GLOBAL CARBON COUNCIL

Driving Climate Actions

Project Verification Report

V3.1 - 2020

CONTENTS

COVER PAGE Project Verification Report Form (PVR)	
BASIC INFORMATION	
Name of approved GCC Project Verifier / Reference No. (also provide weblink of approved GCC Certificate)	Carbon Check (India) Private Limited. /GCCV004/01 http://globalcarboncouncil.com/wp-content/uploads/2021/10/carbon-check-india-private-limited-ccipl.pdf
Type of Accreditation	☐ Individual Track[1] ☒ CDM Accreditation E-0052 Valid from 28/03/2019 until 01/06/2024 https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0052 ☒ ISO 14065 Accreditation https://nabcb.qci.org.in/wp-content/uploads/2023/06/004.html Valid from 28/06/2021 until 27/06/2024
Approved GCC Scopes and GHG Sectoral scopes for Project Verification	**GCC Scope** • Green House Gas (GHG# - ACC) • Environmental No-harm (E+) • Social No-harm (S+) • Sustainable Development Goals (SDG+) **GHG Sectoral Scope** • Energy (renewable/non-renewable sources)
Validity of GCC approval of Verifier	08/03/2023 to 31/05/2024
Title, completion date, and Version number of the PSF to which this report applies	Arushi 87MW bundled solar power project in Telangana and Andhra Pradesh, India. Version 1.4, Dated 19/10/2023
Title of the project activity	Arushi 87MW bundled solar power project in Telangana and Andhra Pradesh, India.
Project submission reference no. (as provided by GCC Program during GSC)	S00557

[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.

<table>
<tr><td>Eligible GCC Project Type[2] as per the Project Standard
(Tick applicable project type)</td><td>☒ Type A:
☐ Type A1
☒ Type A2
☒ Sub-Type 1
☐ Sub-Type 2
☐ Sub-Type 3
☐ Sub-Type 4

☐ Type B – De-registered CDM Projects:
☐ Type B1
☐ Type[3] B2</td></tr>
<tr><td>Date of completion of Local stakeholder consultation</td><td>LSC dates for the 3 Project Activities forming the bundle are as follows:

<table><tr><th>Project Activity</th><th>LSC Completion Date</th></tr><tr><td>Greenko Solar Power (Dharmavaram) Limited</td><td>10/02/2022</td></tr><tr><td>SEI Arushi Private Limited</td><td>12/02/2022</td></tr><tr><td>Sunborne Energy Andhra Private Limited</td><td>15/02/2022</td></tr></table></td></tr>
<tr><td>Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide web-link.</td><td>27/10/2022 to 10/11/2022
No comments were received during GSC.
https://www.globalcarboncouncil.com/global-stakeholders-consultation.html</td></tr>
<tr><td>Name of Entity requesting verification service
(can be Project Owners themselves or any Entity having authorization of Project Owners)</td><td>SEI Arushi Private Limited
Greenko Energies Private Limited</td></tr>
<tr><td>Contact details of the representative of the Entity, requesting verification service
(Focal Point assigned for all communications)</td><td>M. Murali Krishnam Raju
muraliraju.m@greenkogroup.com
Greenko Energies Private Limited</td></tr>
<tr><td>Country where project is located</td><td>India</td></tr>
</table>

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

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

<table>
<tr><td></td><td></td></tr>
<tr><td>GPS coordinates of the Project site(s)</td><td>
<table>
<tr><th>Latitude</th><th colspan="3">Longitude</th></tr>
<tr><td colspan="4"></td></tr>
<tr><td colspan="4">Greenko Solar Power (Dharmavaram) Limited
Capacity: 22 MW
Village: Kunuthuru, District: Anantapur,
State: Andhra Pradesh</td></tr>
<tr><td>14º27'12.4"N</td><td>14.4534°N</td><td>77º40'04.1"E</td><td>77.6678°E</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td colspan="4">SEI Arushi Private Limited
Capacity: 30 MW
Near Nagireddy palli Village, District: Anantapur,
State: Andhra Pradesh</td></tr>
<tr><td>14º13'02.3"N</td><td>14.2173°N</td><td>78º4'13.1"E</td><td>78.0703°E</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td colspan="4">Sunborne Energy Andhra Private Limited
Capacity: 35MW
Gattu mandal, Village: Gattu, District: Mahabubnagar,
State: Telangana</td></tr>
<tr><td>16º7'46.9"N</td><td>16.1297°N</td><td>77º33'31.0"E</td><td>77.5586°E</td></tr>
</table>
</td></tr>
<tr><td>Applied methodologies
(approved methodologies of GCC or CDM can be used)</td><td>GCCM001 - Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers (Version 3.0 - 2022)</td></tr>
<tr><td>GHG Sectoral scopes linked to the applied methodologies</td><td>GHG-SS 1: Energy (renewable/non-renewable sources)</td></tr>
<tr><td>Project Verification Criteria:
Mandatory requirements to be assessed</td><td>☒ ISO 14064-2, ISO 14064-3
☒ GCC Rules and Requirements
☒ Applicable Approved Methodology
☒ Applicable Legal requirements /rules of host country
☒ National Sustainable Development Criteria (if any)
☒ Eligibility of the Project Type
☒ Start date of the Project activity
☒ Meet applicability conditions in the applied methodology
☒ Credible Baseline
☒ Additionality
☒ Emission Reduction calculations
☒ Monitoring Plan
☒ No GHG Double Counting
☒ Local Stakeholder Consultation Process
☒ Global Stakeholder Consultation Process
☒ United Nations Sustainable Development Goals (Goal No 13-Climate Change)</td></tr>
</table>

	☒ Others - CORSIA requirements
Project Verification Criteria: Optional requirements to be assessed	☒ Environmental Safeguards Standard and do-no-harm criteria ☒ Social Safeguards Standard do-no-harm criteria ☒ United Nations Sustainable Development Goals (in additional to SDG 13) ☒ CORSIA requirements
Project Verifier's Confirmation: The *GCC Project Verifier* has verified the GCC project activity and therefore confirms the following:	The GCC Project Verifier, Carbon Check (India) Private Limited, certifies the following with respect to the GCC Project Activity "Arushi 87MW bundled solar power project in Telangana and Andhra Pradesh, India." ☒ The Project Owner has correctly described the Project Activity in the Project Submission Form (version 1.4, dated 06/10/2023) including the applicability of the approved methodology [GCC methodology, GCCM001 version 3.0] and meets the methodology applicability conditions and is expected to achieve the forecasted real, measurable and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reductions estimates correctly and conservatively. ☒ The Project Activity is likely to generate GHG emission reductions amounting to the estimated 1,237,933 tCO_{2e} over the crediting period, as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 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 6 SDGs (SDG and 13), 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 Report, reference number and date of approval	Project Verification Report – CCIPL 1349 Version 3.0, 26/10/2023
Name of the authorised personnel of GCC Project Verifier and his/her signature with date	 Name: Vikash Kumar Singh, Compliance Officer Date: 26/10/2023

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

1. PROJECT VERIFICATION REPORT

Section A. Executive summary

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SEI Arushi Private Limited and Greenko Energies Private Limited has appointed the Project Verifier, Carbon Check (India) Private Ltd. (CCIPL), to perform an independent project verification of the project activity **"**Arushi 87MW bundled solar power project in Telangana and Andhra Pradesh, India.**"** (hereinafter referred to as "project activity"). This report summarizes the findings of verification of the project, performed on the basis of GCC rules and requirements as well as criteria given to provide for consistent project operations, monitoring and reporting. This report contains the findings and resolutions from the project verification and a verification opinion.

The project activity is a bundled project jointly owned by Greenko Solar Power (Dharmavaram) Limited, SEI Arushi Private Limited and Sunborne Energy Andhra Private Limited. SEI Arushi Private Limited and Greenko Energies Private Limited are authorized to act as the Project Owners /25/ in accordance with the requirements of the GCC programme as stated under paragraph 18 of the GCC Clarification No.1 version 1.3 /B01-6/. The purpose of project activity is to utilize clean technology to generate electricity by harnessing solar radiation energy and supply the generated electricity to the Indian grid, which is predominantly fossil fuel based. The bundled project activity involves the installation of solar photovoltaic power plants with capacities of 22MW, 30 MW and 35MW in the states of Andhra Pradesh and Telangana, India. The average annual electricity supplied to grid will be of 133,042 MWh, translating into annual average emission reductions of around 123,793 tCO_2e.

The project also contributes to Environmental No-net-harm Label (E+), Social No-net-harm Label (S+), CORSIA requirements (C+) and 6 United Nations Sustainable Development Goals (SDG+).

"The Project Activity complies with all the applicable requirement of the GCC Program and ICAO's requirements on CORSIA Emissions Unit Eligibility Criteria and CORSIA Eligible Emissions Units, as per Clarification No 1., v1.3 /B01-6/ paragraph 23-25, and the ACCs expected to be issued during the crediting period is likely to be CORSIA eligible and can be used by International Airlines for offsetting their emissions during all phases of CORSIA and therefore requests GCC Steering Committee to append CORSIA Certification label (C+) to this project".

The purpose of the project verification is to have a thorough and independent assessment of the proposed Project Activity against the applicable GCC rules and requirements, including those specified in the Project Standard, applied methodology/methodological tools and any other requirements, in particular, the project's baseline, monitoring plan and the host Party criteria. These are verified to confirm that the project design, as documented, is sound and reasonable and meets the identified criteria. Verification requirement for all GCC projects activity is necessary to provide assurance to stakeholders of the quality of the Project Activity and its intended generation of Approved Carbon Credits (ACCs).

<u>Location</u>

The bundled project activity is implemented in the states of Andhra Pradesh and Telangana, India. Details of the same are as follows:

Latitude		Longitude	
Greenko Solar Power (Dharmavaram) Limited **Capacity: 22 MW** Village: Kunuthuru, District: Anantapur, State: Andhra Pradesh			
14º27'12.4" N	14.4534° N	77º40'04.1" E	77.6678° E
SEI Arushi Private Limited **Capacity: 30 MW** Near Nagireddy palli Village, District: Anantapur, State: Andhra Pradesh			
14º13'02.3" N	14.2173° N	78º4'13.1"E	78.0703° E
Sunborne Energy Andhra Private Limited **Capacity: 35 MW** Gattu mandal, Village: Gattu, District: Mahabunagar, State: Telangana			
16º7'46.9"N	16.1297° N	77º33'31.0" E	77.5586° E

Scope of Project Verification

The project verification scope is defined as the independent and objective review of the project submission form (PSF /1-a/). The PSF /1-a/ is reviewed against the relevant criteria and decisions by the GCC, including the applied GCC approved baseline and monitoring methodology, GCCM001, version 3.0 /B02/, and allied CDM tools. The verification team has, based on the recommendations in the GCC Project Standard, Version 3.1 /B01-1/, Project Verification Standard Version 3.1 /B01-2/, Project Sustainability Standard v 3.0 /B01-5/ and Environment & Social Safeguards Standard v 3.0 /B01-4/, employed a rule-based approach, focusing on the identification of significant risks for project implementation and the generation of ACCs.

The verification activity aims to establish that the proposed project activity meets the requirements set forth in the aforementioned frameworks and standards and also fulfils applicable Legal requirements/rules of host country, National Sustainable Development Criteria and CORSIA requirements and other GCC requirements related to aspects such as project design, applicable conditions, project boundary, baseline scenarios, additionality, emission reduction, monitoring plan, local stakeholder consultation, global stakeholder consultation, GHG emission reductions (ACCs), environmental no-net harm label (E+), social no net harm label (S+), Diamond SDG label (SDG+), CORSIA+.

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

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

Verification Process

Strategic risk Analysis and delineation of the Verification plan:

CCIPL employed the following Project Verification process:

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

The Verification process has utilized to gain an understanding of the:

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

Development of the Verification Plan:

The Audit Team formally documented its Verification plan.

The Verification plan was developed based on discussion of key elements of the Verification process during the kick-off meeting and as per the criteria of engagement. Client had the opportunity to comment on key elements of this plan for Verification. Based on items discussed above and agreed upon with the client in the signed contract, the plan identified the CCIPL audit team members based on following:

- Reasonableness of the assumptions, limitations and methods used to forecast information as per GCC requirements,
- Standards of evaluation and reporting for the Verification.

It also provides an outline of the Verification process and established project deliverables. The project verification consists of the following four phases:

I. A desk review of the project submission form.
   - A review of the data and information;
   - Cross checks between information provided in the PSF /1-d/ and information from sources with all necessary means without limitations to the information provided by the project owner;

II. Follow-up interviews with project stakeholders
   - Interviews with relevant stakeholders in host country with personnel having knowledge with the project development;
   - Cross checking between information provided by interviewed personnel with all necessary means without limitations to the information provided by the project owner;

III. Reference to available information relating to projects or technologies similar projects under verification and review based on the approved methodology /B02/ being applied, of the appropriateness of formulae and accuracy of calculations.

IV. The resolution of outstanding issues and the issuance of the final verification report and opinion.

The Verification team confirms the contractual relationship between the Project Verifier, CCIPL and the Project Owner signed on 21/06/2022 /B22/. The team assigned to the Verification meets the CCIPL's internal procedures including the GCC requirements for the team composition and competence. The Verification team has conducted a thorough contract review as per GCC and CCIPL's procedures and requirements.

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

This report contains the details of the resolution of findings from the project verification which are successfully resolved by the PO to confirm the program design in the documents is sound and reasonable and meets the stated requirements and identified criteria.

Conclusion

Carbon Check (India) Private Ltd. is of the opinion that the project activity "Arushi 87MW bundled solar power project in Telangana and Andhra Pradesh, India." in India as described in the final PSF (Version 1.4, dated 19/10/2023) /1-d/ meets all relevant requirements of GCC and has correctly applied the GCC baseline and monitoring methodology GCCM001 'Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers' version 3.0 /B02/. The review of the PSF, supporting documentation and subsequent follow-up actions (onsite audit and interviews) have provided CCIPL with sufficient evidence to determine the fulfilment of the voluntary labels E+, S+ /B01-4/ and SDG+ with diamond rating /B01-5/.

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 /B01-6/ 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".

Carbon Check (India) Private Ltd. therefore is able to recommend the project activity to the GCC Steering Committee with a request for registration.

Section B. Project Verification team, technical reviewer and approver

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B.1. Project Verification team

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Project Verification findings
1.	Team Leader /Technical Expert/ Local Expert / Financial Expert	IR	Agarwalla	Sanjay Kumar	CCIPL	X	X	X	X
2.	Team Member	IR	Halder	Manas	CCIPL	X	X	X	X
3.	Team Member	ER	Nayak	Kiran[6]	CCIPL	X	-	-	X
4.	Trainee Assessor	IR	Nadkarni	Tanvi	CCIPL	X	-	-	X
5.	Trainee Assessor	IR	Tekapso	Leslie	CCIPL	X	-	-	X
6.	Trainee Assessor	IR	Shirke	Rishika[7]	CCIPL	X	X	X	X

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)
1.	Technical reviewer / Financial Expert	ER	Ranganathan	Seshan	CCIPL
2.	Approver	IR	Singh	Vikash Kumar	CCIPL

[6] Worked until 05/09/2023
[7] Worked until 31/08/2023

Section C. Means of Project Verification

C.1. Desk/document review

The report is based on the assessment of the initial PSF/1-a/ and final PSF/1-d/ undertaken through verification of information using the source provided by the project owner, stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow up actions (e.g., on site visit, interviews) 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.

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

C.2. On-site inspection

Duration of on-site inspection: 29/12/2022 and 30/12/2022				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1. …	Discussions and review of: • Project Design • Project Technology • Project boundary • Applicability of CDM methodology • Environmental Management Plan/ EIA • Local stakeholders meeting process • Management structure with Roles and Responsibilities • Project implementation schedule • Pre project (existing) scenario to meet the energy (heat and electricity) demand •Monitoring Plan •Socio-economic Impacts of the project activity •Sustainability aspects of the project (SDGs) • Baseline Scenarios and alternatives • Project additionality Emission reduction calculations	**Sunborne Energy Andhra Private Limited** Dominicus (SEAPL), Village: Gattu, Gadwal, State: Telangana	29/12/2022	Sanjay Kumar Agarwalla, Manas Halder, Rishika Shirke
		Greenko Solar Power (Dharmavaram) Limited Village: Kunuthuru, District: Anantapur, State: Andhra Pradesh	30/12/2022	
		SEI Arushi Private Limited Near Nagireddy palli Village, District: Anantapur, State: Andhra Pradesh	30/12/2022	

C.3. Interviews

No.	Interview			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Tiruvuri	Saikrishna	Zenith Energy	29/12/2022 & 30/12/2022	Discussion on project implementation, monitoring, Environmental impact, Management structure with Roles and Responsibilities, Socio-economic Impacts of the project activity Sustainability aspects of the project, local stakeholders meeting, legal ownership of the project activity	Sanjay Kumar Agarwalla, Manas Halder, Rishika Shirke
2.	Prasad	M. D. V.	Site in-charge – 35 MW SEAPL	29/12/2022		
3.	Aditya	P.	Site engineer – 35 MW SEAPL	29/12/2022		
4.	Santosh Kumar	S. V. S.	Cluster in-charge – 22 MW GSPL & 30 MW SEI APL	30/12/2022		
5.	Thimappa	B.	Local stakeholder (SEAPL)	29/12/2022	Environment and Social impacts of the project	
6.	Nagesh	B.	Local stakeholder (SEAPL)	29/12/2022	Environment and Social impacts of the project	
7.	Bhaskar	G.	Local stakeholder (SEAPL)	29/12/2022	Environment and Social impacts of the project	
8.	Reddy	P. Srikanth	Local stakeholder (GSPL)	30/12/2022	Environment and Social impacts of the project	
9.	Reddy	P. Adisesha	Local stakeholder (GSPL)	30/12/2022	Environment and Social impacts of the project	
10.	Reddy	B. Krishna	Local stakeholder (SEI APL)	30/12/2022	Environment and Social impacts of the project	
11.	Manjunatha	M.	Local stakeholder (SEI APL)	30/12/2022	Environment and Social impacts of the project	

C.4. Sampling approach

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No sampling approach has been used for this project activity verification.

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

Areas of Project Verification findings	Applicable to Project Types	No. of CL	No. of CAR	No. of FAR
Green House Gas (GHG)				
Identification and Eligibility of project type	A_1, A_2, B_1, B_2	-	-	-
General description of project activity	A_1, A_2, B_1, B_2	1	2	-
Application and selection of methodologies and standardized baselines	A_1, A_2, B_1, B_2	-	-	-
- Application of methodologies and standardized baselines	A_1, A_2, B_1, B_2	-	1	-
- 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	-	1	-
- Baseline scenario	A_1, A_2, B_1, B_2	-	1	-
- Demonstration of additionality including the Legal Requirements test	A_1, A_2, B_1, B_2	1	1	-
- Estimation of emission reductions or net anthropogenic removals	A_1, A_2, B_1, B_2	2	2	-
- Monitoring plan	A_1, A_2, B_1, B_2	2	-	-
Start date, crediting period and duration	A_1, A_2, B_1, B_2	-	-	-
Environmental impacts	A_1, A_2, B_1, B_2	-	-	-
Local stakeholder consultation	A_1, A_2, B_1	-	1	-
Approval & Authorization- Host Country Clearance	A_1, A_2, B_1, B_2	-	-	-
Project Owner- Identification and communication	A_1, A_2, B_1, B_2	1	-	-
Global stakeholder consultation	A_1, A_2, B_1	-	-	-
PSF Template	A_1, A_2, B_1, B_2	-	1	-
Others – Supporting Documents		1	-	-
VOLUNTARY CERTIFICATION LABELS				
Environmental Safeguards (E^+)	A_1, A_2, B_1	1	-	-
Social Safeguards (S^+)	A_1, A_2, B_1		-	-
Sustainable development Goals (SDG^+)	A_1, A_2, B_1	1	-	-
Authorization on Double Counting from Host Country (only for CORSIA)	A_1, A_2, B_1	-	-	-
CORSIA Eligibility (C^+)		-	-	1
Total		10	10	1

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Project Verification	DR, I
Findings	No findings pertaining to this section.
Conclusion	The Verification team reviewed the PSF /1/ and confirms that the Project Owner determines the type of proposed GCC project activity as Type A2. As per §11 of GCC Project Standard (version 03.1) /B01-1/, "*These types of projects are prompt-start and had already started their operations as of 5th July 2020. Their start date of operations shall be after 1st January 2016 but before 5th July 2022. The start date of the Crediting Period for such GCC Project Activities shall be on or after 1 Jan 2016 but not more than one year after the start date of the operations of the GCC Project Activity.*" Furthermore, as per §03 (c), (iv) of GCC clarification no.01 "The deadline for submission of A2 projects has been extended. As per clarification, A2 type projects

	are required to make initial submission to GCC program, for uploading for global stakeholder consultation, prior to 5 July 2022"/B01-6/. The proposed bundle activity has started its operations on 11/02/2016, the start date of crediting period is 10/02/2017 and it was published for global stakeholder consultation from 27/10/2022 to 10/11/2022. The project activity was submitted to GCC on 23/06/2022. The project activities forming the bundle have the following start dates: **Project Activity** / **Capacity** / **Start Date** Greenko Solar Power (Dharmavaram) Limited / 22 MW / 07/11/2017 SEI Arushi Private Limited / 30 MW / 28/10/2017 Sunborne Energy Andhra Private Limited / 35 MW / 11/02/2016 The start date of operation of the bundled activity is considered as the earliest start date amongst all the involved homogenous project activities. The start date of the project activity has been duly verified against the commissioning reports /8/ and found to be acceptable by the verification team. This complies with the requirement of §11 of the GCC Project Standard (version 03.1) including GCC Clarification No. 01 /B01-6/ and § 25 (b) of GCC Project Verification Standard (version 03.1) /B01-2/ and hence the determined project activity type i.e., Type A2 is found to be acceptable by the verification team. Furthermore, the project verification team along with the help of local expert checked the other GHG programmes like, Clean Development Mechanism (CDM) Registry /B08/, VERRA Registry /B09/, and Gold Standard Registry /B10/, 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 project owner has not submitted the said project activity under any other GHG program apart from GCC.

D.2. General description of project activity

Means of Project Verification	DR, I
Findings	CL 10, CAR 02 and CAR 03 were raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	The description of the project activity contained in the PSF /1-d/ can be considered transparent, detailed, and provides a clear overview of the project. The same was confirmed by means of document review and interviews to verify the accuracy and completeness of the project description. 'Arushi 87MW bundled solar power project in Telangana and Andhra Pradesh, India.' is a Solar Photovoltaic Power Project with total installed capacity of 87 MW. The bundled project activity involves the installation of solar power plants with capacities of 22MW, 30 MW and 35MW in the states of Andhra Pradesh and Telangana, India. The purpose of this project activity is to generate electricity by harnessing solar radiation energy and supply the generated electricity to the connected Indian grid. The project verification team has confirmed the same by cross verifying the commissioning reports /8/, power purchase agreement /5/ and physical verification of project site /30/.

The project activity at Greenko Solar Power (Dharmavaram) Limited uses 320W poly crystalline cells type solar PV Modules of Risen Make while the activity SEI ARUSHI Private Limited employs JAP6-72-310/JBB module type by JA Solar with a rated maximum power of 310W and Sunborne Energy Andhra Private Limited employs JAP6-72-310/3BB module type by JA Solar with a rated maximum power of 315W. The solar PV Modules along with associated connection boxes, Transformers, Inverters, other field equipment in all the project premises produce the total project capacity of 87 MW with an expected lifetime of 25 years. The same has also been confirmed from the technical specifications provided by the manufacturer /6/.

The power generation from the project activity replaces the equal amount of power which would otherwise have been supplied from the fossil fuel dominated grid. Thus, project activity helps in an average annual emission reduction of 123,793 tCO_2e/year for a period of 10 years with an annual electricity generation estimated at 133,042 MWh. The same has been crosschecked from the actual generation records /11/ during the physical onsite visit /30/ and is found to be acceptable.

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 CO_2.

The bundled project activity is implemented in the states of Andhra Pradesh and Telangana, India. The geographic co-ordinates for the project activity are:

Latitude		Longitude	
Greenko Solar Power (Dharmavaram) Limited Village: Kunuthuru, District: Anantapur, State: Andhra Pradesh			
14º27'12.4" N	14.4534° N	77º40'04.1" E	77.6678° E
SEI Arushi Private Limited Near Nagireddy palli Village, District: Anantapur, State: Andhra Pradesh			
14º13'02.3” N	14.2173° N	78º4'13.1”E	78.0703° E
Sunborne Energy Andhra Private Limited Gattu mandal, Village: Gattu, District: Mahabubnagar, State: Telangana			
16º7'46.9”N	16.1297° N	77º33’31.0” E	77.5586° E

The same was confirmed by the measurement of co-ordinates using google earth software and GPS at the project site and were found appropriate.

The verification team confirms that project owner has described the GHG emission-reduction activity, including schematics, specifications, and a description of how the project reduces GHG emissions. The same is in accordance with §36 of Project Standard Version 03.1 and cross checked with PSF /1/. Furthermore, the Project

	Activity is a voluntary action by the project owner as confirmed by the verification team upon review of the PSF /1/ and on-site visit interviews/30/. As stated in the PSF /1/, the project activity also voluntarily contributes to Environmental No-net-harm Label (E+), Social No-net-harm Label (S+) and 6 United Nations Sustainable Development Goals (SDG+). As per the PSF /1/, the start date of the Project Activity is 11/02/2016 (earliest start date of operations among all the involved project activities in the bundle). The same is in accordance with requirements of §38 of Project Standard (version 03.1) /B01-1/ as well as §13 of the GCC Clarification No. 1 version 1.3 /B01-6/. The project verification team confirmed the same during the physical onsite visit /30/ as well as from the commissioning certificates /8/. The homogeneity of the bundle is ascertained on the basis of the two-level analysis formulated in the GCC Clarification No.1, version 1.3 /B01-6/. The same can be summarized as follows: **Level-1 Analysis** - Consideration of key aspects for developing Homogeneous Bundles: All the 3 individual solar power project activities meet the criteria outlined in §11 of the GCC Clarification No. 1 version 1.3 as follows: 1. Similarity in Technological Considerations - All activities in a bundle apply same type of technology i.e. Grid connected Solar PV and apply the same methodology i.e. GCCM001 Version 3.0 2. Similarity in Economic and Policy Considerations: All activities in the bundle apply i. Post Tax Equity IRR for investment analysis ii. same investment decision year i.e., 2014 iii. employ the same benchmark [Default value for the cost of equity (expected return on equity) as enshrined in the Investment Analysis. iv. all the activities in the bundle are located in same country i.e. India v. all the activities in the bundle supply electricity to the Indian Grid. 3. Similarity in Environmental or Methodological Considerations - All activities in the bundle i. apply the same methodology i.e., GCCM001 Version 3.0 /B02/ ii. adopt same baseline approach i.e., Indian Grid iii. adopt same monitoring approach and measurement parameters **Level-2 analysis** – Criteria for differentiating the bundles: All the 3 individual solar power project activities meet the criteria outlined in §12 of the GCC Clarification No. 1 version 1.3 /B01-6/ as follows: 1. Same baseline of each activity within a bundle i.e., Indian Grid 2. Same output of each activity i.e., electricity 3. Same Technology of each activity i.e., solar power based electricity generation 4. Same additionality approach i.e., investment analysis using post tax equity IRR. It can therefore be concluded that all the 3 individual project activities involved in the bundle satisfy the criteria outlined in §11 and §12 of the GCC Clarification No. 1 version 1.3 /B01-6/ and hence the bundle is homogenous in nature. The project verification team confirmed the same after review of the PSF /1-d/ and other relevant

	documents. The crediting period is a fixed crediting period of 10 years from 10/02/2017 to 09/02/2027. This is cross checked with the PSF /1/ and conforms with the requirements of §39 and §40 of Project Standard Version 03.1 /B01-1/. CCIPL verification team is therefore able to confirm that the description of the proposed Project Activity in the PSF is accurate and complete and it provides a clear understanding of the Project Activity. The same is found to be acceptable. Furthermore, the verification team cross checked the other GHG programmes like Clean Development Mechanism (CDM) Registry /B08/, VERRA Registry /B09/, Gold Standard Registry /B10/,and voluntary non-GHG Programs like I-REC /B12/ Renewable Energy Certificate (REC) Mechanism /B11/ 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 project owner has not submitted the said project activity under any other GHG program apart from GCC.

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

D.3.1 Application of methodology and standardized baselines

Means of Project Verification	DR, I
Findings	CAR 04 and CAR 08 were raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	The GCC methodology applied is GCCM001, version 3.0 /B02/. It is applicable to grid-connected electricity generation from renewable sources. Applicability of the methodology was confirmed by means of interviews with the PO representatives and document review. The applied methodology is correctly quoted and is identical to the version available on the GCC website. The applied methodology version of the baseline and monitoring methodology /B02/ is valid at the time of submission of the PSF for global stakeholder consultation. All applicability criteria in the methodology are assessed in the below table:

Applicability criteria of the methodology (GCCM001, version 3.0)	Justification in the PSF	Project verifier assessment
Paragraph 9 of the applied methodology states that: The project activities eligible under this methodology aim to build and operate a new USPP or new DPPs, which are subject to following eligibility conditions. (a) The renewable energy generation projects shall supply electricity to user(s), either grid or a specific	This criterion is applicable, as the project employs Solar Photovoltaic power generation technology and supply generated electricity to Indian Grid.	The project activity involves the installation of 87 MW Solar Photovoltaic Panels. The same is a bundled project involving 3 project activities viz. Greenko Solar Power (Dharmavaram) Limited (22 MW) SEI Arushi Private Limited (30 MW) and

	identified user. The project activity will displace electricity from an electricity distribution system that is or would have been supplied by from a national or a regional grid (grid hereafter); the following renewable energy generation technologies qualify under this methodology: (i) Solar Photovoltaic; (ii) On-shore or Off-shore Wind; (iii) Tidal; (iv) Wave		Sunborne Energy Andhra Private Limited (35 MW). The electricity thus generated from project activity is exported to the Indian grid in India through power purchase agreement (PPA) /5/, there by displacing electricity from the regional grid generated by fossil fuel-based power plants. CCPIL project verification team has confirmed the same from the power purchase agreement /5/, as well as the commissioning certificates /8/. The said criterion is fulfilled by the project activity and hence the methodology is applicable to the project activity.
	(b) The project activities can also involve setting up and implementation of a BESS along with the renewable energy generation plant.	Not applicable as the project activity doesn't involve setting up and implementation of a BESS.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity. The project activity design does not involve setting up of battery energy storage systems (BESS). CCPIL project verification team confirmed the same during the onsite visit /30/. Hence this condition is not applicable to the project activity.
	(c) The project activity wherein a BESS has been deployed, can either be a greenfield installation	Not applicable as the project activity didn't deploy a BESS.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e.

	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.		installation of solar PV panels to generate electricity. The project activity design does not involve setting up of battery energy storage systems (BESS). CCPIL project verification team confirmed the same during the onsite visit /30/. Hence this condition is not applicable to the project activity.
	(d) 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.	Not applicable as the project activity didn't deploy a BESS.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity. The project activity design does not involve setting up of battery energy storage systems (BESS). CCPIL project verification team confirmed the same during the onsite visit /30/. Hence this condition is not applicable to the project activity.
	(e) The project activities shall not involve combined heat and power (co-generation) systems.	This criterion is applicable as project activity generates electricity only and does not involve combined heat and power (co-generation) system.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity. The project activity design does not involve combined heat and power (co-generation) system. CCPIL project verification team confirmed the same

			during the onsite visit /30/. Hence this condition is applicable to the project activity.
	(f) The project activities shall not involve co-firing of fossil fuel of any kind.	This criterion is applicable as the project does not involve co-firing of fossil fuel of any kind.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity. The project activity design does not involve co-firing of fossil fuel of any kind. CCPIL project verification team confirmed the same during the onsite visit /30/. Hence this condition is applicable to the project activity.
	(g) The project activities may have consumption of electricity (grid on on-site generation) for site offices.	This criterion is applicable as project may have consumption of electricity (grid on onsite generation) for site offices during maintenance	The project activity involves the installation of a new grid- connected renewable power generation facility i.e., installation of solar PV panels to generate electricity. The project activity does consume electricity at the site office during maintenance. CCPIL project verification team confirmed the same during the onsite visit /30/, interviews with site personnel /30/ as well as from the records maintained for onsite electricity consumption/11/. Hence this condition is applicable to the project activity.

