



Driving Climate Actions

Project Verification Report

V3.1 - 2020

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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	<input type="checkbox"/> Individual Track ¹ <input checked="" type="checkbox"/> CDM Accreditation 28/03/2019 to 01/06/2024 https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0052 <input checked="" type="checkbox"/> ISO 14065 Accreditation UNFCCC (28/06/2021 to 27/06/2024) https://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0052
Approved GCC Scopes and GHG Sectoral scopes for Project Verification	GCC Scope <ul style="list-style-type: none"> • Green House Gas (GHG# - ACC) • Environmental No-harm (E+) • Social No-harm (S+) • Sustainable Development Goals (SDG+) GHG Sectoral Scope <ol style="list-style-type: none"> 1. Energy (renewable/non-renewable sources) (CDM TA 1.2)
Validity of GCC approval of Verifier	08/03/2023 to 31/05/2024
Title, completion date, and Version number of the PSF to which this report applies	Guaimbe Solar Power Projects by AES Version 05 Dated 05/12/2023
Title of the project activity	Guaimbe Solar Power Projects by AES
Project submission reference no. (as provided by GCC Program during GSC)	S00713

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.

<p>Eligible GCC Project Type² as per the Project Standard (Tick applicable project type)</p>	<p><input checked="" type="checkbox"/> Type A: <input type="checkbox"/> Type A1 <input checked="" type="checkbox"/> Type A2 <input checked="" type="checkbox"/> Sub-Type 1 <input type="checkbox"/> Sub-Type 2 <input type="checkbox"/> Sub-Type 3 <input type="checkbox"/> Sub-Type 4</p> <p><input type="checkbox"/> Type B – De-registered CDM Projects: <input type="checkbox"/> Type B1 <input type="checkbox"/> Type B2</p>																
<p>Date of completion of Local stakeholder consultation</p>	<p>11/04/2022</p>																
<p>Date of completion and period of Global stakeholder consultation. Have the GSC comments been verified. Provide web-link.</p>	<p>12/12/2022 – 26/12/2022 No comments were received. https://www.globalcarboncouncil.com/global-stakeholders-consultation-6/</p>																
<p>Name of Entity requesting verification service (can be Project Owners themselves or any Entity having authorization of Project Owners)</p>	<p>1. AES Brasil Operações S.A. 2. Kosher Climate India Private Limited</p>																
<p>Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)</p>	<p>Kosher Climate India Private Limited Address: Zee Plaza, No.1678, Ground and 1st Floor, 27th Main Rd, near Andhra Bank, Sector 2, HSR Layout, Bengaluru, Karnataka 560102 Email: narendra@kosherclimate.com</p>																
<p>Country where project is located</p>	<p>Brazil</p>																
<p>GPS coordinates of the Project site(s)</p>	<table border="1"> <thead> <tr> <th colspan="3">Address and geographic coordinates of the physical site of the project activity</th> </tr> <tr> <th>Project Activity</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>Project Activity 1</td> <td>21°53'23.44"S (-21.8898)</td> <td>49°52'5.81"W (-49.8683)</td> </tr> <tr> <td>Project Activity 2</td> <td>21°53'34.91"S (-21.8929)</td> <td>49°52'14.72"W (-49.8708)</td> </tr> <tr> <td>Project Activity 3</td> <td>21°53'39.97"S</td> <td>49°52'36.38"W</td> </tr> </tbody> </table>		Address and geographic coordinates of the physical site of the project activity			Project Activity	Latitude	Longitude	Project Activity 1	21°53'23.44"S (-21.8898)	49°52'5.81"W (-49.8683)	Project Activity 2	21°53'34.91"S (-21.8929)	49°52'14.72"W (-49.8708)	Project Activity 3	21°53'39.97"S	49°52'36.38"W
Address and geographic coordinates of the physical site of the project activity																	
Project Activity	Latitude	Longitude															
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Project Activity 2	21°53'34.91"S (-21.8929)	49°52'14.72"W (-49.8708)															
Project Activity 3	21°53'39.97"S	49°52'36.38"W															

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

		(-21.8944)	(-49.8767)
	Project Activity 4	21°53'55.50"S (-21.8987)	49°51'36.67"W (-49.8601)
	Project Activity 5	21°53'59.28"S (-21.8998)	49°51'56.52"W (-49.8657)
Applied methodologies (approved methodologies of GCC or CDM can be used)	ACM0002 “Grid-connected electricity generation from renewable sources”, version 21.0 from CDM.		
GHG Sectoral scopes linked to the applied methodologies	Scope 1 - energy industries (renewable / non-renewable sources)		
Project Verification Criteria: Mandatory requirements to be assessed	<input checked="" type="checkbox"/> ISO 14064-2, ISO 14064-3 <input checked="" type="checkbox"/> GCC Rules and Requirements <input checked="" type="checkbox"/> Applicable Approved Methodology <input checked="" type="checkbox"/> Applicable Legal requirements /rules of host country <input checked="" type="checkbox"/> National Sustainable Development Criteria (if any) <input checked="" type="checkbox"/> Eligibility of the Project Type <input checked="" type="checkbox"/> Start date of the Project activity <input checked="" type="checkbox"/> Meet applicability conditions in the applied methodology <input checked="" type="checkbox"/> Credible Baseline <input checked="" type="checkbox"/> Additionality <input checked="" type="checkbox"/> Emission Reduction calculations <input checked="" type="checkbox"/> Monitoring Plan <input checked="" type="checkbox"/> No GHG Double Counting <input checked="" type="checkbox"/> Local Stakeholder Consultation Process <input checked="" type="checkbox"/> Global Stakeholder Consultation Process <input checked="" type="checkbox"/> United Nations Sustainable Development Goals (Goal No 13- Climate Change)		
Project Verification Criteria: Optional requirements to be assessed	<input checked="" type="checkbox"/> Environmental Safeguards Standard and do-no-harm criteria. <input checked="" type="checkbox"/> Social Safeguards Standard do-no-harm criteria. <input checked="" type="checkbox"/> United Nations Sustainable Development Goals (in addition to SDG 13) <input checked="" type="checkbox"/> CORSIA requirements		
Project Verifier’s Confirmation: The <i>GCC Project Verifier</i> has verified the GCC project activity and therefore confirms the following:	<p>The GCC Project Verifier Carbon Check (India) Private Limited, certifies the following with respect to the GCC Project Activity “Guaimbe Solar Power Projects by AES”.</p> <input checked="" type="checkbox"/> The Project Owner has correctly described the Project Activity in the Project Submission Form (version 05, dated 05/12/2023) including the applicability of the approved methodology [CDM		

	<p><i>methodology, ACM0002 version 21]</i> 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.</p> <p><input checked="" type="checkbox"/> The Project Activity is likely to generate GHG emission reductions amounting to the estimated 105,512 tCO₂e per year, as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 and ISO 14064-3.</p> <p><input checked="" type="checkbox"/> The Project Activity is not likely to cause any net-harm to the environment and/or society and complies with the Environmental and Social Safeguards Standard, and is likely to achieve the following labels:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Environmental No-net-harm Label (E⁺) <input checked="" type="checkbox"/> Social No-net-harm Label (S⁺) <p><input checked="" type="checkbox"/> The Project Activity is likely to contribute to the achievement of United Nations Sustainable Development Goals (SDGs), complies with the Project Sustainability Standard, and contributes to achieving a total of [4] SDGs, with the following³ SDG certification label (SDG⁺):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bronze SDG Label <input type="checkbox"/> Silver SDG Label <input checked="" type="checkbox"/> Gold SDG Label <input type="checkbox"/> Platinum SDG Label <input type="checkbox"/> Diamond SDG Label <p><input checked="" type="checkbox"/> The Project Activity complies with all the applicable GCC rules⁴ and therefore recommends GCC Program to register the Project activity with above mentioned labels.</p> <p><input checked="" type="checkbox"/> 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.</p>
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³ 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.

⁴ "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>

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Project Verification Report, reference number and date of approval	Report No: CCIPL1680/GCC/VAL/GSPPA/20221207 Version 01 Date: 08/12/2023
Name of the authorised personnel of GCC Project Verifier and his/her signature with date	Priya Suman, Compliance Officer  Signature: Date: 08/12/2023

1. PROJECT VERIFICATION REPORT

Section A. Executive summary

>>

Kosher Climate India Private Limited has appointed the GCC Project Verifier, Carbon Check (India) Private Ltd., to perform an independent project verification of the Project “Guaimbe Solar Power Projects by AES” (hereafter referred to as “project activity”). This report summarizes the findings of verification of the project, performed based on 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. AES Brasil Operações S.A. have developed and owns the five solar power generation projects in the state of Guaimbê, Brazil with installed capacities of 30 MW each with total project capacity of 150 MW. The installation of five solar power projects have been completed, commissioned and connected to the national Grid of Brazil. The solar power project activity 2, the first commercially operated project, is commissioned on 06/01/2018.

Type of Project	Grid connected solar power project
Technology	Poly-Crystalline Photovoltaic technology
Connected Grid	Brazilian national grid
Expected Annual Electricity supplied to Grid	228,182 MWh
Expected Annual Emission reduction	105,512 tCO ₂ e
GCC labels applied	Environmental No-net-harm Label (E+), Social No-net-harm Label (S+), CORSIA requirements (C+) and United Nations Sustainable Development Goals (SDG+)
Environmental No-net-harm Label (E+) score	+7
Social No-net-harm Label (S+) score	+8
Number of United Nations Sustainable Development Goals (SDG+) opted	4

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 country 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).

Location

The Project Activity is located in the state of Guaimbê, Brazil.

