste from the end of project life will be disposed as per host country regulatory guidelines if available or to the appropriate	+1	Lifetime of the project activity is 25 years. Project Owner will collect, store and dispose the equipment's in compliance to the Solid Waste Management Rules, 2018. Same will monitor by project owner thus accept	Project owner provided mitigation plan to reduce the risk is not likely to cause any harm to the environment The appropriate monitoring plan has been put in place to monitor the risks identified due to the implementat ion of the project activity This will be monitored as per monitoring plan in the PSF section B.7.2 and assessment of the same is provided section D.3.7 of the Project Verification Report.

		•										
	Soil Pollution from Chemicals (including	Not Applicable	Not Applicable	Not Applica ble	prevailing rules at the end-of-life time Hence the impact is harmless.	Not Applicable	Not Applicab Ie	Not Applicabl e	recycling vendor to avoid the environment al impact. Please refer to the section B.7.2 for more details on monitoring Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Pesticides, heavy metals, lead, mercury) (EL07)											
	land use change (change from cropland /forest land to project land) (EL08)	The project activity uses only barren land and hence it is not applicable	Right to fair compensati on and transparenc y in land acquisition Rehabilitatio n and resettlement act 2013	Not Applica ble	There is no loss of livelihood or loss of forest or conserved land area under habitat protection due to the land acquisition for this project activity. hence the impact is Harmless	Not Applicable	Not Applicab le	Not Applicabl e	The barren land is converted to solar power project. Hence this parameter is scored as "0" as the impact cannot be monitored till the lifetime of the project	0	The project activity has been implemented in barren land and no trees/crop have been removed from the site due to project activity or no other natural resource has been used to operate project activity therefore this parameter is cannot be measured and scored as "0"	The project activity has minimal impact on the land use change. The environment al impact is positive with respect to baseline scenario as the barren land is converted to solar power project. Hence this parameter is scored as "0" as the impact cannot be monitored till the lifetime of the project (i.e., 25 years). Hence this parameter will not be scored
	Others (EL09)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
		Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Environment - Water	Reliability/ accessibility of water supply (EW01)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Water Consumptio n from ground and other sources (EW02)	The project activity uses sprays to clean the SPV cells and hence ground water is not used for maintenance purpose, if any	The Water (Prevention & Control of Pollution) Act 1974	Not Applica ble	Harmless, as there is no negative impact due to the project activity.	Not Applicable	Not Applicab le	Not Applicabl e	Annual monitoring of water consumption from records of tankers project owner	+1	There will not be any significant impact on ground water or any other sources. Currently O&M contractor in the plant is arranging tanker water for module cleaning purposes and other uses in the plant. In case, PO plans	The project activity does not use ground water. The water required for cleaning of modules is procured from local water supplier through water tanker. PO has provided water supply logbook for the same. VVB has cross checked the evidence and found acceptable.

	-											
		water is used it will be monitored. (Negative but monitored)									to use ground water for plant operation in future, necessary permissions from government authority will be secured. Water consumption records are maintained, and existing records are also provided to the verifier.	This is also established from the remote audit and by interviewing with the stakeholders. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring has been found acceptable by the team.
	Generation of wastewater (EW03)	Domestic wastewater and effluent from panel cleaning if discharged directly can cause water pollution and burden on the existing centralized wastewater treatment facility	The Water (Prevention & Control of Pollution) Act 1974	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Wastewater discharge without/with insufficient treatment (EW04)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Pollution of Surface, Ground and/or Bodies of water (EW05)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Discharge of harmful chemicals like marine pollutants / toxic waste (EW06)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (EW07)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Add more rows if required	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
		Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Environment – Natural Resources	Conserving mineral resources (ENR01)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable

(ENR02)											
Protecting/ enhancing species diversity (ENR03)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Protecting/ enhancing forests (ENR04)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Protecting/ enhancing other depletable natural resources (ENR05)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Conserving energy (ENR06)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Replacing fossil fuels with renewable sources of energy (ENR07)	The solar power project replaces fossil fuel with the renewable solar energy for the power generation by installing the solar power plant which would have been otherwise generated from the fossil fuel dominant. (Positive impact)	Energy Conservatio n Act 2001	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Continuo us measure ment of electricity generatio n will be done. Paramete r, "Replacin g fossil fuels with renewabl e sources of energy" is included in section B.7.1 of the PSF.	The project is expected to supply an average of 27,704 MWh per year renewable electricity to grid. The electricity to grid. The electricity to produced from the project is 100% clean and green which replaces equal quantity of fossil fuel dominated grid electricity. The quantity of electricity The quantity of electricity produced from the solar project will be monitored for this parameter. Hence, this parameter shall be scored.	+1	The project utilizes renewable solar resources to generate electricity which will replace the electricity generated by fossil fuel plants. Therefore, the parameter will be monitored and is eligible to be scored.	The project will have a positiv impact by relacing fossil fuels renewable sources of energy, amount of energy generated f the renewable energy sources solar power plant will be moni as per monitoring plan in the section B.7.2 for the paramete EGPJ,y and assessment of t same is provided section D.3. the Project Verification Repor
Replacing ODS with non-ODS	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab le	Not Applicabl e	Not Applicable	Not Applicable	No impact Therefore this parameter will not be scored.	Not Applicable

							-									
	refrigerants (ENR08)															
	Others (ENR09)	Not Applicable	Not Applicable	Not Applica ble	Not Applicable	Not Applicable	Not Applicab Ie	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable				
	Add more rows if required															
Net Score:				+6												
Project Own	er's Concl	usion in PSF:	SF: The Project Owner confirms that the Project Activity will not cause any net harm to Environment.													
GCC Project	t Verifier's	Opinion:		The G	CC Verifier c	ertifies that	the Proje	ect Activity	is not likely t	to cause any net l	harm to the environme	nt.				

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

Impact of Project Activity on	Information o	n Impacts, Do∙	-No-Harm Risk Assessment and E	stablishing \$	Safeguards		ect Owner's onclusion	GCC project Verifier's Conclusion (to be included in Project Verification Report only)
	Description of Impact (positive or negative)	Legal requirement /Limit, Corporate policies / Industry best practice	Do-No-Harm Risk Assessment (choose which ever is applicable)	Risk Mitigation Action Plans (for aspects marked as Harmful)	Performance indicator for monitoring of impact.	Ex-ante scoring of environm ental impact	Explanation of the Conclusion	3 rd Party Audit

				Not Applicabl e	Harmless	Harmful	Operationa I / Manageme nt Controls	Monitoring parameter and frequency of monitoring (as per scoring matrix Appendix-02)	Ex- Ante scoring of social impact of the project	Ex- Ante description and justification/explan ation of the scoring of social impact of the project	Verification Process Will the Project Activity cause any harm?
Social Aspects on the identified categories ²² indicated below.	Indicators for social impacts	Describe and identify actual and anticipated impacts on society and stakeholders, both positive or negative, from all source during normal and abnormal/emergency conditions that may result from constructing and operating of the Project Activity within or outside the project boundary, over which the project Owner(s) has/have control	Describe the applicable national regulatory requirements / legal limits or organizational policies or industry best practices related to the identified risks of social impacts	If no social impacts are anticipated , then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicable	If social impacts exist, but are expected to be in compliance with applicable national regulatory requirement s/ stricter voluntary corporate limits by way of plant design and operating principles then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Harmless), project having positive impact on society wrt. To the BAU / baseline scenario must also mark their aspect as "harmless"	If negative social impacts exist that will not be in compliance with the applicable national legal/ regulatory requirement s or are likely to exceed legal limits then the Project Activity is likely to cause harm and shall be indicated as Harmful	Describe the operational or managemen t controls that can be implemented as well as best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as Harmful .	Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmful. The frequency of monitoring to be specified as well. Monitoring parameters can be quantitative or qualitative in nature along with the data source	1 0 +1	Confirm the score of the social impacts of the project with respect to the aspect and its monitored value in relation to legal/regulatory limits (if any) including basis of conclusion	Describe how the GCC Verifier has assessed that the impact of Project Activity on social aspects (based on monitored parameters, quanitative) and in case of "harmful aspects how has the project owner adopted Risk Mitigation Action / management actions plans and policies to mitigate the risks of negative social impacts to levels that are unlikely to cause any harm. Also describe the positive impacts of the project on the society as compared to the baseline alternative or BAU scenario.
Reference to paragraphs of Environment al and Social Safeguards Standard		Paragraph 12 (a)	Paragraph 13 (c)	Paragraph 13 (d) (i)	Paragraph 13 (d) (ii)	Paragraph 13 (d) (iii)	Paragraph 13 (e) (i)	Paragraph 12 (c) and Paragraph 13 (f)	Paragraph 23		Paragraph 24 and Paragraph 26 (a) (ii)