(h) Distributed Power Plants 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.	Not applicable as project is a Utility scale power plant (USPP).	The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity. CCPIL project verification team confirmed the same during the onsite visit /30/. As the project activity is a Utility scale power plant (USPP) which can be confirmed from the PPA /5/ and commissioning documents /9/, the said condition is not applicable.
(i) 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 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.	Not applicable as the project activity didn't deploy a BESS.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e. installation of solar PV panels to generate electricity. The project activity does not deploy a battery energy storage system (BESS). CCPIL project verification team confirmed the same during the onsite visit /30/. Hence this condition is not applicable to the project activity.

Tool 01: Tool for the demonstration and assessment of additionality; Version 7.0	**Justification in the PSF**	**Project verifier assessment**

	Paragraph 9 states that: The use of the "Tool for the demonstration 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.	Since the applied methodology is not a new methodology, the project proponent has applied this tool for the demonstration of additionality in compliance with the tool. Hence this tool is applicable	The project activity applies an approved GCC methodology i.e., GCCM001 "Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers", version 3.0 /B02/ and no new methodology is proposed. Hence this condition is applicable to the project activity.
	Paragraph 10 states that: Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	In line with the methodology requirement, Project developer has applied this tool for the demonstration of additionality assessment. Hence this tool is applicable	The said tool is included in the applied methodology GCCM001, version 3.0 /B02/. Hence, this condition is found to be met.
	Tool 07: Tool to calculate the emission factor for an electricity system; Version 7.0	**Justification in the PSF**	**Project verifier assessment**
	Paragraph 3 states that: 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 condition is applicable. OM, BM and CM are estimated using the Tool under section B.6.1 for calculating baseline emissions.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e., installation of solar PV panels to generate electricity which is then supplied to the Indian Grid. In the absence of this project activity, same amount of electricity would have been generated by the operation of existing/proposed grid connected power plants, predominantly fossil fuel based.

			The baseline emissions are calculated from electricity supplied to the grid by the project activity multiplied with emission factor of the Indian grid, which is calculated using OM, BM and CM using this tool. The same has been elaborated upon in section D.3.6 of this report. Hence this condition is applicable to the project activity and found to be met.
	Paragraph 4 states that: Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in "Appendix 1: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.	The project activity is a grid connected solar Power project. Estimation of OM & BM has been prepared and published in India by the Central Electricity Authority (CEA), Government of India, and accordingly the same has been used. The latest CO_2 Baseline Database for the Indian Power Sector, Version 17, October 2021, published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission factor. The above CO Baseline Database follows the "Tool to calculate the emission factor for an electricity system" Version 07.0.	The project activity has chosen the option to calculate the emission factor for grid power plants only by referring to the data published by CEA /17/. This confirms that only grid connected power plants have been considered for OM, BM and CM calculations and is found to be acceptable by the project verification team. The point has been assessed in detail under section D.3.6 of the report.

	Paragraph 5 states that: 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.	No portion of the Project Electricity system (i.e. Indian Grid) is in an Annex I country.	The project activity is situated in India, which is not Annex I country, hence the condition is not applicable.
	Paragraph 6 states that: Under this tool, the value applied to the CO_2 emission factor of biofuels is zero.	No biofuels are used.	The project activity involves the installation of a new grid- connected renewable power generation facility i.e., installation of solar PV panels to generate electricity and does not involve biofuels. The same was confirmed from power purchase agreement /5/ and site visit /30/. Hence the condition is not applicable.
	TOOL 27: Investment analysis; Version 11.0	**Justification in the PSF**	**Project verifier assessment**
	Paragraph 2 states that This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", the guidelines "Non-binding best practice examples to demonstrate additionality for SSC project activities", or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.	Project activity applies "Tool for the demonstration and assessment of additionality". Hence this tool is applicable.	The project activity utilises the methodological tool "Tool 01: Tool for the demonstration and assessment of additionality", version 07 /B04/. Hence this condition is applicable to the project activity and found to be met.
	Paragraph 3 states that: In case the applied approved baseline and monitoring methodology contains	Not applicable The applied approved baseline and monitoring methodology does not	The applied methodology, GCCM001 version 3.0 /B02/ does not contain requirements for investment analysis

	requirements for the investment analysis that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	contain requirements for the investment analysis that are different from those described in this methodological tool. Hence, not applicable	which are different from that specified in the tool. Hence the condition is not applicable.
	TOOL 24: Common Practice; Version 3.1	**Justification in the PSF**	**Project verifier assessment**
	Paragraph 3 states that: This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.	Project activity applies "Tool for the demonstration and assessment of additionality". Hence this tool is applicable.	The project activity utilises the methodological tool "Tool 01: Tool for the demonstration and assessment of additionality", version 07 /B04/. Hence this condition is applicable to the project activity and found to be met.
	Paragraph 4 states that: In case the applied approved baseline and monitoring methodology defines approaches for the conduction of the common practice test that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Not applicable The applied approved baseline and monitoring methodology does not define any different approaches for conducting common practice test from those described in this methodological tool.	The applied methodology, GCCM001 version 3.0 /B02/ does not contain approaches for conducting common practice test which are different from that specified in the tool. Hence the condition is not applicable.
	The applied baseline and monitoring methodology and relevant tools are valid and applicable to the project activity. The project fulfils all relevant criteria of the applied methodology 'GCCM001: Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers' – Version 3.0 /B02/ and Tool to calculate the emission factor for an electricity system; (Version 7.0) /B05/. Hence, use of the selected methodology is appropriate for this project activity.		

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

Means of Project Verification	DR, I
Findings	-
Conclusion	No further clarifications were sought as the applicability criteria of methodology, and the associated tools was found to be fulfilled.

D.3.3 Project boundary, sources and GHGs

Means of Project Verification	DR, I
Findings	CAR 05 was raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	As per §12 of the applied methodology GCCM001, version 3.0 /B02/, the project boundary is stated as "The spatial extent of the project boundary includes the project power plant, BESS (where deployed) and all power plants connected physically to the electricity system that the GCC project power plant or distributed type power generation devices are connected to". Section B.3 of the PSF /01/ clearly depicts the project boundary along with a pictorial representation. The verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified and the same was found to be in conformity with the applied methodology. Furthermore, the physical boundary of the project activity identified by the project owner has been cross verified during site visit /30/ and duly verified from the commissioning certificates /8/ and power purchase agreement /5/. The same was found to be appropriate and acceptable. The verification team also confirmed that all GHG sources required by the methodology have been included within the project boundary. It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology or accuracy of the emission reductions. The verification team therefore confirms that the identified boundary and the selected emissions sources are justified for the project activity.

D.3.4 Baseline scenario

Means of Project Verification	DR, I
Findings	CAR 06 was raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	As per §13 of the applied methodology GCCM001, version 3.0 /B02/, the baseline scenario is the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid. The Project activity involves generation of electricity by harnessing solar radiation energy and selling it to the Indian grid. The same was confirmed through the power purchase agreement /5/ and commissioning reports /8/. In the absence of this project activity, same amount of electricity would have been generated by the operation of existing/proposed grid connected power plants, predominantly fossil fuel-based.

	The verification team confirms that all assumptions and data used by the project owners are listed in the PSF, including their references and sources. All relevant national and/or sectoral policies and circumstances are considered and listed in the PSF /1/. Furthermore, the verification team also concludes that the identified baseline scenario reasonably represents what would occur in the absence of the project activity. The baseline scenario in the PSF/1/ 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 was compared with the requirements of the baseline described in the applied methodology /B02/ and found to be consistent. Therefore, the verification team also concludes that the identified baseline scenario reasonably represents what would occur in the absence of the project activity and is found to be acceptable.

D.3.5 Demonstration of additionality

Means of Project Verification	DR, I
Findings	CL 07 and CAR 07 were raised and closed successfully. Please refer Appendix 4 for further details.
Conclusion	Project Owner has described the Demonstration of additionality according to the GCC Project Standard Version 03.1 /B01-1/ and the applied methodology GCCM001, version 3.0 /B02/ and relevant methodological tools. In section B.5 of the PSF /1-d/, two components are applied for the demonstration of additionality: - A Legal Requirement Test - Additionality Test <u>Legal Requirement</u>: The project activity is a Type A project and requires undergoing a 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/B13/, National Electricity Policy 2005/B14/, National Solar Mission /B18/, National Action Plan on Climate Change(NAPCC) 2008 /B16/, Renewable Energy Certificates (RECs), 2011 /B17 / 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. The Project is therefore voluntary in nature and hence is additional as per paragraph 46 of GCC Project Standard V3.1 /B01-1/ and passes the legal requirement test. Additionality is demonstrated at the project activity level for the bundled project. Accordingly, common practice analysis is also demonstrated at project activity level.

	This is in accordance with paragraph 7 and 20 of GCC Clarification No. 1 version 1.3 /B01-6/. Additionality Test: To cover this requirement from the GCC Project Standard 3.1 /B01-1/, section 6.4.8, paragraph 45 and as per the applied methodology GCCM001 Version 3.0 /B02/, additionality of the project activity is demonstrated and assessed using the latest version of Tool 01: Tool for the demonstration and assessment of additionality" Version 7.0 /B04/ The PO 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 project activity is a grid connected solar power project in India. This is not the first such project to be installed in the country and therefore project activity does not meet this criterion. ***Step 1: Identification of alternatives to the project activity consistent with current laws and regulations*** ***Sub-step 1a: Define alternatives to the project activity*** Alternative 1: The proposed project activity not undertaken as a GCC project activity. Alternative 2: Continuation of the present situation, i.e., the power generated from the project activity will be fed into India National Grid. ***Sub-step 1b: Consistency with mandatory laws and regulations*** Both the alternatives are consistent with the laws and regulations of India. The environmental regulations, legislations and policy guidelines in respect to the project activity are governed by various regulatory agencies. The principal environmental regulatory agency in India is Ministry of Environment, Forest and Climate Change (MoEF &CC), Delhi supported by Central Pollution Control Board (CPCB). The Solar Power Projects are not covered under the ambit of EIA Notification, 2006. Hence, it does not require preparation of Environmental Impact Assessment Report and pursuing Environmental Clearance from Ministry of Environment, Forest and Climate Change (MoEF & CC). (Annexure-II MOEF&CC, OM on J-11013/41/2006-IA. II (I) dated 7th July 2017) /B21/ Further, MoEF & CC has included Solar Power Projects under "White category" for Consent to Establish/Operate. Newly introduced White category contains 36 industrial sectors which are practically non-polluting. There shall be no necessity of obtaining the Consent to Establish/Operate'' for White category of industries and an intimation to concerned SPCB / PCC shall suffice. In accordance with the requirement of the Modified directions under section 18(1)(b) of the Water (P&PC) Act, 1974 and the Air (P & PC) Act, 1981 regarding harmonization of classification of industrial sectors under red/ orange/ green/ white categories by the CPCB /26/, acknowledgement of Letter to PCB for White Category Industry /26/ received by the PO was checked and found to be acceptable. ***Step 2: Investment analysis for Greenko Solar Power (Dharmavaram) Limited:*** In this section it is demonstrated that the project activity is not financially feasible without the revenue from the sale of ACCs. This is demonstrated in following sections as per "Investment analysis" (Version 11.0) /B07/. The global stakeholder

	consultation for the proposed project was conducted from 27/10/2022 when version 11 of TOOL 27 was latest available version, and hence applicable. The project is bagged through bidding process and the date when letter of award was obtained i.e., 07/11/2014 is considered as the investment decision date for the legal owner to start the project implementation despite inherent financial barriers. The additionality has been established using the data available at the time of investment decision which are mainly CERC RE tariff order dated 15/05/2014 /31/ ***Sub-step 2a: Determine appropriate analysis method*** Since project activity generates revenue, Option III - Benchmark Analysis has been chosen to carry out investment analysis. ***Sub-step 2b: Option III. Apply benchmark analysis*** Since the project is funded through equity and debt funds, Post Tax Equity IRR has been considered an appropriate financial indicator which will be tested against an appropriate benchmark cost of equity. These indicators are industry accepted indicators and are commonly used for financial analysis of similar kinds of projects. In line with para 16 of investment analysis /B07/, as the investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, therefore, project owner has converted the real term values of benchmarks to nominal values by adding the inflation rate. As per para 19 of investment analysis, the cost of equity is determined by selecting the values provided in the Appendix, i.e., Default values for cost of equity (expected return on equity) is presented below: The Required return on equity (benchmark) was computed in the following means: Nominal Benchmark = {(1+Real Benchmark) * (1+Inflation rate)} – 1 Where: - Default value for Real Benchmark = 10.55%, as per TOOL27, version11.0, which is the latest version available at the time of preparation of PSF - Inflation Rate forecast for by Reserve Bank of India (RBI) i.e., Central Bank of India. TOOL27, version 11.0 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in India = **10.55%** As per RBI report “Survey of Professional forecasters” dated 03 June 2014 /32/, the latest report available at the time of decision making, the 10-year inflation forecast projected was 5.10%. Therefore, Benchmark is calculated as {(1+10.55%) x (1+5.10%)} -1 = **16.19%** ***Sub-step 2c: Calculation and comparison of financial indicators*** For calculation of financial indicator, all relevant costs and revenues were found to be included in the IRR sheet /3/ provided by the PO. All assumptions and estimates used for input values were checked against the relevant sources. GCC project activity has a less favourable Equity IRR compared to the benchmark, and hence the GCC project activity cannot be considered as financially attractive.

The key data parameters used to calculate Equity IRR are tabulated below:

Parameter	Value	Project verifier assessment
Capacity	22 MW	The project rated capacity i.e., 22 MW is based on the letter of award dated 07/11/2014 and can be confirmed from the commissioning reports /8/ and found to be consistent and thus acceptable. The same was further confirmed from the purchase order /10/ as well as the PPA /5/. Installed capacity proposed at the time of decision making (i.e., internal management decision) and post decision making (actual implementation) is same.
PLF	19.00%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same is equivalent to the PLF offered by the technology provider and is found to be acceptable. To further cross-check the robustness of the PLF, validation team has cross-checked the actual generation of the project activity /11/ to ascertain the conformity of the estimated PLF to the actual and observed that the generation yielded a PLF of 23.25% /11/.
Auxiliary consumption	0.00%	Value is based on the CERC tariff order /31/ which has considered auxiliary consumption of 0 % and hence the same is acceptable. The value has been cross check against PPA where the value is 0.1% /5/ and was cross checked with, the month-wise record of auxiliary consumption /11/. The same is found to be reasonable and hence acceptable.
Annual generation	36,617 MWh	The value is calculated as: Capacity * PLF * 8760 = 22 MW * 19% * 8760 h = 36,616 MWh. The input values used in calculation were available at the time of investment decision making.

			The actual PLF since the start of operation of the project activity is 23.25% /11/ and therefore the annual average generation value comes to 44,807 MWh which is more than the input value used for IRR analysis.
	Revenue & Expenses		
	Power tariff	6.95 INR/kWh	The Value is based on the CERC RE tariff order 2014-15 /31/ which was available at the time of investment decision making date and is deemed acceptable to the project verification team. The project activity exports the entire power generated to DISCOM at a fixed tariff ₹3.74/kWh (based on PPA /5/) with an escalation of 3% per annum for the first 10 years which is lower than the input value and is deemed acceptable.
	Annual degradation during 1st year (%)	2.50%	The value considered is based on standard performance warranty by the PV module manufacturers (data module sheet) /6/. Based on the data module sheet for the PV modules /6/: Annual degradation from 2nd year till 10th year: (97.5-90)/9= 0.83 Annual degradation from 11th year till 25th year: (90-80)/15=0.67 The percentage of annual degradation is therefore considered appropriate for the project activity.
	Annual degradation from 2nd year till 10 th year (%)	0.83%	
	Annual degradation from 11th year till 25 th year (%)	0.67%	
	O & M cost	27.06 INR million	Value is based on CERC RE tariff order dated 15/05/2014 /31/ and found to be consistent and thus acceptable. According to the said order, O&M expense norm for solar PV power project as ` 12.30 Lakh/MW for FY 2014-15 has been considered.
	Escalation in O&M expenses p.a.	5.72%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same was further checked against the purchase order /10/ and found to be consistent and thus acceptable.
	Project cost and financing structure		

	Project cost	1520.200 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the capital cost norm for FY 2014-15 is INR 691 Lakh/MW for Solar PV Power Projects. The project cost for IRR analysis is calculated as 69.1 INR million * 22MW = 1520.20 INR Million. According to the loan sanction letter /14/, the project cost is 1513.00 INR million which is lower than the input value and is deemed acceptable. The actual project cost for the project activity is 1510 INR million /33/ which is lower than the input value for IRR analysis.
	Loan Amount	1064.14 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus 300 basis points (equivalent to interest rate of 12.70%). Therefore, the loan amount considered for IRR calculations is 70% of the project cost which is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the loan amount is 80% of the project cost i.e., 1210 INR million.
	Equity Investment	456.06 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. The value is equivalent to 30% of the total project cost which is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the equity investment is 20% of the project cost i.e., 300 INR million
	Interest rate on loan	12.70%	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus

			300 basis points (equivalent to interest rate of 12.70%). This is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the applicable interest rate is 11.0% p.a. payable on monthly basis.
	Loan Tenure	48 Quarters	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the loan tenure of 12 years is to be considered for the purpose of determination of tariff for RE projects. This is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the loan tenure is 14 years 9 months.
	Book Depreciation (SLM)		
	Salvage Value (%)	10.00	Salvage value is considered as 10% of the total project cost (excluding cost of land lease, erection and commissioning charges as well as transportation charges) as per the CERC tariff order dated 15/05/2014 /31/. These have been added back to the cash flow. Land cost is not considered in IRR calculations which is deemed acceptable to the project verification team. PO considered 10% of cost of plant and machinery (solar plant) as residual (salvage) value for the project activity conservatively). This is further validated as per the accounting practises and same has been also cross checked from Schedule II of the Companies Act 2013 /B19/ which allows 95% of original cost to be depreciated implying a consideration of 5% as salvage value as a standard accounting practice. Thus, the consideration by the PO of 10% salvage value is conservative and hence appropriate for the project activity.
	IT Depreciation (SLM)		
	IT Depreciation Rate (%)	7.69%	As Per Income Tax, Depreciation rates for power generating units. http://www.incometaxindia.gov.in/charts%20%20tables/depreciation%20rates.htm

		The verification team found that the value is acceptable in accordance with the accounting principles of the host country.
Income tax rate (%)	30.00%	Values are based on tax rates notified by the Government of India for the said FY 2014-2015 (year in which decision was taken). The values are verified from the following links: https://taxguru.in/income-tax/income-tax-rate-chart-assessment-year-201516-financial-year-201415.html https://taxguru.in/service-tax/service-tax-rate-increased-1236-14-subsuming-ec-shec-effective-01062015.html
MAT (%)	18.50%	
Service Tax (%)	15.00%	
Surcharge (%) - Rs.10 to Rs.100 m.	5.00%	
Surcharge (%) - Over Rs.100 m.	10.00%	
Education cess (%)	3.00%	

The input values of the parameters involved in the investment analysis have been crosschecked against each of the evidence provided by the project owner and all the values were found to be applicable/relevant at the time of the investment decision and or project activity scenario.
Post tax Equity IRR i.e., 8.91% is less than Cost of Equity i.e., 16.19% and therefore renders the project activity financially non-feasible.

Sub-step 2d: Sensitivity analysis
As per Tool 27, version 11 /B07/, variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation. 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 (± 10%). The project developer has identified PLF, project cost, and electricity tariff as critical assumptions. O&M cost does not constitute more than 20% of total project cost and hence not considered for sensitivity analysis. The sensitivity analysis reveals that even under more favourable conditions, the equity IRR would not cross the benchmark return as given in the following table:

Parameter	**-10%**	**0**	**+10%**	**Breaching value**
PLF	5.88%	8.39%	11.03%	28.50%
Electricity tariff Rate	5.88%	8.39%	11.03%	28.50%
Project Cost	10.76%	8.39%	6.58%	-25.50%

In conclusion, the equity IRR (after tax) will not reach the benchmark of 16.19% within the reasonable fluctuation range of +/-10% of the key financial parameters. The project verification team has cross-checked all the input values and calculations which are found to be correct and in accordance with Tool 27, version 11 /B07/.

The verification team carried out its own an independent assessment on the

	likelihood of the equity IRR breaching the benchmark and this assessment reveals that the project would become non additional only if: • PLF goes up by 28.50% • Project cost goes down by 25.50% • Tariff increases by 28.50% PP has submitted that such a reduction in project cost / O&M cost or increase in PLF / tariff is highly unrealistic and unlikely to happen for the following reasons: PLF: Generation taken into consideration is equal to CERC recommended PLF. However, as per actual generation since COD, the PLF works out to 23.25% /11/. Hence, to get a PLF of 24.42% (which translates to a hike of 28.50%) on a sustained basis is highly hypothetical and unrealistic. Project cost: Since the project activity is already operational since 2017, the cost incurred by the project owner is INR 1520.20 MN as against the assumed amount of INR 1510 MN /33/, which represents firm cost and as such the question of any reduction in the cost is hypothetical. Tariff: The PPA /5/ signed for a period of 25 years, mentions a tariff rate of INR 3.74/kWh with an escalation of 3% for the first 10 years. It is therefore evident that the tariff rates have decreased compared to that assumed for the financial calculations. Hence, an increase of 28.50% over the current tariff is not feasible. In conclusion, the post-tax equity IRR will not reach the benchmark of 16.19% within the reasonable fluctuation range of +/-10% of the key financial parameters. The project verification team has cross-checked all the input values and calculations which are found to be correct and in accordance with Tool 27, version 11 /B07/. ***Step 3: Barrier analysis*** PO has not applied barrier analysis. ***Step 4: Common practice analysis*** Common practice analysis for the project was conducted using CDM Tool 24, version 3.1) ***Sub-step 4a: The proposed project activity(ies) applies measure(s) that are listed in the definitions section above*** The project is a solar power generation project and adopts type (b) measure listed in the Methodological tool am-tool-24-v03.1 Common practice. The applicable geographical area is Andhra Pradesh state of India. The state of Andhra Pradesh is chosen as the applicable geographical area as against the rest of the host country as the policy/tariff applicable for the renewable power projects is regulated by respective State Electricity Regulatory Commissions (SERCs) in accordance with the generic policy framed by the Central Electricity Regulatory Commission (CERC) and they differ from state to state. This is based on Electricity Act 2003 /B13/, section 82 which clearly mentions “Every State Government shall, within six months from the appointed date, by notification, constitute for the purposes of this Act, a Commission for the State to be known as the (name of the State) Electricity Regulatory Commission” Appropriateness of the same has been checked and confirmed from the aforementioned act. (http://www.cercind.gov.in/08022007/Act-withamendment.pdf).

The investment climate for the renewable energy projects varies from State to State within India due to state specific local policy & regulatory framework as outlined by the State Electricity Regulatory Commissions of the respective state. Thus, consideration of the specific geographical area i.e., State of Andhra Pradesh for the common practice analysis of the proposed project activity found to be reasonable and justified.

Sub-step 4a-1: calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

The applicable capacity calculated as +/-50% of total design capacity of proposed project activity was 11 to 33 MW, which was found to be in line with Tool 24 /B06/.

Sub-step 4a-2: identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

(a) The projects are located in the applicable geographical area
These fall in the applicable geographical location i.e., state of Andhra Pradesh in India.

(b) The projects apply the same measure as the proposed project activity
These apply the same measure i.e., solar radiation based power generation.

(c) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity
These use the same source of input energy i.e., solar.

(d) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant
These produce the same goods/services i.e., electricity supplied to the connected grid.

(e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1
The capacity of these projects is in the range as defined in Step 1 i.e., 11 MW – 33 MW.

(f) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.
The projects started commercial operations before the start date of proposed project activity i.e., 20/01/2017 (Supply agreement for inverters i.e., the CDM start date /10/)

There are 8 similar projects which satisfy all of the above conditions. The information on these projects is obtained from CEA notification on plant wise details of all India Renewable Energy Projects, dated 20/03/2023 /34/

Name of the Plant	Installed Capacity (MW)	Date of Commissioning
M/s. Renew Solar Power Pvt Ltd	21.00	8-Mar-2016
M/s. Welspun Solar Pvt Ltd	30.00	20-Mar-2016
ACME Clean Tech (Niranjana	20.00	31-Mar-2016

Solar Energy Pvt Ltd)		
ACME Clean Tech (Vishwatma Solar Energy Pvt Ltd)	20.00	15-Apr-2016
First Solar Power India Pvt Ltd	20.00	9-May-2016
ACME Clean Tech (M/s. Jaisalmer Solar Energy Pvt Ltd)	20.00	12-May-2016
Waneep Solar Pvt Ltd	25.00	19-May-2016
First Solar Power India Pvt Ltd	20.00	28-Jun-2016

This mentions all the projects implemented before 20/01/2017 within the desired capacity range. This was crosschecked with the relevant source /34/ and found to be accurate.

Sub-step 4a-3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number N_{all}.

Among the identified projects, three of them are not registered with a carbon scheme.

Therefore, $N_{all} = 3$.

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

None of the projects identified above apply a different technology than the proposed project activity. Hence, $N_{diff} = 0$.

Sub-step 4a-5: calculate factor $F=1-N_{diff}/N_{all}$ representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.

The factor of the proposed project activity is calculated as follows:

$F = 1 – N_{diff}/N_{all} = 1 – (0/3) = 1$
$N_{all} – N_{diff} = 3-0=3$

As per applied tool, the proposed project activity is a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and N_{all} - N_{diff} is greater than 3.

For the proposed project, F is greater than 0.2, but N_{all} -N_{diff} is not greater than 3, therefore, the project activity is not a common practice in the state of Andhra Pradesh.

The project verification team therefore concludes that as the project activity is not financially feasible and not a common practice, the project is additional.

Step 2: Investment analysis for SEI Arushi Private Limited:
In this section it is demonstrated that the project activity is not financially feasible without the revenue from the sale of ACCs. This is demonstrated in following sections as per “Investment analysis” (Version 11.0) /B07/.

	The project is bagged through bidding process and the date when letter of award was obtained i.e., 07/11/2014 is considered as the investment decision date for the legal owner to start the project implementation despite inherent financial barriers. The additionality has been established using the data available at the time of investment decision which are mainly CERC RE tariff order dated 15/05/2014 /31/ ***Sub-step 2a: Determine appropriate analysis method*** Since project activity generates revenue, Option III - Benchmark Analysis has been chosen to carry out investment analysis. ***Sub-step 2b: Option III. Apply benchmark analysis*** Since the project is funded through equity and debt funds, Post Tax Equity IRR has been considered an appropriate financial indicator which will be tested against an appropriate benchmark cost of equity. These indicators are industry accepted indicators and are commonly used for financial analysis of similar kinds of projects. In line with para 16 of investment analysis, as the investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, therefore, project owner has converted the real term values of benchmarks to nominal values by adding the inflation rate. As per para 19 of investment analysis, the cost of equity is determined by selecting the values provided in the Appendix, i.e., Default values for cost of equity (expected return on equity) is presented below: The Required return on equity (benchmark) was computed in the following means: Nominal Benchmark = {(1+Real Benchmark) * (1+Inflation rate)} – 1 Where: - Default value for Real Benchmark = 10.55%, as per TOOL27, version11.0, which is the latest version available at the time of preparation of PSF - Inflation Rate forecast for by Reserve Bank of India (RBI) i.e., Central Bank of India. TOOL27, version 11.0 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in India = **10.55%** As per RBI report “Survey of Professional forecasters” dated 03 June 2014 /32/, the latest report available at the time of decision making, the 10-year inflation forecast projected was 5.10%. Therefore, Benchmark is calculated as {(1+10.55%) x (1+5.10%)} -1 = **16.19%** ***Sub-step 2c: Calculation and comparison of financial indicators*** For calculation of financial indicator, all relevant costs and revenues were found to be included in the IRR sheet /3/ provided by the PO. All assumptions and estimates used for input values were checked against the relevant sources. GCC project activity has a less favourable Equity IRR compared to the benchmark, and hence the GCC project activity cannot be considered as financially attractive. The key data parameters used to calculate Equity IRR are tabulated below:

Parameter	Value	Project verifier assessment
Capacity	30 MW	The project rated capacity i.e., 30 MW is based on the letter of award dated 07/11/2014 and can be confirmed from the commissioning reports /8/ and found to be consistent and thus acceptable. The same was further confirmed from the purchase order /10/ as well as the PPA /5/. Installed capacity proposed at the time of decision making (i.e., internal management decision) and post decision making (actual implementation) is same.
PLF	19.00%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same is equivalent to the PLF offered by the technology provider and is found to be acceptable. To further cross-check the robustness of the PLF, validation team has cross-checked the actual generation of the project activity /11/ to ascertain the conformity of the estimated PLF to the actual and observed that the generation yielded a PLF of 23.49% /11/.
Auxiliary consumption	0.00%	Value is based on the CERC tariff order /31/ which has considered auxiliary consumption of 0 % and hence the same is acceptable. The value has been cross check against PPA where the value is 0.1% /5/ and was cross checked with, the month-wise record of auxiliary consumption /11/. The same is found to be reasonable and hence acceptable.
Annual generation	49,932 MWh	The value is calculated as: Capacity * PLF * 8760 = 30 MW * 19% * 8760 h = 49,932 MWh. The input values used in calculation were available at the time of investment decision making. The actual PLF since the start of operation of the project activity is 23.49% /11/ and therefore the annual average generation value

			comes to 61,732 MWh which is more than the input value used for IRR analysis.
	Revenue & Expenses		
	Power tariff	6.95 INR/kWh	The Value is based on the CERC RE tariff order 2014-15 /31/ which was available at the time of investment decision making date and is deemed acceptable to the project verification team. The project activity exports the entire power generated to DISCOM at a fixed tariff ₹3.74/kWh (based on PPA /5/) with an escalation of 3% per annum for the first 10 years which is lower than the input value and is deemed acceptable.
	Annual degradation during 1st year (%)	2.50%	The value considered is based on standard performance warranty by the PV module manufacturers (data module sheet) /6/. Based on the data module sheet for the PV modules /6/: Annual degradation from 2nd year till 10th year: (97.5-90)/9= 0.83 Annual degradation from 11th year till 25th year: (90-80)/15=0.67 The percentage of annual degradation is therefore considered appropriate for the project activity.
	Annual degradation from 2nd year till 10 th year (%)	0.83%	
	Annual degradation from 11th year till 25 th year (%)	0.67%	
	O & M cost	36.90 INR million	Value is based on CERC RE tariff order dated 15/05/2014 /31/ and found to be consistent and thus acceptable. According to the said order, O&M expense norm for solar PV power project as ` 12.30 Lakh/MW for FY 2014-15 has been considered.
	Escalation in O&M expenses p.a.	5.72%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same was further checked against the purchase order /10/ and found to be consistent and thus acceptable.
	Project cost and financing structure		
	Project cost	2073.00 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the capital cost norm for FY 2014-15 is INR 691 Lakh/MW for Solar PV Power

			Projects. The project cost for IRR analysis is calculated as 69.1 INR million * 30MW = 2073.00 INR Million. According to the loan sanction letter /14/, the project cost is 2300.00 INR million which is higher than the input value and is deemed acceptable. The actual project cost for the project activity is 2619.8 INR Million /33/ which is more than the input value used for IRR analysis.
	Loan Amount	1452.10 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus 300 basis points (equivalent to interest rate of 12.70%). Therefore, the loan amount considered for IRR calculations is 70% of the project cost which is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the loan amount is 78% of the project cost i.e., 1790 INR million.
	Equity Investment	621.90 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. The value is equivalent to 30% of the total project cost which is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the equity investment is 22% of the project cost i.e., 510 INR million
	Interest rate on loan	12.70%	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the RE projects treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus 300 basis points (equivalent to interest rate of 12.70%). This is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the applicable interest rate is

			11.0% p.a. payable on monthly basis.
	Loan Tenure	48 Quarters	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the loan tenure of 12 years is to be considered for the purpose of determination of tariff for RE projects. This is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the loan tenure is 60 quarters.
	Book Depreciation (SLM)		
	Salvage Value (%)	10.00	Salvage value is considered as 10% of the total project cost (excluding cost of land lease, erection and commissioning charges as well as transportation charges) as per the CERC tariff order /31/ dated 15/05/2014. These have been added back to the cash flow. Land cost is not considered in IRR calculations which is deemed acceptable to the project verification team. PO considered 10% of cost of plant and machinery (solar plant) as residual (salvage) value for the project activity conservatively). This is further validated as per the accounting practises and same has been also cross checked from Schedule II of the Companies Act 2013 /B19/ which allows 95% of original cost to be depreciated implying a consideration of 5% as salvage value as a standard accounting practice. Thus, the consideration by the PO of 10% salvage value is conservative and hence appropriate for the project activity.
	IT Depreciation (SLM)		
	IT Depreciation Rate (%)	7.69%	As Per Income Tax, Depreciation rates for power generating units. http://www.incometaxindia.gov.in/charts%20%20tables/depreciation%20rates.htm The verification team found that the value is acceptable in accordance with the accounting principles of the host country.
	Income tax rate (%)	30.00%	Values are based on tax rates notified by the Government of India for the said FY 2014-2015 (year in
	MAT (%)	18.50%	
	Service Tax (%)	15.00%	

Surcharge (%) - Rs.10 to Rs.100 m.	5.00%	which decision was taken). The values are verified from the following links: https://taxguru.in/income-tax/income-tax-rate-chart-assessment-year-201516-financial-year-201415.html https://taxguru.in/service-tax/service-tax-rate-increased-1236-14-subsuming-ec-shec-effective-01062015.html
Surcharge (%) - Over Rs.100 m.	10.00%	
Education cess (%)	3.00%	

The input values of the parameters involved in the investment analysis have been crosschecked against each of the evidence provided by the project owner and all the values were found to be applicable/relevant at the time of the investment decision and or project activity scenario.