Address and geographic coordinates of the physical site of the project activity			
Project Activity	Physical address	Latitude	Longitude
Guaimbê I Parque Solar S.A.	Fazenda Azaléia, Estrada Municipal Guaimbê-Lins, Bairro Ciências.	21°53'23.44"S (-21.8898)	49°52'5.81"W (-49.8683)
Guaimbê II Parque Solar S.A.	Fazenda Azaléia, Estrada Municipal Guaimbê-Lins, Bairro Ciências.	21°53'34.91"S (-21.8929)	49°52'14.72"W (-49.8708)
Guaimbê III Parque Solar S.A.	Fazenda Azaléia, Estrada Municipal Guaimbê-Lins, Bairro Ciências.	21°53'39.97"S (-21.8944)	49°52'36.38"W (-49.8767)

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Guaimbê IV Parque Solar S.A.	Fazenda Azaléia, Estrada Municipal Guaimbê-Lins, Bairro Ciências.	21°53'55.50"S (-21.8987)	49°51'36.67"W (-49.8601)
Guaimbê V Parque Solar S.A.	Fazenda Azaléia, Estrada Municipal Guaimbê-Lins, Bairro Ciências.	21°53'59.28"S (-21.8998)	49°51'56.52"W (-49.8657)

Scope of the GCC Project Verification

The project verification scope is defined as the independent and objective review of the project submission form (PSF /1/). The PSF /1/ is reviewed against the relevant criteria (see above) and decisions by the GCC, including the CDM approved baseline and monitoring methodology /B02/ and CDM Methodological tool 01 /B04/, tool 07/B05/, tool 24/B07/ and tool 27/B06/. The verification team has, based on the recommendations in the GCC Project Standard, Version 3.1 /B01-1/ and Project Verification Standard Version 3.1 /B01-2/ employed a rule-based approach, focusing on the identification of significant risks for project implementation and the generation of ACCs.

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

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

Verification Process

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

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

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

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

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

Development of the GCC Project verification Plan:

The Audit Team formally documented its GCC Project verification plan as well as determined the data-sampling plan. The GCC Project verification plan was developed based on discussion of key elements of

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

- Project level of assurance (which is reasonable as per ISO 14064-2 requirements),
- Materiality threshold and
- Standards of evaluation and reporting for the GCC Project verification.

Materiality threshold on the basis of reasonableness of the assumptions, limitations and methods used to forecast information shall be based upon the evaluation of sufficient and appropriate information. It also provides an outline of the GCC Project verification process and established project deliverables. This GCC Project verification plan also included a sampling plan, which is designed to evaluate all project elements in areas of high risk of inaccuracy or non-conformance.

The project verification consists of the following four phases:

I. A desk review of the project submission form.

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

II. Follow-up interviews with project stakeholders

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

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

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

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

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

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

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

Conclusion

The review of the PSF, supporting documentation and subsequent follow-up actions (onsite audit and interviews) have provided CCIPL with sufficient evidence to determine the fulfilment of stated criteria. CCIPL is of the opinion that the project activity "Guaimbe Solar Power Projects by AES" as described in the final PSF (Version 05, dated 05/12/2023) /1/ meets all relevant requirements of GCC and has correctly applied the CDM baseline and monitoring methodology 'ACM0002: Grid-connected electricity generation from renewable sources' /B02/.

“The 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 review of the PSF, supporting documentation and subsequent follow-up actions (onsite audit and interviews) have provided CCIPL with sufficient evidence to determine the fulfilment of the voluntary labels E+, S+ /B01-4/ and SDG+ with gold rating /B01-5/. Therefore, the project is being recommended to GCC Steering Committee for request for registration including the applied labels.

Section B. Project Verification team, technical reviewer and approver

>>

B.1. Project Verification team

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

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of GCC Project Verifier or outsourced entity)
1.	Technical reviewer	ER	Chakraborty	Shivaji	CC IPL
2.	Financial Expert	ER	Chakraborty	Shivaji	CC IPL
3.	Approver	IR	Suman	Priya	CC IPL

Section C. Means of Project Verification

C.1. Desk/document review

>>

The verification was performed primarily as a document review of the initial PSF version 02 dated 03/11/2022 and revised final PSF version 05 dated 05/12/2023/01/. The verification of information provided in the PSF was performed using the source of information provided by the project owner. Additionally, the cross checks were performed for information provided in the PSF using information from sources other than the verification sources, the verification team’s sectoral or local expertise and, if necessary, independent background investigations.

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

C.2. On-site inspection

Duration of on-site inspection: 07/02/2023				
No.	Activity performed on-site	Site location	Date	Team member
1.	Discussions and review of: <ul style="list-style-type: none"> • 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 • Assessment of E+, S+, SDG+ and CORSIA aspects as per the PSF and GCC requirements, Authorization on Double Counting from Host Country, the legal ownership of the project and GCC requirements. 	In the state of Guaimbê, Brazil	07/02/2023	Vijay Mathew João Luiz Pereira

C.3. Interviews

No.	Interview			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Carlos	Luis	AES	07/02/2023	Project Description, Baseline identification, Project Boundary, project financing, Additionality, Baseline Calculation, Regulatory requirements, project status, Monitoring procedures & Calibration of meters, Operation and Maintenance, Data recording, Emergency procedures, etc. Mode of Invitation for stakeholders meeting, Stakeholders meeting consultation, advantages and disadvantages of the project, employment generation, SDG status, Environment and social net harm, etc.	Vijay Mathew
2.	Alis	Juwano	AES			
3.	Bezdinguam	Alexander	AES			João Luiz Pereira
4.	Gomes	Natalio	Local stakeholder			
5.	S. Gomes	Luca	Local stakeholder			
6.	Joao	Luiz	Loal expert			
7.	Bellapu	Nagaraju	Kosher Climate India Pvt. Ltd.			
8.	Barbi	Jeorge	Kosher Climate India Pvt. Ltd.			

C.4. Sampling approach

>>

No sampling approach is used for this project verification process.

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		CAR 01	
General description of project activity	A ₁ , A ₂ , B ₁ , B ₂			
Application and selection of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂	CL 01		
- Application of methodologies and standardized baselines	A ₁ , A ₂ , B ₁ , B ₂			
- Deviation from methodology and/or methodological tool	A ₁ , A ₂ , B ₁ , B ₂			
- Clarification on applicability of methodology, tool and/or standardized baseline	A ₁ , A ₂ , B ₁ , B ₂			
- Project boundary, sources and GHGs	A ₁ , A ₂ , B ₁ , B ₂		CAR 02	
- Baseline scenario	A ₁ , A ₂ , B ₁ , B ₂	CL 02	CAR 03 CAR 04 CAR 05	
- Demonstration of additionality including the Legal Requirements test	A ₁ , A ₂ , B ₁ , B ₂		CAR 06	
- Estimation of emission reductions or net anthropogenic removals	A ₁ , A ₂ , B ₁ , B ₂		CAR 07 CAR 08	
- Monitoring plan	A ₁ , A ₂ , B ₁ , B ₂		CAR 09	

Start date, crediting period and duration	A ₁ , A ₂ , B ₁ , B ₂			
Environmental impacts	A ₁ , A ₂ , B ₁ , B ₂	CL 03		
Local stakeholder consultation	A ₁ , A ₂ , B ₁			
Approval & Authorization- Host Country Clearance	A ₁ , A ₂ , B ₁ , B ₂		CAR 10	
Project Owner- Identification and communication	A ₁ , A ₂ , B ₁ , B ₂			
Global stakeholder consultation	A ₁ , A ₂ , B ₁		CAR 01	
Others (please specify)	A ₁ , A ₂ , B ₁ , B ₂			
VOLUNTARY CERTIFICATION LABELS				
Environmental Safeguards (E ⁺)	A ₁ , A ₂ , B ₁	CL 04	CAR 11	
Social Safeguards (S ⁺)	A ₁ , A ₂ , B ₁	CL 04	CAR 11	
Sustainable development Goals (SDG ⁺)	A ₁ , A ₂ , B ₁	CL 05	CAR 11	
Authorization on Double Counting from Host Country (only for CORSIA)	A ₁ , A ₂ , B ₁		CAR 12	FAR 01
CORSIA Eligibility (C ⁺)			CAR 12	
Total		05	12	01

Section D. Project Verification findings

D.1. Identification and eligibility of project type

Means of Project Verification	Desk Review and Interviews																				
Findings	No findings were in this section. Please refer to Appendix 4 for further details.																				
Conclusion	<p>The GCC Project Verification team reviewed the PSF /1/ and confirms that the Project Owner determines the type of proposed GCC project activity as follows.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Parameters</th> <th style="width: 45%;">Project Position</th> <th style="width: 30%;">Verified Documents</th> </tr> </thead> <tbody> <tr> <td>Type of Project</td> <td>Type A2. These types of projects are prompt-start and had already started their operations as of 5 July 2020. Their start date of operations shall be after 1 January 2016 but before 5 July 2022. The start date of the project activity is 06/01/2018.</td> <td>PSF/1/, Commissioning certificates /4/</td> </tr> <tr> <td>Sub type</td> <td>Sub-Type 1. The project is an existing operational project, not submitted to any Program, which have started operations after 1 January 2016.</td> <td>PSF/1/, Commissioning certificates /4/</td> </tr> <tr> <td>Start date of project activity</td> <td>06/01/2018. (earliest date of commission)</td> <td>PSF/1/, Commissioning certificate /4/</td> </tr> <tr> <td>Start date of Crediting period</td> <td>From 06/01/2018 to 05/01/2028</td> <td>PSF/1/, Commissioning certificate /4/</td> </tr> <tr> <td>Global stakeholder consultation</td> <td>12/12/2022 – 26/12/2022</td> <td>Global Stakeholder consultation on GCC projects /12/</td> </tr> </tbody> </table> <p>The project activity complies with the requirement of §11 of the GCC Project Standard (version 03.1) /B01-1/ and GCC clarification no.01 /B01-6/ and § 25 (b) of GCC Project Verification Standard (version 03.1) /B01-2/.</p>			Parameters	Project Position	Verified Documents	Type of Project	Type A2. These types of projects are prompt-start and had already started their operations as of 5 July 2020. Their start date of operations shall be after 1 January 2016 but before 5 July 2022. The start date of the project activity is 06/01/2018.	PSF/1/, Commissioning certificates /4/	Sub type	Sub-Type 1. The project is an existing operational project, not submitted to any Program, which have started operations after 1 January 2016.	PSF/1/, Commissioning certificates /4/	Start date of project activity	06/01/2018. (earliest date of commission)	PSF/1/, Commissioning certificate /4/	Start date of Crediting period	From 06/01/2018 to 05/01/2028	PSF/1/, Commissioning certificate /4/	Global stakeholder consultation	12/12/2022 – 26/12/2022	Global Stakeholder consultation on GCC projects /12/
Parameters	Project Position	Verified Documents																			
Type of Project	Type A2. These types of projects are prompt-start and had already started their operations as of 5 July 2020. Their start date of operations shall be after 1 January 2016 but before 5 July 2022. The start date of the project activity is 06/01/2018.	PSF/1/, Commissioning certificates /4/																			
Sub type	Sub-Type 1. The project is an existing operational project, not submitted to any Program, which have started operations after 1 January 2016.	PSF/1/, Commissioning certificates /4/																			
Start date of project activity	06/01/2018. (earliest date of commission)	PSF/1/, Commissioning certificate /4/																			
Start date of Crediting period	From 06/01/2018 to 05/01/2028	PSF/1/, Commissioning certificate /4/																			
Global stakeholder consultation	12/12/2022 – 26/12/2022	Global Stakeholder consultation on GCC projects /12/																			