²² sourced from the CDM SD Tool and the sample reports are available (<u>https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx</u>)

Social - Jobs	Long-term jobs (> 10 year) created/ lost (SJ01)	The project creates long term job opportunities during operation. (Positive impact)	There is no legal requirement from local authority to create employment from the project activity	-	Harmless	-	-	The number of people employed by the project will be monitored yearly through checking payroll records or attendance records or the social insurance. Refer section B.7.1 of PSF.	+1	There is no mandatory law to generate employment from the project activity, However, project Owner has decided to generate employment for minimum 5 people for long term thereby creating positive impact wrt baseline scenario. The parameter will be monitored and quantified, therefore will be scored.	The project operation has created new job opportunities in the area during operational phase of the project activity and would create at least 05 jobs in future. The number of persons employed would be monitored through payroll records and salary slips. This will be monitored as per monitoring plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project Verification
	New short-term jobs (< 1 year) created/ lost (SJ02)	The project creates short term job opportunities.	There is no legal requirement from local authority to create employment from the project activity	-	Harmless	-	-	People will be employed during operation phase for short term through third party as support staff and monitored yearly as number of persons employed for short term. Refer B.7.1.	0	There is no mandatory law to generate employment from the project activity, However, project Owner has decided to generate employment for minimum 2 people for short term thereby creating positive impact wrt baseline scenario. The parameter will be monitored and quantified, therefore will be scored.	Report. The project operation has created new job opportunities in the area during operational phase of the project activity and would create at least 02 jobs in future for short- term. The number of persons employed would be monitored through payroll records and salary slips. This will be monitored as per monitoring plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project

,											Verification Report.
	Sources of income generation increased / reduced (SJ03)	The project creates job opportunities for people.	There is no legal requirement from local authority to create employment from the project activity	-	Harmless	-	-	-	0	Employment will be provided to local people wherever possible thereby creating positive impact. However, the parameter will not be monitored and quantified and thus scored as 0.	The project owner will create new job opportunities in the area during operational phase of the project activity which result in increment of income of the local people. The increment in income of people is not quantifiable hence not monitored.
	Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities (SJ04) (human rights)	PO ensures to avoid discrimination while hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities.	IFC Performance Standard-2: Labour and Working conditions ²³ and HR policy of PO.	-	Harmless	-	-	-	0	The project owner will not make employment decisions based on personal characteristics unrelated to inherent job requirements. The project will base the employment relationship on the principle of equal opportunity and fair treatment and will not discriminate with respect to any aspects of the employment relationship. The project will take measures to prevent and address harassment, intimidation, and/or exploitation, especially regarding women. PO will provide equal pay for equal work irrespective of race, gender,	The project operation has created new job opportunities avoiding discrimination while hiring in the area during operational phase of the project activity. The number of persons employed would be monitored through HR records. Hence, the parameter can't be quantified and measured.