Post tax Equity IRR i.e., 8.69% is less than Cost of Equity i.e., 16.19% and therefore renders the project activity financially non-feasible.

Sub-step 2d: Sensitivity analysis

As per Tool 27, version 11, variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation. 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 (± 10%). The project developer has identified PLF, project cost, and electricity tariff as critical assumptions. The sensitivity analysis reveals that even under more favourable conditions, the equity IRR would not cross the benchmark return as given in the following table:

Parameter	**-10%**	**0**	**+10%**	**Breaching Value**
PLF	6.00%	8.69%	11.44%	25.50%
Electricity tariff Rate	6.00%	8.69%	11.44%	25.50%
Project Cost	11.15%	8.69%	6.72%	-23.50%

The validation team carried out its own an independent assessment on the likelihood of the equity IRR breaching the benchmark and this assessment reveals that the project would become non additional only if:

- PLF goes up by 25.5%
- Project cost goes down by 23.5%
- Tariff increases by 25.5%

PP has submitted that such a reduction in project cost or increase in PLF / tariff is highly unrealistic and unlikely to happen for the following reasons:

PLF: Generation taken into consideration is equal to CERC recommended PLF.

	However, as per actual generation since COD, the PLF works out to 23.49% /11/. To get a PLF of 23.75% (which translates to a hike of 25.50%) on a sustained basis is highly hypothetical and unrealistic if we take the expected degradation into consideration. Project cost: Since the project activity is already operational since 2017, the cost incurred by the project owner is INR 2619.8 MN /33/ as against the assumed amount of INR 2073.00 MN, which represents firm cost and as such the question of any reduction in the cost is hypothetical. Tariff: The PPA /5/ signed for a period of 25 years, mentions a tariff rate of INR 3.74/ kWh with an escalation of 3% for the first 10 years. It is therefore evident that the tariff rates have decreased compared to that assumed for the financial calculations. Hence, an increase of 25.5% over the current tariff is not feasible. In conclusion, the post-tax equity IRR will not reach the benchmark of 16.19% within the reasonable fluctuation range of +/-10% of the key financial parameters. The project verification team has cross-checked all the input values and calculations which are found to be correct and in accordance with Tool 27, version 11 /B07/. ***Step 3: Barrier analysis*** PO has not applied barrier analysis. ***Step 4: Common practice analysis*** Common practice analysis for the project was conducted using CDM Tool 24, version 3.1) ***Sub-step 4a: The proposed project activity(ies) applies measure(s) that are listed in the definitions section above*** The project is a solar power generation project and adopts type (b) measure listed in the Methodological tool am-tool-24-v03.1 Common practice. The applicable geographical area is Andhra Pradesh state of India. The state of Andhra Pradesh is chosen as the applicable geographical area as against the rest of the host country as the policy/tariff applicable for the renewable power projects is regulated by respective State Electricity Regulatory Commissions (SERCs) in accordance with the generic policy framed by the Central Electricity Regulatory Commission (CERC) and they differ from state to state. This is based on Electricity Act 2003, section 82 which clearly mentions “Every State Government shall, within six months from the appointed date, by notification, constitute for the purposes of this Act, a Commission for the State to be known as the (name of the State) Electricity Regulatory Commission” Appropriateness of the same has been checked and confirmed from the aforementioned act. (http://www.cercind.gov.in/08022007/Act-withamendment.pdf). The investment climate for the renewable energy projects varies from State to State within India due to state specific local policy & regulatory framework as outlined by the State Electricity Regulatory Commissions of the respective state. Thus, consideration of the specific geographical area i.e., State of Andhra Pradesh for the common practice analysis of the proposed project activity was found to be reasonable and justified. ***Sub-step 4a-1: calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.*** The applicable capacity calculated as +/-50% of total design capacity of proposed

	project activity was 15 to 45 MW, which was found to be in line with Tool 24. ***Sub-step 4a-2: identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:*** **(g) The projects are located in the applicable geographical area** These fall in the applicable geographical location i.e., state of Andhra Pradesh in India. **(h) The projects apply the same measure as the proposed project activity** These apply the same measure i.e., solar radiation based power generation. **(i) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity** These use the same source of input energy i.e., solar. **(j) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant** These produce the same goods/services i.e., electricity supplied to the connected grid. **(k) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1** The capacity of these projects is in the range as defined in Step 1 i.e., 15 MW – 45 MW. **(l) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.** The projects started commercial operations before the start date of proposed project activity i.e., 16/06/2015 (date of purchase order for modules) There are no similar projects which satisfy all of the above conditions. The information on these projects is obtained from CEA notification on plant wise details of all India Renewable Energy Projects, dated 20/03/2023 /34/ PO satisfactorily mentions all the projects implemented before 16/06/2015 within the desired capacity range. This was crosschecked with the relevant source /34/ and found to be accurate. ***Sub-step 4a-3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number N_{all}.*** As no projects were identified in the previous step, $N_{all} = 0$ ***Sub-step 4a-4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number N_{diff}.*** Since $N_{all} = 0$

	N_{diff} = 0 ***Sub-step 4a-5: calculate factor F=1-N_{diff}/N_{all} representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.*** The factor of the proposed project activity is calculated as follows: F = 1 – N_{diff}/N_{all} = 1 – (0/0) = 1 N_{all} – N_{diff} = 0-0=0 As per applied tool, the proposed project activity is a "common practice" within a sector in the applicable geographical area if the factor F is greater than 0.2 and N_{all} - N_{diff} is greater than 3. For the proposed project, F is greater than 0.2, but N_{all} -N_{diff} is not greater than 3, therefore, the project activity is not a common practice in the state of Andhra Pradesh. The project verification team therefore concludes that as the project activity is not financially feasible and not a common practice, the project is additional. ***Step 2: Investment analysis for Sunborne Energy Andhra Private Limited:*** In this section it is demonstrated that the project activity is not financially feasible without the revenue from the sale of ACCs. This is demonstrated in following sections as per "Investment analysis" (Version 11.0). The commissioning date of the project activity is 11/02/2016. The project is bagged through bidding process and the date when letter of award was obtained i.e., 24/05/2014 is considered as the investment decision date for the legal owner to start the project implementation despite inherent financial barriers. The additionality has been established using the data available at the time of investment decision which are mainly CERC RE tariff order dated 15/05/2014 /31/ ***Sub-step 2a: Determine appropriate analysis method*** Since project activity generates revenue, Option III – Benchmark Analysis has been chosen to carry out investment analysis. ***Sub-step 2b: Option III. Apply benchmark analysis*** Since the project is funded through equity and debt funds, Post Tax Equity IRR has been considered an appropriate financial indicator which will be tested against an appropriate benchmark cost of equity. These indicators are industry accepted indicators and are commonly used for financial analysis of similar kinds of projects. In line with para 16 of investment analysis, as the investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, therefore, project owner has converted the real term values of benchmarks to nominal values by adding the inflation rate. As per para 19 of investment analysis, the cost of equity is determined by selecting the values provided in the Appendix, i.e., Default values for cost of equity (expected return on equity) is presented below: The Required return on equity (benchmark) was computed in the following means:

Nominal Benchmark = {(1+Real Benchmark) * (1+Inflation rate)} – 1

Where:

- Default value for Real Benchmark = 10.55%, as per TOOL27, version11.0, which is the latest version available at the time of preparation of PSF
- Inflation Rate forecast for by Reserve Bank of India (RBI) i.e., Central Bank of India.

TOOL27, version 11.0 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in India = **10.55%**

As per RBI report "Survey of Professional forecasters" dated 01 April 2014 /35/, the latest report available at the time of decision making, the 10-year inflation forecast projected was 5.40%.

Therefore, Benchmark is calculated as {(1+10.55%) x (1+5.40%)} -1 = **16.52%**

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

For calculation of financial indicator, all relevant costs and revenues were found to be included in the IRR sheet /3/ provided by the PO. All assumptions and estimates used for input values were checked against the relevant sources.

GCC project activity has a less favourable Equity IRR compared to the benchmark, and hence the GCC project activity cannot be considered as financially attractive.

The key data parameters used to calculate Equity IRR are tabulated below:

Parameter	**Value**	**Project verifier assessment**
Capacity	35 MW	The project rated capacity i.e., 35 MW is based on the letter of award dated 24/05/2014 and can be confirmed from the commissioning reports /8/ and found to be consistent and thus acceptable. The same was further confirmed from the purchase order /10/ as well as the PPA /5/. Installed capacity proposed at the time of decision making (i.e., internal management decision) and post decision making (actual implementation) is same.
PLF	19.00%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same is equivalent to the PLF offered by the technology provider and is found to be acceptable.

			To further cross-check the robustness of the PLF, validation team has cross-checked the actual generation of the project activity /11/ to ascertain the conformity of the estimated PLF to the actual and observed that the generation yielded a PLF of 23.00% /11/.
	Auxiliary consumption	0.00%	Value is based on the CERC tariff order /31/ which has considered auxiliary consumption of 0 % and hence the same is acceptable. The value has been cross check against PPA where the value is 0.1% /5/ and was cross checked with, the month-wise record of auxiliary consumption /11/. The same is found to be reasonable and hence acceptable.
	Annual generation	58,254 MWh	The value is calculated as: Capacity * PLF * 8760 = 35 MW * 19% * 8760 h = 58,254 MWh. The input values used in calculation were available at the time of investment decision making. The actual PLF since the start of operation of the project activity is 23.00% /11/ and therefore the annual average generation value comes to 70,518 MWh which is more than the input value used for IRR analysis.
	Revenue & Expenses		
	Power tariff	6.95 INR/kWh	The Value is based on the CERC RE tariff order 2014-15 /31/ which was available at the time of investment decision making date and is deemed acceptable to the project verification team. The project activity exports the entire power generated to DISCOM at a fixed tariff ₹6.49/kWh (based on PPA /5/) for 25 years which is lower than the input value and is deemed acceptable. The actual project cost for the project activity is 3113.9 INR Million /33/ which is more than the input value used for IRR analysis.
	Annual degradation during 1st year (%)	2.50%	The value considered is based on standard performance warranty by the PV module manufacturers (data module sheet) /6/.

	Annual degradation from 2nd year till 10 th year (%)	0.83%	Based on the data module sheet for the PV modules /6/: Annual degradation from 2nd year till 10th year: (97.5-90)/9= 0.83 Annual degradation from 11th year till 25th year: (90-80)/15=0.67 The percentage of annual degradation is therefore considered appropriate for the project activity.
	Annual degradation from 11th year till 25 th year (%)	0.67%	
	O & M cost	43.05 INR million	Value is based on CERC RE tariff order dated 15/05/2014 /31/ and found to be consistent and thus acceptable. According to the said order, O&M expense norm for solar PV power project as ` 12.30 Lakh/MW for FY 2014-15 has been considered.
	Escalation in O&M expenses p.a.	5.72%	Value is based on CERC RE tariff order dated 15/05/2014 /31/. The same was further checked against the purchase order /10/ and found to be consistent and thus acceptable.
	Project cost and financing structure		
	Project cost	2418.50 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the capital cost norm for FY 2014-15 is INR 691 Lakh/MW for Solar PV Power Projects. The project cost for IRR analysis is calculated as 69.1 INR million * 35MW = 2418.50 INR Million. According to the loan sanction letter /14/, the project cost is 3257.00 INR million which is higher than the input value and is deemed acceptable.
	Loan Amount	1692.95 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the53rojectts treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus 300 basis points (equivalent to interest rate of 12.70%). Therefore, the loan amount considered for IRR calculations is 70% of the project

			cost which is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the loan amount is 64.5% of the project cost i.e., 2100 INR million.
	Equity Investment	725.55 INR million	The value is based on the CERC RE Tariff order 2014-15 /31/. The value is equivalent to 30% of the total project cost which is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the equity investment is 35.5% of the project cost i.e., 1157 INR million
	Interest rate on loan	12.70%	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the computations of interest on loan carried out for determination of tariff in respect of the54rojectts treating the value base of loan as 70% of the capital cost and the weighted average of Base rate prevalent during the first six months of the (i.e. 9.70%) plus 300 basis points (equivalent to interest rate of 12.70%). This is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the applicable interest rate is 12.25% p.a.
	Loan Tenure	48 Quarters	The value is based on the CERC RE Tariff order 2014-15 /31/. According to the said order, the loan tenure of 12 years is to be considered for the purpose of determination of tariff for RE projects. This is deemed acceptable to the project verification team. According to the loan sanction letter /14/, the loan tenure is 63 quarters.
	Book Depreciation (SLM)		
	Salvage Value (%)	10.00	Salvage value is considered as 10% of the total project cost (excluding cost of land lease, erection and commissioning charges as well as transportation charges) as per the CERC tariff order dated 15/05/2014. These have been added back to the cash flow. Land cost is not considered in IRR calculations which is deemed acceptable to the project verification team. PO considered 10% of cost of plant and machinery (solar plant) as residual

		(salvage) value for the project activity conservatively). This is further validated as per the accounting practises and same has been also cross checked from Schedule II of the Companies Act 2013 /B19/ which allows 95% of original cost to be depreciated implying a consideration of 5% as salvage value as a standard accounting practice. Thus, the consideration by the PO of 10% salvage value is conservative and hence appropriate for the project activity.
IT Depreciation (SLM)		
IT Depreciation Rate (%)	7.69%	As Per Income Tax, Depreciation rates for power generating units. http://www.incometaxindia.gov.in/charts%20%20tables/depreciation%20rates.htm The verification team found that the value is acceptable in accordance with the accounting principles of the host country.
Income tax rate (%)	30.00%	Values are based on tax rates notified by the Government of India for the said FY 2014-2015 (year in which decision was taken). The values are verified from the following links: https://taxguru.in/income-tax/income-tax-rate-chart-assessment-year-201516-financial-year-201415.html https://taxguru.in/service-tax/service-tax-rate-increased-1236-14-subsuming-ec-shec-effective-01062015.html
MAT (%)	18.50%	
Service Tax (%)	15.00%	
Surcharge (%) – Rs.10 to Rs.100 m.	5.00%	
Surcharge (%) – Over Rs.100 m.	10.00%	
Education cess (%)	3.00%	

The input values of the parameters involved in the investment analysis have been crosschecked against each of the evidence provided by the project owner and all the values were found to be applicable/relevant at the time of the investment decision and or project activity scenario.

Post tax Equity IRR i.e., 8.53% is less than Cost of Equity i.e., 16.19% and therefore renders the project activity financially non-feasible.

Sub-step 2d: Sensitivity analysis

As per Tool 27, version 11, variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should

be subjected to reasonable variation. 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 (± 10%). The project developer has identified PLF, project cost, and electricity tariff as critical assumptions. The sensitivity analysis reveals that even under more favourable conditions, the equity IRR would not cross the benchmark return as given in the following table:

Parameter	-10%	0	+10%	Breaching Value
PLF	5.97%	8.53%	11.22%	29.00%
Electricity tariff Rate	5.97%	8.53%	11.22%	29.00%
Project Cost	10.94%	8.53%	6.69%	-25.50%

The validation team carried out its own an independent assessment on the likelihood of the equity IRR breaching the benchmark and this assessment reveals that the project would become non additional only if:

- PLF goes up by 29.00%
- Project cost goes down by 25.5%
- Tariff increases by 29.00%

PP has submitted that such a reduction in project cost or increase in PLF / tariff is highly unrealistic and unlikely to happen for the following reasons:

PLF: Generation taken into consideration is equal to CERC recommended PLF. However, as per actual generation since COD, the PLF works out to 23.00% /11/. To get a PLF of 24.51% (which translates to a hike of 29.00%) on a sustained basis is highly hypothetical and unrealistic.

Project cost: Since the project activity is already operational since 2016, the cost incurred by the project owner is INR 3113.9 MN /33/ as against the assumed amount of INR 2418.5 MN, which represents firm cost and as such the question of any reduction in the cost is hypothetical.

Tariff: The PPA /5/ signed for a period of 25 years, mentions a tariff rate of INR 6.49/ kWh. It is therefore evident that the tariff rates have decreased compared to that assumed for the financial calculations. Hence, an increase of 29% over the current tariff is not feasible.

In conclusion, the post-tax equity IRR will not reach the benchmark of 16.19% within the reasonable fluctuation range of +/-10% of the key financial parameters. The project verification team has cross-checked all the input values and calculations which are found to be correct and in accordance with Tool 27, version 11 /B07/.

Step 3: Barrier analysis
PO has not applied barrier analysis.

Step 4: Common practice analysis
Common practice analysis for the project was conducted using CDM Tool 24, version

	3.1) ***Sub-step 4a: The proposed project activity(ies) applies measure(s) that are listed in the definitions section above*** The project is a solar power generation project and adopts type (b) measure listed in the Methodological tool am-tool-24-v03.1 Common practice. The applicable geographical area is Telangana state of India. The state of Telangana is chosen as the applicable geographical area as against the rest of the host country as the policy/tariff applicable for the renewable power projects is regulated by respective State Electricity Regulatory Commissions (SERCs) in accordance with the generic policy framed by the Central Electricity Regulatory Commission (CERC) and they differ from state to state. This is based on Electricity Act 2003, section 82 which clearly mentions "Every State Government shall, within six months from the appointed date, by notification, constitute for the purposes of this Act, a Commission for the State to be known as the (name of the State) Electricity Regulatory Commission" Appropriateness of the same has been checked and confirmed from the aforementioned act. (http://www.cercind.gov.in/08022007/Act-withamendment.pdf). The investment climate for the renewable energy projects varies from State to State within India due to state specific local policy & regulatory framework as outlined by the State Electricity Regulatory Commissions of the respective state. Thus, consideration of the specific geographical area i.e., State of Telangana for the common practice analysis of the proposed project activity was found to be reasonable and justified. ***Sub-step 4a-1: calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.*** The applicable capacity calculated as +/-50% of total design capacity of proposed project activity was 17.5 to 52.5 MW, which was found to be in line with Tool 24. ***Sub-step 4a-2: identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:*** **(m) The projects are located in the applicable geographical area** These fall in the applicable geographical location i.e., state of Telangana in India. **(n) The projects apply the same measure as the proposed project activity** These apply the same measure i.e., solar radiation based power generation. **(o) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity** These use the same source of input energy i.e., solar. **(p) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant** These produce the same goods/services i.e., electricity supplied to the connected grid. **(q) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1** The capacity of these projects is in the range as defined in Step 1 i.e., 17.5

	MW – 52.5 MW. **(r) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.** The projects started commercial operations before the start date of proposed project activity i.e., 14/08/2015 (date of purchase order for modules i.e., CDM start date) There are 0 similar projects which satisfy all of the above conditions. The information on these projects is obtained from CEA notification on plant wise details of all India Renewable Energy Projects, dated 20/03/2023 /34/ PO satisfactorily mentions all the projects implemented before 14/08/2015 within the desired capacity range. This was crosschecked with the relevant source /34/ and found to be accurate. ***Sub-step 4a-3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number N_{all}.*** As no projects are identified in the previous step, $N_{all} = 0$ ***Sub-step 4a-4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number N_{diff}.*** Since $N_{all} = 0$, $N_{diff} = 0$. ***Sub-step 4a-5: calculate factor $F=1-N_{diff}/N_{all}$ representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.*** The factor of the proposed project activity is calculated as follows: $F = 1 – N_{diff}/N_{all} = 1 – (0/0) = 1$ $N_{all} – N_{diff} = 0-0=0$ As per applied tool, the proposed project activity is a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and N_{all} - N_{diff} is greater than 3. For the proposed project, F is greater than 0.2, but N_{all} -N_{diff} is not greater than 3, therefore, the project activity is not a common practice in the state of Telangana. The project verification team therefore concludes that as the project activity is not financially feasible and not a common practice, the project is additional. The project verification team also concludes that the project activity is not financially feasible without ACC revenue and is additional.

D.3.6 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	DR, I
Findings	CL 03, CL 04, CAR 08 and CAR 09 were raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	The verification team confirms that the equations and parameters used to calculate GHG emission reductions or net anthropogenic removals in the sections B.6 of PSF/1/ are in accordance with applied methodology, GCCM001 version 3.0 /B02/. The baseline emissions are calculated using the formula: $\boldsymbol{BEy = EG_{PJ,y} \times EF_{grid,y}}$ Where: BEy = Baseline emissions in year *y* (t CO_2) $EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh/yr.) $EF_{grid,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the latest version of "TOOL07: Tool to calculate the emission factor for an electricity system" (t CO_2/MWh) The formula has been correctly applied as per §24 of the applied methodology according to which "baseline emissions include only CO_2 emissions from electricity generation in power plants that are displaced due to the project activity". As per the PSF the estimated net electricity generation from the project activity ($\boldsymbol{EG_{PJ,y}}$) is estimated to be 133,042 MWh/year which is derived from the Joint Monthly Reading Reports /7/. The same have been duly verified and the project verification team confirms that the actual generation from the project activity tallies with the estimation in the PSF as well as the ER calculation sheet /2/ and hence is acceptable. The electricity generation from the project activity is calculated based on the value of PLF 19 % which is sourced from the generic levelized generation tariff order for the FY 2014-15 by the CERC, dated 15th of May 2014 /31/. The value considered by the project owner for determining the ex-ante emission reductions in the PSF is therefore deemed acceptable to the verification team after verification of the said order. Also, the degradation of solar panels assumed as 2.5% for the 1st year and 0.83% on each year up to 10 years (till the end of the crediting period). Based on the sectoral expertise and standard performance warranty of the solar panel suppliers/6/ of the project activity this is acceptable to verification team. The project activity has applied the "Tool to calculate the emission factor for an electricity system" version 7.0 /B05/ for the calculation of CO_2 emission factor of the grid. The assessment of the step wise approach for the calculation of the parameter $EF_{grid,y}$ is detailed below:

Steps for Calculation of combined grid emission factor as per TOOL07: "Tool to calculate the emission factor for an electricity system" version 07	**Assessment**
Step 1: Identify the relevant electricity systems	In accordance with §10(e) of the applied tool, the project activity identifies the

		Indian Grid as the relevant electricity system. In India, all regional grids have been integrated as a single Indian Grid covering all the states in December 2013 by the Central Electricity Authority (CEA), Government of India. Therefore, in accordance with §17(a) of the applied tool the delineation of the project electricity system and connected electricity systems published by the DNA of the host country i.e. CO_2 Baseline Database for the Indian Power Sector, Version 17, October 2021 published by Central Electricity Authority (CEA), Government of India/17/ is used. The same has been duly verified and found to be acceptable.
	Step 2: Choose whether to include off-grid power plants in the project electricity system (optional)	The project activity has chosen only grid power plants. The project verification team has reviewed the ER sheet/2/, the CEA published database/17/ and found the same to be acceptable.
	Step 3: Select a method to determine the operating margin (OM) (**($EF_{grid,OMSimple,y}$)**	With reference to the options provided for the determination of OM under §38 of the Tool, the project activity has selected Simple OM emission factor calculation. The same is found acceptable as the options of Simple adjusted OM and Dispatch data analysis OM could not be utilized due to lack of availability of data. The aforementioned fact is also considered by the Central Electricity Authority in the user guide for CO_2 Baseline Database for the Indian Power Sector version 17.0, October 2021 /17/. Furthermore, the Average OM method also cannot be applied as low cost/must run resources (LCMR) constitute less than 50% of total grid generation for recent 5year data (2016-2017 to 2020-2021). The same has been verified against the CEA Baseline database /17/. Therefore, as the LCMR share for the recent 5 years is less than 50%, simple OM can be used.

		The same is found to be in compliance with the applied tool and found to be acceptable. The parameter "Simple OM emission factor", is fixed ex-ante.
	Step 4: Calculate the operating margin emission factor according to the selected method	The Simple OM emission factor is calculated as a weighted average generation for the recent 3 years i.e. 2018-2019, 2019-2020, and 2020-2021. The values have been verified against the database used i.e. Central Electricity Authority in the user guide for CO_2 Baseline Database for the Indian Power Sector version 17.0, October 2021 /17/ and found to be accurate. The same is found to be in compliance with §42(a) of the applied tool and found to be acceptable.
	Step 5: Calculate the build margin (BM) emission factor **($EF_{grid,BM,y}$)**	The Build Margin emission factor is calculated based on the recent information available i.e. value for the year 2020-2021. The value has been verified against the database used i.e. Central Electricity Authority in the user guide for CO_2 Baseline Database for the Indian Power Sector version 17.0, October 2021 /17/ and found to be accurate. The same is found to be in compliance with §72(a) of the applied tool and found to be acceptable.
	Step 6: Calculate the combined margin (CM) emission factor	The combined margin emission factor is calculated by the Weighted average CM method and is based on the formula provided in §85 of the applied tool. The verification team has reviewed the calculation in the PSF/1/ as well as the ER calculation sheet/2/ and found the same to be transparent and accurate. The result of the emission factor calculation is therefore found to be acceptable.
	The combined margin emission factor ($EF_{grid,y}$) calculated on the basis of Tool 07 is 0.9305 tCO_2e/MWh. This complies with the requirement stated in paragraph 9 of GCC Clarification no. 3 (version 1.0) /B01-8/, which states that "if the project owner applies options 8(c) to 8(e) above, the latest available emission factor shall not be	

	older than 3 years, at the time of submission of the project documentation for starting Global Stakeholder Consultation (GSC)". Therefore, the baseline emission value is derived as 123,793tCO_2e using the aforementioned formulae and figures and is found to be acceptable. <u>Project emissions</u>: As per §26 of the applied methodology "for most renewable energy project activities, project emissions are equal to zero." As solar energy is a GHG emission free source of energy for the project activity, project emissions are considered "Zero" for the project activity i.e. PEy = 0. The same is in accordance with the applied methodology as well as project design and hence is found to be acceptable. <u>Leakage Emissions</u> As per §29 of the applied methodology no leakage emissions are estimated for the project activity. Leakage emissions are therefore considered "Zero" for the project activity i.e. LEy = 0. The same is in accordance with the applied methodology as well as project design and hence is found to be acceptable. <u>Emission reductions</u> In accordance with §30 of the applied methodology, emission reductions are calculated as follows: $ERy = BEy - PEy - LEy$ Where: ERy = Emission reductions in year *y* (t CO_2) BEy = Baseline Emissions in year *y* (t CO_2) PEy = Project emissions in year *y* (t CO_2) LEy = Leakage emissions in year *y* (t CO_2) Therefore, the annual emission reduction value is derived as 123,793 tCO_2e using the aforementioned formulae and figures and is found to be acceptable. CCIPL verification team confirms that the baseline methodology and the applicable tool(s) have been applied correctly to calculate emission factor, project emissions, baseline emissions, leakage and emission reductions. Furthermore, all the data used in the PSF/1/ as well as the ER calculation sheet/2/ is quoted correctly including their source. The verification team therefore concludes that all the values used in the PSF are reasonable and the calculations are complete and accurate without any omissions. The same is found to be acceptable.

D.3.7 Monitoring plan

Means of Project Verification	DR, I
Findings	CL 04, CL 05, CL 06 and CAR 08 were raised and closed successfully. Please refer to Appendix 4 for further details.

Conclusion

The monitoring plan described in the PSF is in compliance with the applied methodology "GCCM001" version 3.0 /B02/. The monitoring plan is also found to be in compliance with the requirements of GCC Environment and Social-Safeguards Standard version 3.0 /B01-4/ and Project Sustainability Standard version 3.1 /B01-5/.

The CCIPL project verification team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology and confirmed that no deviations relevant to the project activity have been found. The procedures have been reviewed through document review and interviews with the respective monitoring personnel.

The project verification team can hence confirm that the proposed monitoring plan is feasible within the project design. Therefore, the project owner is able to implement the monitoring plan and the achieve emission reductions that can be reported ex-post and verified.

Data and parameters fixed ex-ante:

Ex-ante parameters provided under section B.6.2 of the PSF /1/ are found to be appropriate and in line with the applied methodology GCCM001 (version 3.0) /B02/. Ex-ante parameters of the project activity would be as follows:

Parameter	Verified Value	Assessment
Operating margin CO_2 emission factor for the project electricity system in year y **$EF_{grid,OM,y}$**	0.9522 tCO_2 /MWh	The values are based on latest CO_2 Baseline Database for the Indian Power Sector User Guide, Version 17.0 /17/, October 2021 published by Central Electricity Authority (CEA), Government of India. For parameter **$EF_{grid,OM,y}$**, as per paragraph 42(a) of the "tool to calculate the emission factor for an electricity system" version 7.0, 3-year generation-weighted average, based on the most recent data available at the time of submission of the PSF has been used and found to be appropriate. For parameter **$EF_{grid,BM,y}$**, as per paragraph 72(a) of the "tool to calculate the emission factor for an electricity system" version 7.0, the most recent data available at the time of submission of the PSF has been used and found to be appropriate.
Build margin CO2 emission factor for the project electricity system in year y **$EF_{grid,BM,y}$**	0.8653 tCO_2 /MWh	

		The documentation source/17/ has been duly verified to confirm the values. Please also refer section D.3.6
Combined margin CO_2 emission factor for the project electricity system in year y **$EF_{grid,y}$**	0.9305 tCO_2 /MWh	In accordance with paragraph 85 of "tool to calculate the emission factor for an electricity system" version 7.0, the parameter **$EF_{grid,y}$** is calculated as the weighted average of the operating margin (0.75) & build margin (0.25) values, sourced from CO_2 Baseline Database for the Indian Power Sector User Guide, Version 17.0, October 2021/17/. The PSF as well as Emission Reduction calculation excel sheet/2/ have been duly verified to confirm the calculation. The derived value is found to be appropriate.