D.2. General description of project activity

Means of Project Verification	Desk review and Interviews		
Findings	CAR 01 was raised, and findings are closed. Please refer to Appendix 4 for further details.		
Conclusion	The description of the project activity contained in the PSF /1/ can be considered transparent, detailed and provides a clear overview of the project. Its content was confirmed by means of document review and interviews to verify the accuracy and completeness of the project description.		
	Parameters	Project Details	Verified documents
	Name of the Project	Guaimbe Solar Power Projects by AES	PSF/1/
	Project developer	1. AES Brasil Operações S.A. 2. Kosher Climate India Private Limited	PSF/1/, Commissioning certificate /4/ and O&M contract/08/.
	Capacity	150 MW	EPE/5/, PPA /9/ On-site visit /15/
	Purpose of the project	The purpose of the project activity is to generate electricity using solar power. the electricity generated is supplied to the Brazilian national grid.	Commissioning certificate /4/ EPE/5/, PPA /9/ On-site visit /15/
	Annual Generation	228,182 MWh/year	EPE/5/
	Emission reduction	1,055,117 tCO ₂ e (for the entire crediting period.)	ER/2/
	<p>Since solar energy is clean energy, project activity does not involve any fossil fuel firing and hence no greenhouse gases are involved in the project activity. The power generation from the project activity replaces the equal amount of power which otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources. Thus, project activity helps in an average annual emission reduction of 105,512 tCO₂e/year for a period of 10 years.</p> <p>The Project Activity by AES Brasil Operações S.A. through its SPVs of Guaimbê I Parque Solar S.A., Guaimbê II Parque Solar S.A., Guaimbê III Parque Solar S.A., Guaimbê IV Parque Solar S.A. and Guaimbê V Parque Solar S.A. is in the state of Sao Paulo, Brazil. The project involves the installation of 5 solar photovoltaic power generation plants in the five sites in the following coordinates.</p>		
	Address and geographic coordinates of the physical site of the project activity		
Project Activity	Capacity	Latitude	Longitude
Guaimbê I Parque Solar S.A.	30 MW	21°53'23.44"S (-21.8898)	49°52'5.81"W (-49.8683)

Guaimbê II Parque Solar S.A.	30 MW	21°53'34.91"S (-21.8929)	49°52'14.72"W (-49.8708)
Guaimbê III Parque Solar S.A.	30 MW	21°53'39.97"S (-21.8944)	49°52'36.38"W (-49.8767)
Guaimbê IV Parque Solar S.A.	30 MW	21°53'55.50"S (-21.8987)	49°51'36.67"W (-49.8601)
Guaimbê V Parque Solar S.A.	30 MW	21°53'59.28"S (-21.8998)	49°51'56.52"W (-49.8657)

The same was confirmed by cross checking with the project GPS co-ordinates using google earth software and during the onsite visit/15/. Further details such as district and province name of the project location are checked during the physical on-site verification /15/. The GCC project verification team has also cross checked the solar power project activity implementation status with the commissioning certificate /04/ of the project activity and found appropriate.

Parameters	Project Details	Verified documents
Type of Project	Greenfield solar power project	Commissioning certificate /4/ EPE document /5/, PPA /9/ EPC contract/7/, O&M contract /8/. Manufacture specification/10/
Technology	poly-crystalline photovoltaic technology	
Model & make	BYD 325P6K-36B-1500 BYD 320P6K-36B-1500	
Total Project Capacity	150 MW	
Lifetime of the project	25 Years	
Project start date	06/01/2018 (earliest commissioning date)	Commissioning certificate/4/

The installation of total five solar photovoltaic power generation plants of capacity 30 MW each, in the site have been completed, commissioned, and connected to the national Grid of Brazil through the erected distribution and transmission lines. The same is confirmed from the On-site visit/15/.

Within a year, the project activity's investment decisions were made. This shows that every activity involved in the project has a specific location and may meet the necessary criteria (baseline, additionality, monitoring, etc.). The project activity will be collective establishment of baseline, emission reductions calculations, additionality demonstration (including investment and common practice analysis), project monitoring plan and assessment of certification labels have been carried out which is found to be in line with GCC Clarification no 1.

The baseline scenario is that the electricity delivered to the grid by both the project activity would be generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid. The same complies with the applied methodology /B02/. The project is expected to generate and feed GHG free electricity to the connected national electricity grid of Brazil.

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 United Nations Sustainable Development Goals (SDG+).

	GCC labels applied	Environmental No-net-harm Label (E+), Social No-net-harm Label (S+), CORSIA requirements (C+) and United Nations Sustainable Development Goals (SDG+)
	Environmental No-net-harm Label (E+) score	+7
	Social No-net-harm Label (S+) score	+8
	Number of United Nations Sustainable Development Goals (SDG+) opted	4
<p>The project owner has described the GHG emission-reduction activity, including schematics, specifications and a description of how the project reduces GHG emissions. This is as per §36 of GCC Project Standard Version 03.1 and cross checked with PSF /1/.</p> <p>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/15/.</p> <p>In accordance with §44 of GCC Project Standard (version 03.1) /B01-1/, the verification team has assessed the geographical boundary of the Project Activity, within which it will be implemented, and confirms that geographical boundary of the Project Activity comprises the following boundaries.</p> <ul style="list-style-type: none"> • The solar power plant itself • The point of connection to Brazilian national grid for sale of electricity. <p>This was checked and confirmed by reviewing the PSF /1/, on-site visit interviews with representatives of project owner. /15/</p> <p>As per the PSF /1/, start date of the Project activity 06/01/2018 (Earliest start date of commercial operation of the Project) /4/. The same is in accordance with requirements of §38 of GCC Project Standard (version 03.1) /B01-1/.</p> <p>A crediting period is a fixed crediting period for the Project Activity, from 06/01/2018 to 05/01/2028, i.e., of 10 years. This is cross checked by PSF /1/ and conforms the requirement of §39 and §40 of GCC Project Standard Version 03.1 /B01-1/.</p> <p>GCC project verification team confirms that the description of the proposed Project Activity in the PSF is accurate and complete, and it provides an understanding of the Project Activity.</p>		

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

D.3.1 Application of methodology and standardized baselines

Means of Project Verification	Desk review and Interviews
Findings	CL 01 was raised, and finding is closed. Please refer to Appendix 4 for further details.
Conclusion	The CDM methodology applied is ACM0002, version 21.0 /B02/. It is applicable to greenfield renewable energy power generation using WTGs. The applicability of the methodology could be confirmed by means of interviews with the Project owner representatives, physical site visit and document review.

<p>The applied methodology is correctly quoted and is identical to the version available on the UNFCCC website. The applied version of the baseline and monitoring methodology /B02/ is valid at the time of submission of the PSF for global stakeholder consultation. All applicability criteria in the methodology are assessed in the below table:</p>												
<p>Applicability criteria of the methodology (ACM0002, Version 21.0)</p>	<p>Justification in the PSF by PO</p>	<p>GCC Project Verification body assessment</p>										
<p>This methodology is applicable to grid-connected renewable power generation project activities that: (a) install Greenfield power plant; (b) involve a capacity addition to (an) existing plant(s); (c) involve a retrofit of (an) existing plant(s)/unit(s); (d) involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) involve a replacement of (an) existing plant(s)/unit(s)</p>	<p>The project activity is a newly installed green field solar energy-based electricity generation project connected to the national grid. Therefore, it confirms to the said criteria</p>	<table border="1"> <thead> <tr> <th>Parameters</th> <th>Project Specification</th> <th>Verified document</th> </tr> </thead> <tbody> <tr> <td>Type of project activity</td> <td>Greenfield solar project</td> <td rowspan="3">contract signed by the technology provider /7/, power purchase agreement signed /9/, and the commissioning certificates /4/.</td> </tr> <tr> <td>Category</td> <td>Renewable energy</td> </tr> <tr> <td>Project capacity</td> <td>150 MW</td> </tr> </tbody> </table> <p>Hence the methodology is applicable to the proposed project activity.</p>	Parameters	Project Specification	Verified document	Type of project activity	Greenfield solar project	contract signed by the technology provider /7/, power purchase agreement signed /9/, and the commissioning certificates /4/.	Category	Renewable energy	Project capacity	150 MW
Parameters	Project Specification	Verified document										
Type of project activity	Greenfield solar project	contract signed by the technology provider /7/, power purchase agreement signed /9/, and the commissioning certificates /4/.										
Category	Renewable energy											
Project capacity	150 MW											
<p>In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that: (a) Integrate BESS with a Greenfield power plant. (b) Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic¹ or wind power plant(s)/unit(s);</p>	<p>The project activity is the installation of a new grid connected renewable solar power project and does not involve the integration of a Battery Energy Storage System (BESS). This condition is not applicable</p>	<p>The proposed activity is a grid connected solar power project and it does not involves the integration of a BESS. CCPIL project verification team confirmed the same during the onsite visit /15/. Hence this condition is not applicable to the proposed project activity.</p>										

	<p>(c) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s); (d) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s).</p>	<p>for the project activity.</p>	
	<p>The methodology is applicable under the following conditions: (a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit; (b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the</p>	<p>The proposed project activity is the installation of solar power plant/unit without BESS integration. Therefore, the said criteria are not applicable.</p>	<p>The proposed activity is the grid connected solar power project without the integration of a BESS. So, the criterion is not applicable for the subject project. CCPIIL project verification team confirmed the same during the onsite visit /15/.</p>