²³ <u>https://www.ifc.org/en/insights-reports/2012/ifc-performance-standard-2</u>

										ethnics, religion, marginalized groups and people with disabilities. However, the parameter can't be measured and quantify thus scored as 0.	
Social - Health & Safety	Disease prevention (SHS01)	The project activity is the installation of solar power plant. There is no possibility of disease due to the operation of project activity.	The Factories Act, 1948 ²⁴	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	There is no possibility of disease due to the operation of project activity. Therefore, the parameter is not eligible to score.	Disease is not a possibility as a result of project activity operations. As a result, the parameter is not scoreable.
	Occupational health hazards (SHS02)	Project owner provided all the workers the safety training before they go to work on the power station to ensure the security.	EHS policy of Project Owner	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	The project owner will provide regular safety training to their workers about the accident hazards and risk related to specific works and preventive measures for avoiding accidents at site. However, the parameter can't be measured and quantify thus not eligible to score.	Workers will get frequent safety training from the project owner about the risks and hazards of certain tasks as well as preventive steps to keep the site accident-free. But the parameter isn't quantifiable or measurable, thus it can't be scored.
	Reducing / increasing accidents/Incidents/fatal ity (SHS03)	Project owner provided all the workers the safety training before they go to work on the power station to ensure the security. (Negative impact)	The Factories Act, 1948 & EHS policy of Project Owner ⁶⁵	-	Harmless	-	Project owner provided all the workers the safety training before they go to work on the power station to ensure the security.	Fatal and non- fatal occupational injuries in the project plant will be yearly monitored. Refer section B.7.2.	+1	The project owner will provide regular safety training to their workers about the accident hazards and risk related to specific works and preventive measures for avoiding accident at site. The parameter in terms of fatal and non- fatal occupational injuries can be measured and quantify yearly	The occupational injury criteria, which includes both fatal and non-fatal injuries, is measurable and quantifiable annually, making it suitable for scoring. The number of trainings would be monitored through training attendance records and photos. This will be monitored as per monitoring

²⁴ https://labour.gov.in/sites/default/files/factories_act_1948.pdf

									therefore is eligible to score.	plan in the PSF section B.7.1 and assessment of the same is provided section D.3.7 of the Project Verification Report.
Reducing / increasing crime (SHS04)	The project activity is the installation of solar power plant. There is no possibility of crime due to the operation of the project activity.	Crime comes under law & order of local government authority and there is no legal requirement from local authority to project owner to liable to reduce crime.	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Project activity will increase local employment so there is no chance to increase crime in the local area due to the solar power projects. However, the parameter can't be measured and quantify thus not eligible to score.	There is no possibility that the solar power projects would result in a rise in local criminality because project activities will provide jobs in the community. But the parameter isn't quantifiable or measurable, thus it can't be scored.
Reducing / increasing food wastage (SHS05)	The project activity is the installation of solar power plant. There is no possibility of food wastage due to the project activity	The compulsory food waste reductio n bill, 2018 ²⁵	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable.
Reducing / increasing indoor air pollution (SHS06)	The project activity is the installation of solar power plant. There is no possibility of indoor air pollution due to the project activity.	The Air (Prevention & Control of Pollution) Act 1981 ⁴⁹	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Efficiency of health services (SHS07)	The project activity is the installation of solar power plant. There is no involvement of health services due to the project activity.	No local regulation available	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable

²⁵ http://164.100.47.4/billstexts/RSBillTexts/AsIntroduced/food-E-21619.pdf

	Sanitation and waste management (SHS08)	The project activity is the installation of solar power plant. There is no involvement of sanitation and waste management practices due to the project activity. (Positive impact)	No local regulation available	No local regulatio n available	No local regulation available	No local regulation available	No local regulation available	No local regulation available	No local regulation available	No local regulation available	No local regulation available
	Other health and safety issues (SHS09)	The project activity is the installation of solar power plant. There is no involvement other health and safety issues due to the project activity.	EHS policy of Project Owner	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Social - Education	specialized training / education to local personnel (SE01)	The project owner provides job related training according to the positions. (Positive impact)	There is no legal requirement from local authority to provide training to people	-	Harmless	-	-	Training records/eviden ce for the training would be maintained by the project owner and monitored yearly. Refer section B.7.1 of the PSF.	+1	The project Owner will provide regular job related training to their workers according to their positions. The parameter will be monitored and quantified yearly. Therefore, the parameter is eligible to score.	The job-related training provided to the project personnel are the routine training program for daily operation & maintenance and safety practices to be followed as per industry norms. Therefore, this parameter will be scored however monitoring plan is provided in section B.7.1 of the PSF to ensure the compliance of the regulations which will be harmless during entire crediting period of the project activity which is appropriate and acceptable.
	Educational services improved or not (SE02)	The created permanent jobs will receive	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Training records/eviden	+1	Project Omwer will take the initiative for the	The PO has provide the records of the