Data and parameters to be monitored ex-post:

Ex-post parameters mentioned under section B.7.1 of the PSF /1/ are found to be appropriate and in line with the applied methodology GCCM001 (version 3.0) /B02/. The parameters that are to be monitored ex-post are:

Sr. No.	Parameter	Assessment
1.	**$EG_{PJ,Y}$** Quantity of net electricity generation supplied by the project plant/unit to the grid in year y *(Replacing fossil fuels with renewable sources of energy and SDG 7)*	The electricity generated by the project activity is supplied to the Indian grid. The net electricity generated is based on the difference between export to the DISCOM and import from grid. The amount of electricity exported by the project activity is continuously monitored by a bi-directional energy meter main and check meters of accuracy class 0.2s which are located at the substation. The serial numbers mentioned in the PSF are in accordance with the onsite observation /30/. The energy meters installed at the substation end are jointly inspected and sealed by the state utility and its representatives. The calibration of the meters has been

			carried out once in a year by the state electricity officials as per provision in the Power Purchase Agreement for each project activity /5/ which is acceptable to the verification team. The same has been confirmed during the onsite visit /30/ and by checking the calibration certificates /9/. The verification team also confirmed that the metering is performed as per the single line diagram /12/ checked during the onsite visit. The monitoring parameter is recorded on monthly basis. The Joint Meter Readings (JMR) taken every month from the meter, in the presence of authorised official from state electricity board along with a representative of the project owner, gives the net value of electricity supplied by the project activity to the grid. The monthly value of metered energy is the basis for PO to raise monthly invoices /13/. Therefore, Net electricity supplied to the grid by the project activity will be cross checked with the JMR /7/ and monthly invoices raised /13/. It can therefore be concluded that the project owner has the ability to implement the monitoring plan mentioned in the PSF /1/. Furthermore, the 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.
	2.	CO_2 Emission Reductions *(SDG 13)*	The project activity generates and supplies renewable solar sourced based electricity to the grid, where it replaces fossil fuel source-based electricity. Emission reduction is calculated based on the net electricity generation from the project activity and grid emission factor. While the grid emission factor is fixed ex-ante, the net electricity generation is continuously monitored as stated above for the monitoring parameter $\mathbf{EG_{PJ,Y}}$. The calculation procedures for the reduction in CO_2 emissions are correctly defined in the PSF. The parameter is being monitored to assess to contribution SDG goal -13 Climate Change and also

			the positive environmental impact. Adequate details for monitoring/reporting/recording are defined in the PSF. The CO_2 emission reduction is validated from the ER calculation sheet /02/ and found appropriate.
	3.	Skill Development Training *(SDG 4)*	The project owner will provide training for both existing employees and local youth and adults with relevant skills. The project will train at least 3 persons throughout the crediting period which can be verified from the training attendance sheet. The means of monitoring was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
	4.	Efficiency of health services *(SDG 3)*	The project owner will create basic health services, set up health camps and distribute medicines and vaccines to local people. The records for the same will be kept by the project owner and will be monitored once in three years. The means of monitoring was confirmed during interviews conducted on site /30/ 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.	Solid waste Pollution from E-wastes	The e-waste generated by the Project activity viz. Spares of SCADA system, inverters and other electrical and electronic parts involved in the project or post their useful life will be disposed as per prevailing laws and regulations of the host country i.e. E-Waste (Management) Rules, 2011. Accordingly, the e-waste generated from the project activity will be collected by the SPCB authorized Solid E-Waste recyclers/ dismantlers/ Scrap dealers. The quantity of E-waste reused/recycled/refurbished/disposed of will be monitored per year by means of the records maintained on site. This was further confirmed by interviewing /30/ the monitoring personnel of the project activity during site visit. The monitoring practice followed is therefore found to be appropriate and is

		acceptable to the verification team.
6.	Incidents/Accidents *(SDG 8)*	The number of major incidents/accidents will be monitored yearly. The project owner conducts occupational safety trainings, display of safety posters at site and follows company EHS policy /24/ strictly. The monitored value can be confirmed from the EHS records maintained on site. This was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
7.	Employment – Long Term *(SDG 9)*	This parameter is monitored yearly based on the number of jobs created by the project owner on a long term basis. The project will at least provide employment to 3 persons yearly which can be verified using the site register / employment records maintained for project activity. PO has provided the Project Activity specific Employee Lists segregated into long term and short-term employments /36/. This was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.
8.	Employment – Short Term	This parameter is monitored yearly based on the number of jobs created by the project owner on a short-term basis. The project will at least provide employment to 5 persons yearly which can be verified using the site register / employment records maintained for project activity. PO has provided the Project Activity specific Employee Lists segregated into long term and short-term employments /36/. This was confirmed during interviews conducted on site /30/ and the monitoring practices followed by the project owner is appropriate in relation to the project activity and its acceptable to the assessment team.

The verification team therefore confirms that the parameters to be monitored have been presented correctly according to methodological as well as Standard specific

	requirements/B02/ /B01/. This is in conformance with the requirements of GCC Verification Standard (version 3.1) /B01-2/.

D.4. Start date, crediting period and duration

Means of Project Verification	DR, I
Findings	No findings were raised pertaining to this section
Conclusion	The project activities forming the bundle have the following start dates: **Project Activity** / **Capacity** / **Start Date** Greenko Solar Power (Dharmavaram) Limited / 22 MW / 07/11/2017 SEI Arushi Private Limited / 30 MW / 28/10/2017 Sunborne Energy Andhra Private Limited / 35 MW / 11/02/2016 The start date of the bundle activity is therefore considered as11/02/2016, which is the earliest date of start of operation amongst all the involved project activities in the bundle. The same has been duly verified against the commissioning reports /8/ and found to be acceptable by the verification team. Crediting period has been chosen as fixed 10 years from 10/02/2017 to 09/02/2027. The start date of the crediting period is stated as 10/02/2017, which is appropriate as per §40(b) of the Project Standard version 03.1 /B01-1/. Project owner has considered the expected lifetime of the project activity as 25 years. The same has been verified against the technical specification /6/ of the Solar Photovoltaic Panels installed and confirmed on the basis of sectoral expertise. The project verification team therefore concludes that the start date, crediting period type and duration are in conformance with the requirements of §38, §39 and §40 of GCC Project Standard, version 03.1 /B01-1/ and §13 of GCC Clarification No. 1, version 1.3 /B01-6/.

D.5. Environmental impacts

Means of Project Verification	DR, I
Findings	No findings were raised pertaining to this section
Conclusion	The project activity refers to the guidelines on Environmental Impact Assessment published by Ministry of Environment, Forests and Climate Change (MoEF & CC), Government of India (GOI) under Environmental Impact Assessment notification 14/09/2006 which was further amended on 14/07/2018 /B20/. The said guidelines categorise project activities that require Environmental Impact Assessment. Solar radiation based power projects are not listed in any of the categories of the schedule and hence are exempted from conducting Environmental Impact Assessment as per host country legislation. Furthermore, the report on “Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects” by the Ministry of New and Renewable

	Energy (MNRE) dated September 2013 /37/ does not envisage any significant impact due to solar radiation based power projects on the environment. Based on the above referenced documents, the verification team concludes that as per host country legislation, environmental impacts due to solar power plants are not considered significant and hence Environmental Impact Assessment is not mandated.

D.6. Local stakeholder consultation

Means of Project Verification	DR, I
Findings	CAR 10 was raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	The local stakeholder consultation (LSC) was conducted for each project activity in the bundle at their respective project activity site as per GCC requirements. Details of the same are as follows:

Project Activity	LSC Date	Location
Greenko Solar Power (Dharmavaram) Limited	10/02/2022	Kunuthuru Village, Anantapur district, Andhra Pradesh.
SEI Arushi Private Limited	12/02/2022	Near Nagireddy palli village, Anantapur district, Andhra Pradesh
Sunborne Energy Andhra Private Limited	15/02/2022	Gattu -Village, Gadwal, Telangana.

The verification team confirms that the local stakeholder consultation process was performed by the project owner before the submission of the project activity for global stakeholder consultation.

The relevant local stakeholders were invited through phone calls and meeting notice /18/. The assessment team has reviewed the documentation in order to validate the inclusion of relevant stakeholders. The verification team confirms that the communication method used to invite the stakeholders is found to be appropriate.

As detailed in the PSF /1/, the representative of GCC project owner explained technical aspects and GCC mechanism & its requirement of project to stakeholders, also explained about Social, Environmental benefits and UN sustainable development goal impacts of the project. Furthermore, the stakeholders were asked to answer a questionnaire to gauge their understanding of the project activity and address their concerns if any. The summary of comments presented in the PSF has been verified with the documentation of the stakeholder consultation /18/ as well as onsite interviews with various stakeholders /30/ and has been found to be complete and appropriate. No negative feedback was received.

Therefore, the verification team concludes that the local stakeholder consultation process was adequately conducted by the project participant considering the ongoing pandemic to receive unbiased comments from the all the relevant stakeholders. The verification team confirms that the local stakeholder consultation process performed for the bundled project activity fulfils the GCC requirements and all the LSC documents /18/ are verified and found acceptable.

D.7. Approval and Authorization- Host Country Clearance

Means of Project Verification	DR, I
Findings	FAR 01 has been raised in this context. Please refer to Appendix 4 for further details.
Conclusion	As per the GCC Clarification No. 1 /B01-6/ the submission of Host Country Attestation on double counting is required by CORSIA labelled project after 31/12/2020. Therefore, for carbon credits issued during the period 10/02/2017 to 31/12/2020 the host country approval is not required. The verification team confirms that Host Country Attestation will be required and provided by the project owner during the first or subsequent verification when the issuance of carbon credit is considered beyond 31/12/2020.

D.8. Project Owner- Identification and communication

Means of Project Verification	DR, I
Findings	CL 02 was raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	The project activity is a bundle involving three individual project activities legally owned by Greenko Solar Power (Dharmavaram) Limited, SEI Arushi Private Limited and Sunborne Energy Andhra Private Limited. The project verification team has also verified the company registration documents /4/, commissioning reports /8/ as well as the power purchase agreement /5/ to ascertain the legal ownership of the project activity and found the same to be acceptable. The entities involved have chosen SEI Arushi Private Limited and Greenko Energies Private Limited to act as the project owners for the bundled project and same has been duly verified against the Letter of Authorization signed by all the legal owners and accepted by the designated project owner/25/. The information and contact details of the project owner have also been appropriately incorporated in Appendix 1 of the PSF. The verification team further confirms that the information of the project owner is provided as per the template and the information regarding the project owner stated in the PSF/1/ and authorization letter/25/ were found to be consistent and acceptable. The same is also in accordance with paragraph 18 of GCC Clarification No. 1 version 1.3 /B01-6/.

D.9. Global stakeholder consultation

Means of Project Verification	DR, I
Findings	No findings pertaining to this section
Conclusion	The PSF was published for global stakeholder consultation from 27/10/2022 till 10/11/2022 (https://www.globalcarboncouncil.com/global-stakeholders-consultation/). During the above period no Global stakeholders' comments were received. The verification team therefore concludes that the process for global stakeholder consultation was conducted in accordance with the requirements of paragraphs 25 and 26 of the GCC Project Standard (version 3.1) /B01-1/. The PSF was made public for receiving stakeholder feedback and no comments were raised during the GSC process.

D.10. Environmental Safeguards (E+)

<table>
<tr><td>Means of Project Verification</td><td>DR, I</td></tr>
<tr><td>Findings</td><td>CL 08 was raised and closed successfully. Please refer to Appendix 4 for further details.</td></tr>
<tr><td>Conclusion</td><td>The Project owner has chosen to apply for the Environmental No-net-harm Label (E+). The assessment of the impact of the project activity on the environmental safeguards has been carried out in section E.1 of the PSF. No risks to the environment were identified due to the project implementation and operation.

The following have been identified as positive impacts of the project activity:

Environment – Air- CO_2 emissions: Use of solar energy for electricity production
Environment – Natural Resources – Replacing fossil fuels with renewable sources of energy.

Furthermore, risks are identified regarding Solid Waste Pollution from E-waste, during operational life of the project activity and project owner has provided appropriate mitigation plan for the same in section B.7.2 of the PSF.

The appropriate monitoring plan has been put in place to monitor the parameters scored and risks identified due to implementation of the project activity. The detailed matrix, including project verification team assessment, has been included in appendix 5 of this report.

<table>
<tr><th>Impact of Project Activity on Environmental Safeguards</th><th>Assessment</th></tr>
<tr><td>CO_2 emissions (EA03)</td><td>In absence of the project activity, the electricity generated from the project activity would be generated in the Indian Grid by power plants that are predominantly fossil-fuel based, thereby leading to CO_2 emissions. The generated electricity by the project activity is based on the renewable energy source, which causes no CO_2 emissions. The project will thus have a positive impact by reducing measurable amount of CO_2 emissions. The project is expected to reduce CO_2 emission throughout the crediting period. As no negative environmental impacts are anticipated, the parameter is evaluated as harmless and scored a +1 by the project owner. This is accepted by the project verification team.

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.</td></tr>
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</td></tr>
</table>

	Solid waste Pollution from E-wastes (EL04)	The e-waste generated by the Project activity viz. Spares of SCADA system, inverters, and other electrical and electronic parts involved in the project or post their useful life will be disposed as per prevailing laws and regulations i.e. E-Waste (Management) Rules, 2011. Monitoring plan is provided in section B.7.2 of the PSF to ensure the compliance with the regulations in place. The same will be monitored throughout the crediting period by the project owner by means of records of e-waste re-used/recycled/refurbished or disposal from the project activity. The same was confirmed during the onsite assessment /30/ and accepted by the verification team. The monitoring plan provided is provided in section B.7.2 is appropriate and assessment of the same is provided section D.3.7 of the Project Verification Report.
	Replacing fossil fuels with renewable sources of energy (ENR07)	In absence of the project activity, the equivalent amount of electricity would be generated from the operation of grid-connected power plants, which is GHG intensive. The project activity generates and supplies renewable solar sourced based electricity to the grid, where it replaces fossil fuel source-based electricity, thus the project activity is unlikely to cause any harm and is assessed as harmless. As the project activity will have a positive impact by replacing fossil fuels with renewable sources of energy, the parameter is evaluated as harmless and scored a +1 by the project owner. This is accepted by the project verification team. 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.
	The verification team confirms that the project owner has conducted assessment and reporting of the potential aspects which are identified for each project type as per appendix 1 of the GCC Project Environmental and Social Safeguards standard version 3.0/B01-4/ and is applicable to the Project activity and the monitoring procedure of each is given in section E.1, B.7.1, and B.7.2 of the PSF. Therefore, it can be concluded that the Project Activity is not likely to cause any harm to the environment and net score for the project comes out to be +3, hence, is eligible to achieve additional E+ certification. The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to environment.	

D.11. Social Safeguards (S+)

Means of Project Verification	DR, I
Findings	CL 08 was raised and closed successfully. Please refer to Appendix 4 for further details.

Conclusion

The Project owner has chosen to apply for the Social No-net-harm Label (S+). The assessment of the impact of the project activity on the social safeguards has been carried out in section E.2 of the PSF. No risks to society were identified due to the project implementation and operation.

The following have been identified as positive impacts of the project activity:
Social – Jobs – Long-term jobs (> 1 year) created/ lost.
New short-term jobs (< 1 year) created/ lost
Social – Health & Safety – Reducing / increasing accidents / Incidents /fatality
Efficiency of health services
Social – Education – specialized training / education to local personnel

Furthermore, risks are identified regarding accidents/incidents during operational life of the project activity and project owner has provided appropriate mitigation plan for the same in section B.7.2 of the PSF.

The appropriate monitoring plan has been put in place to monitor the elements scored in social safeguard section E .2 of the PSF. The detailed matrix, including project verification team assessment, has been included in appendix 6 of this report.

Impact of Project Activity on Social Safeguards	Assessment
Long-term jobs (> 1 year) created/ lost (SJ01)	The project activity will lead to long term employment generation during the operational phase which can be verified from the employment records maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report. The aforementioned documents can be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2. The creation of permanent jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
Short-term jobs (< 1 year) created/ lost (SJ02)	The project activity has led to short term employment generation during the construction and the operational phase which can be verified from the employment records maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report. The aforementioned documents can be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2. The creation of temporary jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.

	Specialized training / education to local personnel (SE01)	As per the PSF/1/ and interview with the project owner/30/, the project owner would impart training to the local youth periodically so as to increase the skill set of on operation and maintenance of project; occupational safety, first aid, accident reporting etc. The monitoring approach is discussed in section D.3.7 of this report. The same could be verified from the training records and interviews with the employees to confirm the same during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2 The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	Reducing / increasing accidents/Incidents/fatality (SHS03)	As per the PSF /1/, records of major accidents/incidents in a year will be monitored through EHS records. The project owner shall provide the job-related Health and safety trainings to its employees on regular interval, and the number of accidents occurred can be verified at the time on emission reduction verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2. The monitoring approach is discussed in section D.3.7 of this report. The impact created by the project is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	Efficiency of health services (SHS07)	The project owner will organize medical camps including distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in three years. The same could be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2 The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	The verification team confirms that the project owner has conducted assessment and reporting of the potential aspects which are identified for each project type as per appendix 1 of the GCC Project Environmental and Social Safeguards standard version 3.0/B01-4/ and is applicable to the Project activity and the monitoring procedure of each is given in section E.1, B.7.1, and B.7.2 of the PSF. Therefore, it can be concluded that the Project Activity is not likely to cause any harm to society	

	and net score for the project comes out to be +5, hence, is eligible to achieve additional S+ certification. The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to society.

D.12. Sustainable development Goals (SDG+)

Means of Project Verification	DR, I
Findings	CL 09 was raised and closed successfully. Please refer to Appendix 4 for further details.
Conclusion	The project Activity demonstrates that it contributes to achieving the United Nations Sustainable Development Goals (SDGs). Of the 17 defined Goals, the project activity has no adverse effect on any and is expected to contribute to 6 SDGs. Hence the Project owner has chosen to apply for the United Nations Sustainable Development Goals (SDG+ label). The detailed assessment of the impact of the project activity on each of the targeted SDG's has been carried out in section F of the PSF by the project owner and Annexure 7 of this report. The 6 SDGs targeted for the SDG+ Label are: Goal 3: Ensure healthy lives and promote well-being for all at all ages Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation Goal 13: Take urgent action to combat climate change and its impacts.

UN-level SDGs	Assessment
Goal 3. Ensure healthy lives and promote well-being for all at all ages SDG Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and //vaccines for all Indicator 3.8.1: Coverage of essential health services	The project owner will organize medical camps including distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in three years and should be verified during ER verification stage. PO has provided a declaration /38/ which states that some activities performed to achieve SDG 3 targets are beyond CSR, which is deemed acceptable to the project verification team. The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.
Goal 4. Ensure inclusive and equitable quality education and promote	The project owner will conduct training on relevant technologies to empower local stakeholders with digital literacy. Records of trainings and workshops conducted should be verified during the ER

	lifelong learning opportunities for all SDG Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship Indicator 4.4.1: Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	Verification stage along with the number of people trained over the crediting period. The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.
	Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all SDG target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix Indicator 7.2.1: Renewable energy share in the total final energy consumption	The project activity is a bundled solar power project with an installed capacity of 87 MW and it generates electricity of 133,042 MWh per year. The project activity was commissioned on 11/02/2016 (earliest start date of operation amongst the project activities involved in the bundle) and it continues to provide clean energy, thereby increasing the renewable energy share in the total final energy consumption thereby complying with the SDG target 7.2. The same was duly verified by the verification team from commission reports/8/ and electricity generation records /11/. The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF/1/ and found to be acceptable.
	Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all SDG Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment. Indictor 8.8.1: Fatal and	PO will ensure to protect labour rights by implementing strict EHS policy and through safety trainings, and display of safety posters/guidelines at project sites. The number of major accidents/incidents will be monitored through EHS records which should be verified during ER Verification stage. The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.

	non-fatal occupational injuries per 100,000 workers, by sex and migrant status	
	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation SDG target 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries Indicator: 9.2.2: Manufacturing employment as a proportion of total employment	The project will provide employment opportunities to at least 10 eligible candidates for operations of the renewable energy related project activity. This can be verified from the employment records maintained on site. The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.
	Goal 13. Take urgent action to combat climate change and its impacts SDG target 13.2: Integrate climate change measures into national policies, strategies and planning. Indicator 13.2.2: Total greenhouse gas emissions per year.	The project is estimated to achieve GHG emission reduction of 123,793 tCO_2e/year, thereby meeting the SDG target 13.2. The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF/1/ and found to be acceptable.
	The verification team confirms that the SDGs chosen by the project owner are in compliance with the paragraph 19, 20 and 21 GCC Project sustainability standard version 3.0/B01-5/ and is applicable to the Project activity and the monitoring procedure of each SDG is given in section F and B.7.1 of the PSF. It can therefore be concluded that the Project Activity is likely to contribute to the United Nations Sustainable Development Goals and would have a positive impact, hence, is eligible to achieve additional Diamond SDG+ certifications.	

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

Means of Project Verification	DR, I
Findings	FAR 01 has been raised. Please refer to Appendix 4 for further details.
Conclusion	A declaration under section A.5 of the PSF has been included for use of the approved carbon credits (ACCs) for the entire crediting period from 10/02/2017 to 09/02/2027 to offset GHG emissions.

	The project owner has clarified the intention for use of carbon credits for CORSIA. The project owner declared that no host country attestation is required for the pilot phase of 2021-23 (accepting credits issued for monitoring periods between 2016 and 2020), which is appropriate and acceptable according to paragraph 16 of the Standard on Avoidance of Double Counting, version 1.0 /B01-7/. Assessment with regards to confirmation on the project activity not being registered under any other GHG reduction certification mechanism, thereby avoiding double counting is provided under section D.2 of this report. The host country attestation is yet to be obtained for authorization on double counting. The verification team confirms that Host Country Attestation will be required and provided by the project owner during the first or subsequent verification when the issuance of carbon credit is considered beyond 31/12/2020.

D.14. CORSIA Eligibility (C+)

Means of Project Verification	DR, I
Findings	FAR 01 has been raised. Please refer to Appendix 4 for further details.
Conclusion	The project activity meets the CORSIA Eligibility criteria as 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. Furthermore, the Project Activity does not cause any net harm to the environment and/or society and therefore achieves Environmental No-net-harm Label (E+) as well as Social No-net-harm Label (S+) in accordance with the Environmental and Social Safeguards Standard, version 3.0. The project activity also contributes towards achieving United Nations Sustainability Development Goals (SDGs) by achieving 6 SDGs as per Project Sustainability Standard, version 3.0 to achieve SDG+ Label. The verification team therefore concludes that “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., v 1.3 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”. As per Clarification No.1 version 1.3 /B01-6/, for carbon credits generated during 01/01/2016 to 31/12/2020, Host Country Attestation is not required for CORSIA labeled credits. For carbon credits generated since 01/01/2021, HCA will be submitted by PO prior to submission of requesting issuance for emission reductions to the GCC Program. Therefore, a FAR has been raised in this respect.

Section E. Internal quality control

The Verification report has undergone a technical review and quality review before being submitted to the project owner. A technical reviewer is qualified in accordance with CCIPL’s qualification scheme for GCC verification performed the technical review.

Section F. Project Verification opinion

The GCC Project Verifier, Carbon Check (India) Private Ltd, verifies and certifies that the GCC Project Activity “Arushi 87MW bundled solar power project in Telangana and Andhra Pradesh, India.”:

(a) has correctly described the Project Activity in the Project Submission Form (version 1.3, dated 06/10/2023) including the applicability of the approved GCC methodology, GCCM001, version 3.0 and meets the methodology applicability conditions, is additional and is expected to achieve the forecasted real and additional GHG emission reductions, complies with the monitoring methodology, has appropriately conducted local and global stakeholder consultation processes and has calculated emission reduction estimates correctly and conservatively;

(b) is likely to generate GHG emission reductions amounting to the estimated 1,237,933 tCO_2e (for the fixed 10 years crediting period), as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules and therefore requests the GCC Program to register the Project Activity;

(c) is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, version 3.0 and therefore requests the GCC Program to register the Project Activity, which is likely to achieve the requirements of the Environmental No-net-harm Label (E+) and the Social No-net harm Label (S+); and

(d) is likely to contribute to the achievement of United Nations Sustainability Development Goals (SDGs), comply with the Project Sustainability Standard, version 3.0 and contribute to achieving a total of 6 SDGs, which is likely to achieve the Diamond SDG certification label (SDG+).

(e) 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., v 1.3 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 Verification report describes a total of 21 findings, which include:

- 01 Forward Action Request (FAR);
- 10 Clarification Requests (CLs);
- 10 Corrective Action Requests (CARs)

All findings are resolved by the project owner (except the FAR which needs to be resolved during emission reduction verification).

Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits
BM	Build Margin
CAR	Corrective Action Required
CERC	Central Electricity Regulatory Commission
CDM	Clean Development Mechanism
CL	Clarification Request
CM	Combined Margin
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
DNA	Designated National Authority
DR	Document Review
E^+	Environmental No net harm Label
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Green House Gas
GORD	Gulf Organization for Research and Development
GSC	Global Stakeholder Consultation
I	Interview
IRR	Internal Return Rate
ISO	International Organization for Standardization
Kw	Kilo Watt
KWh	Kilo Watt hour
LSC	Local Stakeholder Consultation
MENA	Middle East & North Africa
MW	Mega Watt
MWh	Mega Watt hour
OM	Operating Margin
PO	Project Owner
PPA	Power Purchase Agreement
PLF	Plant load factor
PS	Project Standard
PSF	Project Submission Form
PVR	Project Verification Report
S+	Social No- net harm Label
SDG+	United Nation Sustainable Development Goal Label
SERC	State Electricity Regulatory Commission
tCO_2e	Tonnes of Carbon dioxide equivalent
UNFCCC	United Nations Framework Convention
V	Version
VB	Verification Body
VS	Verification Standard

Appendix 2. Competence of team members and technical reviewers

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Sanjay Agarwalla

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

for the following functions and requirements:

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

in the following Technical Areas:

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

Issue Date
1st January 2023

Expiry Date
31st December 2023

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Manas Halder

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

for the following functions and requirements:

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

in the following Technical Areas:

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

Issue Date

1st January 2023

Expiry Date

31st December 2023

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. S. Ranganathan

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

for the following functions and requirements:

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

in the following Technical Areas:

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

Issue Date

1st January 2023

Expiry Date

31st December 2023

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

CCIPL_FM 7.9 Certificate of Competency_V2.1_012023

Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
/1/	PO	a) PSF for GSC	version 1.0, dated, 19/10/2022	PO
		b) Intermediate PSF	version 1.1, dated, 23/06/2023	
		c) PSF	Version 1.3 Dated 06/10/2023	
		d) Final PSF	Version 1.4 Dated 19/10/2023	
/2/	PO	a. Emission reduction calculation spread sheet including grid emission factor calculation corresponding to /1-a/	Arushi ER Sheet version 1.0, dated, 19/10/2022	PO
		b. Emission reduction calculation spread sheet including grid emission factor calculation corresponding to /1-c/	Arushi ER Sheet version 1.3, dated, 06/10/2022	
/3/	PO	a. IRR spread sheet corresponding to /1-a/	Investment analysis_Arushi Bundle base final version 1.0, dated, 19/10/2022	PO
		b. IRR spread sheet corresponding to /1-c/	Investment analysis_Arushi Bundle base final version 1.3, dated, 06/10/2022	
		IRR sheet with actual values used for analysis	-	
/4/	Ministry of Corporate Affairs	Legal status of the project owners (Company Master data) viz: a. Greenko Solar Power (Dharmavaram) Limited: Registration number - 079823 b. SEI Arushi Private Limited: Registration number - 094154 c. Sunborne Energy Andhra Private Limited: Registration number - 061586 Sourced from: Home (mca.gov.in)	Date of Incorporation : a.19/03/2012 b.13/12/2013 c.27/10/2008	PO
/5/	Southern power distribution company of	Power Purchase Agreement entered between southern power distribution company of Andra Pradesh Limited and SEI Arushi Pvt Ltd	Dated 05/12/2014	PO

	Andra Pradesh Limited	2nd Amendment to Power Purchase Agreement entered between southern power distribution company of Andra Pradesh Limited and SEI Arushi Pvt Ltd	Dated 06/07/2018	PO
		Power Purchase Agreement entered between southern power distribution company of Andra Pradesh Limited and M/s Rain Cements Ltd	Dated 08/12/2014	PO
		Amendment to Power Purchase Agreement entered between southern power distribution company of Andra Pradesh Limited and M/s Rain Cements Ltd	Dated 06/04/2015	PO
		Amendment to Power Purchase Agreement dated 08/12/2014 together with its amendment dated 06/04/2015, entered between southern power distribution company of Andra Pradesh Limited and M/s Rain Cements Ltd	Dated 05/08/2015	PO
		2nd Amendment to Power Purchase Agreement dated 08/12/2014 together with its amendment dated 06/04/2015, entered between southern power distribution company of Andra Pradesh Limited and M/s Rain Cements Ltd	05/08/2015	PO
		3rd Amendment to Power Purchase Agreement dated 08/12/2014 together with its amendments dated 06/04/2015 & 05/08/2015, entered between southern power distribution company of Andra Pradesh Limited and M/s Rain Cements Ltd	Dated 06/07/2018	PO
	Central power distribution company of Telangana Limited	Power Purchase Agreement entered between central power distribution company of Telangana Limited and M/s Sunborne Energy Andhra Private Limited	Dated 30/05/2014	PO
	TSSPDCL	Amendment between Southern Power Distribution Company of Telangana Limited and M/s Sunborne Energy Andhra Private Limited to Power Purchase Agreement dated 30/05/2014 entered between central power distribution company of Telangana Limited and M/s Sunborne Energy Andhra Private Limited	Dated 12/08/2014	PO
		2nd Amendment between Southern Power Distribution Company of Telangana Limited and M/s Sunborne Energy Andhra Private Limited to the 2nd Amendment dated 12/08/2014 entered to the PPA dated 30/05/2014 between central power distribution company of Telangana Limited and M/s Sunborne Energy Andhra Private Limited	Dated 15/06/2015	PO
		3rd Amendment between Southern Power Distribution Company of Telangana Limited and M/s Sunborne Energy Andhra Private Limited to the 2nd Amendment dated 15/06/2015 to the amended PPA dated 12/08/2014 entered to the PPA dated 30/05/2014 between central power distribution company of Telangana Limited and M/s Sunborne Energy Andhra Private Limited	Dated 13/01/2016	PO
/6/	PO	Evidence for the project location (all the three project activities in the bundle) including	-	PO

		photographs, nameplates of the installed units, and technical specifications of key project equipment installed at site		
/7/	PO	JMR Records for all the three project activities in the bundle from the year of start of operations	-	PO
/8/	PO	Commissioning reports of all the project activities in the bundle: Greenko Solar Power (Dharmavaram) Limited SEI Arushi Private Limited Sunborne Energy Andhra Private Limited	Dated 07/11/2017 28/10/2017 11/02/2016	PO
/9/	Yathva Energy Solutions Pvt. Ltd.	Calibration Certificates for meters installed for M/s Greenko Solar Power Dharmavaram Limited - S No. 22009950 - S No. 22009951 - S No. 22009952	Dated 04/01/2023	PO
		Calibration Certificates for meters installed for SEI Arushi Pvt Ltd: - S No. 22010028 - S No. 22010031 - S No. 22010030	Dated 29/03/2023	
		Calibration Certificates for meters installed for Sunborne Energy Andhra Private Limited: - S No. 20000024 - S No. 20003323 - S No. 20000025	Dated 09/11/2022	
/10/	SunEdison Products Singapore Pte Lt	Purchase Order for SEI Arushi Pvt Ltd	Dated 16/06/2015	PO
	SMA Solar Technology AG	Supply Agreement between Rain Coke Limited ad SMA Solar Technology AG for central inverters	Dated 20/01/2017	
	SunEdison Energy Holding	Purchase Order for Sunborne Energy Andhra Private Limited	Dated 14/08/2015	
/11/	Greenko solar dharmavaram SEI Arushi Pvt Ltd Sunborne Energy Andhra Private Limited	Monthly Generation and auxiliary consumption records: - Greenko solar dharmavaram - SEI Arushi Pvt Ltd - Sunborne Energy Andhra Private Limited	For: - November 2017 – March 2023 - April 2018 – February 2023 - March 2016 – February 2023	PO
/12/	PO	Single line diagram for the 3 project activities, from electricity generation to the electricity feed point at grid interconnection	-	PO
/13/	Greenko solar dharmavaram SEI Arushi Pvt Ltd	Sample Electricity Invoices	FY 2021 FY 2022	PO