	<p>plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity;</p> <p>(c) In case of Greenfield project activities applicable under paragraph 5 (a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g. by referring to feasibility studies or investment decision documents);</p> <p>(d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies 2 may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period.</p>		
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	<p>During the time periods (e.g. week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.</p>		
	<p>In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or (b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m²; or (c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m²; or (d) The project activity is an integrated hydro power project involving multiple</p>	<p>The proposed project activity is the installation of a solar power plant/unit. Therefore, the said criteria are not applicable</p>	<p>The proposed project activity is not a hydro power project. The proposed activity is a Greenfield grid connected solar power project. CCPIL project verification team confirmed the same during the onsite visit /15/. Hence this condition is not applicable to the proposed project activity.</p>

	<p>reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m², all of the following conditions shall apply:</p> <p>(i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/m²;</p> <p>(ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity.</p> <p>(iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m² shall be:</p> <p>a. Lower than or equal to 15 MW; and</p> <p>b. Less than 10 per cent of the total installed capacity of integrated hydro power project.</p>		
	<p>In the case of integrated hydro power projects, project participants shall:</p> <p>(a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project;</p>	<p>The proposed project activity is the installation of a solar power plant/unit. Therefore, the said criterion is not applicable</p>	<p>The proposed project activity is not a hydro power project. The proposed activity is a Greenfield grid connected solar power project. CCPIL project verification team confirmed the same during the onsite visit /15/. Hence this condition is not applicable to the proposed project activity.</p>

	<p>or</p> <p>(b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of five years prior to the implementation of the CDM project activity.</p>									
	<p>The methodology is not applicable to:</p> <p>(a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site.</p>	<p>(a) The project activity is the installation of a new solar power plant/unit. Which does not involve switching of grid-connected</p>	<table border="1"> <thead> <tr> <th>Parameters</th> <th>Project Status</th> <th>Verified document</th> </tr> </thead> <tbody> <tr> <td>Any fossil fuel switching activity?</td> <td>Not applicable</td> <td rowspan="2">Confirmed from Contract signed by the solar Power project technology provider /7/, EPE document</td> </tr> <tr> <td>Biomass fired power plant involved in the project activity?</td> <td>Not applicable</td> </tr> </tbody> </table>	Parameters	Project Status	Verified document	Any fossil fuel switching activity?	Not applicable	Confirmed from Contract signed by the solar Power project technology provider /7/, EPE document	Biomass fired power plant involved in the project activity?
Parameters	Project Status	Verified document								
Any fossil fuel switching activity?	Not applicable	Confirmed from Contract signed by the solar Power project technology provider /7/, EPE document								
Biomass fired power plant involved in the project activity?	Not applicable									

	<p>(b) Biomass fired power plants/ units.</p>	<p>power plant. (b) The project activity is the installation of a new solar power plant and not Biomass fired power plant.</p> <p>Therefore, the said criteria are not applicable.</p>			<p>/5/, and the commissioning certificates /4/.</p>												
	<p>In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”</p>	<p>The project activity is the installation of a new solar power plant/unit that does not involve retrofits, rehabilitations, replacements, or capacity additions. Therefore, the said criterion is not applicable</p>	<table border="1"> <thead> <tr> <th>Parameters</th> <th>Project Status</th> <th>Verified document</th> </tr> </thead> <tbody> <tr> <td>Any Capacity addition?</td> <td>Not applicable</td> <td rowspan="4">Confirmed from Contract signed by the solar power project technology provider /7/, Descriptive Memorial document /5/, and the commissioning certificates /4/.</td> </tr> <tr> <td>Any Retrofits?</td> <td>Not applicable</td> </tr> <tr> <td>Any Rehabilitation?</td> <td>Not applicable</td> </tr> <tr> <td>Any replacement</td> <td>Not applicable</td> </tr> </tbody> </table>	Parameters	Project Status	Verified document	Any Capacity addition?	Not applicable	Confirmed from Contract signed by the solar power project technology provider /7/, Descriptive Memorial document /5/, and the commissioning certificates /4/.	Any Retrofits?	Not applicable	Any Rehabilitation?	Not applicable	Any replacement	Not applicable		
	Parameters	Project Status	Verified document														
Any Capacity addition?	Not applicable	Confirmed from Contract signed by the solar power project technology provider /7/, Descriptive Memorial document /5/, and the commissioning certificates /4/.															
Any Retrofits?	Not applicable																
Any Rehabilitation?	Not applicable																
Any replacement	Not applicable																
<p>Applicability criteria of the tool 7, Version 7.0</p>	<p>Justification in the PSF</p>	<p>GCC Project Verification assessment</p>															
<p>The tool lists the following applicability criteria: (a) This tool may be applied to estimate the OM, BM and/or CM</p>	<p>The project activity is a greenfield solar power generation plant that supplies electricity to the grid.</p>	<p>The project activity involved the construction and operation of 150 MW solar power plant in</p>															

	<p>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).</p>	<p>Hence, the “Tool 07: tool to calculate the emission factor for an electricity system version 7.0” is applicable and used to calculate the OM, BM and CM.</p>	<p>Brazil. The electricity thus generated is being sold to Brazilian national grid. In the absence of the project activity, the same amount of electricity (grid electricity) would be generated in the Brazilian national grid. Therefore, combined margin calculation applies to the Brazilian national grid.</p>
	<p>Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, the conditions specified in “Appendix 2: Procedures related to off-grid power generation” should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.</p>	<p>Since the project activity is grid connected solar power project this condition is applicable.</p> <p>Combined margin grid emission factor has been calculated as per the CO₂ emission factor data base published by the Brazilian national grid, which is approved by its Designated National Authority (DNA) “Ministry of Science and Technology “CO₂ emission factors for electricity generation in the National Interconnected System of Brazil - Base Year 2021⁵ has been used for emission factor.</p>	<p>Project owner has calculated the emission factor applying this applicability condition. This is accepted by the project verification team.</p>
	<p>(c) In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.</p>	<p>The project activity is in Brazil, a non-Annex I country. Therefore, this criterion is not applicable for the project activity</p>	<p>The electricity generated from the GCC project will be sold (100%) to Brazilian National grid. Since the project electricity system is in Brazil which is not an Annex I country (Date of ratification of Kyoto protocol by Brazil = 23/08/2002), the</p>

⁵ https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao_despacho.html

			project verification team has accepted the application of the tool to calculate the grid emission factor.
	(d) Under this tool, the value applied to the CO2 emission factor of biofuels is zero.	The project activity is a grid connected solar power project and therefore, this criterion is not applicable for the project activity	The project activity is a grid connected solar power project. There is no biofuels related activity.
	Applicability criteria of the tool 1, Version 7.0	Justification in the PSF	GCC Project Verification body assessment
	The use of the “Tool for the demonstration and assessment of additionality” is not mandatory for project owners when proposing new methodologies. Project owners may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	Since the applied methodology is not a new methodology, the project owner has applied this tool for the demonstration of additionality in compliance with the tool. Refer to section B.5 of the PSF for the detailed applicability of this tool and additionality assessment. Hence this tool is applicable	The PO has not proposed any new methodology. PO has applied tool 1 version 7 for the demonstration of additionality. The same is detailed in section B.5 of the PSF. Hence the tool is applicable.
	Once the additionally tool is included in an approved methodology, its application by project owners 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	Project owner has applied the Tool for the demonstration and assessment of additionality, version 7, which is in line with the methodology ACM0002 Grid-connected electricity generation from renewable sources, version 21.
	Applicability criteria of the tool 24, Version 3.1	Justification in the PSF	GCC Project Verification body assessment
	This methodological tool is applicable to project activities that apply the methodological tool “Tool for the demonstration and assessment of additionality”, the methodological tool “Combined	Project activity applies “Tool for the demonstration and assessment of additionality”. Hence this tool is applicable.	The applicability criterion is met as the project activity applies the methodological tool “Tool for the demonstration and

	<p>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.</p>		<p>assessment of additionality.”</p>
	<p>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.</p>	<p>Applied methodology ACM0002 version 21.0 doesn't specify any approach for the demonstration of common practice analysis. As per the methodology the additionality including common practice analysis has been demonstrated as per the Tool 01: Tool for the demonstration and assessment of additionality” version 7.0.0 and Tool 24: Common Practice Analysis version 3.1. Hence Justified.</p>	<p>The applied methodology is ACM0002, Version 21. It doesn't define approaches for the conduction of the common practice test that are different from those described in this methodological tool 24 Common Practice Analysis version 3.1.</p>
	<p>Applicability criteria of the tool 27, Version 11</p> <p>This methodological tool is applicable to project activities that apply the methodological tool “Tool for the demonstration and assessment of additionality”, the methodological tool “Combined tool to identify the baseline scenario and demonstrate additionality”, the guidelines “Non-binding best practice examples to demonstrate additionality for SSC project activities”, or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.</p>	<p>Justification in the PSF</p> <p>The Project activity applies “Tool for the demonstration and assessment of additionality”. Hence this tool is applicable.</p>	<p>GCC Project body assessment</p> <p>The applicability criterion is met as the project activity applies the methodological tool “Tool for the demonstration and assessment of additionality.”</p>
<p>In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from</p>	<p>Applied methodology ACM0002 version 21.0 doesn't specify any approach for the demonstration of</p>	<p>The applied methodology is ACM0002, Version 21. It doesn't contain requirements for the</p>	

	those described in this methodological tool, the requirements contained in the methodology shall prevail.	Investment analysis. As per the methodology the additionality including investment analysis has been demonstrated as per the Tool 01: Tool for the demonstration and assessment of additionality” version 7.0.0 and Tool 27: Investment Analysis version 12.0. Hence Justified.	investment analysis that are different from those described in this methodological tool 27 Investment Analysis version 11.0.
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D.3.2 Clarification on applicability of methodology, tool and/or standardized baseline

Means of Verification	Project	Desk Review, Interview
Findings		-
Conclusion		NA

D.3.3 Project boundary, sources and GHGs

Means of Verification	Project	Desk Review, Interview
Findings		No findings were in this section. Please refer to Appendix 4 for further details.
Conclusion		<p>According to the approved baseline and monitoring methodology “ACM0002” of “Grid connected renewable electricity generation”, version 21 /B02/, the project boundary is “the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to”. The physical boundary of the project activity identified by the project owner has been cross verified by site visit observation /15/, commissioning report for the power plant /4/ and power purchase agreement /9/.</p> <p>In section B.3 of the PSF /01/, project boundary has not been stated in figure 4 and table. Hence, the project boundary includes the solar power plant and the other power plants which connected to the related electricity system and the Brazilian national grid.</p>