		specific job training by the project owner as per CSR policy of Project implementer						ce by the project owner.		improvement of the educational service of the employee.	company related to the CSR of the project activity, which in lines the measures taken in the report. The records will be maintained of the, the same will be checked during the emission reduction verification of the project. The training will be monitored through parameter.
	Project-related knowledge dissemination effective or not (SE03)	Project activity transfers knowledge on new renewable energy technology.	EHS policy of Project Owner	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
	Other educational issues (SE03)	The project activity is the installation of solar power plant. There is no involvement other educational issues due to the project activity.	EHS policy and Project Owner	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Social - Welfare	Improving/ deteriorating working conditions (SW01)	The project activity is the installation of solar power plant. There is no possibility of deteriorating working condition due to the project activity.	EHS policy of Project Owner	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
	Community and rural welfare (indigenous people and communities) (SW02)	The project activity is the installation of solar power plant which creates positive impact on community and works for rural welfare.	EHS policy of Project Owner	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable

Poverty alleviation (more people above poverty level) (SW03)	The project activity involves the generation of employment which results in poverty alleviation.	No local regulation	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Improving / deteriorating wealth distribution/ generation of income and assets (SW04)	The project activity involves the generation of employment.	No local regulation	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Increased or / deteriorating municipal revenues (SW05)	The project activity is the installation of solar power plant. There is no involvement of municipal revenues due to the project activity.	No local regulation	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Women's empowerment (SW06) (human rights)	Project activity provides equal opportunity to women are not discriminated when compared with their male counterpart in regard to the salary/remunerati on for similar nature of job. The project owner shall ensure the women employee in the organization work in a safe and friendly environment and their grievances (if any) are adequately addressed. (Positive impact)	National Gender policy for women empowerme nt 2001 ²⁶	-	Harmless	-	-	Currently there is no women employed at project site at managerial position. However, PO would provide managerial position to women in future, thus monitoring parameter is established which is to be monitored on annual basis. Refer section B.7.1 of PSF.	+1	Project Owner will take initiative for Promoting gender equality, empowering women, and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups etc. The project activity is located in the remote area and women employment is not possible due to safety concerns, but they are encouraging to apply at the site. However, PO would provide employment to women in future,	In order to promoting gender equality, empowering women, and providing elderly residents with various amenities as well as steps to decrease the inequalities that socially and economically disadvantaged groups must contend with. Although women cannot be employed at the project site owing to safety issues, they are encouraged to apply. The project activity is located in a rural region. On the other hand, PO would

²⁶

https://pib.gov.in/newsite/PrintRelease.aspx?relid=103327#:~:text=National%20Policy%20for%20Women&text=The%20Government%20of%20India%20had,forms%20of%20discrimina tion%20against%20women.

									thus monitoring parameter is established which is to be monitored on annual basis.	eventually give jobs to women, hence an annual monitoring plan is provided in section B.7.1 of the PSF and accepted to verifier's team.
Reduced / increased traffic congestion (SW07)	The project activity is the installation of solar power plant. There is no involvement of traffic congestion due to the project activity.	No local regulation	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Exploitation of Child labour (human rights) (SW08)	The project activity is the installation of solar power plant. There is no involvement of child labour due to the project activity. (Negative impact)	The Child Labour (Prohibition and Regulation) Act, 1986 ²⁷	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Minimum wage protection (human rights) (SW09)	The project activity is the installation of solar power plant. Employees are paid as per minimum wage rule during the construction and operation phase of the project activity.	Centralized HR policy of Project owner	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Abuse at work place.(with specific reference to women and people with special disabilities / challenges) (human rights) (SW10)	Avoiding of abuse at workplace ensures safe working environment for all the workers.	IFC Performance Standard-2: Labor and Working conditions	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable
Other social welfare issues (SW11)	The project activity is the installation of solar power plant. There is no involvement of	No mandatory regulations	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Not Applicable	Not Applicable