	Sunborne Energy Andhra Private Limited			
/14/	L&T Financial Services	Rupee Term Loan Facility of Rs. 121 Cr to Rain Coke Ltd for 22 MW Solar Project	Dated 08/12/2016	PO
	L&T Finance Limited	Common Loan Agreement between SEI Arushi Pvt Ltd and L&T Finance Limited	Dated 03/05/2017	
	Aditya Birla Finance Limited	Rupee Loan Agreement among Sunborne Energy Andhra Private Limited and Aditya Birla Finance Limited	Dated 12/08/2015	
/15/	Southern power distribution company of Andra Pradesh Limited	Letter of Award for Greenko solar dharmavaram (Earlier known as M / s Rain Cements Ltd)	Dated 07/11/2014	PO
		Letter of Award for SEI Arushi Pvt Ltd	Dated 07/11/2014	
	Andhra Pradesh Power Coordination Committee	Letter of Award for Sunborne Energy Andhra Private Limited	Dated 24/05/2014	
/16/	PO	Sample solid waste records for all the 3 project activities	FY 2021-2022	PO
/17/	CEA	India's National Electricity Network Emission Factor (Grid EF calculations) - Central Electricity Authority (CEA) database https://cea.nic.in/cdm-co2-baseline-database/?lang=en	Version 17, October 2021	PO
/18/	PO	All evidence related to Local Stakeholders Consultation process for all the 3 project activities: **Greenko solar dharmavaram** Invitation notice, dated 25/01/2022 Attendance Sheet, dated 10/02/2022 Photos Feedback forms, dated 10/02/2022 **SEI Arushi Pvt Ltd** Invitation notice, dated 25/01/2022 Attendance Sheet, dated 12/02/2022 Photos Feedback forms, dated 12/02/2022 **M/s Sunborne Energy Andhra Private Limited** Invitation notice, dated 25/01/2022 Attendance Sheet, dated 15/02/2022 Photos Feedback forms, dated 15/02/2022	-	PO
/19/	Greenko solar dharmavaram SEI Arushi Pvt Ltd M/s Sunborne Energy Andhra Private Limited	ODA Declaration for Greenko solar dharmavaram, SEI Arushi Pvt Ltd, and M/s Sunborne Energy Andhra Private Limited	-	PO
/20/	Greenko solar dharmavaram	Sample Training Records including photographs, attendance sheet, feedback forms, training	FY 2020-2022	PO

		material and questionnaires for years 2020, 2021, and 2022		
	SEI Arushi Pvt Ltd	Sample Training Attendance sheets and photographs for the years 2019, 2020, 2021, 2022 and 2023	FY 2019-2023	
	M/s Sunborne Energy Andhra Private Limited	Sample Training Records: Photographs and attendance sheets for the years 2021 and 2022	FY 2021-2022	
/21/	PO	Sample Accident and Incident Records for all the 3 project activities	April 2021 - March 2022	PO
/22/	Greenko	Greenko Corporate Social Responsibility Policy	Dated 18/01/2022	PO
/23/	Greenko	Greenko Sustainability Policy	Dated 19/04/2022	PO
/24/	Greenko	Greenko Integrated Management System (GIMS) Policy	Dated 03/03/2020	
/25/	Greenko solar dharmavaram SEI Arushi Pvt Ltd M/s Sunborne Energy Andhra Private Limited	Letter of Authorization issued by Greenko Solar Dharmavaram Limited, SEI Arushi Pvt Ltd, and Sunborne Energy Andhra Private Limited to authorize SEI Arushi Pvt Ltd and Greenko Energies Private Limited as the Project Owners.	Dated 03/10/2023	PO
/26/	Press Information Bureau Government of India Ministry of Environment, Forest and Climate Change.	Re-Categorisation of Industries a landmark decision, new category of white industries will not require environmental clearance	Dated 05/03/2016	PO
/27/	GOVERNMENT OF ANDHRA PRADESH DEPARTMENT OF INDUSTRIES	Application for usage of ground water: - Greenko solar dharmavaram - SEI Arushi Pvt Ltd - M/s Sunborne Energy Andhra Private Limited	Dated - 24/04/2018 16/03/2018 23/08/2019	PO
/28/	PO	Sample welfare records for all the 3 project activities including pictures	FY 2020-2023	PO
/29/	PO	Sample employee health coverage records (Checkup reports) for all the 3 project activities	FY 2020-2023	PO
/30/	CCIPL	Audit notes and photographs	Dated 29/12/2022 – 30/12/2022	CCIPL
/31/	CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI	Determination of generic levellised generation tariff for the FY 2014-15 under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012. https://cercind.gov.in/2014/orders/SO354.pdf	Dated 15/05/2014	Others

/32/	Reserve Bank of India	Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 28th Round (Second Bi-monthly) https://m.rbi.org.in/Scripts/PublicationsView.aspx?id=15761	Dated 03/06/2014	Others
/33/	SAI CHAITHANYA & CO CHARTERED ACCOUNTANTS	CA Certificates for M/s. Greenko Solar Power (Dharmavaram) Limited, M/s. SEI Arushi Private Limited, and M/s. Sunborne Energy Andhra Private Limited	Dated 25/02/2022	PO
/34/	Central Electricity Authority	Plant wise details of all India renewable energy projects https://cea.nic.in/wp-content/uploads/2020/04/Plant-wise-details-of-RE-Installed-Capacity-merged.pdf	Dated 20/03/2020	Others
/35/	Reserve Bank of India	Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 27th Round (Q4:2013-14) https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=15729	Dated 01/04/2014	Others
/36/	PO	Long term and short term employment records for all 3 project activities	-	PO
/37/	Ministry of New and Renewable Energy (MNRE)	Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects https://odishainnovationcell.nic.in/Content/SIC/Articles/RE_Development_Impacts_in_India.pdf	Dated September 2013	Others
/38/	Greenko solar dharmavaram SEI Arushi Pvt Ltd M/s Sunborne Energy Andhra Private Limited	Declaration for SDG 3 activities performed beyond CSR	Dated 06/10/2023	PO
/B01/	GCC	1. GCC Project Standard, version 3.1 2. GCC Verification Standard, version 3.1 3. GCC Program Manual, version 3.1 4. Environment-and-Social-Safeguards-Standard, version 3.0 5. Project-Sustainability-Standard, version 3.0 6. GCC Clarification No. 1, version 1.3 7. GCC Standard on Avoidance of Double Counting, version 1.0 8. GCC Clarification No. 3, version 1.0	-	Others
/B02/	GCC	GCC Methodology: GCCM001 Methodology for Renewable Energy Generation Projects Supplying Electricity to Grid or Captive Consumers	version 3.0	Others
/B03/	GCC	PSF template	-	Others
/B04/	UNFCCC	Tool 01: Tool for demonstration and assessment of additionality	Version 7.0.0	Others
/B05/	UNFCCC	Tool 07: Tool to calculate the emission factor for	Version 7.0	Others

		an electricity system		
/B06/	UNFCCC	Tool 24: Common practice	Version 3.1	Others
/B07/	UNFCCC	Tool 27: Investment analysis	Version 11.0	Others
/B08/	CDM	https://cdm.unfccc.int/Projects/proj search.html	-	Others
/B09/	VERRA	https://registry.verra.org/app/search/VCS/All%20 Projects	-	Others
/B10/	Gold Standard	GSF Registry (goldstandard.org)	-	Others
/B11/	Indian REC Standard	Renewable Energy Certificate Registry https://www.recregistryindia.nic.in/index.php/pub lics/registered_regens	-	Others
/B12/	I.REC Standard	International REC Standard (I-REC) https://www.irecstandard.org/regist ries/	-	Others
/B13/	Govt. of India	Electricity Act 2003, dated 26/05/2003	-	Others
/B14/	Govt. of India	National Electricity Policy 2005, dated 12/02/2005		
/B15/	Govt. of India	Integrated Energy Policy, 2006	-	Others
/B16/	Govt. of India	National Action Plan on Climate Change (NAPCC), 2008	-	Others
/B17/	Govt. of India	Renewable Energy Certificates (RECs), 2011	-	Others
/B18/	Govt. of India	National Solar Mission	-	Others
/B19/	Govt. of India	Companies Act 2013	-	Others
/B20/	Ministry of Environment, Forest and Climate Change Govt. of India	Environmental Impact Assessment notification 1_SO1533E_14092006.pdf (environmentclearance.nic.in) Environmental Impact Assessment notification Amendment	Dated 14/09/2006 Dated 14/07/2018	Others
/B21/	Ministry of Environment, Forest and Climate Change Govt. of India	Applicability of Environment Impact Assessment Notification, 2006 on Solar Photo Voltaic (PV) Power Projects; Solar Thermal Power Plants; and development of Solar Parks	Dated 07/07/2017	Others
/B22/	CCIPL	Contract signed between CCIPL and M/s SEI Arushi Pvt Ltd	Dated 21/06/2022	CCIPL

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

Table 1. CLs from this project verification

CL ID	01	**Section no.**	-	**Date:** 20/01/2023
Description of CL				
PO is requested to provide the following supporting documents for all the three project activities in the bundle: i. Proof of Legal Ownership ii. Power Purchase Agreement iii. Technical specification document of installed Solar PV modules, Inverters and Transformers iv. Joint Meter Reading Records (since the commissioning of project till date) v. Sample Invoices raised for FY 2021-2022 vi. Generation Records (since the commissioning of project till date) vii. On site electricity consumption records viii. Evidence for Investment decision date ix. Loan sanction letters (Arushi and Sunborne) x. O&M Agreement xi. Records of end of life waste, solid waste generation and disposal and contracts with PCB certified vendors xii. Approval for usage of Ground water, if applicable xiii. Details of workers employed / contracts signed for long term during construction and operational stages xiv. Details of workers employed / contracts signed for short term during construction and operational stages xv. EHS policy xvi. CSR policy xvii. Health coverage records xviii. Community and rural welfare contribution records xix. HR policy xx. Accident / Incident Records xxi. Training records xxii. Acknowledgement from PCB for White Category Industry xxiii. No ODA Undertaking/ declaration from the project owner xxiv. Local Stakeholder Meeting Photographs, Attendance sheet (Arushi and Greenko) and Minutes of Meeting. xxv. Declaration of intended use of Approved Carbon Credits (ACCs)				
Project Owner's response				**Date:** 23/06/2023
All the above documents are provided through mail except serial no. x and xii are not applicable; for point xi: records are provided but no vendor's contractor for E waste disposal as there is no waste produced for disposal; for point xxv: It is stated in sec A.5 of PSF.				
Documentation provided by Project Owner				
Project verifier assessment				**Date:** 18/07/2023

The following discrepancies have been observed in the documents provided: xi. PO has provided records for e-waste generation but no information is provided for Hazardous waste. Furthermore, no specific modes of disposal and contracts with PCB certified vendors have been provided. xii. Application for Permission for usage of Ground water – Not provided xiii. PA specific Employee Lists have been provided. However, the same has not been segregated into those employed for long term (operational) and short term (construction and operational). xvi. CSR, Sustainability and GIMS Policy has been provided. All the policies belong of “Greenko”, however no relationship between the PO and Greenko is mentioned in the PSF. PO to Clarify. xviii. Community and rural welfare contribution records apart from photographs as the data source mentioned is “Allotment of funds”. xxii. Acknowledgement from / Intimation to MoEF for White Category Industry – Not provided xxiv. While Local Stakeholder Meeting Attendance sheet, Invitation Notices have been provided, Photographs, Feedback forms as well as Minutes of Meeting are missing for all the PAs. PO to also provide documents mentioned under specific CAR/CLs. PO is requested to provide only those documents that pertain to PAs in the bundle. **Hence, CL 01 remains open.**
Project Owner’s response **Date:** 06/09/2023
The following discrepancies have been observed in the documents provided: xi. PO has provided information regards to Hazardous waste, as these are solar projects there is neglible amount of this kind. Whereas for E waste, there is no quantity for disposal therefore no contracts with PCB certified vendors. xii. Application for Permission for usage of Ground water are provided xiii. Employee list pertaining to candidate project segregated into long term and short term is provided. xvi. Relationship between the PO and Greenko is mentioned in the first paragraph of Sec. A.1 of the PSF as the project activities are the SPVs under “Greenko”. xviii. Now PO is wishing not to claim for community and rural welfare as they are done under CSR. xxii. Acknowledgement from / Intimation to MoEF for White Category Industry is provided xxiv. Feedback forms as well as Minutes of Meeting are for all the PAs is provided.
Documentation provided by Project Owner
All documents for above CL are provided through a mail.
Project verifier assessment **Date:** 28/09/2023

xi. For E-waste, PO is required to elaborate on the storage procedures for the same and the quantity of E waste necessary for a contract to be signed with the vendor. Furthermore, PO is required to provide evidence to substantiate that the amount of Hazardous waste generated is negligible and demonstrate compliance to the applicable regulations for both E-waste and Hazardous wastes in section E.1. Hence the finding **remains opened.** xii. PO has provided the application for Permission for usage of Ground water; hence the finding is closed. xiii. PO has provided the PA specific Employee Lists segregated into long term and short-term employments. However, there is no means of cross checking this information. Equally for short term jobs which are temporary in nature, security guards have been included which normally in this type of projects are to be long term jobs. Hence, the finding **remains opened.** xvi. PO has included in section A.1 of the revised PSF, the relationship between PO and Greenko which is acceptable by the verification team. However, although the LOA has been signed by both the parties, in paragraph 3 of the LOA, only SEI Arushi Private Limited is mentioned as the PO. Therefore, clarification is requested. Hence, the finding **remains opened**. xviii. PO is no longer scoring +1 for the parameter "community or rural welfare" under social safeguards, which is deemed acceptable to the verification team. Therefore, this finding is closed. xxii. MoEF document related to White Category Industry has been provided by PO. Hence, the finding is closed. xxiv. Photographs, Feedback forms as well as Minutes of Meeting have been provided for all the PAs. Hence, the finding is closed.
Project Owner's response **Date:** 05/10/2023
xi. As per records given for E waste by PO, it is explained that all the quantity of E waste generated is stored separately in a designated area at site and is being refurbished and reused and no quantity is left for disposal. With respect to Hazardous waste, no quantity is generated as of now. So, PO states that as of now there are no contracts for Ewaste or hazardous waste. For future waste generation, PO stated the procedure followed by them for Ewaste and hazardous waste in the PSF. xiii. For our project, generally security contract is only for one year and being renewed every year (contracts are confidential), so this is treated as short term, for crosschecking the data provided, few photographs of the registers are enclosed in the similar way it is maintained and can be crosschecked during issuance with site records. xvi. As per the latest LOA all the legal owners have authorised SEI Arushi Private Limited & Greenko Energies Private Limited as the project owners, who will act behalf of others.
Documentation provided by Project Owner
LOA
Project verifier assessment **Date:** 16/10/2023
The justification and the supporting documents provided by the PO are deemed acceptable to the project verification team. Hence, this CL is closed.

CL ID	02	**Section no.**	D.8	**Date:** 20/01/2023
Description of CL				
The joint project owners mentioned in the PSF (Cover page and Section C) are different from the ones mentioned in the LOA. Furthermore, a similar discrepancy was observed in the LSC attendance sheet where in M/s Rain Coke Limited is mentioned whereas the LOA identifies M/s Greenko Solar Power (Dharmavaram) Limited as the project owner.				
Project Owner's response				**Date:** 23/06/2023
1. The project owner is SEI Arushi Private limited and the same is mentioned in both PSF and LOA 2. M/s Rain Coke Limited and M/s Greenko Solar Power (Dharmavaram) both represent same project as name was changed from Rain coke limited to Greenko solar power (Dharmavaram).				
Documentation provided by Project Owner				
Revised PSF *Certificate of Incorporation pursuant to change of name*				
Project verifier assessment				**Date:** 18/07/2023

The Joint project owners mentioned in the PSF are now in accordance with those in the LOA. The PSF has been revised to mention the new name i.e. M/s Greenko Solar Power (Dharmavaram) Limited consistently throughout. It could be verified from the '*Certificate of Incorporation pursuant to change of name'*, issued by the Ministry of Corporate Affairs, GoI dated 07/08/2019 that the name of the company was changed from M/s Rain Coke Limited to M/s Greenko Solar Power (Dharmavaram) Limited. The corrections made are found to be appropriate by the verification team and hence CL 02 is closed.

CL ID	03	**Section no.**	D.3.6	**Date:** 20/01/2023
Description of CL				
Section B.2 of the PSF refers to onsite consumption of electricity "for site offices during maintenance". However, PO has not considered the same as project activity emission referring to it as a "Minor source of emission" in section B.3 of the PSF. PO is required to corroborate and justify the same in accordance with paragraph 26 of the applied methodology.				
Project Owner's response				**Date:** 23/06/2023
Though electricity is consumed for site offices during maintenance as mentioned in section B.2 of PSF, however the same is negligible at less than 0.5% of the generation. Hence is considered as negligible				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023
PO is required to substantiate its claim of "less than 0.5%" with proper documentary evidence. Furthermore, the same is to be reflected in the revised PSF. **Hence, CL 03 remains open.**				
Project Owner's response				**Date:** 06/09/2023
In Section B.6.1. since project emission is zero, the statement relating to calculation of CO2 emission, which has inadvertently crept in, has been removed. Likewise, in table under section B.3. has also been corrected and made consistent with sec. B 6.1.				
Documentation provided by Project Owner				
Revised PSF and supporting documents				
Project verifier assessment				**Date:** 28/09/2023
In the revised PSF, PO has updated the Project emission to be equal to 0 as per paragraph 26 of the applied methodology GCCM001 version 4.0 which is deemed acceptable to the verification team. Hence the finding is closed.				

CL ID	04	**Section no.**	D.3.6, D.3.7	**Date:** 20/01/2023
Description of CL				
In section B.6.1 of the PSF: i. As per the applied methodology paragraph 42(a), Simple OM emission factor is to be calculated ex-ante using "*a 3-year generation-weighted average, based on the most recent data available at the time of submission of the CDM-PDD to the DOE for validation*". However, the data used for the same in the PSF pertains to the years 2014-15, 2015-16 and 2016-17 which is not in accordance with the applied methodology. ii. Similarly, the data used in the PSF for Build Margin (BM) emission factor pertains to 2016-17. However, as per the applied methodology paragraph 72, BM is to be calculated ex-ante using "most recent information available on units already built for sample group m at the time of CDM-PDD submission to the DOE for validation". Hence, the same is not in accordance with the applied methodology.				
Project Owner's response				**Date:** 23/06/2023

i.	As per the applied methodology paragraph 42(a), Simple OM emission factor is calculated ex-ante using "a 3-year generation-weighted average, based on the most recent data available at the time of submission of the CDM-PDD to the DOE for validation" for which Version 17.0 of CEA data is considered and changed accordingly.
ii.	Similarly, the data used for Build Margin (BM) emission factor pertains to the latest data i.e., 2020-21. Thus BM is calculated ex-ante using "most recent information available on units already built for sample group m at the time of CDM-PDD submission to the DOE for validation". Hence, the same is made in accordance with the applied methodology.

Documentation provided by Project Owner	
Revised PSF	
Project verifier assessment	**Date:** 18/07/2023
Section B.6.1 of the revised PSF now includes the most recent available data for the determination of Simple OM emission factor and Build Margin (BM) emission factor. The same is based on "CO_2 Emission Database" Version 17.0, published by CEA. The data used has been found to be appropriate by the verification team and hence CL 04 is closed.	

CL ID	05	**Section no.**	D.3.7	**Date:** 20/01/2023

Description of CL

In Section B.7.1 of the PSF:

i.	For the parameter $EG_{PJ,Y}$, as the project activity is already operational, please provide the specific energy meter type installed, their accuracy, serial numbers, calibration status etc at the feeders as well as substation. The same is to be provided for all the three project activities forming the bundle.
ii.	The QA/QC procedures should be more specific to the project activity as the same is operational since 2016, PO should touch upon the functioning of main and check meter.
iii.	Please check and correct the "Frequency of Measuring/reading" column.
iv.	In the Additional Comments column, the archiving period is to be appropriately mentioned.

Project Owner's response	**Date:** 23/06/2023

In Section B.7.1 of the PSF:

i.	For the parameter $EG_{PJ,Y}$, as the project activity is already operational, the specific energy meter type installed, their accuracy, serial numbers, calibration status etc. for all the project activities forming the bundle at the feeder as well as substation are provided.
ii.	The PO has updated QA/QC procedures with more specific to the project activity as the same is operational since 2016 and touching upon the functioning of main and check meter.
iii.	The Frequency of Measuring/reading column is corrected
iv.	In the Additional Comments column, the archiving period is changed and mentioned appropriately.

Documentation provided by Project Owner	
Revised PSF *Commissioning Certificates*	
Project verifier assessment	**Date:** 18/07/2023

i. For the parameter $EG_{PJ,Y}$, the energy meter serial numbers have now been mentioned for all the three project activities forming the bundle. The same have been appropriately classified into Main / Check / Standby.

However, energy meter type as well as calibration details are also to be specified as the project activity is already operational.

Furthermore, from the JMRs submitted, it is observed that there is in change in the Meters at Dharmavarm site, also it has been distinguished as Feeder 1 and feeder 2. Similarly, a change in meters at PA Sunborne is also observed when compared to Commissioning Certificate. PO to elaborate on the same as crediting period will cover readings from both meters. **Hence, the finding remains open.**

ii. The QA/QC procedure to be elaborated upon as the same is operational since 2016. **Hence, the finding remains open.**

iii. The "Frequency of Measuring/reading" column has been modified appropriately for the parameter $EG_{PJ,Y}$. Hence, the finding is closed.

iv. The archiving period is not provided correctly. For QA/QC purposes' this should be updated to 'All data is kept for at least two years after the end of crediting period or two years after the last issuance whichever is later'. **Hence, the finding remains open.**

v. From the sample JMRs submitted, it is observed that Net Energy Billed = Export – Import. However, no information regarding the same is provided in the PSF. PO to elaborate on the JMRs as well as calculation methods applicable.

Project Owner's response	**Date:** 06/09/2023

i. The energy meter type as well as calibration details were indicated in PSF at sec B.7.1

Two feeders have been used in Dharmavaram site as per the requirements of DISCOM and each feeder has 11 MW capacity. This is explained clearly at section A.3 along with SLD.

For PA Sunborne, the faulty meters were replaced. Details regarding the present meters at site are provided in the PSF and the same were witnessed during audit. During preparation of MRs the change in meters will linked.

ii. The QA/QC procedures are elaborated in sec. B7.1.

iii. Closed

iv. The archiving period is corrected and updated. The archiving period has been corrected to 2 years beyond the end of crediting period or two years after the last issuance, whichever is later in sec. B7.1

v. Calculation method is described in the section B.7.1

Documentation provided by Project Owner
Revised PSF and supporting documents

Project verifier assessment	**Date:** 28/09/2023

i. PSF has been revised and the energy meter type identified on site has been reported into it. However, calibration details are provided only for the year 2023 and PO is required to provide calibration details and calibration certificates since the start date of the project. Hence the finding **remains opened.**

ii. QA/QC procedures have been revised in section B.7.1 by the PO and is deemed acceptable by the verification team. Hence the finding is closed.

iii. Closed.

iv. PO has corrected the archiving period in section B.7.1 which is acceptable by the verification team. Hence the finding is closed.

v. PO has appropriately revised the PSF according to the point raised and this is acceptable by the verification tam. Hence the finding is closed.

Project Owner's response	**Date:** 05/10/2023

i. Calibration details are provided only for the year 2023 to show that calibration of meters is being carried out. All details from commissioning will be shared during issuance.
Documentation provided by Project Owner
Revised PSF and supporting documents
Project verifier assessment **Date:** 16/10/2023
PO has provided the latest calibration details in the PSF, and all relevant calibration data will be provided during the monitoring periods. Hence, this CL is closed.

CL ID	06	**Section no.**	D.3.7	**Date:** 20/01/2023
Description of CL				
In section B.7.1 of the PSF, parameters to be monitored for E+/S+ and SDGs: i. The parameters, monitored with reference to scoring in Section E and F, are required to be specific and clear on the frequency of monitoring, the legal requirements in place, QA/QC in line with the PSF completing guidelines. ii. For the parameter “Solid Waste” please correlate with the information provided in section E.1 and be more specific to the project activity as the same is operational since 2016. Monitoring needs to be specific to each type of solid waste category generated. iii. Though the parameter “Community and rural welfare (indigenous people and communities) etc.” is scored in section E.2, the same does not find a mention under section B.7.1 Section B.7.2 In Section E.1 some of the parameters which are scored if not managed properly can create harmful impact on environment and hence risk mitigation plan needs to be defined for those for e.g. solid waste from end of life products.				
Project Owner’s response				**Date:** 23/06/2023
In section B.7.1 of the PSF, parameters to be monitored for E+/S+ and SDGs: i. The parameters, monitored with reference to scoring in Section E and F, are made specific and clear on the frequency of monitoring, the legal requirements in place, QA/QC as per the PSF completing guidelines. ii. The PO has already indicated in the PSF in section E.1 that the monitoring is specific to solid waste quantity per year. To be more specific “Quantity (in kgs/tons/numbers) of waste being reused/refurbished/recycled per year” iii. The parameter “Community and rural welfare (indigenous people and communities) etc.” is scored in section E.2, and the same is mentioned under section B.7.1 In Section E.1 some of the parameters which are scored if not managed properly can create harmful impact on environment and hence risk mitigation plan is defined for those in section B.7.2				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023

i. The parameters required to be monitored with reference E+/S+/ SDGs are required to be specific and clear on the frequency of monitoring, the legal requirements in place, QA/QC in line with the PSF completing guidelines. Furthermore, where required the PO to co-relate the parameters such as "EG $_{PJ, Y}$" and "Emission Reductions". **Hence, the finding remains open.**

ii. Monitoring needs to be specific to each parameter mentioned in section E.1 and E.2 for example the different types of waste categories, types of employment – short term / Long term.

Section B.7.1 / B.7.2 as well as Section E.1 of the revised PSF lack information on Solid Waste from hazardous waste such as waste oil as well as End of Life Products/ equipment. PO to justify the same. **Hence, the finding remains open.**

iii. The parameter "Community and rural welfare (indigenous people and communities) etc." is now mentioned under section B.7.1. However, the PO is required to elaborate upon the same. **Hence, the finding remains open.**

Section B.7.2
'Solid waste from E-waste' is identified under section B.7.2. However, the table is not appropriately completely w.r.t. the Risk mitigation plan as well as description. **Hence, the finding remains open.**

Project Owner's response	**Date:** 06/09/2023

i. The parameters required to be monitored with reference E+/S+/ SDGs are made specific and clear incorporating the frequency of monitoring, the legal requirements in place and QA/QC in line with the PSF completing guidelines. PO also correlated the parameters.

ii. The monitoring is made specific to all parameters mentioned in section E.1 and E.2.

The project activity does not generate any hazardous waste. However, project activity generates solid waste from E waste (Spares of SCADA system, inverters, etc.), which is recycled/reused/refurbished/disposed off and the same is indicated at sec B.7.2

iii. The parameter "Community and rural welfare" is elaborated under section B.7.1 and same is not claimed.

Section B.7.2
The table for Solid waste from E-waste has been completed along with risk mitigation plan in the revised PSF.

Documentation provided by Project Owner
Revised PSF and Supporting documents

Project verifier assessment	**Date:** 28/09/2023

i. PO is required to elaborate the purpose (parameter–specific) of monitoring and describe QA/QC procedures for all included in sections B.7.1 and B.7.2, in line with the PSF completing guidelines. Additionally, PO is requested to clarify the addition of the rows titled "value of monitoring parameter" and "data source" which is not in accordance with the template requirement. Hence the finding **remains opened**.

ii. PO is required to make specific all parameters outlined in sections E.1 and E.2 into the sections B.7.1 / B.7.2. Equally PO is required to justify how the project cannot produce end of life equipment and not generate hazardous wastes such as transformer oil. Hence the finding **remains opened.**

iii. The parameter "rural or community welfare" has not been elaborated in section B.7.1 and is no longer scoring +1 for the parameter under social safeguards, which is deemed acceptable to the verification team. Therefore, this finding is closed.

Section B.7.2
'Solid waste from E-waste' is identified under section B.7.2. However, the table is not appropriately completed w.r.t. the Risk mitigation plan. The information in columns 'targets to be achieved by', 'targets achieved on' and 'date of closing the program' have not been correctly added. **Hence, the finding remains open.**

Project Owner's response	**Date:** 05/10/2023

i. Monitoring procedure is elaborated in section B.7. Templates in section B.7.1 are corrected and made consistent with elaborated QA/QC procedures.
ii. All parameters outlined in sections E.1 and E.2 (that are scored) are brought into the sections B.7.1 / B.7.2. Also PO has elaborated on end of life equipment and hazardous wastes in the PSF. Hazardous waste such as transformer oil will be replaced only after few years of operations.

Section B.7.2
'Solid waste from E-waste' is identified under section B.7.2. The table is appropriately completed w.r.t. the Risk mitigation plan with information in columns 'targets to be achieved by', 'targets achieved on' and 'date of closing the program' have been updated.

Documentation provided by Project Owner

Revised PSF and supporting documents

Project verifier assessment | **Date:** 16/10/2023

i. PP has corrected the table under parameter description row of section B.7.1 and B.7.2. The finding is closed.
ii. PO has included all parameters that are scored in section E.1 and E.2 into the sections B.7.1 / B.7.2 and also elaborated on end-of-life equipment and hazardous waste in the revised PSF. The finding is closed.

Section B.7.2
'Solid waste from E-waste' table updated under section B.7.2. and information w.r.t. targets have been provided. The finding is closed.

CL ID	07	**Section no.**	D.3.5	**Date:** 20/01/2023

Description of CL

With respect to investment analysis, the following findings are raised:

i. Under step 1, sub-step 1b "Consistency with mandatory laws and regulations" PO to justify that the alternative(s) enlisted shall be in compliance with all mandatory applicable legal and regulatory requirements along with the list of relevant national laws and regulations applicable.
ii. PO needs to confirm (with credible evidence) on the compliance of paragraph 10 of CDM Tool 27, version 11 which states "*Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant*."
iii. In accordance with paragraph 34 of the PSF completion guidelines, PO needs to specify the project milestones including the investment decision date under step 2 of investment analysis, in section B.5 of the PSF, and further needs to check and confirm that the listed input values have been consistently applied in all calculations.
iv. PO to provide Standard performance warranty referred for deration/degradation factor applied.
v. PO to provide a breakup of the value considered under Gross Depreciation.
vi. Under Sensitivity analysis, the breaching values for each of the factors need to be mentioned along with justification as to why is it not possible. Furthermore, As the project is already generating, the sensitivity analysis to be based on realistic values.

Project Owner's response | **Date:** 23/06/2023

i. Under step 1, sub-step 1b "Consistency with mandatory laws and regulations" PO has listed the relevant laws and regulations to justify that the alternative(s) enlisted shall be in compliance with all mandatory applicable legal and regulatory requirements. Both the alternatives identified are in conformity with extant legal and regulatory requirements
ii. PO confirms that the project activity complies with paragraph 10 of CDM tool 27, version 11 and all the input values used in the investment analysis are valid and applicable at the time of taking investment decision by the project participant.
iii. The following milestones are considered for determining the investment decision date under step-2 of investment analysis in section B.5 of the PSF and listed input values have been consistently applied in all calculations.