D.3.4 Baseline scenario

Means of Verification	Project	Desk Review, Interview		
Findings		CAR 02 was raised, and finding is closed. Please refer to Appendix 4 for further details.		
Conclusion		<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Methodology requirement baseline</td> <td style="width: 50%;">GCC Project Verifier Opinion</td> </tr> </table>	Methodology requirement baseline	GCC Project Verifier Opinion
Methodology requirement baseline	GCC Project Verifier Opinion			

	<p>According to the approved baseline methodology ACM0002 /B-02/, “The baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.”</p>	<p>Project activity involves generation of electricity using solar power plant and selling it to Brazilian National grid as confirmed through the power purchase agreement /9/ and commissioning report /4/. In the absence of this project activity, same amount of electricity would have been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid. The same was cross checked and confirmed by latest available emission factor of the Brazilian national grid approved by its Designated National Authority (DNA) “Ministry of Science and Technology 2021/16/.</p>
<p>The relevant national and/or sectoral policies, regulations and circumstances are taken into account during the determination of baseline scenario.</p>	<p>Project Owner has considered all the applicable national and sectoral level policies in demonstrating the regulatory compliance of the project and baseline scenario.</p> <p>National/sectoral policies & regulations:</p> <ul style="list-style-type: none"> • Law nº 9.427,1996: The National Electric Energy Agency (ANEEL)/33/ • Law nº 9.648,1998: The National Electric System Operator (ONS)/34/ • Law nº 10.848,2004: Provides for the commercialization of electricity/35/ • Decree nº 6.353, 2008: Regulates the contracting of reserve energy through auctions/36/ <p>According to all the referred policies and regulations the baseline scenario is in compliance with all applicable legal and regulatory requirements. Also,</p> <ul style="list-style-type: none"> • There are no policies implemented in the host country since adaptation of the Kyoto Protocol (11/12/1997) which give comparative advantage to the renewable energy project activity, and there are no policies in the host country which mandates to implement a particular technology for the power generation purpose. <p>Hence there is no impact of the E+ and E- policies while demonstrating the baseline scenario of this project activity</p>	
<p>The baseline scenario has been adequately stated as: The baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations</p>		

	<p>described in “TOOL07: Tool to calculate the emission factor for an electricity system”.</p> <p>The following ex ante parameters and assumptions were used to estimate baseline emissions of the project activity.</p> <p>Combined margin CO₂ emission factor for the project electricity system in year y (EF_{grid,CM,y}) – The value has been calculated and published by Department of Climate Change - Ministry of Natural Resources and Environment, 2020. The value is calculated as per the TOOL 07: “Tool to calculate the emission factor for an electricity system” (Version 07.0). This was found in accordance with the methodology.</p> <p>CCPIL project verification team was able to verify all the documented evidence listed above during the GCC Project Verification process and can confirm that:</p> <ul style="list-style-type: none"> • All the assumptions and data used by the project owners are listed in the PSF, including their references and sources. • All documentation used /4/ /5/ /9/ /16/ /20/ are relevant for establishing the baseline scenario and correctly quoted and interpreted in the PSF. • Relevant national and/or sectoral policies and circumstances are considered and listed in the PSF /1/. <p>The approved baseline methodology ACM0002, version 21, has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed GCC project activity.</p>
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D.3.5 Demonstration of additionality

Means of Project Verification	Desk Review, Interview
Findings	CL 02, CAR 04, CAR 05 and CAR 03 were raised, and finding is closed. Please refer to Appendix 4 for further details.
Conclusion	<p>Project owner has described the Demonstration of additionality according to the GCC Project Standard Version 03.1. In section B.5 of the PSF, two components are applied for the demonstration of additionality.</p> <p>(i) Legal Requirement Test: The project activity is a Type A project and requires undergoing a Legal Requirement Test. The following laws are considered.</p> <ul style="list-style-type: none"> • Law no. 9.427,1996: The National Electric Energy Agency (ANEEL)/33/; • Law no. 9.648,1998: The National Electric System Operator (ONS)/34/; • Law no. 10.848,2004: Provides for the commercialization of electricity/35/; • Decree nº 6.353, 2008: Regulates the contracting of reserve energy through auctions/36/ • Law no. 9.074,1995: The Brazilian Electricity Act, does not influence the choice of fuel and technology used for power generation. /37/ <p>Hence, power generation using renewable energy is not a legal or mandatory requirement.</p> <p>However, the projects as in the project activity are not mandated by law or regulations and are entirely a voluntary action. The project complies with paragraph 46 of GCC Project Standard V3.1.</p>

	<p>(ii) Additionality Test: To cover this requirement from the GCC Project Standard 3.1, section 6.4.8, paragraph 45 and as per the applied methodology ACM0002 Version 21.0, additionality of the following project activity is demonstrated and assessed by the latest version of Tool 01: Tool for the demonstration and assessment of additionality” Version 7.0 /B-04/. The project owner has adopted the stepwise approach for demonstrating and assessing the additionality of the project activity as follows:</p> <p>Step 1: Identification of alternatives to the project activity consistent with current laws and regulations</p> <p>Sub-step 1a: Define alternatives to the project activity: Alternative 1: The proposed project activity undertaken without being registered as a GCC project activity. Alternative 2: No project activity is undertaken.</p> <p>The first alternative, which is the implementation of the project without carbon revenue, is not financially attractive as discussed in the investment analysis section below. The second alternative (Scenario 2) is the baseline scenario and implementation of the proposed project as a GCC project activity would be additional to this scenario. No project activity is undertaken and continuation of current scenario. In this scenario, due to increasing electricity demand new power plants should be constructed which includes mainly thermal power plants (baseline scenario). Implementation of the project is additional to the baseline scenario which is alternative 2 above and therefore reduces the emissions.</p> <p>Outcome of Step 1a Continuation of the current situation is not considered as a realistic alternative due to increasing electricity demand therefore new power plants should be constructed which includes mainly thermal power plants. Implementation of the project is additional to the baseline scenario which is an alternative 2 above and therefore reduces the emissions.</p> <p>Sub-step 1b: Consistency with mandatory laws and regulations:</p> <p>There are no laws or regulations in Brazil issued by The Brazilian federal government, that restrict implementation of solar power project. Further, no law or regulation issued by The Brazilian federal government, which mandates project owner to invest in solar power project.</p> <p>The National/sectoral policies & regulations are:</p> <ul style="list-style-type: none"> • Law nº 9.427,1996: The National Electric Energy Agency (ANEEL)/33/ • Law nº 9.648,1998: The National Electric System Operator (ONS)/34/ • Law nº 10.848,2004: The legal framework for the commercialization of electric energy. /35/ • Decree nº 6.353, 2008: Regulates the contracting of reserve energy through auctions/36/ <p>The resultant alternatives to the project as outlined in Step 1a are in compliance with the applicable laws and regulations.</p> <p>Outcome of Step 1b</p>
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	<p>Mandatory legislation and regulations for each alternative are considered in sub-step 1b. Based on the above analysis, the proposed project activity is not the only alternative amongst the project owners that is in compliance with mandatory regulations. Therefore, the proposed GCC project activity is considered as additional.</p> <p>Step 2: Investment analysis</p> <p>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 the following sections as per TOOL 27: “Investment analysis” (Version 12.0). No public funding or ODA are associated with the implementation of this GCC project activity.</p> <p>Sub-step 2a: Determine appropriate analysis method. The project owner has chosen to apply investment analysis to demonstrate the additionality of the project activity using the benchmark analysis method. Project owner has identified post tax equity IRR as the most suitable financial indicator. The project cannot apply simple cost analysis since the project brings revenue from the sale of electricity; also, investment comparison analysis cannot be applied as the alternative to the project activity is the electricity generated by new and existing grid connected power plants.</p> <p>Sub-step 2b: Option III. Apply benchmark analysis. Post tax equity IRR has been chosen as the financial indicator for the demonstration of financial unviability for the proposed project activity. Since, the PO is demonstrating financial unattractiveness of the project and the project cost involves both equity and debt, post-tax equity IRR is considered to be the appropriate option to indicate financial unattractiveness; and the same is accepted by the verification team.</p> <p>As per para 15 of Investment analysis/B06/, “The applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or WACC are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied by relevant national authorities are also appropriate. The GCC Project Verification body shall validate that the benchmarks used are applicable to the project activity and the type of IRR calculation presented.”</p> <p>Further para 16 of the tool 27 states that “In situations where an investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, project owners shall convert the real term values of benchmarks to nominal values by adding the inflation rate. The inflation rate shall be obtained from the inflation forecast of the central bank of the host country for the duration of the crediting period. If this information is not available, the target inflation rate of the central bank shall be used. If this information is also not available, then the average forecasted inflation rate for the host country published by the IMF (International Monetary Fund World Economic Outlook) or the World Bank for the next five years after the start of the project activity shall be used”. The equity IRR calculated is nominal equity IRR. Accordingly, Project owner converted the default benchmark which is in real terms into nominal terms by using the following equation.</p> <p>Nominal Benchmark = $\{(1+\text{Real Benchmark}) \times (1+\text{Inflation rate})\}^{-1}$</p> <p>The GCC Project Verification team referred to the book ‘Corporate Finance: Theory and Practice’, 2nd edition, by ‘Aswath Damodaran’ /17/. In page 320 of the book, the same equation is mentioned for converting real into nominal values. Hence the GCC Project Verification team considers the above equation as appropriate for converting real benchmark into nominal benchmark.</p>
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Parameters	Project's Specifics	GCC Project Verifier opinion
Investment decision date	13/03/2017	EPE document /07/
Type of Benchmark	Post tax equity IRR/02/	As per the para 15 of Tool 27: Investment analysis, version 12.0, 'Required/expected returns on equity are appropriate benchmarks for an equity IRR' /B06/
Default Benchmark value	10.91 % is default for Brazil in Appendix Tool 27: Investment analysis.	Project owner has chosen the default for Brazil as per Appendix of EB 116, Annex 2 to demonstrate additionality, which is the latest available during the time global stakeholder consultation. Hence, accepted the same.
Inflation rate	2.03 % sourced from Banco Central Do Brazil /21/	The value has sourced from the Banco Central Do Brazil./21/ The inflation rate is obtained from the inflation forecast of the central bank of the host country. Hence the same found appropriate and in line with tool 27.
Benchmark value	15.37%	Project owner has chosen the default for Brazil as per Appendix of EB 116, Annex 2 to demonstrate additionality, which is the latest available during the time global stakeholder consultation. Project owner has sourced the inflation forecast for Brazil from I Banco Central Do Brazil available at the time of investment decision /21/. GCC project verification team verified all the above said details and documents; and confirmed that the benchmark identified to compare the financial attractiveness of the project activity is appropriate.