²⁷ https://labour.gov.in/sites/default/files/act_2.pdf

-,		other social									
		welfare issues due to the project activity.									
	Avoidance of human trafficking and forced labour (human rights) (SW12)	Avoiding of human trafficking and forced labour at workplace ensures safe working environment for all the workers.	IFC Performance Standard-2: Labor and Working conditions	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	Project owner ensure that all the contracted workers are provided with condition of services, rate of wages, holidays, hours of work as stipulated in the rules as per applicability and tenure of service, by the deputed contractor. No worker is forced to work in the project plant. The parameter can't be measured and quantify thus not eligible to score.	The project owner makes sure that the deputed contractor gives all contractual workers the terms of service, pay rate, holidays, and work hours that are specified in the applicable rules according to their tenure of service. There is no forced labour in the project factory. The criteria are not measurable or quantifiable, making it ineligible for a score.
	Avoidance of forced eviction and/or partial physical or economic displacement of IPLCs (human rights) (CW13)	Avoidance of forced eviction results in community welfare.	Land Acquisition Act 1894 (Amended in 1984) and The Right to Fair Compensatio n and Transparenc y in Land Acquisition, Rehabilitatio n and Resettlement Act, 2013 ²⁸	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicabl e	No forest land or agricultural land or residential area is involved for the project. This project does not involve any forced eviction/ resettlement in terms of physical and economical aspects hence do not attract Resettlement plan as per applicable national/state legislation. The parameter can't be measured and quantify thus not eligible to score.	The project does not involve any residential areas, farms, or forests. According to applicable federal and state laws, this project does not entail any forced eviction or relocation in terms of the physical or financial. As a result, it is not subject to a resettlement plan. The parameter isn't measurable or quantifiable, hence it can't be scored.

²⁸ https://lddashboard.legislative.gov.in/sites/default/files/A2013-30.pdf

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Provisions of resettlement and human settlement displacement (human rights) (CW14)	Avoidance of resettlement and human displacement results in community welfare.	Land Acquisition Act 1894 (Amended in 1984) and The Right to Fair Compensatio n and Transparenc y in Land Acquisition, Rehabilitatio n and Resettlement Act, 2013 ⁷⁰	Not Applicabl e	Harmless	Not Applicable	Not Applicable	Settlement as per the Regional/Natio nal Norms are provided	0	No forest land or agricultural land or residential area is involved for the project. This project does not involve any forced eviction/ resettlement in terms of physical and economical aspects hence do not attract Resettlement plan as per applicable national/state legislation. The parameter can't be measured and quantify thus not eligible to score.	The project does not involve any residential areas, farms, or forests. According to applicable federal and state laws, this project does not entail any forced eviction or relocation in terms of the physical or financial. As a result, it is not subject to a resettlement plan. The parameter isn't measurable or quantifiable, hence it can't be scored.
Community and social welfare	There is a positive impact on the community and rural welfare.	No specific rule or regulation applicable	Not Applicabl e	Harmless as there is negative impact through this project activity	Not Applicable	Not Applicable	Project activity implementatio n voluntarily contributes to the Economic, Environmental , Economical, and social well-being for the community. Hence there is no specific parameter to measure is introduced	0	There is no mandate to invest in the project activity by the project owner. However, Project activity implementation voluntarily contributes to the Economic, Environmental, Economical, and social well-being for the community. Empower and upskill the local people and youth by training and creating the employment to local people during construction and operation of the project activity. Leads to the infrastructure development like internal roads in the nearby villages. Creates economic development by	Assessment team found that there no specific rules and regulation by host country or corporates to monitor the community and social welfare impact. Thus, this impact is not measured. However, Verifiers confirmed through interview with the local stakeholder that due to project activity, many benefits regarding Economic, Environmental, Economical, and social well-being for the community introduced. Thus being a neutral impact , scored as "0".