M/s Greenko solar power (Dharmavaram) Limited:

Date of execution of PPA	08-02-2014
Inverters supply agreement	20-08-2015
COD	07-11-2017
Amended PPA	06-07-2018

M/s SEI Arushi Private Limited:

PPA at 2013 for 5 MW	12-05-2014
Amended PPA	07-06-2018
Purchase order for modules	16-06-2015
COD	28-10-2017

Sunborne Energy Andhra Private Limited:

Purchase order for modules	14-08-2015
COD	11-02-2016
Date of execution of PPA	30-05-2014
Amended PPA	13-01-2016

IV.The degradation normally takes place in solar power generation plants due to degradation of modules. That is reflected in module data sheet provided by manufacturers.

V. The PO has considered the entire project cost (less land) for the purpose of calculation depreciation as per the prevailing laws. As provided by Sec. 32 of the Income Tax Act, the entire plant and machinery excluding land has been considered as a 'block of assets' and the depreciation has been provided accordingly. Appendix IA prescribes only one rate – 7.69% – for all assets. Moreover, this is more conservative from the demonstration of additionality point of view.

VI. Under Sensitivity analysis, the breaching values for each of the factors is mentioned along with justification as to why it is not possible

Documentation provided by Project Owner

1. *Degradation factor proof*
2. *Loan sanction letter (same provided in CL no.1)*

Project verifier assessment **Date:** 18/07/2023

i. Step 1, sub-step 1b "Consistency with mandatory laws and regulations" has been revised by the PO to justify that the alternative(s) enlisted shall be in compliance with all mandatory applicable legal and regulatory requirements along with the list of relevant national laws and regulations applicable. The finding is closed.

ii. Through document review and due diligence of project activity verification team understand that, all the 3 PAs forming the bundle were awarded to PO by State Government through competitive bidding process. In this respect PO is requested that the DPR prepared during bidding process needs to be provided to verification team and justify the financial additionality based DPR values. Also, the highest tariff values on which bidding initiated needs to be used for investment analysis purpose. The letter of award can be considered investment decision date by PO.

Furthermore, PO needs to ensure that all the input values for Assumptions made in the PSF/ IRR sheet are available, valid and applicable at the time of the investment decision date.

iii. "Investment Decision Dates" have not been provided under section B.5.
Furthermore, the table (in a chronological manner) to be elaborated upon to include important milestones such as loan sanction etc. For Amendments in PPA the reason to be mentioned such as change in tariff, Capacity, Parties etc. The said table is to be incorporated in the revised PSF as well. Also, the documentary evidence mentioned therein, apart from PPA, is required to be provided.

iv. The data sheets submitted provide a 0.7% degradation per year from 2nd year onwards. In view of the same, PO to substantiate the claim for Annual degradation of 0.83% and 0.67% applied.

v. PO to also provide evidence for Land Cost etc.

vi. Under Sensitivity analysis, the breaching values for each of the factors need to be mentioned along with justification as to why is it not possible. Furthermore, As the project is already operational, PO is requested to justify that the project is still additional using all actual input values of PA. Evidence for actual values to be provided.

Also, in accordance with para 27 of Tool 27 Ver. 11 "Variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation" PO to justify that parameters only related to above criteria are selected for sensitivity analysis in section B.5.

vii. Table in section B.5 of PSF showing list of financial parameters used for investment analysis needs to be presented with source / web-links for each parameter included in the IRR spread sheet. The table in the PSF and the IRR sheet should co-relate.

viii. PO is required to substantiate PLF in accordance with paragraph 3 of "Guidelines for the reporting and verification of Plant load factors" EB 48 Annex 11.

ix. For Dharmavaram: Repayment Instalment values are not mentioned in the table in PSF, also couldn't find in the sanction letter.
For PA Dharmavaram, the date of the loan sanction letter is after a gap of 2 years from the date of the PPA. Similarly, for PA Arushi the PPA date is 05/12/2014 whereas the Loan sanction date is 31/05/2017. PO to justify the gap.

PO to check the WPI inflation values used for calculation of Benchmark. For both PA Arushi and Sunborne, the PSF refers to "RBI report - Survey of Professional forecasters dated 03 June 2014". However, the projected forecast values are different. Also, the reference made in IRR sheet does not match with the PSF.

x. As per para 16 of Tool 27 please explain that the investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, hence PO has converted the real term values of benchmarks to nominal values by adding the inflation rate. The same is not clear in PSF section B.5.

Hence, CL 07 remains open.

Project Owner's response	**Date:** 06/09/2023

i. Closed

ii. Letter of award by the state DISCOM is considered as investment decision date by the PO. At the time of investment decision PO relied on CERC tariff order available at the time of investment decision and the parameters available in the tariff order are considered for investment analysis.

It is further clarified that all the input values for Assumptions made in the PSF/ IRR sheet are available, valid and applicable at the time of the investment decision date

iii. The PPA date mentioned for M/s Greenko Solar Power (Medak) Limited is corrected.

The table provided in the response is provided in the revised PSF in a chronological manner.

The change in PPA as per the requirements of DISCOM. There is no change in the capacity and other conditions of original PPA except tariff. Other than the amended PPA, there is no other evidence available for Amendment of PPA with the project owner

iv. Annual degradation of 0.83% and 0.67% is as per the data sheets provided earlier, the calculations is as per the graph in the data sheet and is as below.

Caluclation –
Annual degradation from 2nd year till 10th year : (97.5-90)/9= 0.83

Annual degradation from 11th year till 25th year : (90-80)/10=0.67

Data sheet considered is attached

v. Investment decision has been taken based on the input parameters contained in CERC RE order. The said CERC order does not provided the cost of land separately

vi. We have revised the PSF specifying under sensitivity analysis the breaching values for each of the factors along with justification as to why is it not possible to breach the benchmark. PO has worked out equity IRR considering actual parameters with relevant evidence to justify that the project is still additional. Evidence for actual values is also provided. PO has justified in accordance with para 27 of Tool 27 Ver. 11 sensitivity analysis of the parameters specified as per the criteria specified under tool 27 in section B.5

vii. Table in section B.5 of PSF showing list of financial parameters used for investment analysis are presented with source for each parameter All the parameters have been sourced from CERC RE tariff order, except depreciation and tax rates which have been sourced from Income Tax Rules and Act

viii. As all assumptions for Additionality are now taken from CERC, PO removes the statement { in accordance with paragraph 3 of “Guidelines for the reporting and verification of Plant load factors” EB 48 Annex 11}

ix. All assumptions taken for each PA is as per decision making date and respective additionality sheets are updated and corrected

We have considered letter of award as the date for investment decision, which is 7th,November-2014. At the time investment decision the Po has relied on CERC tariff order that is available. All the parameters for investment analysis are taken from the CERC tariff order.

In respect of Dharmavaram project, kindly note that, though original PPA is signed on 8th,Dec-2014 , the fina PPA is executed on 5th,aug-2015. Only subsequently the PO has taken steps for sanction of loan and placement of orders.

In respect of Arushi project, due to amendments in PPA (latest amendment was 7th,June-2018),

there was a delay in getting loan sanction.

x. As per para 16 of Tool 27, PO has converted the real term values of benchmarks to nominal values by adding the inflation rate. The same is clarified under “estimation of Benchmark” in PSF section B.5.

Documentation provided by Project Owner	
Revised PSF and supporting documents	
Project verifier assessment	**Date:** 28/09/2023

i. Closed

ii. The letter of award has been considered as the investment decision date for all PAs and the input values are taken from CERC tariff orders for respective PAs, which was available at the time of investment decision. This is deemed acceptable to the verification team. Hence the finding is closed.

iii. The bidding process is an important milestone in the project which is not elaborated in the revised PSF.

PO is required to provide all the amended PPAs to justify the change in tariff for each PA in the bundle. Hence the finding **remains opened.**

iv. The verification team has noticed that the degradation factor calculation is not described in PSF. Equally, the calculation for the annual degradation from year 11 to 25, the number of years interval has been taken as 10 instead of 14. Hence the finding **remains opened.**

v. The verification team understands that investment decision has been taken by the PO based on the input parameters contained in CERC RE order and that the CERC order does not provide the cost of land separately. PO does not consider the Land cost in IRR which is acceptable by the verification team. Hence, the finding is closed.

vi. PO is required to clarify why O&M cost is not considered for sensitivity analysis. Equally PO has not justified compliance in accordance with para 27 of Tool 27 Ver. 11. Hence the finding **remains opened.**

vii. Table in section B.5 of the revised PSF showing list of financial parameters used for investment analysis has been elaborated by PO with source / web-links for each parameter included in the IRR spread sheet and the value in the table matches with those in the IRR spreadsheet. Hence the finding is closed.

viii. The input values are taken from CERC tariff orders for respective PAs, available at the time of investment decision. This complies with the “Guidelines for the reporting and verification of Plant load factors” EB 48 Annex 11 and is deemed acceptable. Therefore, this finding is closed.

ix. Repayment Instalment values have been mentioned in the table in PSF.

The values from the CERC tariff order are used in the IRR calculation were available at the time of investment decision which is deemed acceptable to the verification team.

However, PO to check the WPI inflation date reported in Benchmark for Sunborne, the PSF refers to “RBI report - Survey of Professional forecasters dated 03 June 2014” which differs from the reference in the IRR sheet. Hence the finding **remains opened.**

x. PO has converted the real term values of benchmarks to nominal values by adding the inflation rate. The same is clarified under “estimation of Benchmark” in the revised PSF in section B.5. This is acceptable to the verification team. Hence, the finding is closed.

Project owner response	**Date:** 05/10/2023

i. Closed

ii. Closed

iii. Description regarding bidding is elaborated in the revised PSF in sec B.5.

All the amended PPAs are attached.

iv. Calculation –

Annual degradation from 2nd year till 10th year : (97.5-90)/9= 0.83

Annual degradation from 11th year till 25th year : (90-80)/15=0.67
This degradation is described in the PSF.

v. Closed

vi. Paragraph 27 of Tool 27 Ver. 11 states "Variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation (all parameters varied need not necessarily be subjected to both negative and positive variations of the same magnitude), and the results of this variation should be presented in the PDD and be reproducible in the associated spreadsheets. Where a DOE considers that a variable which constitute less than 20 per cent has a material impact on the analysis they shall raise a corrective action request to include this variable in the sensitivity analysis". As you would observe in none of the cases O&M cost account for more than 20% of project cost or project revenue. Hence, as per the Tool, O&M cost does not qualify as a variable to be subjected to reasonable variation.

vii. Closed

viii. Closed

ix. The letter of award date is the decision making date of the projects. The letter of award in the case of Sunborne Energy (Andhra) Pvt. Ltd. is 24th May 2014. At the time of decision making the report of the Survey of Professional Forecasters of 1St April 2014 was available (and not 3rd June, 2014). The WPI inflation rate as per 1st April 2014 report of the Survey of Professional Forecasters is 5.4%, which has been considered correctly in PSF and the worksheet. However, in the PSF instead of typing 1st April, 2014, by mistake 3rd June, 2014 has been typed. We regret the error and the PSF has now been corrected.

Documentation provided by Project Owner

Revised PSF and supporting documents

Project verifier assessment	**Date:** 16/10/2023

iii. PO has provided the amended PPAs which justify the change in tariff for each PA. Hence, the finding is closed.
iv. PO has described the calculation in section B.6.4 of the revised PSF. Hence, the finding is closed.
vi. The O&M cost does not account for more than 20% of project cost or project revenue. Hence, as per the Tool, O&M cost does not qualify as a variable to be subjected to reasonable variation. This is deemed acceptable. Hence the finding is closed.
ix. The revision in the PSF is deemed acceptable to the project verification team and hence, this finding is closed.

CL ID	08	**Section no.**	D.10, D.11	**Date:** 20/01/2023

Description of CL

In section E: Environmental and Social Safeguards of the PSF:

i. Please complete the table uniformly with appropriate use of "Not Applicable", "No Action Required" etc. and accordingly fix appropriate KPI for each of the identified harmless and harmful Environmental and Social Safeguards along with proper reference for relevant applicable legislation.

ii. Monitoring approach and parameter as well as the basis of the conclusion 'as to why the parameter will be scored' to be elaborated upon using specific targets and performance indicators such as targeted CO_2 emission reductions, minimum number of people targeted for imparting training etc. The chosen parameters should be quantified for the baseline scenario and the project scenario.

iii. With reference to solid waste from Plastic, Hazardous waste, E-waste, End of Life Products as the project activity is operational since 2016, please be very specific as to what is being classified here (for e.g. Solar PV modules, inverter, cables, electronic cards etc.) and accordingly frame the detailed monitoring approach

with reference disposal in line with applicable regulations viz. SPCB authorized vendor as well as quantity of waste generated/ disposed.

iv. E-waste is governed by E-waste (Management and Handling) Rules and has a compliance obligation. PO to justify the basis for scoring the aforementioned parameter in the PSF.

v. PO has indicated the use of Ground water for cleaning of PV Modules. However, the PSF does not mention about the waste that is being generated, its treatment and disposal and its environmental impacts. The section on the "Environment-water" therefore to be completed appropriately.

vi. Scored parameters such as "Occupational health hazards"/ "Improving/ deteriorating working conditions" / etc." make generic statements such as "reduces the chance to happen accidents ….", "the people from local communities would have to work somewhere with fatiguing work conditions" etc. – please be project activity specific with respect to description of impact, the monitoring approach and parameters as well as conclusion leading to the parameter being scored.

vii. The following parameters:

1. "Replacing fossil fuels with renewable sources of energy" and "CO2 emissions";
2. "specialized training / education to local personnel" and "Project related knowledge dissemination effective or not";
3. "Occupational health hazards" and "Reducing / increasing accidents /Incident s/fatality"

are scored +1 based on the same theory / justification. PO to justify the scoring the said parameters.

viii. PO is requested to justify as to how the trainings conducted for parameters "specialized trainings/ education to local personnel" and "Project related knowledge dissemination effective or not" are different from those mandated under legal/regulatory requirements for the sector.

ix. Child Labour prohibition and Minimum Wage are governed by their respective acts in place in India and have a compliance obligation. PO to justify the basis for scoring the aforementioned parameters in the PSF.

x. PO also needs to demonstrate that under "Social safeguards" impacts created are additional to compliance obligation under CSR commitments.

xi. In accordance with paragraph 22(b) of Project Sustainability Standard version 3.0, PO to ensure that all linkages between chosen SDGs and E+/S+ parameters are reflected for e.g. Goal 1.1 and parameter "poverty elevation SW03".

Project Owner's response	**Date:** 23/06/2023

i. The appropriate use of "Not Applicable", "No Action Required" etc. and accordingly appropriate KPI for each of the identified harmless and harmful Environmental and Social Safeguards along with proper reference for relevant applicable legislation has been made clear.

ii. The fact that projects are already established and in operation, the parameters scored like targeted CO_2 emission reductions, minimum number of people employed targeted for imparting training are quantified below for the project scenario.

iii. With reference to solid waste, only solid waste from E-waste is considered in the project scenario. The E-waste (for e.g. Solar PV modules, inverter, cables, electronic cards etc.) is classified here as Solid waste and the detailed monitoring approach along with KPI is clearly defined.

iv. E-waste is governed by E-waste (Management and Handling) Rules and PO agrees with it and Scores this parameter as per the latest GCC Environmental standard that the quantity of waste is monitored and is in line with the regulations.

v. The water required for cleaning of modules is negligible and gets evaporated. Hence no waste is generated and we have not considered any score in the PSF

vi. PO feels that scored parameters such as "Occupational health hazards"/ "Improving/ deteriorating working conditions" / etc." are not project activity specific with respect to description of impact, the monitoring approach is not appropriate and hence those are not considered for scoring.

vii. Parameters scored +1 with same theory with respect to others parameters that are scored are been ignored. Only one parameter for a theory is considered.

viii.	PO has considered extra trainings conducted for parameters “specialized trainings/ education to local personnel” and “Project related knowledge dissemination effective or not” that are different from those mandated under legal/regulatory requirements for the sector.
ix.	Child Labour prohibition and Minimum Wage are governed by their respective acts in place in India and have a compliance obligation. So PO will not take score for the aforementioned parameters in the PSF.
x.	PO confirms that welfare activities done are additional to CSR commitments.
xi.	In accordance with paragraph 22(b) of Project Sustainability Standard version 3.0, PO ensures that all linkages between chosen SDGs and E+/S+ parameters are reflected in the PSF

Documentation provided by Project Owner

Revised PSF
Photographs of Welfare Activities
Training Records
E-waste Excel Sheet
CSR and EHS/Sustainability Policy

Project verifier assessment | **Date:** 18/07/2023

i.	The table in section E has been uniformly completed with appropriate use of “Not Applicable”, “No Action Required” etc. However, KPI / Performance indicator for monitoring the impact for each of the identified Environmental and Social Safeguards along with proper reference for relevant applicable legislation such as Air (Prevention & Control of Pollution) Act 1981 etc. has not been done. **The finding remains open.**
ii.	The table in section E.1 as well as E.2 has not been appropriately completed. The monitoring parameter is to be aligned with monitoring approach, explanation for justification as well as direct performance indicator to measure the impact. **The finding remains open.**
iii.	It is acceptable that No Plastic waste is generated at the Project Activity site. However, PO to justify the absence of Hazardous waste such as transformer oil as well as Waste from End of Life Products i.e. damaged or defunct Solar PV modules. Furthermore, for solid waste from E-waste PO to elaborate in the PSF as to what is being classified as e-waste is to be specified in the PSF and accordingly frame the detailed monitoring approach with reference disposal in line with all applicable regulations. From 2023 onwards Management of solar PV modules shall be in accordance with the e-waste management rules, 2022 notified on 2/11/2022. PO to address future compliance with the same. **The finding remains open.**
iv.	The justification for scoring of the Parameter “Solid waste Pollution from E-wastes” in accordance with E-waste (Management and Handling) Rules is acceptable to the verification team. However, PO to address the finding in point (iii) above.
v.	Justification provided by the PO for no wastewater being generated in the process of cleaning PV Modules is acceptable to the verification team. However, PO to provide approval for use of Ground water for the said purpose in accordance with Permission for abstraction of Ground water under Environmental (Protection) Act 1986. **The finding remains open.**
vi.	Description of impact, the monitoring approach and parameters as well as conclusion leading to the parameter being scored / not scored to be project activity specific without the use of generic / ambiguous statements. **The finding remains open.**
vii.	The justification provided by the PO w.r.t. only one parameter being scored for each theory is acceptable to the verification team. However, the same is not evident for the parameters “Replacing fossil fuels with renewable sources of energy” and “CO2 emissions”. Furthermore, the parameters “Occupational health hazards” and ““Project related knowledge dissemination effective or not” are now

not scored, but the 'explanation of conclusion' is not appropriately addressed. **The finding remains open.**

viii. PO is requested to elaborate on the "extra trainings" mentioned in the justification provided with the provision of examples of training provided. Furthermore, PO to also clarify if these are in addition to sector specific requirements mandated by CEA, SERC regulations etc.

Furthermore, only attendance sheets are provided for various trainings, including such as Trainings on 'GSPDL Material Handling', 'HIRA' and 'WAH', but under material handling...what type of material handling is given is not elaborated or specified.

Also, the parameter "Project related knowledge dissemination effective or not" is stated to be "Not Applicable" in the revised PSF. **The finding remains open.**

ix. The PO has not raised claims against the parameters "Exploitation of Child labour" and "Minimum wage protection" in section E.2 of the revised PSF. The same is acceptable to the verification team. However, PO is required to provide an appropriate conclusion for the same instead of terming it as "Not applicable". **The finding remains open.**

x. CSR policy, dt. 18/01/2022 submitted by the PO mentions "Education, Healthcare, Rural Development, Livelihood Enhancement and Environment" as the focus areas. PO to provide evidence, apart from photographs, to substantiate their claim for the parameter "Community and rural welfare (indigenous people and communities)". The evidence to be correlated to monitoring parameter which is "Allocation of funds" for welfare activities and the said parameter is to be elaborated upon in section E.2. **The finding remains open.**

xi. All linkages between chosen SDGs and E+/S+ parameters are not reflected in the revised PSF for e.g. the parameter for Goal 3 does not find a mention in Section E.2. **The finding remains open.**

xii. The parameter "Sources of income generation increased / reduced", has a positive impact in the conclusion but has not been scored. Providing jobs for people, infrastructure development is not sufficient to score/ conclude. Objective procedures shall be included to track changes in income/income sources status pre- and post-project.

Similarly, the parameter "Poverty alleviation (more people above poverty level)", "Educational services improved or not" has a Positive impact in conclusion but has not been scored.

PO to address all such claims / conclusions and complete the table appropriately.

xiii. For parameter "Reducing accidents", "Data Source" should include training attendance sheet/training records in addition to monitoring the "Major Accidents/incidents per year". Also examples of training to be included in parameter for transparency purpose as project is already operational.

Furthermore, procedures for monitoring and reporting of accidents and their resolution shall be included in the PSF.

Project Owner's response	**Date:** 06/09/2023

i. Social Safeguards along with proper reference for relevant applicable legislation is provided in the revised PSF. 'Harmful', 'Harmless', 'Not applicable' and 'No action required' response have been suggested by the format itself. However, monitoring parameter, if scored, has been duly indicated

ii. Table E.1 and E.2 have been revised. Wherever credit is claimed, monitoring parameter has been aligned with monitoring approach, direct performance indicator for measurement has been given along with explanation.

iii. The revised PSF elaborates what is classified as e-waste and hazardous waste, monitoring approach and disposal along with the governing regulations

There is a probability of project generating E-wastes (spares of SCADA system and inverters). It will be Collected and disposed properly through authorized vendors and comply with the rules of E Waste disposal guidelines. Solid waste(E waste) quantity (in kgs/tons/numbers) reused/recycled/refubrished or disposed per year Monitored through records maintained or form 2 of waste management.

The PO will comply with from 2023 onwards Management of solar PV modules as per e-waste management rules, 2022 notified on 2/11/2022.

iv. The finding in point iii above is addressed in the response made for iii above.
v. The applications made for usage of ground water made with relevant authority is attached
vi. The impact, monitoring approach and parameters as well as conclusion leading to the parameter being scored / not scored have been incorporated for all parameters in sec. E.1 & E.2

vii. This project activity replaces fossil fuels with solar energy, which is a renewable energy source, for the generation of electricity. The Project activity thus Supply energy to the fossil fuel dominated grid using Renewable Source of energy

Project Activity generates Electricity from renewable source. Hence no CO_2 emissions from the project activity.

In the absence of project , fossil fuel based power plants will be used, which produce more Co_2 emissions to generate electricity. Thus parameters “Replacing fossil fuels with renewable sources of energy” and “CO_2 emissions” are claimed on different KPIs

Occupational health hazards- Like in any project, physical stress is the only occupational health hazard. PP confirms that the project will provide good working environment to employees so that they are not exposed to any occupational health hazards.

Project-related knowledge dissemination effective or not - Project provides job-related training and thereby impart knowledge to existing employees and new recruits. Training on operation & maintenance of solar modules, occupational safety like fire safety, first aid, emergency procedures, risk assessment, accident reporting procedure welfare activities like, safe use of workplace tools, machinery, equipment etc.

viii. Examples of training to be provided have been elaborated. As could be seen, these are in addition to specific requirements mandated by CEA, SERC regulations etc
ix. Conclusion has been given not only exploitation of child labour and minimum wage protection but also for all parameters irrespective of wether it is scored or not

X. PO now doesn’t claim for the welfare activities and claims for the health services for which monitoring parameter can be justified and same is elaborated in the PSF.

Xi. Linkages has been established between all SDGs and E+/S+ parameters in sec B.7.1

Xii. Though the project contributes positively to income generation and infrastructure development, it is difficult to monitor and measure these objectively. Parameters are not scored, where the monitoring and performance measurement does not lend itself to objective measurement. However, job creation has been scored as it lends itself to monitoring and measurement. In the revised PSF, conclusion is provided for each parameter irrespective whether it is scored or not and the table has been completed appropriately

Xiii. For parameter “Reducing accidents”, information on trainings is mentioned. The monitoring KPI is clearly mentioned and monitored through records.

Documentation provided by Project Owner	
Revised PSF and supporting documents	
Project verifier assessment	**Date:** 28/09/2023

i. It has been observed by the verification team that, the tables in section E have been uniformly completed, however for some parameters, such as Hazardous waste, End of life equipment and several others, PO is required to justify how no environmental impact is anticipated. Hence the finding **remains opened.**

ii. PO has aligned the monitoring parameter with monitoring approach as well as explanation for justification which is deemed acceptable by the verification team. Hence the finding is closed.

iii. PO has elaborated in the revised PSF what is being classified as e-waste and accordingly framed the detailed monitoring approach with reference disposal in line with all applicable regulations.

Nevertheless, PO has not provided justification for the absence of Hazardous waste such as transformer oil as well as Waste from End-of-Life Products i.e., damaged, or defunct Solar PV modules. Hence the finding **remains opened.**

iv. The finding in point (iii) in relation to justification for scoring of the Parameter "Solid waste Pollution from E-wastes" has been addressed by the PO in the revised PSF which is deemed acceptable by the verification team. Hence the finding is closed.

v. PO has provided approval for use of Ground water for the said purpose in accordance with Permission for abstraction of Ground water under Environmental (Protection) Act 1986 which is deemed acceptable by the verification team. Hence the finding is closed.

vi. Description of impact and the monitoring approach for the parameters has been described. However, the conclusion of the parameter being scored is not clear and all the parameters are either scored +1 or 0. Please refer to paragraph 22 of the Environment and Social Safeguards Standard (v 3.0) where the criteria for scoring the parameters have been specified. PO is requested to revise section E accordingly. **Therefore, this finding remains open.**

vii. PO has justified the scoring for the parameters "Replacing fossil fuels with renewable sources of energy" and "CO2 emissions" and "Occupational health hazards" and ""Project related knowledge dissemination effective or not" in sections E.1 and E.2 which is acceptable to the verifier. Therefore, this finding is closed.

viii. PO has elaborated on the extra trainings which is deemed acceptable.

The parameter "Project related knowledge dissemination effective or not" is stated to be "Not Applicable". However, it is scored 0 in the revised PSF. Paragraph 22 (c) of the Environment and Social Safeguards Standard (v 3.0) states that *"If the environmental impact is positive with respect to the pre-project scenario or baseline scenario, but the impact cannot be or has not been measured and monitored or not demonstrated satisfactorily, a score of zero "0" shall be assigned to the aspect"*. PO to justify the non-applicability and scoring of the said parameter impact. **Therefore, this finding remains open.**

ix. PO has addressed appropriate conclusions for the parameters "Exploitation of Child labour" and "Minimum wage protection" in the revised PSF. Hence the finding is closed.

x. PO now doesn't claim for the community or rural welfare activities and claims for the health services for which monitoring parameter has been elaborated. This is acceptable to the verification team. Hence the finding is closed.

xi. Linkages has been established between all SDGs and E+/S+ parameters in sections B.7.1 and B.7.2. However, PO is required to justify the parameters that are chosen to monitor for SDGs (3, 4, 8, and 9) are done under legal requirements or not. PO is required to justify how the activities performed to claim the said goals are additional to these legal requirements. Hence the finding **remains opened.**

xii. PO has appropriately justified the scoring of the parameters which is acceptable to the verification team. Hence the finding is closed.

xiii. PO has included for parameter “Reducing accidents”, training records in addition to monitoring the “Major Accidents/incidents per year”. Also, the training method has been included in parameter for transparency purpose as project is already operational which is deemed acceptable by the verification team. Hence, the finding is closed.	
Project Owner’s response	**Date:** 05/10/2023
i. Parameters, such as Hazardous waste, End of life equipment and several others are explained in revised PSF. ii. closed. iii. With respect to Hazardous waste, no quantity is generated as of now. So, PO states that as of now there are no contracts for Ewaste or hazardous waste. For future waste generation, PO stated the procedure followed by them for Ewaste and hazardous waste in the PSF. Hazardous waste such as transformer oil is changed after few years of operations as well as Waste from End-of-Life Products procedure is stated, majorly they are under manufactures scope. iv. closed. v. closed. vi. As per Environment and Social Safeguards Standard (v 3.0) scoring the parameters have been revised. vii. closed. viii. The parameter “Project related knowledge dissemination effective or not” is now revised in the PSF**.** ix. closed. x. closed. xi. PO has demonstrated additionality for all claimed SDGs and most of the SDGs claimed are linked to E+/S+. Their monitoring is demonstrated. Claim for few SDGs are to be shown as they are yet to take place and can be demonstrated during issuance like SDG 4.	
Documentation provided by Project Owner	
Revised PSF and supporting documents	
Project verifier assessment	**Date:** 16/10/2023
i. PO has now provided more clarity on hazardous waste, end of life equipment etc. in section E of the revised PSF. Hence, the finding is closed. iii. PO explained that since no quantity of hazardous waste is generated as of now, there are no contracts for E waste or hazardous waste. For future waste generation, PO stated the procedure followed by them for E waste and hazardous waste in the PSF. Hazardous waste such as transformer oil is changed after few years of operations as well as waste from end-of life products procedure is stated. This is deemed reasonable and acceptable. Hence, the finding is closed. vi. PO has revised the scoring of the parameters and these are now in accordance with the Environment and Social Safeguards Standard (v 3.0). Hence, the finding is closed. viii. PO has revised the parameter appropriately. The finding is closed. xi. PO has explained that all SDG claimed are not done under any legal requirements and additional. In the absence of activities claimed under SDGs, the plant will be operational. In the absence of PA or baseline scenario these activities claimed under SDGs couldn’t have taken place. This is deemed acceptable. Hence the finding is closed.	

Table 2.

CL ID	09	**Section no.**	D.12	**Date:** 20/01/2023
Description of CL				

In section F: Sustainable Development Goals of the PSF:

i. For SDG Goals that are scored, indicators, project activity specific description, specific targets, justification for positive effect as well as specific monitoring approach and parameters need to be mentioned. As the project activity is operational since 2016, the indicators and monitoring needs to be substantiated with actual credible evidence.
ii. Goal 1.1 states “Eradicate extreme poverty for all locally employed people”. Please justify the same. How does the PO ensure locally employed are extremely poor, is there a baseline being referred to, does the PO have specific hiring guidelines etc.
iii. PO is required to justify the suitability of the following indicators scored considering Nature of Project activity and Baseline indicator:
    a. Indicator 3.8.1 “Coverage of essential health services”

       Also, Goal 3.8 states “ensure financial risk protection”, how does the PO define this and what measures are taken to ensure fulfilment. Financial Risk protection is covered under UN SDG indicator 3.8.2.

    b. Indicator 4.4.1 “Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill”
    c. Indicator 8.8.1 “Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status”

iv. PO needs to justify the suitability of Goal 9 target and performance indicator chosen for the project activity considering:
    a. Nature of project activity
    b. Baseline indicator for target

Impact of parameter considered for this indicator is already covered under goal 7 & 13

Project Owner’s response	**Date:** 23/06/2023

i. For SDG Goals that are scored, indicators, project activity specific description, specific targets, justification for positive effect as well as specific monitoring approach and parameters are substantiated with actual credible evidence.
ii. PO finds that Goal 1.1 cannot be monitored as stated and don't wish to claim it.
iii. Indicator 3.8.1 "Coverage of essential health services" is applicable to this project activity as the PO provides the same to their employees within the project activity. Relevant record are being enclosed

PO considers indicator 3.8.1, while indicator 3.8.2 "ensure financial risk protection" is not considered

For SDG 4, the Indicator 4.4.1 "Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill" is modified to "Number of persons trained" who are locals and contribute to skill development.

Indicator 8.8.1 "Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status" is applicable as the project is a solar generation plant there are chances of minor and major injuries/accidents to occur and the same are recorded and maintained in the EHS formats

iv. PO finds that Goal 7 is claimed for same monitoring parameter as of goal 9, so goal 7 is claimed dropping 9.