The assessment team has verified all the above said documents and confirmed that the benchmark identified to compare the financial attractiveness of the project activity is appropriate.

Chronology:

Sl. no	Guaimbe I	Date of Activity
1.	Technical Qualification approved by EPE	13/10/2014
2.	Date of auction	31/10/2014
3.	Date of Auction result	16/01/2015
4.	Signing of Power Purchase Agreement	20/07/2015
5.	Signing of EPC Contract (Investment decision date)	13/03/2017
6.	Project Commissioning	13/03/2018

Sl. no	Guaimbe II	Date of Activity
1.	Technical Qualification approved by EPE	13/10/2014

2.	Date of auction	31/10/2014
3.	Date of Auction result	16/01/2015
4.	Signing of Power Purchase Agreement	20/07/2015
5.	Signing of EPC Contract (Investment decision date)	13/03/2017
6.	Project Commissioning	06/01/2018

Sl. no	Guaimbe III	Date of Activity
1.	Technical Qualification approved by EPE	13/10/2014
2.	Date of auction	31/10/2014
3.	Date of Auction result	16/01/2015
4.	Signing of Power Purchase Agreement	20/07/2015
5.	Signing of EPC Contract (Investment decision date)	13/03/2017
6.	Project Commissioning	04/10/2018

Sl. no	Guaimbe IV	Date of Activity
1.	Technical Qualification approved by EPE	13/10/2014
2.	Date of auction	31/10/2014
3.	Date of Auction result	16/01/2015
4.	Signing of Power Purchase Agreement	20/07/2015
5.	Signing of EPC Contract (Investment decision date)	13/03/2017
6.	Project Commissioning	26/04/2018

Sl. no	Guaimbe V	Date of Activity
1.	Technical Qualification approved by EPE	13/10/2014
2.	Date of auction	31/10/2014
3.	Date of Auction result	16/01/2015
4.	Signing of Power Purchase Agreement	20/07/2015
5.	Signing of EPC Contract (Investment decision date)	13/03/2017
6.	Project Commissioning	13/04/2018

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

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

GCC project activity has a less favorable Equity IRR than 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. These parameters have been sourced from the EPE document and PPA. Input values used in the investment analysis are valid and applicable at the time of the investment decision (signing of the EPC contract), and the Net generation has been sourced from the Technical Qualification Document (for approval to participate in the auction) submitted to EPE (Empresa de Pesquisa Energética) which is a government authorized entity for conducting auctions. Hence, this is in line with the guidelines of EB48, Annex 23.

Parameter	Unit	Value		Assessment and cross checking
Capacity of the project	MW	Guaimbe I	30.00	Verified against EPE documents /05/, and cross verified against the EPC contract/07/. Five solar power plants are installed at sites, commissioned and connected to the national Grid of Brazil. Further, the same has been confirmed during onsite visit. /15/
			30.00	
		Guaimbe III	30.00	
		Guaimbe IV	30.00	
		Guaimbe V	30.00	
Plant Load Factor	%	Guaimbe I	18.49 %	Verified against annual net electricity generation mentioned in the EPE documents /05/. The same is cross verified from the actual electricity generation reports/18/. The PO has performed a sensitivity analysis wherein PLF has also subjected to sensitivity. The IRR breaches the benchmark value at a PLF variation of more than 74.90%. Hence, CCPIL confirms that the PLF considered for the project activity is appropriate; hence acceptable.
		Guaimbe II	18.49 %	
		Guaimbe III	18.49 %	
		Guaimbe IV	18.49 %	
		Guaimbe V	18.49 %	
Annual Net generation	MWh	Guaimbe I	48,587 .1	Verified against annual net electricity generation mentioned in the EPE documents /05/. The values are cross verified from the actual electricity generation reports/18/. The PO has performed a sensitivity analysis wherein net generation has also been subjected to sensitivity. The IRR breaches the benchmark value at a variation of Net Annual Generation more than 74%. Hence, CCPIL confirms that the PLF considered for the project activity is appropriate; hence acceptable.
		Guaimbe II	48,587 .1	
		Guaimbe III	48,587 .1	
		Guaimbe IV	48,587 .1	
		Guaimbe V	48,587 .1	
Tariff	BRL/ MWh	Guaimbe I	215.95	The project verification team has crosschecked with the power purchase agreement signed with COMPANHIA DE ELETRICIDADE DO

			Guaimbe II	215.95	AMAPA CEA – CCEE. /9/. The values are cross verified from the actual sales revenue reports/18/. Tariff Escalation is 4.02%. The PO has performed a sensitivity analysis wherein tariff has also been subjected to sensitivity. A variation more than 74% increase in the tariff is required to breach the benchmark value of IRR. Hence, CCPIL confirms that the tariff considered for the project activity is appropriate; hence acceptable.
			Guaimbe III	220.8	
			Guaimbe IV	220.8	
			Guaimbe V	220.8	
	Operation and Maintenance Cost	BRL Million/Annum	Guaimbe I	2.11	Project owner has taken O&M cost per MW per annum as 70180 BRL/MW/Annum with reference to the EPE documents /05/. The total O&M cost per annum is 2.11 BRL Million. Since the project is already commissioned the GCC project verification team has cross checked the actual O&M cost from the O&M contract/8 /. The parameter is also subjected to sensitivity analysis and the same does not cross the benchmark even at -100%. Hence the GCC project verification body found it acceptable.
			Guaimbe II	2.11	
			Guaimbe III	2.11	
			Guaimbe IV	2.11	
			Guaimbe V	2.11	
Escalation in O & M	%	4.0		https://www.bcb.gov.br/en/monetarypolicy/historicalpath/08/	
VAT on O&M	%	17.00		https://assets.kpmg.com/content/dam/kpmg/es/pdf/2017/08/Brasil%202017.pdf/08/	
Land lease Cost	BRL /Annum	50,000.00		Verified against annual net electricity generation mentioned in the EPE documents /05/. The PO has taken the value of Land Lease Cost per annum as 50,000.00 BRL. And the land escalation is 5% from the land contract. CCPIL confirms that the land lease cost considered for the project activity is appropriate; hence acceptable.	
Project cost	BRL Million	Guaimbe I	127.82	Verified against EPE documents /05/. The same is cross verified against the EPC Contract of 2017 /07/. Project verification team has subjected project cost in the sensitivity analysis and found that IRR will not cross the benchmark even if the project cost	
		Guaimbe II	127.82		

			Guaimbe III	127.82	reduced to -48.65%. The same is out of scope as the project is already commissioned. Hence the project cost considered by PO is found conservative and the same is acceptable.	
			Guaimbe IV	127.53		
			Guaimbe V	127.21		
	Debt	%	70		The Project Owner has assumed the debt equity ratio (75:25) at the time of investment decision. The project verification team has checked the impact of the IRR with the project is funded with various ratios viz. 50:50, 70:30, 95:05 etc. and in all scenarios the IRR is not crossing the benchmark value. Hence, the debt equity ratio considered in the investment analysis is acceptable to the GCC Project Verification team.	
	Equity	%	30			
	Interest Rate	%	11.00		Verified against EPE documents /05/. The project verification team has cross verified the same with data provided by the central bank of Brazil /24/. As per the report the interest rate provided by Central bank of Brazil is 12.25%. Hence, the value used for the financial analysis is acceptable to the project verification team.	
	TUST Charges	BRL/ kW/ month	5.185		In Brazil, electricity producers using renewable sources receive a 50% discount in the Tariff for the Use of the Transmission System - TUST fee (from the Portuguese Tarifa de Uso do Sistema de Transmissão). This discount aims at boosting investments in renewable energy projects and shall be considered as a Type Policy as defined by Annex 3, EB 22. The TUST cost has been taken into account based on the previous years to determine the conservative cost of TUST within the state with comparable project activity/23/.	
			BRL/ MW/ annum	Guaimbe I		0.0000 019
				Guaimbe II		0.0000 019
				Guaimbe III		0.0000 019
Guaimbe IV				0.0000 019		
Guaimbe V	0.0000 019					
TFSEE (Electric	%	0.4		According to Article 29, the inspection fee must be established at 0.4% of the		

	Energy Services Inspection Fee)			annual economic gain received by the concessionaire, holder of the permit, or other designated person/25/. PO has mentioned the inspection fee in the Quarterly financial report of 31 December 2021 of the solar power project activities/14/.
	Debt Repayment tenure	Year	15	The PO has taken the values from Internal Assumption. However, the GCC verification team has cross checked with the loan sanction agreement. And the values found to be applicable.
	Moratorium	Year	1	
	Depreciation Rate	%	10	Project owner has sourced the value as mentioned from the 2017 Worldwide corporate tax guide/29/ and found to be correct, which was applicable at the time of investment decision.
	Income tax rate (IRPJ)	%	34.00	The Income tax rate is cross checked from the prevailing tax /26/ rates and found to be correct, which was applicable at the time of investment decision. The GCC verification body has cross checked the same from the 2017 Worldwide corporate tax guide/29/ which is in the investment decision date. As per the Brazilian accounting practice, the value is conservative and found to be appropriate.
	Annual Degradation	%	0.80	https://documents.unboundsolar.com/media/astronergy-chsm6612p-335-silver-poly-solar-panel-specs-20181126180741.1977435.pdf
	Salvage Value	BRL Million	Guaimbe I	12.78
Guaimbe II			12.78	
Guaimbe III			12.78	
Guaimbe IV			12.75	
Guaimbe V			12.72	

Applicable Taxes (% of Revenue)			
Surtax	10%	%	https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/tax/guides/ey-worldwide-corporate-tax-guide-2014.pdf
PIS	0.65%	%	
COFINS	3.00%	%	
Corporate Income tax	15%	%	
Social Contribution CSLL (% Of Taxable Cashflow)	9%	%	

The equity IRR calculations were provided in a spreadsheet /03/. The calculation was verified and found to be correct by GCC project verification team; as well as the assumptions used in the calculation were deemed to be correct. The post-tax equity IRR without GCC carbon credit is 2.03 %, which confirms that the proposed project activity in absence of the GCC carbon credit benefits and compared to the benchmark return on equity 15.37% is not financially attractive.