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										empowering the other project developers to implement more projects in the project area. However, being the impact is neutral considering the baseline scenario this parameter will scored as 0.	
	Threatened Livelihood	Increased economic and infrastructure activity may leads to increase levels of pollution to air, water, and land, and consume finite resources in a manner that may threaten people and the environment.	No specific rule or regulation applicable	Not Applicabl e	Harmless The proposed project is a clean energy project and will not have major pollution sources associated with it. Since the lands is a barren land and not used for any vegetation or agriculture purposes there is no loss of land. More over since the land is procured on lease basis this will create the sustained income to the farmers who has given the	Not Applicable	Not Applicable	The impact is neutral compared to the baseline scenario this parameter is not introduced.	0	There is no loss of threat to the local livelihood or endangered species or environment due to the implementation of the project activity. Since the impact is neutral compared to the baseline scenario this parameter will scored "0".	During interview with the Project owner and local stakeholders, Verifiers team confirms that due to the project activity there is no major impact to nearby livelihood as the project was commissioned on baren land. Thus, being a neutral impact. Impact is scored as "0"

					land for lease.						
	Communal Harmony	The project activity has several positive impacts such as improving living conditions and promote community involvement via economic development, revenue generation and improved infrastructure	Organization HR policy	Not applicabl e	Harmless as PO follows policy to implement no discriminat ion	Not applicable	Not applicable	The impact is neutral compared to the baseline scenario this parameter is not introduced	0	Every employee follows company's HR policy prohibits discrimination on any basis. Also, in forced to demonstrate commitment to working in harmony with the community. However, as there is no monitoring plan to measure the impact, behind a neutral impact, scored as "0"	During interview with the PO and local stakeholders every employee follows company's HR policy prohibits discrimination on any basis, and the same has been shared with the verifier to demonstrate commitment to working in harmony with the community. Same has been confirmed and scored as "0"
Net Score	Net Score:		+5								
Project C	wner's Conclusion	n in PSF:	The Projec	t Owner o	confirms th	at the Pro	ject Activi	ty will not cau	ise any ne	et harm to societ	у.
GCC Pro	ject Verifier's Opin	ion:	The GCC	Verifier ce	ertifies that	the Proje	ct Activity	is not likely to	o cause ar	ny net harm to se	ociety.

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

UN-level SDGs	UN-level Target	Declared Country- level SDG		Defining Project-level SDGs			Conc (To be incluc	ct Verifier's lusion led in Project Report only)
			Project-level SDGs	Project-level Targets/Actions	Contribution of Project- level Actions to SDG Targets	Monitoring	Verification Process	Are Goal/ Targets Likely to be Achieved?
Describe UN SDG targets and indicators See: <u>https://unstats.un.or</u> g/sdgs/indicators/in dicators-list/	Describe the UN- level target(s) and correspo nding indicator no(s)	Has the host country declared the SDG to be a national priority? Indicate Yes or No	Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope or creating a new indicator(s). Refer to previous column for guidance.	Define project-level targets/actions in line with nee project level indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s).	Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined	Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG indicator and its correspondi	Describe how the GCC Verifier has verified the claims that the project is likely to achieve the identified Project level SDGs target(s).	Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or no)

					project-level SDG targets	ng target, frequency of monitoring and data source		
Goal 1: End poverty in all its forms everywhere	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 3. Ensure healthy lives and promote well-being for all at all ages	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 5. Achieve gender equality and empower all women and girls	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Goal 6. Ensure availability and sustainable management of water and sanitation for all	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 7. Ensure access to affordable, reliable, sustainable, and	SDG target 7.2, "By 2030	Yes	Increase the share of renewables in the total installed power capacity connected to the national grid.	27,704 MWh per year clean energy generation	The project provides 6 MWh annual	The net electricity which will be supplied to	This project is renewable solar power project and	Yes

modern energy for all	increase substanti ally the share of renewabl e energy in the global energy mix" by the utilization of solar power as a renewabl e energy source" Indicator 7.2.1 Renewabl le energy share in the total final energy consump tion. KPI - Amount of renewabl e energy supplied to grid for consump tion.				clean energy to the grid.	the grid by the project activity will be monitored continuously through energy meter (main and check meter) installed at the sub- station. The meters remain under the custody of state utility. Please refer to Section B.7.1 for monitoring details.	installations started operation from 22/02/2022 and same was verified with the commissioni ng certificates provided by the project owner. The generated power from the project activity is the clean energy and continuously monitored by the energy meters installed at the site and included in the PSF.	
Goal 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all	SDG target 8.5, "By 2030, achieve full and productiv e employm ent and descent	Yes	Number of employments as a part of project activity	Around 25 numbers of persons will be employed during the crediting period. In addition, training will be conducted for the employees.	Employment of persons the project activity is likely to in reduction of proportion of unemployment (Indicator 8.5.1)	The total number of persons employed will be assed from Employee logbook or register and confirmation from	This is a direct positive impact of the project activity, which will help to reduce unemployme nt in the host	Yes