Documentation provided by Project Owner

Revised PSF

Project verifier assessment | **Date:** 18/07/2023

i. For SDG Goals that are scored, Project Level indicators, Targets / Actions, Contribution to UN SDG as well as Monitoring are not adequately elaborated upon. Refer paragraph 22 of Project-Sustainability-Standard, version 3.0. Kindly review this SDG in totality and update accordingly. **The finding remains open.**
ii. The PO has withdrawn its claim against UN SGD Goal 1. The same is acceptable to the verification team and therefore the finding is closed.
iii. For the SDG Goals 3, 4 as well as 8. Project level Actions & Indicators are not directly linked with UN SDG targets and indicators. PO is required to justify the suitability of the same. Confirming that the Project Owner can claim a lower SDG label, in case the project is not able to demonstrate impact on specific SDG goals or data or the information provided is inadequate or incomplete. **The finding remains open.**
iv. The PO has withdrawn its claim against UN SGD Goal 9. The same is acceptable to the verification team and therefore the finding is closed.

Project Owner's response | **Date:** 06/09/2023

i. Sec. F. SDG goals has been corrected in respect of SDG goals that are scored. The revision incorporates project level indicators, targets/actions, contribution to UN SDG as well as monitoring.
ii. Closed
iii. In the revised PSF, the project level actions and indicators have been directly linked to UN SDG targets and indicators
iv. Closed
v. PO now claims SDG 9 and its monitoring and impacts are elaborated in the PSF

Documentation provided by Project Owner

Revised PSF

Project verifier assessment | **Date:** 28/09/2023

i. PO has reviewed and updated SDG Goals that are scored, Project level indicators, Targets / Actions, Contribution to UN SDG as well as Monitoring in the revised PSF. However, according to paragraph 23 Project Sustainability Standard (v3.1), "*Confirming to legal / regulatory requirement for continuation of business will not qualify as positive impacts on SDGs for the project activity as they are mandatory to continue operations of the unit.*" PO must ensure that the impacts created by the project are positive for claiming the said SDGs and define project level indicators, Targets / Actions, Contribution to UN SDG accordingly. Hence, the finding **remains opened** ii. Closed. iii. PO has revised the project level actions and indicators by directly linking them to the UN SDG targets and indicators which is acceptable to the verification team. However, PO is required to demonstrate the additionality of all SDGs claimed. Hence, the finding **remains opened.** iv. Closed. v. PO has selected SDG indicator 9.2.2 "Manufacturing employment as a proportion of total employment" and the project contribution for the same is stated as employment generation. According to the meta data of the said indicator, this indicator presents the share of manufacturing employment in total employment. PO is requested to clarify how the project contribution aligns with the selected UN indicator. Hence, the finding **remains opened.**
Project Owner's response **Date:** 05/10/2023
i. All claimed SDGs are not done under legal requirements and are additional which are other than business as usual. Even in the absence of activities claimed under SDGs, the plant will be operational. In the absence of PA or baseline scenario these activities claimed under SDGs couldn't have taken place as there is no incentive for implementation of such activities. ii. Closed iii. PO has demonstrated additionality for all claimed SDGs and most of the SDGs claimed are linked to E+/S+. Their monitoring is demonstrated. Claim for few SDGs are to be shown as they are yet to take place and can be demonstrated during issuance like SDG 4. iv. Closed v. For SDG 9, the project level SDG is defined as per UN SDG and KPI is defined as per Project level SDG.
Documentation provided by Project Owner
Revised PSF and supporting documents
Project verifier assessment **Date:** 16/10/2023
i. PO has explained that all SDG claimed are not done under any legal requirements and additional. In the absence of activities claimed under SDGs, the plant will be operational. In the absence of PA or baseline scenario these activities claimed under SDGs couldn't have taken place. This is deemed acceptable. Hence the finding is closed. iii. Explanation provided with response to finding i. The finding is closed. v. PO has explained that the project level KPI is aligned with the UN SDG indicator. Hence, the finding is closed.

Table 3.

CL ID	10	**Section no.**	D.2	**Date:** 20/01/2023
Description of CL				
In Appendix 8 of the PSF, PO is requested to elaborated upon the analysis with regards to homogeneity of the Bundle in accordance with GCC Clarification No. 1				
Project Owner's response				**Date:** 23/06/2023
In Appendix 8 of the PSF, PO has elaborated upon the analysis with regards to homogeneity of the Bundle in accordance with GCC Clarification No. 1				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023

The PO has elaborated upon Level 1 analysis of homogeneity of the Bundle in the revised PSF. However, Level 2 Analysis also needs to be elaborated upon in accordance with paragraph 10 of GCC Clarification No. 1, version 1.3. **CL 10 therefore remains open.**
Project Owner's response **Date:** 06/09/2023
Level 2 analysis is being elaborated as per the clarification 1 in the PSF
Documentation provided by Project Owner
Revised PSF
Project verifier assessment **Date:** 28/09/2023
PO has elaborated the considerations for level 2 analysis in the revised PSF which is deemed acceptable by the verification team. Hence the finding is closed.

Table 2. CARs from this project verification

CAR ID	01	**Section no.**	-	**Date:** 20/01/2023
Description of CAR				
PO shall clarify, on the cover page of the PSF, if the project activity has been issued with carbon credits or environmental attributes of compensating nature by any other GHG/ non-GHG program, either for compliance or voluntary purposes. Accordingly, PO is requested to select only the applicable option under **'Generic Requirements applicable to all Project Types'** under "Declaration by the Authorized Project Owner and focal point".				
Project Owner's response				**Date:** 23/06/2023
On the cover page, PO has selected only the applicable option "No outcomes (e.g. emission reductions, environmental attributes) generated by the Project Activity under GCC will be claimed as carbon credits or environmental attributes under any other GHG/non-GHG8 program, either for compliance or voluntary purposes, during the entire GCC crediting period " under **'Generic Requirements applicable to all Project Types'** under "Declaration by the Authorized Project Owner and focal point".				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023
The "Declaration by the Authorized Project Owner and focal point" now clearly indicates that the outcomes generated by the project activity under GCC will not be claimed as carbon credits or other environmental attributes under any other GHG/ non-GHG program during the entire GCC crediting period. The Cover page of the revised PSF is found to be correct and appropriate. Hence CAR 01 is closed.				

CAR ID	02	**Section no.**	D.2	**Date:** 20/01/2023
Description of CAR				
The following was not captured in section A of the PSF as per the 'Instructions for completing the PSF': i. Summary of Project boundary and technologies/measures employed in section A.1. ii. The name of the project activity viz. M/s Greenko Solar Power (Dharmavaram) Limited is different from the one identified on the map provided i.e. M/s Rain coke Limited. iii. Detailed physical address of M/s Sunborne Energy Andhra Private Limited to be provided under section A.2 iv. List of facilities, systems and equipment to be elaborated upon under section A.3 e.g. number of modules involved etc. v. Details and Arrangement of Metering/ monitoring equipment including arrangement of feeders for evacuation of electricity to the substation in section A.3. vi. Description as to how the electricity is generated and exported to grid along with details of voltage levels at switchyard and grid station in section A.3				

[8] Non-GHG program could be such as I-REC facilitating reliable energy claims with Renewable Energy Certificate (REC) schemes

Project Owner's response	**Date:** 23/06/2023

The following information has been updated in section A of the PSF

i. Summary of Project boundary, technologies/measures employed is provided in section A.1.
ii. Both projects are same as there was name change and the geocordinates are corrected in the PSF
iii. Physical address of M/s Sunborne Energy Andhra Private Limited is provided under section A.2 is corrected
iv. List of facilities, systems and equipment have been elaborated upon under section A.3 e.g. number of modules involved etc.
v. Details and Arrangement of Metering/ monitoring equipment for evacuation of electricity to the substation have been explained in section A.3.
vi. Description as to how the electricity is generated and exported to grid along with details of voltage levels at switchyard and grid station have been explained in section A.3.

Documentation provided by Project Owner

Revised PSF

Project verifier assessment	**Date:** 18/07/2023

i. Summary of Project boundary is not adequately elaborated upon. The same is to be in accordance with the methodology applied. Furthermore, revised PSF does not mention summary of technologies/measures employed under section A.1. **The finding remains open.**
ii. Appropriate corrections have been made w.r.t. to name of the project Activity and the revised PSF correctly mentions the new name of the project activity as M/s Greenko Solar Power (Dharmavaram) Limited consistently.

However, PO to clarify the changes made to the Geo-coordinates. **The finding remains open.**

iii. Detailed physical address of M/s Sunborne Energy Andhra Private Limited to be provided under section A.2 in the format Village, Mandal, District and State. Furthermore, PO to specify the use of "DOMINICUS (SEAPL)" as the same is not mentioned in any of the documents provided. **The finding remains open.**
iv. List of facilities, systems and equipment has been elaborated upon under section A.3 of the revised PSF. However, details on the type and number of modules installed is still missing. **The finding remains open.**
v. Details and Arrangement of Metering/ monitoring equipment for evacuation of electricity to the substation have not been provided in section A.3.
vi. Description as to how the electricity is generated and exported to grid along with details of voltage levels at switchyard and grid station has not been provided in section A.3.**The finding remains open.**
vii. From the PPAs submitted, it is understood that all the PAs were allotted though a State Government Competitive Bidding Process. No such information has been provided in the PSF. Furthermore, no details of the parties involved in the PPA as well as change in legal ownership of the PA has been provided in the PSF for any of the PAs forming the bundle.

Also, all the policies provided / the training documents/ Project Name Boards display/ mention "Greenko". However, no relationship between the PO and Greenko is mentioned in the PSF. PO to Clarify.

viii. The average generation value to be provided in section A.1 along with source.
ix. PO to correct the formatting, numbering, subscript, alignment of maps as well as typographical errors throughout the PSF.

Hence, **CAR 02 remains open**.

Project Owner's response	**Date:** 06/09/2023

i. Summary of Project boundary is elaborated and technologies/measures are employed under section A.1.

ii. Geo-coordinates were corrected based on the attached site photographs. The geo coordinates photos were attached

iii. Detailed physical address of M/s Sunborne Energy Andhra Private Limited to be provided under section A.2 in the format Village, Mandal, District and State.

"DOMINICUS (SEAPL)" is removed in revised PSF.

iv. details on the type and number of modules installed are updated in the revised PSF.

v. Details and Arrangement of Metering/ monitoring equipment for evacuation of electricity to the substation have is elaborated in section A.3.

vi. Description as to how the electricity is generated and exported to grid along with details of voltage levels at switchyard and grid station has been provided in section A.3.

vii. The project activities allotted to the project owner through State Government Competitive Bidding Process is mentioned in the PSF.

Parties involved in PPA and change in legal ownership of the project activity is specified at Sec-A1. Letter of Authorization is also attached.

viii. The average generation value is provided in section A.1 along with source.

ix. PO corrected the formatting, numbering, subscript, alignment of maps as well as typographical errors throughout the PSF.

Documentation provided by Project Owner	
Revised PSF and supporting documents	
Project verifier assessment	**Date:** 28/09/2023

i. PO has revised the summary of the project boundary and has elaborated a summary of technologies/measures employed under section A.1. Hence the finding is closed.

ii. The geo-coordinates have been revised by the PO. Hence the finding is closed.

iii. The project verifier has observed that the detailed physical address of M/s Sunborne Energy Andhra Private Limited has been provided under section A.2. Hence the finding is closed.

iv. The details on the type and number of modules installed have been inserted into the revised PSF by the PO which is deemed acceptable by the project verifier. Hence the finding is closed.

v. Details and arrangement of metering/ monitoring equipment for evacuation of electricity to the substation have been elaborated by the PO in the revised PSF which deemed acceptable by the project verifier. Hence the finding is closed.

vi. PO has described how the electricity is generated and exported to the grid along with details of voltage levels at switchyard and grid station in section A.3 of the revised PSF which is deemed acceptable by the project verifier hence the finding closed.

vii. PO has specified the relationship between PO and Greenko through the change in legal ownership of the project activity is specified at Sec-A1. Equally, Letter of Authorization has been attached by the PO in support of its statement which is deemed acceptable by the project verifier hence the finding is closed.

viii. PO is required to insert the average generation value in section A.1 along with source. Hence the finding **remains open.**

ix. PO is required to correct the formatting, numbering, subscript, alignment of maps as well as typographical errors throughout the PSF. Hence the finding is closed.

Project Owner's response	**Date:** 05/10/2023
viii. PO has inserted the average generation value in section A.1 along with source.	
Documentation provided by Project Owner	

Project verifier assessment	**Date:** 16/10/2023
PO has provided the average generation value in section A.1 of the revised PSF along with source. Hence, the CAR is closed.	

CAR ID	03	**Section no.**	D.2	**Date:** 20/01/2023

Description of CAR

The following discrepancies were observed during the site visit with respect to technical specifications provided under section A.3 of the PSF:

1. M/s Greenko Solar Power (Dharmavaram) Limited
    1. SPV - Two different types of SPV modules are installed, viz. 315 W (Risen) and 320 W (Risen), while details of only one (Risen 320 W) have been provided in section A.3 of the PSF.
    2. Inverters – 900 4 x 6 = 24 (4 blocks with 6 inverters in each block); total number of inverters installed not mentioned in section A.3 of the PSF.
    3. Transformer – details incomplete in section A.3 of the PSF, eg. total number of installed transformers not mentioned.
2. M/s SEI Arushi Private Limited
    1. SPV - Five different types of SPV modules are installed, viz. 310 W (JA Solar), 315 W (JA Solar), 315 W (Risen), 320 W (Risen), 325 W (Risen), while details of only one (JA Solar 310 W) have been provided in the PSF.
    2. Inverters – total numbers of each type of inverters installed do not match with that mentioned in the PSF.
    3. Transformers - total numbers of each type of transformers installed do not match with that mentioned in the PSF. Presence of 160 KVA transformer installation was found but not mentioned in the PSF.
3. M/s Sunborne Energy Andhra Private Limited
    1. SPV - Two different types of SPV modules are installed, viz. 315 W (JA Solar) and 320 W (ReneSola), while details of only one (JA Solar 315) has been provided in the PSF.

Project Owner's response	**Date:** 23/06/2023
The above stated details with respect to technical specifications are addressed and updated under section A.3 of the PSF.	

Documentation provided by Project Owner

Revised PSF
Equipment Name Plate Photographs

Project verifier assessment	**Date:** 18/07/2023

The following discrepancies have been observed w.r.t technical specification details:

1. PA Dharmavarm: Inverter Tech Specs. Name details consist a pic of 900 KVA inverter, while the PSF states 1000KVA.
2. PA Arushi: Transformer details mentioned do not match with onsite observations.
3. PA Sunborne: Inverter and Transformer details mentioned do not match with onsite observations.

PO to ensure only evidence pertaining to the PAs are submitted. PO to make required corrections and provide evidence for the same. **Hence, CAR 03 remains open.**

Project Owner's response	**Date:** 06/09/2023

1. PA Dharmavarm: Inverter Tech Specs Were corrected in PSF. The capacity is 1000kVA
2. PA Arushi: Transformer details mentioned are as per the site.
3. PA Sunborne: Inverter and Transformer details mentioned as per the onsite.

The technical specifications were corrected in the sec A3 as per the onsite observations

Documentation provided by Project Owner	
Revised PSF and supporting documents	
Project verifier assessment	**Date:** 28/09/2023
1. PO has corrected the value of the capacity of the inverter Tech specs to 1000kVA. Hence the finding is closed. 2. PO has revised the PSF providing the inverter and transformer details of PA Arushi which is cross checked and deemed acceptable by the verification hence the finding is closed. 3. PO has revised the PSF providing PA sunborne Inverter and transformer details which is cross checked and deemed acceptable by the verification team hence the finding is closed.	

CAR ID	04	**Section no.**	D.3.1	**Date:** 20/01/2023
Description of CAR				
1. The PO is required to include reference of GCC Clarification No.1 under section B.1 2. Applicability conditions of the 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)' have not been included for justification in section B.2 of the PSF. 3. All applicability conditions mentioned under section 2.2 of "Tool 24 - Common Practice Version 3.1" and section 2.1 of "Tool 27 - Investment analysis, Version 11.0" have not been included for justification in section B.2.				
Project Owner's response				**Date:** 23/06/2023
In section B.1, B.2, all applicability conditions for all Tools used are included and justified. *1.* The PO has included reference of GCC Clarification No.1 under section B.1 *2.* 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)' is included for justification in section B.2 of the PSF. *3.* Tool 24 - Common Practice Version 3.1" and section 2.1 of "Tool 27 - Investment analysis, Version 11.0" are included for justification in section B.2.				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023
i. The reference to GCC Clarification No.1, version 1.3 has been included under section B.1 of the revised PSF. Finding is therefore closed. ii. All applicability conditions but applicability condition 06 pertaining to CO_2 emission factor of biofuels of the 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)'was referred. **Hence, finding remains Open.** iii. All applicability conditions mentioned under section 2.2 of "Tool 24 - Common Practice Version 3.1" and section 2.1 of "Tool 27 - Investment analysis, Version 11.0" have now been included for justification in section B.2 of the revised PSF. The same are found to be appropriate and acceptable to the verification team and hence the findings is closed.				
Project Owner's response				**Date:** 06/09/2023
ii. Applicability condition 06 pertaining to CO_2 emission factor of biofuels is corrected. (No bio fuels are used by the project activity)				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 28/09/2023
ii. PO states that, under the tool 7, the value applied to the CO_2 emission factor of biofuels is zero due to no biofuel used in the project which is deemed acceptable by the project verifier hence the finding is closed.				

CAR ID	05	**Section no.**	D.3.3	**Date:** 20/01/2023
Description of CAR				
PO is required to describe the project boundary in section B.3				
Project Owner's response				**Date:** 23/06/2023
PO has described project boundary in section B.3				

Documentation provided by Project Owner	
Revised PSF	
Project verifier assessment	**Date:** 18/07/2023
The project boundary in section B.3 is to be elaborated upon in accordance with the applied methodology. **CAR 05 remains Open.** Also, for the table "Emission sources included in or excluded from the Project Boundary" under section B.3; Baselines emission by BESS installation is not applicable for the Bundle under consideration. Correction requested.	
Project Owner's response	**Date:** 06/09/2023
The project boundary in section B.3 is elaborated in accordance with the applied methodology. The table "Emission sources included in or excluded from the Project Boundary" under section B.3 is corrected.	
Documentation provided by Project Owner	
Revised PSF	
Project verifier assessment	**Date:** 28/09/2023
PO has elaborated the project boundary in accordance with the applied methodology. Hence the finding is closed.	

CAR ID	06	**Section no.**	D.3.4	**Date:** 20/01/2023
Description of CAR				
Under section B.4 of the PSF: 1. PO is required to provide and explain all data used to establish the baseline scenario viz. parameters, data sources along with relevant references. 2. PO is also required to describe how the relevant national and/or sectoral policies, regulations and circumstances are taken into account.				
Project Owner's response				**Date:** 23/06/2023
Under section B.4 of the PSF: 1. PO has provided and explained all data used to establish the baseline scenario viz. parameters, data sources along with relevant references. *2.* PO has also described how the relevant national and/or sectoral policies, regulations and circumstances are taken into account.				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023
i. The PSF is appropriately revised to include the data used to establish the baseline scenario along with relevant references. The baseline emission factor parameters are based on the latest available database published by the Central Electricity Authority (CEA), Government of India. Version 17.0 that was applicable was the time of PSF submission to GCC. The same is found to be appropriate and acceptable to the verification team. However, section B.4 mentions the application of both Version 16.0 and 17.0 of the CEA database. Correction requested. **Finding remains open.** ii. Description as to how the relevant national and/or sectoral policies, regulations and circumstances are taken into account has to be elaborated upon. PO to co-relate the same with other relevant sections of the PSF. **Finding remains open.**				
Project Owner's response				**Date:** 06/09/2023

i.	section B.4 was corrected with 17.0 of the CEA database.
ii.	While the relevant national and/or sectoral policies, regulations are explained under Legal requirement test, how the relevant national and/or sectoral policies, regulations and circumstances are taken into account has been elaborated and co-related with other relevant sections in sub-step 1(b) (consistency with mandatory laws and regulations) of sec. B.5.

Documentation provided by Project Owner

Revised PSF and supporting documents

Project verifier assessment **Date:** 28/09/2023

i.	The P.O in the revised PSF has mentioned the application of version 17.0 of the CEA database which is deemed acceptable by the VVB hence the finding is closed.
ii.	PO has described how the relevant national and/or sectoral policies have been considered which is deemed acceptable by the VVB hence the finding is closed.

CAR ID	07	**Section no.**	D.3.5	**Date:** 20/01/2023

Description of CAR

Under Section B.5 of the PSF:

1. The Legal Requirement Test to demonstrate additionality is required to be elaborated upon supported with details and documentary evidence.
2. In accordance with para 20 of clarification 1, "The common practice shall be ascertained for each bundle or activity depending upon the level for which additionality is defined." As additionality is defined at the activity level, common practice will be defined at the same level (each activity).
3. Common Practice analysis step 2(a), identifies 'the states of Telangana and Andhra Pradesh in India as the applicable geographical area". Justification for the specific selection as against the rest of the host country in accordance with Paragraph 9 of applied Tool 24 is not provided.

Project Owner's response **Date:** 23/06/2023

1. The Legal Requirement Test to demonstrate additionality is elaborated upon supported with details and documentary evidence.
2. In accordance with para 20 of clarification 1, common practice and additionality are ascertained at the same level (i.e., for each activity in the bundle).
3. For Common Practice analysis step 2(a), justification for selected geographical area against the rest of the host country in accordance with Paragraph 9 of applied Tool 24 is provided in PSF.

Documentation provided by Project Owner

Revised PSF Version
Plant-wise Details of All India Renewable Energy Projects-Reg. dt. 20/03/2020 published by CEA, Ministry of Power, Govt. of India

Project verifier assessment **Date:** 18/07/2023

i.	The Legal Requirement Test to demonstrate additionality is not elaborated upon supported with details and documentary evidence. **The finding therefore remains open.**
ii.	In accordance with para 20 of clarification 1, common practice analysis has now been carried out separately for each PA forming the bundle. However, PO to mention the relevance of chosen cut-off date for common practice analysis and provide documentary evidence for the same. PO to also provide functional web-links in the footnotes. **The finding therefore remains open.**
iii.	Justification for the specific selection of a state as against the rest of the host country has not been provided for PA M/s Sunborne Energy Andhra Private Limited. **The finding therefore remains open.**

Project Owner's response **Date:** 06/09/2023

i.	The Legal Requirement Test to demonstrate additionality is elaborated with supporting details in sec B.5. in the revised PSF. The section has been clearly marked for easy identification
ii.	PO mentioned the relevance of chosen cut-off date for common practice analysis. Documents considered for common practice analysis is attached
iii.	Justification for the specific selection of a state as against the rest of the host country has been provided for PA M/s Sunborne Energy Andhra Private Limited.

Documentation provided by Project Owner	
Revised PSF and supporting documents	
Project verifier assessment	**Date:** 28/09/2023
i. The Legal Requirement Test to demonstrate additionality is elaborated with supporting details in sec B.5. in the revised PSF which is deemed acceptable. Hence, this finding is closed. ii. PO has mentioned the relevance of chosen cut-off date for common practice analysis and provides documentary evidence for the same. Functional web-links are provided in the footnotes. Therefore, this finding is closed. iii. Justification for the specific selection of a state as against the rest of the host country has been provided for PA M/s Sunborne Energy Andhra Private Limited which is deemed acceptable. Therefore, this finding is closed.	

CAR ID	08	**Section no.**	D.3.1, D.3.6, D.3.7	**Date:** 20/01/2023
Description of CAR				
Under Section B.6 of the PSF: 1. In accordance with paragraph 14 of the 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)', PO is required to explain how the steps involved in calculation of baseline emission factor are applied along with justification for choices and relevant references in section B.6.1. 2. The calculation method for parameter "$EF_{grid,OM,y}$" is not provided in section B.6.2. 3. The calculation method mentioned for parameter "$EF_{grid,BM,y}$" is incorrect under section B.6.2. 4. Reference has been made to "CO_2 Emission Database, Version 16.0, March 2021 published by CEA, however the latest available version is 17, October 2021.				
Project Owner's response				**Date:** 23/06/2023
Under Section B.6 of the PSF: 1. In accordance with paragraph 14 of the 'Tool to calculate the emission factor for an electricity system, Version 07.0 (Tool 07)', PO has explained how the steps involved in calculation of baseline emission factor are applied along with justification for choices and relevant references in section B.6.1. 2. The calculation method for parameter "$EF_{grid,OM,y}$" is provided in section B.6.2. 3. The calculation method mentioned for parameter "$EF_{grid,BM,y}$" is corrected under section B.6.2. 4. The latest available version 17, October 2021 is used. Same is referred in section B.6.2				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023
Section B.6.1 of the revised PSF appropriately explains the steps involved in calculation of baseline emission factor along with justification for choices and relevant references. The same is in accordance with Tool 07 applied. Furthermore, the latest available version of "CO_2 Emission Database" i.e. Version 17.0, published by CEA, has been appropriately used throughout the revised PSF. However, the following discrepancies are observed: i. The calculation method for parameter "$EF_{grid,OM,y}$" provided in section B.6.2 is incorrect. ii. In Section B.6, the Baseline Emission Calculation equation is not in accordance with applied methodology. The equaction and nomenclature to be in accordance with the methodology applied throughout the PSF. **CAR 08 remains Open.**				
Project Owner's response				**Date:** 06/09/2023
i. The calculation method for parameter "$EF_{grid,OM,y}$" provided in section B.6.2 corrected. ii. In Section B.6, the Baseline Emission Calculation equation is corrected with applied methodology.				
Documentation provided by Project Owner				
Revised PSF				

Project verifier assessment	**Date:** 28/09/2023
i. PO has provided the calculation method for the parameter in section B.6.2. Hence the finding is closed. ii. VVB has reviewed the PSF and confirms that the baseline emission calculation equation has been corrected in accordance with the methodology applied throughout the PSF. Hence the finding is closed.	

CAR ID	10	**Section no.**	D.6	**Date:** 20/01/2023
Description of CAR				
In section G of the PSF 1. Details regarding means for inviting stakeholders' participation have not been provided. 2. It is not clear whether the SDG impacts of project were discussed during LSC meeting.				
Project Owner's response				**Date:** 23/06/2023
In section G of the PSF 1. Details regarding means for inviting stakeholders' participation have been provided in PSF 2. discussion about SDG impacts of project were discussed during LSC meeting is mentioned				
Documentation provided by Project Owner				
Revised PSF				
Project verifier assessment				**Date:** 18/07/2023
1. Details regarding means for inviting stakeholders' participation has not been adequately elaborated upon. **The finding therefore remains open.** 2. SGD impacts of the project discussed during the LSC meetings are to be elaborated upon in section G of the PSF in addition to details about No net harm to Environment (E+) as well as No net harm to the Society (S+) discussed as neither section G.1 / G.2 provide details about the same. Summary of comments provided revolves mainly around employment and welfare. **The finding therefore remains open.**				
Project Owner's response				**Date:** 06/09/2023
i. Details about means of invitation is elaborated upon. ii. Section G has been revised by including the details of how the project activity contributes to E+/S+/UN SDG goals. Summary of comments not only includes employment and welfare, but also about the impact of the project activity on the climatic condition. The question on welfare raised by the stakeholders is in fact all-inclusive in as much as it includes jobs, training, medical facilities, water supply, power, etc. That is why, the project representative had requested the shareholders to present their requirements to the site-in-charge through the village representative, so that the activities could be taken up based on the priority and fund availability.				
Documentation provided by Project Owner				
Revised PSF and supporting documents				
Project verifier assessment				**Date:** 28/09/2023
i. In section G of the PSF, PO has stated that notice of invitation was sent to stakeholders. PO is required to provide evidence for the same. This finding **remains open.** ii. PO has explained that during local stakeholder consultation, the advantages of the project including economic development (job opportunities), welfare, clean energy (electricity generation through renewable source), and emission reductions were discussed with the stakeholders which covers No net Harm to Environment/Society and SDG impacts. All the requirements for LSC were taken care during EIA and is deemed acceptable to the project verification team. Therefore, this finding is closed.				
Project Owner's response				**Date:** 05/10/2023
i. Notice of invitation is enclosed.				
Documentation provided by Project Owner				
Revised PSF and supporting documents				
Project verifier assessment				**Date:** 16/10/2023
PO has provided the required evidence. Therefore, this CAR is closed.				

Table 3. FARs from this project verification

FAR ID	01	**Section no.**	D.7, D.13, D.14	**Date:** 20/01/2023
Description of FAR				
Project Owners shall demonstrate the compliance to CORSIA requirements for the credits claimed beyond 31 December 2020 with respect to double counting and HCLOA requirements and also future CORSIA requirements applicable time to time for the project activity				
Project Owner's response				**Date:** DD/MM/YYYY
-				
Documentation provided by Project Owner				
-				
Project verifier assessment				**Date:**
No response provided				

Appendix 5. Environmental safeguard assessment

Impact of Project Activity on		**Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards**								**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 / regulatory/ voluntary corporate threshold Limits**	**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 environmental impact**	***Explanation of the Conclusion***	**3rd Party Audit**
				Not Applicable	**Harmless**	**Harmful**	**Operational Controls**	**Program of Risk Management Actions**	**Monitoring parameter and frequency of monitoring**	**Ex- Ante scoring of the environmental impact (as per scoring matrix Appendix-02)**	**Ex- Ante description and justification/explanation of the scoring of the environmental impact**	**Verification Process**
Environmental Aspects on the identified categories[9] 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 requirements /legal limits / voluntary corporate limits related to the identified risks of environmental impacts.*	*If no environmental impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as **Not Applicable***	*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*	*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*	*Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as '**Harmfu'l** at least to a level that is in compliance with applicable legal/regulator requirements or industry best practice or stricter*	*Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce or eliminate the risk of impacts that have been identified as **Harmful**.*	*Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of 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.* .

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

					Activity is unlikely to cause any harm (is safe) and shall be indicated as ***Harmless*** */If the project has an positive impact on the environment mark it as "harmless" as well.*	*harm (may be un-safe) and shall be indicated as* ***Harmful***	*voluntary corporate requirements*					
Reference to paragraphs of Environmental and Social Safeguards Standard		*Paragraph 12 (a)*	*Paragraph 13 (c)*	*Paragraph 13 (d) (i)*	*Paragraph 13 (d) (ii)*	*Paragraph 13 (d) (iii)*	*Paragraph 13 (e) (i)*	*Paragraph 13 (e) (ii)*	*Paragraph 12 (c) and Paragraph 13 (f)*	*Paragraph 22*		*Paragraph 24 and Paragraph 26 (a) (i)*
Environment - *Air*	*SO_x emissions (EA01)*	The project activity does not cause SOx emissions. The project activity avoids SOx emissions that would have been generated by the similar activity in the baseline, where the fuel used are fossil fuels.	National Ambient Air Quality Standards as notified by CPCB.	Not Applicable	-	-	Not applicable.	Not applicable.	No action required	0	The Project proponent confirms that the project activity will not cause SOx emissions.	There will be no SOx emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on SOx emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of SOx emissions. The Project Owner has not wished to identify the same and being

												it an overall positive impact, accepted by the assessment team
	NO_x emissions (EA02)	The project activity does not cause NOx emissions. The project activity avoids NOx emissions that would have been generated by the similar activity in the baseline, where the fuel used are fossil fuels.	National Ambient Air Quality Standards as notified by CPCB.	Not Applicable	-	-	Not applicable	Not applicable-	No action required	0	The Project proponent confirms that the project activity will not cause NOx emissions.	There will be no NOx emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on NOx emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of NOx emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team
	CO_2 emissions (EA03)	Project Activity generates Electricity from renewable source. Hence no CO2 emissions from the project activity. In the absence of project fossil fuel based power plants will be used which produce more Co_2 emissions to generate electricity.	National Ambient Air Quality Standards as notified by CPCB.	-	Harmless	-	Not applicable	Not applicable-	Emission reductions in tCO_2e per year monitored through ER sheet on a monthly basis using the emission factor	+1	Project owner concludes that, the project does not generate CO2 as the power is generated using renewable energy CO_2Emission reduction will be measured based on the electricity generated using	In absence of the project activity, the electricity generated from the project activity would be generated in the Indian Grid by power plants that are predominantly fossil-fuel

											the emission reduction factor	based, thereby leading to CO_2 emissions. The generated electricity by the project activity is based on the renewable energy source, which causes no CO_2 emissions. The project will thus have a positive impact by reducing measurable amount of CO_2 emissions. The project is expected to reduce CO_2 emission throughout the crediting period. As no negative environmental impacts are anticipated, the parameter is evaluated as harmless and scored a +1 by the project owner. This is accepted by the project verification team. 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.