Sub-step 2d: Sensitivity analysis

A sensitivity analysis has been carried out for parameters contributing more than 20% revenues and costs, to demonstrate the robustness of the financial analysis. The parameters for which sensitivity analysis was done are annual power generation (PLF), change in tariff, project costs, operational and maintenance cost, Sensitivity analysis was conducted for ±10% variation. Reasonable variations for these parameters were checked by calculating the variation necessary to reach the benchmark and then discussing the likelihood for that to happen.

Variation %	-10%	Normal	10%	Variation required to reach benchmark	Value required to reach benchmark (Guai mbe I)	Value required to reach benchmark (Guai mbe II)	Value required to reach benchmark (Guai mbe III)	Value required to reach benchmark (Guai mbe IV)	Value required to reach benchmark (Guai mbe V)
Tariff	0.28 %	2.03 %	3.78 %	74.90 %	377.00	377.00	386	386	386
Net Annual Generation	0.28 %	2.03 %	3.78 %	74.90 %	84,979	84979	84,979	84,979	84,979
Project Cost	3.47 %	2.03 %	0.85 %	-48.65 %	65.63	65.63	65.63	65.49	65.32

	O&M Cost	2.47 %	2.03 %	1.59 %	NA	NA	NA	NA	NA	NA
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The results of sensitivity analysis /03/ show that even with a variation of ±10% in tariff, Net power generation, project cost, and O&M cost, equity IRR is significantly lower than the benchmark. And it is evident from the results given above; the project remains additional even under the most favorable conditions. Major input values have been cross checked with the actual values and hence each input value breaching the benchmark is unlikely.

It is verified that the benchmark is reached if:

1. The tariff rate is increased above 74.90%
The Tariff rates of electricity used for investment analysis is sourced from EPE documents /05/ applicable at the time of investment decision. Furthermore, the projects will breach the benchmark value at a tariff variation of 74.90%. As per the PPA the tariff is fixed and there are not any chances for 20 years. Hence, it's highly unlikely that tariff rate will increase above breaching value.
2. Annual Net Generation is increased above 74.90%.
Annual Net Generation considered by the project owner sourced from EPE Document prepared by the third party, which is approved by the Federal Government of Brazil /05/ is appropriate. The project activity will cross the benchmark only with an increase in Annual Net Generation of 74.90%. The GCC project verification team has cross checked the actual generation for the period of one year and found that the annual Net Generation is higher than the estimated value. A further increase is not found to be a realistic scenario.
3. Project Cost is reduced by -48.65%
The project costs considered for investment analysis are sourced from EPE documents /05/. A variation of -48.65% is required for IRR to breach benchmark, which is not possible as the project is already commissioned, and the actual cost is higher than the estimated value. Hence, it's highly unlikely that project cost will decrease below breaching value.
4. Reduction in O&M costs
The O&M agreement is already in place by the project owner. GCC project verification team has cross check the O&M contract. The GCC project verification team has checked the IRR of the project activity with the actual O&M cost and found that, with the actual O&M cost the project activity is not crossing the benchmark.

Hence, it has been proven that in actual scenario, the IRR is not crossing the benchmark value.

Step 3: Barrier Analysis
The additionality of the project has been demonstrated by applying the investment analysis, thus no barrier analysis is carried out.

Step 4: Common Practice Analysis
The section below provides the analysis as per step 4 of the "Tool for the demonstration and assessment of additionality", version 7.0.0 and according to "Common Practice" Tool version 03.1.

	<p>Step 1: Calculate applicable capacity or output range as +/- 50% of the total design capacity or output of the proposed project activity: The capacity of the project activity is 150 MW. Therefore, capacity of solar plants which will be included in the analysis will be between 75 MW to 225 MW.</p> <p>Step 2: Identify similar projects (both 8CDM and non-CDM) which fulfil all the following conditions:</p> <p>a) The projects are located in the applicable geographical area.</p> <p style="padding-left: 40px;">The project is in Brazil and the applicable geographical area is Brazil. All the projects in the host country Brazil have been chosen for analysis.</p> <p>b) The projects apply the same measure as the proposed project activity.</p> <p style="padding-left: 40px;">Renewable Energy through solar Projects</p> <p>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.</p> <p style="padding-left: 40px;">solar power projects</p> <p>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.</p> <p style="padding-left: 40px;">The project activity produces electricity; therefore, all solar power plants that produce electricity are candidates for similar projects.</p> <p>e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1.</p> <p style="padding-left: 40px;">Range in between 75 MW to 225 MW</p> <p>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 start date i.e., the EPC contract signing date of the project activity is on 13/03/2017. As Kyoto Protocol was ratified by Brazil on 23/08/2002, therefore projects which had started commercial operation between 23/08/2002 to 13/03/2017 have been considered.</p> <p>There is no project activity that has a capacity range between 75 MW to 225 MW within the commercial operation between 23/08/2002 to 13/03/2017.</p> <p>Numbers of Similar projects identified which fulfill above-mentioned conditions are, N_{solar} = 0</p>
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	<p>Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing GCC Project Verification. Note their number, N_{all}.</p> <p>After excluding the registered, submitted for registration and under validation CDM/VCS/GS/GCC projects, the total number of projects, $N_{all} = 0$</p> <p>Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number N_{diff}.</p> <p>Projects with technologies different to technology applied in the proposed project activity were identified as $N_{diff} = 0$.</p> <p>Step 5: calculate factor $F = 1 - (N_{diff}/N_{all})$ representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.</p> <p>The factor F was found to be in line with Tool 24 $F = 1 - (N_{diff}/N_{all}) = 1 - (0/0) = 1$ $N_{all} - N_{diff} = 0 - 0 = 0$</p> <p>The project activity would be common practice, only both of the following conditions apply.</p> <p>$F > 0.2$ and $N_{all} - N_{diff} > 3$</p> <p>For the concerned project, $F = 1$ and $N_{all} - N_{diff} = 0$ (Which is less than 3), therefore, the proposed project is not a common practice within the applicable geographical area. Hence, the proposed project is additional.</p>
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D.3.6 Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	Desk Review, Interview
Findings	CAR 06 was raised and finding is closed. Please refer to Appendix 4 for further details.
Conclusion	<p>Baseline Emission According to ACM0002 methodology, emission reductions related to project activities is estimated as follows:</p> $BE_y = EG_{facility,y} \times EF_{grid,CM,y}$ <p>Where: BE_y = Baseline emissions in year y (t CO₂/yr) $EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr) $EF_{grid,CM,y}$ = Combined margin CO₂ 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 CO₂ e/MWh).</p>

As per para 49 of ACM0002, version 21.0, when the project activity is installation of Greenfield power plant, then:

$$EG_{PJ,y} = EG_{facility,y}$$

Where,

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/yr)

Since the electricity generation values differ between years as explained in A.1, annual average electricity generation over the crediting period has been calculated and given in ER Sheet /02/. According to ER Sheet, $EG_{facility,y}$ is.

Project	$EG_{facility,y}$ (MWh)
Project Activity 1	48,587.1
Project Activity 2	48,587.1
Project Activity 3	48,587.1
Project Activity 4	48,587.1
Project Activity 5	48,587.1
Total	242,935

Also, according to “Latest available emission factor of the Brazilian national grid approved by its Designated National Authority (DNA) “Ministry of Science and Technology” CO₂ emission factors for electricity generation in the National Interconnected System of Brazil - Base Year 2021 is 0.4624 tCO₂/MWh.

Therefore, annual baseline emission is calculated as below:

$$\begin{aligned}
 BE_y &= EG_{PJ,y} \times EF_{grid,CM,y} \\
 &= 228,182 \text{ MWh} \times 0.4624 \text{ tCO}_2/\text{MWh} \\
 &= 105,512 \text{ tCO}_2
 \end{aligned}$$

Project Emissions (PE_y)

As the project activity is a solar -based power generation, the project emissions are not applicable to the project activity as per the methodology ACM0002/B02/.

Hence, PE_y = 0

Leakage (LE_y)

As per ACM0002 /B02/, no leakage emissions are considered.

Therefore, LE_y = 0.

Emission Reductions

Based on the data above, the emission reduction value for the project activity is:

$$ER_y = BE_y - PE_y - LE_y$$

	ER_y = BE_y = 105,512 tCO₂/yr
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D.3.7 Monitoring plan