	work for all women and men including for young people and persons with disabilitie s and equal pay for work of equal value, " Indicator 8.5.1 average hourly earnings of female and male employe e, by occupati on, age and persons with disabilitie s.					contractual service agency. Please refer to Section B.7.1 for monitoring details.	country, this parameter is verifiable during the monitoring period. The total number of persons working in the project activity along with details of female- male break up, age and role and persons with disabilities, if any will be monitored and Payroll/ HR records will be used to monitor this parameter. The relevant monitoring plan is included in the section B.7.1 of the PSF also the assessment of the same has been provided D.3.7 of PVR.	
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA

Goal 10. Reduce inequality within and among countries	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 11. Make cities and human settlements inclusive, safe, resilient, and sustainable	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 12. Ensure sustainable consumption and production patterns	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA
Goal 13. Take urgent action to combat climate change and its impacts	SDG Target 13.2- "Integrat e climate change measure s into national policies, strategie s and planning" KPI - Amount of emission reduction achieved by project under UNFCCC / GCC / Domestic market mechani sm.	Yes	Quantum of GHG avoided due to the project activity	The project activity is expected to result in avoidance of 314.555tCO ₂ e per annum.	Project activity results in avoidance of GHG emission by generation of electricity using renewable energy resources and its supply to the grid, which will avoid generation of equivalent quantum of electricity from fossil fuel- based power plant resulting in emission of CO ₂ .	Avoidance of GHG emission is estimated as product of electricity generated and supplied to the grid and grid emission factor. Please refer to Section B.7.1 for monitoring details.	This is direct positive impact of the project which will avoid around 314.555tCO 2 / Year. The generated power from the project activity is the clean energy and continuously monitored by the energy meters installed at the site and included in the monitoring plan in the PSF.	Yes
Goal 14. Conserve and sustainably use the oceans, seas,	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA

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and marine resources for sustainable development									
Goal 15. Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA	
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA	
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	Not Applicabl e	Not Applicabl e	Not Applicable	Not Applicable	Not Applicable	Not Applicable	NA	NA	
			SUMMARY		Targe	eted	Likely to be A	chieved	
Total Number of SDGs	i				3		:	}	
Certification label (Bro	nze, Silver,	Gold, Platin	um, or Diamond) for the ACCs as	defined in the PSF	Silv	er	Sil	/er	

Appendix 8. Project Monitoring Meters

MSW Jaipur Meter details:-

Meter types Make	Model	Class	Serial No	Calibration date	Due date
Energy Meter- Secure	Secure Meter	0.2s	APX00581	22/02/2022	21/02/2027

Manikgarh Cement Works:-

Meter types Make	Model	Class	Serial No	Calibration date	Due date
Main meter- Secure	Secure Meter	0.2s	X1599654	27/02/2021	26/02/2026

Check meter- Kusu	im Meco 0.2s	21008801	23/02/2023	22/02/2028
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Balaji Cement Works:-

Energy meter- Secure Secure Meter	0.2s	APZ01468	26/11/2022	25/11/2027
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Check meter- Secure Secure Meter	0.2s	APZ01469	26/11/2022	25/11/2027	
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Standby meter- Secure	Secure Meter	0.2s	APZ01470	26/11/2022	25/11/2027
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Ginigera Cement Works:-

Energy meter-	Nelster welcon	0.2s	23003582	08/08/2023	07/08/2028
Standby meter-	Nelster welcon	0.2s	23003687	08/08/2023	07/08/2028

DOCUMENT HISTO	ORY	
	01112/2020	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 CORSIA²⁹;
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

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

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