	CO emissions (EA04)	The project activity does not generate any CO emissions within or outside the project boundary. In the absence of project activity, there is a possibility of CO emissions.	National Ambient Air Quality Standards as notified by CPCB.	Not Applicable	-	-	No action required	Not applicable	No action required	0	PP concludes that, there is no CO emissions are observed during operation of plant.	There will be no CO emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on CO emissions as otherwise same amount of electricity would have been generated in baseline thermal power plants and that would have emitted some amount of CO emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team.
	Suspended particulate matter (SPM) emissions (EA05)	Executed Project activity does not produce any SPM emissions except during construction.	National Ambient Air Quality Standards as notified by CPCB.	Not Applicable	-	-	No action required	Not applicable	No action required	0	PP concludes that, no SPM emissions produced from the Project activity during Operational phase. Negligible amount of emissions during construction.	There will be no SPM emissions or risk from the project being it Solar power project.

	Fly ash generation (EA06)	Fly ash emissions are not produced from this project activity either within or outside the project boundary. In the absence of project activity, conventional power plant produce Fly ash emissions	National Ambient Air Quality Standards as notified by CPCB.	Not Applicable	-	-	Not applicable	Not applicable	No action required-	0	PP confirms that, in the baseline scenario (grid) some of the fossil fuel power plants produce Fly ash emissions, on which data is not available.	There will be no Fly Ash emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity do have an unquantifiable positive impact on Fly ash emissions as otherwise some amount of electricity would have been generated in baseline from COAL based thermal power plants and that would have emitted some amount of Fly Ash emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team.
	Non-Methane Volatile Organic Compounds (NMVOCs) (EA07)	The solar plant does not cause any NMVOC emission	National Ambient Air Quality Standards as notified by CPCB	Not applicable	-	-	Not applicable	Not applicable	No action required	0	PP confirms that the project activity does not emit any NMVOCs and solar energy projects have been classified as white category. An acknowledgement from MOEF for White Category industry is enclosed	There will be no NMVOC emissions or risk from the project being it Solar power project. However, the Assessment team feels that project activity does have an unquantifiable positive impact on NMVOC emissions as otherwise same amount of

												electricity would have been generated in baseline thermal power plants and that would have emitted some amount of NMVOC emissions. The Project Owner has not wished to identify the same and being it an overall positive impact, accepted by the assessment team.
	Odor (EA08)	The project does not emit any odor.	National Ambient Air Quality Standards as notified by CPCB	Not applicable	-	-	Not applicable	Not applicable	No action required		PP confirms that the project activity does not emit any odor.	There is no risk of odor emission as project activity is a Solar power plant
	Noise Pollution (EA09)	The project does not produce any noise.	Noise (Regulation and control Rules 2000 amended in 2010)	Not applicable	-	-	Not applicable	Not applicable	No action required		PP confirms that the project activity does not produce any noise.	There is no risk of Noise pollution as project activity is a Solar power plant.
Environment - *Land*	*Solid waste Pollution from Plastics (EL-01)*	No plastic waste is generated by the project activity	Plastic Waste (Management and Handling) Rules, 2016	Not applicable	-	-	Not applicable	Not applicable	No action required		The project does not generate any plastic waste. Thus PP concludes that the there is no solid waste pollution from plastics.	There will be no major plastic waste generated due to the project activity.
	Solid waste Pollution from Hazardou	There is no possibility of waste generation from hazardous wastes on year to year basis. Even otherwise	Harzardous and other Wastes(Manage	Not applicable	-	-	Not applicable	Not applicable	No action required		The project does not generate any hazardous waste on year to year basis. Even	The project has not generated hazardous waste till now.

	s wastes(EL02)	if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors.	ment and Transboundary Movement) Rules, 2016							otherwise if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors on yearly basis. Thus doesn't harm environment.	PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors on yearly basis.
	Solid waste Pollution from Bio-medical wastes (EL03)	No bio medical waste is generated by the project activity	Biomedical Waste Management Rules 2016Movement) Rules, 2016	Not applicable	-	-	Not applicable	Not applicable	No action required		Projct proponent confirms that the project activity does not generate any biomedical waste. Thus there is no solid waste pollution from biomedical wastes	No risk identified
	Solid waste Pollution from E-wastes (EL04)	There is a probability of project generating E-wastes (spares of SCADA system and inverters) .	E-waste (Management and Handling) Rules 2011	-	Harmless	-	It will be Collected, stored at designated place and it is recycled/refubrished / reused /disposed properly through authorized vendors and comply with the rules of E Waste disposal guidelines	Not applicables	Solid waste(E-waste) quantity numbers) reused/recycled/refubrished or disposed per year Monitored through records maintained or form 2 of waste management	+1	PP concludes that, the solid waste from E-wastes will be collected, segregated and reused/recycled/ refurbished/ and disposed properly. Hence, E-waste will not cause any harm to environment	The e-waste generated by the Project activity viz. Spares of SCADA system, inverters, and other electrical and electronic parts involved in the project or post their useful life will be disposed as per prevailing laws and regulations i.e. E-Waste (Management) Rules, 2011.

												Monitoring plan is provided in section B.7.2 of the PSF to ensure the compliance with the regulations in place. The same will be monitored throughout the crediting period by the project owner by means of records of e-waste re-used/recycled/refurbished or disposal from the project activity. The same was confirmed during the onsite assessment /30/ and accepted by the verification team. The monitoring plan provided is provided in section B.7.2 is appropriate and assessment of the same is provided section D.3.7 of the Project Verification Report.
	Solid waste Pollution from Batteries (EL05)	The project activity will generate solid waste from batteries, at the end of life of batteries.	Battery Waste Management rules-2016	Not Applicable	-	-	Used batteries will be returned to the battery manufacturers, who will recycle them-	Not Applicable	No action required		PP concludes that the batteries will be returned to the manufactures as a part of Battery Management Rules.	No risk identified
	Solid waste Pollution from end	There is no possibility of waste generation from end of life products on year to	Solid Waste Management	Not Applicable	-	-	Not applicable	Not applicable	No action required		PP concludes that the project will not generate any solid waste	PO has a standard procedure for disposal of such

	of life products/ equipment (EL06)	year. Even otherwise if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off to approved PCB vendors.	Rules, 2016								from end of life products / equipment during operational phase on year to year basis. Even otherwise if any waste is generated at site, PO has a standard procedure for disposal of such waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off to approved PCB vendors. .	waste. Whenever such waste is generated, the same is stored at designated place at site and disposed off through approved PCB vendors on yearly basis.
	Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07)	The project does not use any chemicals (including pesticides, heavy metals ,lead, mercury)	Not applicable	Not applicable	-	-	Not applicable	Not applicable	No action required		PP confirms that the project will not generate any soil pollutant chemicals, including pesticides, heavy metals, lead and mercury	No significant soil pollution from chemicals during operation phase of the project activity However, in the baseline scenario (grid) some of the fossil fuel power plants may have polluted soil from chemicals on which data is not available and can't be quantified and therefore the emission reductions cannot be quantified and therefore this parameter will not be scored.
	land use change (change	Project activity is established in non crop land and non	The Telangana	Not Applicable	-	-	Not applicable-	Not applicable-	- No action required		Project activity is located in non - crop/ non-forest	No risk identified

	from cropland /forest land to project land) (EL08)	forest land, so there is no change in land use.	Agricultural Land (Conversion for Non Agricultural Purposes) Act, 2006								area. Hence, the question of change in land use does not arise.	
Environment - *Water*	*Reliability / accessibility of water supply (EW01)*	Not Applicable	Not applicable	Not applicable	-	-	Not applicable	Not applicable	No action required		Project activity does not require water except for drinking and sanitary purposes	No risk identified
	Water Consumption from ground and other sources (EW02)	Ground water will be utilised for cleaning of modules at the site.		Not Applicable (No Actions Required)	-	-	Not applicable	Not applicable	No action required		PP confirms that there is no major impact from the project activity, by water consumption from ground and other sources.	No risk identified
	Generation of wastewater (EW03)	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No action required		The project activity does not generate any wastewater, except water used for sanitary purposes, which is harmless.	No risk identified
	Wastewater discharge without/with insufficient treatment (EW04)	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No action required		The project activity does not discharge any wastewater other than water used for sanitary purposes, which is harmless.	No risk identified
	Pollution of Surface, Ground and/or Bodies of water (EW05)	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No action required		The project activity does not pollute surface/ground and/or bodies of water.	No risk identified

	Discharge of harmful chemicals like marine pollutants / toxic waste (EW06)	Not Applicable	The Water (Prevention & Control of Pollution) Act, 1974	Not applicable	-	-	Not applicable	Not applicable	No action required		The project activity does not discharge any harmful chemicals or toxic waste	
Environment – *Natural Resources*	*Conserving mineral resources (ENR01)*	The project activity generates electricity from renewable source i.e., using solar, so we conserve natural resources as, in the baseline scenario, electricity is generated by using fossil fuels.	Mines and Minerals (Development and Regulation) Amendment Act, 2015	Not Applicable	-	-	Not applicable	Not applicable	No action required	0	PP concludes that, project activity does not use any mineral, , as the electricity is generated based on renewable sources	No risk identified
	Protecting / enhancing plant life (ENR02)	Not Applicable	There ae no regulations	Not Applicable	-	-	Not applicable	Not applicable	No action required		Project activity is implemented in barren land. There were no trees at the time of implementation.	No risk identified
	Protecting / enhancing species diversity (ENR03)	Not Applicable	Environment protection Act, 1986.	Not Applicable	-	-	Not applicable	Not applicable	No action required		The protect or enhance species diversity	No risk identified
	Protecting / enhancing forests (ENR04)	Not applicable	The Forest (Conservation) Act, 1980 & 1981	Not applicable	-	-	Not applicable	Not applicable	No action required		The project proponent confirms that the project is located in a barren land,	No risk identified
	Protecting / enhancing other depletable natural resources (ENR05)	Not applicable	Mines and Minerals (Development and regulation) Act, 1957	Not applicable	-	-	Not applicable	Not applicable	No action required		Project proponent confirms that the project will not use any natural resources in the project activity	No risk identified
	Conserving energy (ENR06)	Not applicable	Energy Conserva	Not applicable			Not applicable	Not applicable	No action required		As the project is a renewable energy project, it	No risk identified

			tion Act, 2001								is already conserving energy, as in the absence of the project, energy would have been generated using fossil fuel.	
	Replacing fossil fuels with renewable sources of energy (ENR07)	This project activity replace fossil fuels with solar energy, which is a renewable energy source for the generation of electricity.	There are no Regulations at present,	-	Harmless	-	Not applicable-	Not applicable	Quantity of net electricity generated per year replacing fossils fuel., evidenced by Joint Meter Reading	+1	Project proponent concludes that the Project activity will Supply Energy to the grid using Renewable Source of energy.	In absence of the project activity, the equivalent amount of electricity would be generated from the operation of grid-connected power plants, which is GHG intensive. The project activity generates and supplies renewable solar sourced based electricity to the grid, where it replaces fossil fuel source-based electricity, thus the project activity is unlikely to cause any harm and is assessed as harmless. As the project activity will have a positive impact by replacing fossil fuels with renewable sources of energy, the parameter is evaluated as harmless and scored a +1 by the project owner. This is

												accepted by the project verification team. 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.
	Replacing ODS with non-ODS refrigerants (ENR08)	Not Applicable	There are no regulation at present	Not applicable			Not applicable	Not applicable-	No action required		As this is a renewable energy project replacement of ODS with non-ODS refrigerants does not arise	No risk identified

Net Score:		**+3**
Project Owner's Conclusion in PSF:		The Project Owner confirms that the Project Activity will not cause any net harm to Environment.
GCC Project Verifier's Opinion:		The GCC Verifier certifies that the Project Activity is not likely to cause any net harm to the environment...

Appendix 6. Social Safeguards Assessment

Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards							Project Owner's Conclusion		GCC 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 environmental impact**	**Explanation of the Conclusion**	**3rd Party Audit**
				Not Applicable	**Harmless**	**Harmful**	**Operational / Management 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/explanation of the scoring of social impact of the project**	**Verification Process**
Social Aspects on the identified categories [10] ***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 requirements/ stricter voluntary corporate limits by way of plant design and operating principles then the Project Activity is unlikely to cause any harm (is*	*If negative social 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 and shall be indicated as* ***Harmful***	*Describe the operational or management 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 harmless of 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 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.*

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

					*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"***						.
Reference to paragraphs of Environmental and Social Safeguards Standard		*Paragraph 12 (a)*	*Paragraph 13 (c)*	*Paragraph 13 (d) (i)*	*Paragraph 13 (d) (ii)*	*Paragraph 13 (d) (iii)*	*Paragraph 13 (e) (i)*	*Paragraph 12 (c) and Paragraph 13 (f)*	*Paragraph 23*		*Paragraph 24 and Paragraph 26 (a) (i)*
Social - *Jobs*	*Long-term jobs (> 10 year) created/ lost (SJ01)*	There is a positive impact of the project activity on the creation of long-term jobs during its operational time.	There are no Regulations at present	-	Harmless	-	No action required	Number of persons employed(> 1 year) and monitored per year through employment records	+1	Though there is no mandatory law PP has an internal goal of improving the local economy by providing direct and indirect employment oppurtunities and Economic value addition.	The project activity will lead to long term employment generation during the operational phase which can be verified from the employment records maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report. The aforementioned documents can be verified during issuance verification in accordance with the monitoring plan in the PSF

											section B.7.1. and E.2. The creation of permanent jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	New short-term jobs (< 1 year) created/ lost (SJ02)	There is a positive impact of the project activity on the creation of short-term jobs for local worker during its construction phase and operational phase.	There are no Regulations at present	-	Harmless	-	No action required	Number of persons employed(< 1 year) per year	+1	Though there is no mandatory law PP has an internal goal of improving the local economy by providing short term employment and employment and Economic value addition.	The project activity has led to short term employment generation during the construction and the operational phase which can be verified from the employment records maintained on site for each project activity. The monitoring approach is discussed in section D.3.7 of this report. The aforementioned documents can be verified during issuance verification in accordance with the monitoring plan

											in the PSF section B.7.1. and E.2. The creation of temporary jobs is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	Sources of income generation increased / reduced (SJ03)	The project activity creates employment for people through infrastructure development in the nearby project area which will increase income of people.	There are no regulations at present	Not Applicable	-	-	No action required	Not applicable	0	PP confirms that, the project activity will create jobs for people through infrastructure development which will increase in source of income.	No risk identified
	Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities (SJ04) *(human rights)*	The project will provide employment to all without discrimination based on gender, ethnicity, religion, etc.	Article 16 of Constitution of India	Not applicable	-	-	No action required	Not applicable	0	As the constitution provides for equal opportunity to all in employment, PP confirms that the project will provide employment without discrimination..	No risk identified

Social - *Health & Safety*	*Disease prevention (SHS01)*	There is no disease prevention through the project activity	The Factories Act, 1948	Not applicable	-	-	No action required	Not applicable		PP confirms that the project will maintain proper hygienic condition to protect the employees.	No risk identified
	Occupational health hazards (SHS02)	Like in any project, physical stress is the only occupational health hazard.	The Factories Act, 1948	Not applicable	-	-	No action required	Not applicable		PP confirms that the project will provide good working environment to employees so that they are not exposed to any occupational health hazards.	No risk identified
	Reducing / increasing accidents/Incidents/fatality (SHS03)	Project activity will strive to reduce the accidents during construction and operational phase by its EHS policy.	There are no specific Regulations on this aspect	-	Harmless	-	As per the Factories Act, a written notice should be given to the Factories Inspector within 72 hours of the occurrence of accident and acknowledgement taken	Records of major accidents/incidents rate in the year monitored through EHS records For this parameter trainings are also provide for which Training records are maintained	+1	PP has an strict EHS policy which aims to reduce accidents and ensure employeehealth and safety, Employees will be trained in operation and maintenance aspects of solar plant and will be provided with necessary safety equipment to avoid accidents.	As per the PSF /1/, records of major accidents/incidents in a year will be monitored through EHS records. The project owner shall provide the job-related Health and safety trainings to its employees on regular interval, and the number of accidents occurred can be verified at the time on emission reduction verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2. The monitoring approach is discussed in

											section D.3.7 of this report. The impact created by the project is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	Reducing / increasing crime (SHS04)	The project doesn't reduce or increase the crime.	Indian Penal Code deals with crime and punishment	Not applicable	-	-	No action required	Not applicable		Since the project activity will increase the sources of income of the people and develop infrastructure in and around the area, crime rate will come down. No credit is claimed	No risk identified
	Reducing / increasing food wastage (SHS05)	The project activity doesn't involve in reducing/ increasing food wastage	Food Waste (Reduction) Act, 2018	Not applicable	-	-	No action required	Not applicable		The project will provide suitable place for employees to store the lunch and dine to avoid any contamination and wastage. Food wastage is not anticipated.	No risk identified
	Reducing / increasing indoor air pollution (SHS06)	The project activity doesn't involve in reducing/increasing indoor air pollution	The Air (Prevention & Control of Pollution) Act, 1981	Not applicable	-	-	No action required	Not applicable		Project proponent confirms that the solar energy projects are installed in open and do not cause any air pollution.	No risk identified
	Efficiency of health services (SHS07)	The project activity conducts medical camps, distribution of medicines and vaccines for the	There are no statutory regulations on efficiency of health	-	Harmless	-	No action required	Number of health camps conducted. Vaccines distributed	+1	Project proponent will conduct health camps for people in the nearby villages.	The project owner will organize medical camps including

		stakeholders which will contributes conductsto rural or community welfare in terms of efficiency of health services.	services in India at present				Medicine distributed These will be monitored once in three years			distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in three years. The same could be verified during issuance verification in accordance with the monitoring plan in the PSF section B.7.1. and E.2 The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	Sanitation and waste management (SHS08)	Not Applicable	Hazardous and other Wastes (Management and Trans boundary movement)	Not applicable	-	-	No action required	Not applicable		The project proponent confirms that the project will ensure proper disposal of wastes as per Central Pollution Control Board guidelines	No risk identified

			Amendment Rules, 2016							;Septic tank will be provided with onsite treatment before disposal. Toilets, septic tanks and waste collection areas will be located away from natural drainage channels.	
Social - *Education*	*specialized training / education to local personnel (SE01)*	The Project proponent will provide skill development training to local youths mainly on subjects relating to the project. This will have a positive impact on the project as it will create a reservoir of talents employable when need arises	There are no regulations at present	-	Harmless	-	Training will be provided to local youths to improve their skillset, on operation and maintenance of project;; Occupational safety First aid, accident reporting etc.	Number of persons trained over entire crediting period Training attendance sheet	+1	Project proponent Confirms that, training will be provided to local youths to upgrade their skills.	As per the PSF/1/ and interview with the project owner/30/, the project owner would impart training to the local youth periodically so as to increase the skill set of on operation and maintenance of project; occupational safety, first aid, accident reporting etc. The monitoring approach is discussed in section D.3.7 of this report. The same could be verified from the training records and interviews with the employees to confirm the same during issuance verification in accordance with the monitoring plan in the PSF

											section B.7.1. and E.2 The parameter is a positive impact created by the project activity and thus this impact is assessed as harmless. An appropriate monitoring plan has been put in place to monitor the parameter for the impact, hence the scoring of +1 has found acceptable by the team.
	Educational services improved or not (SE02)	The project activity under CSR program improves educational services as the requirement of nearby communities and fund availability	CSR policy of the company	Not Applicable	-	-	No action required	Not applicable	0	Project proponent will take initiative under CSR to improve educational services. to the local communities	No risk identified
	Project-related knowledge dissemination effective or not (SE03)	Project provides job-related training and thereby impart knowledge to existing employees and new recruits	HR policy of the company	Not applicable	-	-	Training operation & maintenance of solar panels occupational safety, like fire safety, first aid, emergency procedures, risk assessment, accident reporting procedure welfare activities like, safe use of workplace tools, machinery, equipment etc.	Not Applicable		Project proponent confirms that job-related training will be provided to existing employees and new recruits to improve their knowledge base	No risk identified

Social - *Welfare*	*Improving/ deteriorating working conditions (SW01)*	Not applicable	EHS and HR policy of the company	Not applicable	-	-	No action required	Not applicable		Since the project has a good EHS and HR policy and offers good working environment, there will be no deterioration in working condition.	No risk identified
	Community and rural welfare (indigenous people and communities) *(SW02)*	By initiating various programs the project activity enables welfare of the rural community.	CSR policy of the company	Not applicable	-	-	No action required	Not applicable	0	PP confirms that, the project will contribute towards welfare of the rural community. Welfare activities will be organized as per requirement of the community.	No risk identified
	Poverty alleviation (more people above poverty level) (SW03)	By generating direct and indirect employment opportunities, the project activity contributes to the efforts of poverty alleviation.	There are no Regulations at present	Not Applicable	-	-	No action required	Not applicable	0	PP concludes that, the Poverty alleviation will occur due to providing direct and indirect employment opportunities.	No risk identified
	Improving / deteriorating wealth distribution/ generation of income and assets (SW04)	Not Applicable as the project activity only increases the income sources but cannot predict improving/deteriorating wealth distribution/generation of income and assets.	There are no regulations at present	Not applicable	-	-	No action required	Not applicable	0	Since the project is an equal opportunity employer, it will provide employment to all based on the need and suitability. This action will result in generation of income sources	No risk identified
	Increased or / deteriorating municipal revenues (SW05)	Taxes payable by the company and the Professional Taxes payable by employees improves the amount of taxes paid but cannot predict increased/deteriorating municipal revenue.		Not applicable	-	-	Not applicable	Not applicable	0	Project proponent confirms that the company has to pay tax to concern local body and the employees have to pay professional tax, which will improve the revenue of municipal corporation. Moreover, the small	No risk identified

										shops coming up in nearby areas due to this project will also contribute to the revenue of municipal corporation	
	Women's empowerment (SW06) *(human rights)*	Women are not employed at the project activity as it is located in a far remote location.	There is no specific regulation requiring employment of women even in remote location at present	Not Applicable	-	-	Not applicable	Not applicable -		PP concludes that women are not employed as the project as project is in a remote location.	No risk identified
	Reduced / increased traffic congestion (SW07)	Not Applicable	Nil	Not applicable	-	-	Not applicable	Not applicable		Due to project activity traffic may increase in the area. However, since the project is located in a remote area, it will not create traffic congestion.	No risk identified
	Exploitation of Child labour *(human rights)* *(SW08)*	project does not employ child labour as it is prohibited by law	The Child Labour (Prohibition and Regulation) Act, 1986	Not applicable	-	-	Not applicable	Not applicable		PP confirms that the project will not employ child labour in any of the project activity	No risk identified
	Minimum wage protection *(human rights) (SW09)*	Employees are paid wages confirming to the Minimum Wages Act.	The Minimum Wages Act, 1948	Not applicable	-	-	Not applicable	Not applicable		Project proponent confirms that all the employees will be paid wages and salaries confirming to the rates stipulated for that category by the Act	No risk identified
	Abuse at work place.(with specific reference to women and people with special disabilities / challenges) *(human rights) (SW10)*	The extant laws prevent, prohibit and in case of occurrence redressal of any abuse of women, scheduled caste and tribe and differently abled employees at work	Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013	Not applicable	-	-	Not applicable	Not applicable		Project proponent confirms that while women are not employed in the project location, employees belonging to SC and ST and differently abled employees will be	No risk identified

			Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989 The Rights of Persons with Disability Act, 2016							treated like any other employees.	
	Other social welfare issues (SW11)	Not applicable	Not applicable	Not applicable	-	-	Not applicable	Not applicable		Not applicable	No risk identified
	Avoidance of human trafficking and forced labour *(human rights)* *(SW12)*	IPC prohibits recruiting, transporting, harboring, transferring a person for exploitation and slavery,	Indian Penal Code, 1860	Not applicable	-	-	Not applicable	Not applicable		Project proponent confirms that the project does not employ or keep any person in employment against their will	No risk identified
	Avoidance of forced eviction and/or partial physical or economic displacement of IPLCs *(human rights)* *(CW13)*	Project activity is located in a non-forest, non-agricultural and non-human settlement area.	The Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Act, 2013	Not applicable	-	-	Not applicable	Not applicable		The project is located in non-forest, non-agricultural and non-human settlement area and hence the question of forced eviction or displacement of people does not arise	No risk identified
	Provisions of resettlement and human settlement displacement *(human rights)* *(CW14)*	Project activity is located in a non-human settlement area without necessitating any displacement.	The Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Act, 2013	Not applicable	-	-	Not applicable	Not applicable		As the project is located in a non-human settlement area, the question of resettlement of people does not arise	No risk identified
	Add more rows if required										

Net Score:	+5	
Project Owner's Conclusion in PSF:	The Project Owner confirms that the Project Activity will not cause any net harm to society.	
GCC Project Verifier's Opinion:	The GCC Verifier certifies that the Project Activity [is not likely to cause any net harm to society.	

Appendix 7. United Nations Sustainable Development Goals (SDG)

UN-level SDGs	**UN-level Target**	**Declared Country-level SDG**	**Defining Project-level SDGs**				**GCC Project Verifier's Conclusion** **(To be included in Project Verification 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: https://unstats.un.org/sdgs/indicators/indicators-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 ofr guidance.*	*Define project-level targets/actions in line with nee project level indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s).*	*Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project-level SDG targets*	*Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG indicator and its corresponding target, frequency of monitoring and data source*	*Describe how the GCC Verifier has verified the claims that the project is likely to achieve the identified Project level SDGs target(s).*	*Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or no)*
Goal 1: End poverty in all its forms everywhere	NA	NA	NA	NA	NA	NA	NA	NA
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	NA	NA	NA	NA	NA	NA	NA	NA

Goal 3. Ensure healthy lives and promote well-being for all at all ages	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and //vaccines for all Indicators: 3.8.1	Yes	Achieve health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for the local stakeholders and employees.	Ensure health care services local stakeholders and employees by organising/conducting health related activities like medical camp. Clinical camp, distribution of medicines and vaccines, etc. Target is to organise/conduct atleast one health related activity in three years	Organizing Health camps, other health related activities periodically for stakeholders to increase efficiency of health services or Providing group health insurance to the employees Above actions result in a direct positive effect that contributes to achieving the defined project-level SDG targets	Monitored through welfare activity records Number of health related activities conducted for stakeholders per three years Records of group health insurance, health camps conducted and EHS training programs	The project owner will organize medical camps including distribution of medicines and vaccines for the local people. The number of health camps conducted, vaccines distributed, and Medicine distributed will be monitored once in three years and should be verified during ER verification stage. The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.	Yes
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and	Yes	Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship, from local stakeholders	To train the, local youth and adults with relevant skills through trainings during the operational phases of the project for getting decent jobs and provide entrepreneurship opportunities. Target is to provide training to atleast three individuals over	Empowering local stakeholders with digital literacy and training on relevant technologies. This action contributes to achieving the defined project level SDG targets	Monitored through records of trainings and workshops conducted, Number of persons trained over the crediting period.	The project owner will conduct training on relevant technologies to empower local stakeholders with digital literacy. Records of trainings and workshops conducted should be verified during the ER Verification stage along with the number of people trained over the crediting period.	Yes

	entrepreneurs hip Indicators: 4.4.1			the crediting period.			The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.	
Goal 5. Achieve gender equality and empower all women and girls	NA	NA	NA	NA	NA	NA	NA	NA
Goal 6. Ensure availability and sustainable management of water and sanitation for all	NA	NA	NA	NA	NA	NA	NA	NA
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 "By 2030, Increase substantially the share of renewable energy in the global energy mix" Indicator 7.2.1.	Yes	To increase the share of renewable energy in the National energy mix.	Targeted net electricity MWH supplied to the grid by the project activity in a year throughout the crediting period.	The solar Power project contributes directly to achieving the SDG target because the project activity delivers renewable energy, which would otherwise be generated by fossil fuel dominated grid connect power generating plants.	The net electricity supplied to the grid by the project activity is continuously monitored through energy meter and recorded in JMRs on monthly basis. Amount of energy supplied to Grid per year	The project activity is a bundled solar power project with an installed capacity of 87 MW and it generates electricity of 133,042 MWh per year. The project activity was commissioned on 11/02/2016 (earliest start date of operation amongst the project activities involved in the bundle) and it continues to provide clean energy, thereby increasing the renewable energy share in the total final energy consumption thereby complying with the SDG target	Yes

							7.2. The same was duly verified by the verification team from commission reports/8/ and electricity generation records /11/. The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF/1/ and found to be acceptable.	
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment Indicators: 8.8.1	Yes	Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, and those in precarious employment in the project activity.	Ensure to protect labour rights and have no occupational injuries. To achieve “0” (zero) major injuries	By implementing strict EHS policy to protect labour rights and through safety trainings, and display of safety posters/guidelines at project sites. The above actions result in direct positive effects that contribute to project-level SDG . .	Monitored through EHS/safety records maintained Fatal and non-fatal occupational injuries per year or Number of major accidents\incidents per year	PO will ensure to protect labour rights by implementing strict EHS policy and through safety trainings, and display of safety posters/guidelines at project sites. The number of major accidents/incidents will be monitored through EHS records which should be verified during ER Verification stage. The parameter being monitored in the monitoring plan is found adequate. This	Yes

							has been discussed under section D.3.7 of this report.	
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries Indicators: 9.2.2	Yes	Promote inclusive and sustainable industrialization and significantly raise industry's share of employment by the project activity	Establishment of Project activity promotes sustainability (use of renewable energy) and also creates employment opportunities with target of 10 persons employed per year.	By providing employment opportunities to the eligible candidates for operations of the renewable energy related project activity. The above actions result in direct positive effects that contribute to project-level SDG.	Monitored through employment records maintained Number of persons employed per year.	The project will provide employment opportunities to at least 10 eligible candidates for operations of the renewable energy related project activity. This can be verified from the employment records maintained on site. The parameter being monitored in the monitoring plan is found adequate. This has been discussed under section D.3.7 of this report.	Yes
Goal 10. Reduce inequality within and among countries	NA	NA	NA	NA	NA	NA	NA	NA
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	NA	NA	NA	NA	NA	NA	NA	NA
Goal 12. Ensure sustainable consumption and production patterns	NA	NA	NA	NA	NA	NA	NA	NA
Goal 13. Take urgent action to combat climate change and its impacts	13.2 Integrate climate change measures into national policies, strategies and planning	Yes	To reduce GHG emissions	Reduce 123,793(tCo_2/year) per annum through electricity generation from renewable energy.	The project activity utilises the renewable source of energy to produce electricity that would be produced	Electricity produced by the renewable generating unit in records multiplied by an emission factor as recorded in	The project is estimated to achieve GHG emission reduction of 123,793 tCO_2e/year, thereby meeting the SDG target 13.2.	Yes

					fossil-fuel based plants, thus the project leads to reduction in GHG emissions will combat climate change and contribute to positive effect on the project-level SDG	ER sheet or this PSF Number of emission reductions per year	The generated power is continuously monitored by the energy meters installed at the substation and details of the same are included in the PSF/1/ and found to be acceptable.	
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	NA	NA	NA	NA	NA	NA	NA	NA
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	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	NA	NA	NA
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	NA	NA	NA	NA	NA	NA	NA	NA

SUMMARY	**Targeted**	**Likely to be Achieved**
Total Number of SDGs	**+6**	**+6**
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF	**Diamond**	**Diamond**

DOCUMENT HISTORY

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

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

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