Means of Project Verification	Desk Review, Interview																		
Findings	CAR 08 and CAR 07 were raised and finding is closed. Please refer to Appendix 4 for further details.																		
Conclusion	<p>The approved baseline and monitoring methodology “ACM0002” version 21 /B02/ has been applied. The monitoring plan is in accordance with the monitoring methodology; the monitoring plan will give opportunity for real measurement of achieved emission reductions. GCC project verification team has checked all the parameters presented in the monitoring plan against the requirements of the methodology; no deviations relevant to the project activity have been found in the plan.</p> <p>GCC project verification team confirms that the monitoring arrangements described in the monitoring plan are feasible within the project design, and the means of implementation of the monitoring plan are sufficient to ensure the emission reductions achieved by/resulting from the proposed GCC project activity can be reported ex post and verified.</p> <p>Parameters available at the time of project verification (ex-ante) (Mention under section B.6.2 of the PSF) are:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Parameter</th> <th style="width: 15%;">Value</th> <th style="width: 15%;">Unit</th> <th style="width: 45%;">Assessment</th> </tr> </thead> <tbody> <tr> <td>Combine Margin CO2 emission factor in year y of Brazil Grid (EF_{grid,CM,y})</td> <td style="text-align: center;">0.4624</td> <td style="text-align: center;">tCO₂/MWh</td> <td>The value is calculated considering 75% operating margin and 25% build margin as per the “tool to calculate the emission factor for an electricity system” Version 07.0.0 /B05/.</td> </tr> </tbody> </table> <p>Parameters that will be monitored (ex-post) (Mention under section B.7.1 of the PSF) are:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Parameter</th> <th style="width: 15%;">Value</th> <th style="width: 15%;">Unit</th> <th style="width: 45%;">Assessment</th> </tr> </thead> <tbody> <tr> <td>EG_{facility,y} (Net Electricity generated and delivered to the grid by the power plant in year y)</td> <td style="text-align: center;">242,935</td> <td style="text-align: center;">MWh</td> <td> <p>The estimated net electricity generated is given, however, the value for the parameter will be verified through review of monthly meter reading records/18/.</p> <p>There are two meters for the project activity of 0.2s accuracy class (main meter and check meter)/15/. Both are bidirectional meters, installed at the main substations to measure the net exported electricity from the plant. The meter details are provided below</p> </td> </tr> </tbody> </table>			Parameter	Value	Unit	Assessment	Combine Margin CO2 emission factor in year y of Brazil Grid (EF _{grid,CM,y})	0.4624	tCO ₂ /MWh	The value is calculated considering 75% operating margin and 25% build margin as per the “tool to calculate the emission factor for an electricity system” Version 07.0.0 /B05/.	Parameter	Value	Unit	Assessment	EG _{facility,y} (Net Electricity generated and delivered to the grid by the power plant in year y)	242,935	MWh	<p>The estimated net electricity generated is given, however, the value for the parameter will be verified through review of monthly meter reading records/18/.</p> <p>There are two meters for the project activity of 0.2s accuracy class (main meter and check meter)/15/. Both are bidirectional meters, installed at the main substations to measure the net exported electricity from the plant. The meter details are provided below</p>
Parameter	Value	Unit	Assessment																
Combine Margin CO2 emission factor in year y of Brazil Grid (EF _{grid,CM,y})	0.4624	tCO ₂ /MWh	The value is calculated considering 75% operating margin and 25% build margin as per the “tool to calculate the emission factor for an electricity system” Version 07.0.0 /B05/.																
Parameter	Value	Unit	Assessment																
EG _{facility,y} (Net Electricity generated and delivered to the grid by the power plant in year y)	242,935	MWh	<p>The estimated net electricity generated is given, however, the value for the parameter will be verified through review of monthly meter reading records/18/.</p> <p>There are two meters for the project activity of 0.2s accuracy class (main meter and check meter)/15/. Both are bidirectional meters, installed at the main substations to measure the net exported electricity from the plant. The meter details are provided below</p>																

	Location of meter		Getulina (Main substation) and Guaimbe (pooling substation)	
	Replacing fossil fuels with renewable sources of energy	228,182	MWh/year	The project activity will result in emission reduction by replacing the fossil fuels with renewable sources of energy. The same will be monitored and confirmed through the monthly generation records/18/.
	CO ₂ Emissions	105,512	tCO ₂ e/year	The project activity will result in emission reduction. The same will be contributing toward the sustainable development goal SDG 13. The parameters will be monitored on a monthly basis. The same will be reported through ER calculation sheet. /02/
	Solid Waste Pollution from Hazardous Wastes	At actual record	Count of the wastes (tons/year)	The project activity may generate Hazardous waste during the operation of the project activity. Hazardous waste will be handled according to the national regulations: Law 12.305/2010 (which amends Law 9.605/1998)/19/; the same will be treated and disposed as per the law. Hazardous waste quantity generated and disposed of will be continuously monitored and recorded in the EMP/13/. The same will be issued at the time of verification. The data is provided in the Environmental management plan of Guaimbe Solar Power Projects by AESin Brazil/13/.
	Solid Waste Pollution from E-Wastes	At actual record	Count of the wastes (tons/year)	The project activity may generate E-waste during the operation of the project activity. E-wastes will be handled according to the national regulations: Law 12.305/2010 (which amends Law 9.605/1998)/19/; the same will be treated and disposed as per the law. E wastes quantity generated and disposed of will be continuously monitored and recorded in the Plant logbooks or records annually and the details will be recorded in EMP /13/. The records will be issued at the time of verification. The same is confirmed from the agreement between licensed third-party vendor /20/.
	Solid Waste Pollution from end-of-life products/equip	At actual record	Count of the wastes (tons/year)	The project activity may generate end-of-life products/equipment during the operation of the project activity. The same will be handled

	ment			according to the national regulations: Law 12.305/2010 (which amends Law 9.605/1998)/19/; the same will be treated and disposed as per the law. Hazardous waste quantity generated and disposed of will be continuously monitored and recorded in the Plant logbooks or records annually and the details will be recorded in EMP /13/. The same will be issued at the time of verification.
	Solid Waste Pollution from batteries	At actual record	(tones/year)	The project activity may generate battery waste at the end of its lifetime during the operation of the project activity. The same will be handled according to the national regulations: Law No. 12305. Brazilian National Policy on Solid Waste (batteries)/19/; the same will be disposed or transferred to recycler as per the law. Battery waste quantity generated and disposed will be continuously monitored and recorded in the Plant logbooks or records annually and the details will be recorded in EMP/13/. The same will be issued at the time of verification.
	Long-term jobs (> 1 year) created	At actual record	Numbers	Project activity will generate long term local employment. This will be an indicator against sustainable development goal SDG 8. The parameter will be verified through employment records/38/.
	Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities	At actual record	Numbers	Project activity will not have any discrimination practices. The same will be monitored and verified through HR policy/38/.
	Water Consumption from ground and other sources	At actual record	Numbers	The project activity needs water for cleaning of the solar modules with minimal requirement for domestic usage. Project is not located in the residential or rural area hence there is no impact on the existing usage pattern. Parameter will be monitored, and data will be recorded in the plant logbooks.
	Specialized training / education to local personnel	At actual record	Numbers	The project activity ensures that adequate training has been provided to the working personnel. The same will be monitored and verified through

				employment training records at the time of verification /38/.
	Reducing / increasing accidents/incidents/fatality	At actual record	Numbers	During the project activity, there is monitoring of occupational health hazards occurred during the project operation and recording the no. of related EHS trainings conducted to mitigate the impact of possible occupational health hazards at the project site. The same will be handled according to the national regulations: Law No. 6,514/1977, known as the Consolidation of Labor Laws (Consolidação das Leis do Trabalho or CLT). /19/; The wastewater will be diverted through the drain system to the drainage. The wastewater generated will be continuously monitored and recorded in Plant logbooks or records annually and the details will be recorded in EMP /13/. The same will be issued at the time of verification.
	Community and rural welfare	At actual record	Numbers	The project activity will contribute to the Economic, Environmental, Economical, and social well-being for the community. The same will be monitored and verified through community development records at the time of verification.
	Women's empowerment	At actual record	Numbers	The project activity will result in women empowerment by promoting gender equality, providing employment opportunities, and enabling women to actively participate in decision making. And providing employment opportunities for women will avoid the risk of gender discrimination and social instability in the society. The same will be contributing toward the sustainable development goal SDG 5. The parameter will be monitored on yearly basis.
	Exploitation of Child Labor	At actual record	Numbers	The project activity monitors there is no child labor happening during the operation of the project activity. The same will be handled according to the national regulations: Labour Act - 2 Law Decree No. 5452/1943. Labor Laws Consolidation ./32/; Records are being maintained that avoids the violation of child labor act and archived till the end of the crediting

				period. The same will be issued at the time of verification.
	Occupational health hazards	At actual record	Numbers	Project activity will monitor the occupational health hazards occurred during the project operation and record the number of related OSH trainings conducted to mitigate the impact of possible occupational health hazards at the project site. The parameter will be monitored on yearly basis and can be verified against the Employee training records. /38/
<p>The monitoring plan content has been checked in the project activity and compared against the requirements of the monitoring methodology /B02/. It has been confirmed by the verification team that the monitoring plan, procedures, roles and responsibilities provided in the PSF is deemed to be feasible.</p>				

D.4. Start date, crediting period and duration

Means of Project Verification	Desk Review, Interview
Findings	CAR 09 was raised and finding is closed. Please refer to Appendix 4 for further details.
Conclusion	<p>The start date of the project is 06/01/2018, which is the start date of earliest date of the commercial operation of the first project /4/. Crediting period has been chosen as fixed 10 years from 06/01/2018 to 05/01/2028.</p> <p>A crediting period of a maximum length of 10 years has been selected by the project proponent. Therefore, the duration of the crediting period is 06/01/2018 to 05/01/2028. Technical lifetime for the project activity is 25 years /10/. The project verification team concludes that the duration of the proposed project activity is in conformance with the requirements of §39 and §40 of GCC Project Standard, version 03.1 /B01-1/.</p>

D.5. Environmental impacts

Means of Project Verification	Desk Review, Interview
Findings	No findings in this section. Please refer to Appendix 4 for further details.
Conclusion	<p>The project activity has obtained relevant and required environmental approvals and operational licenses prior to the start of the construction of the project activity. Applicable impact assessment studies have been carried out before the construction of the project activity. Project owner has conducted an Environmental and social impact assessment study.</p> <p>The project verification team has confirmed that the Environmental and social impact assessment study was carried out during March of 2014. The report concludes that implementation of the solar power project does not have any adverse impacts on the geology, Air quality, Noise quality, Human values, social and economic issues in the project area/06/, /13/ and /19/.</p>

	The project will benefit the local people by engaging them in construction, operation, and maintenance activities during the project. The verification team also confirm that the project owner has taken all the necessary legal approvals from the government and other parties to implement the project activity.
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D.6. Local stakeholder consultation

Means of Project Verification	Desk review and Interviews
Findings	CL 03 has been raised and closed, please refer to Appendix 4 for further details.
Conclusion	It has been indicated in the PSF /1/ that the local stakeholder consultation has been done for the project activity on 11/04/2022 conducted at Rua Fernando Martins Paredes, Guaimbe in Sao Paulo, Brazil. The meeting announcement was done by putting public notice at project site/nearby village. The same covers meeting location, date, time, and contact information/22/. A summary of comments has been provided by the project owner in the PSF/1/ and it is found that no adverse comment was received for the project activity. This has also been verified by GCC project verification team during site visit /15/. Further, the interviews confirmed that there was no adverse comment about the project and this project will lead to employment generation and better environmental conditions. GCC project verification team considers the local stakeholder consultation carried out adequately and can confirm that the process is in line with the requirements of GCC. /22/

D.7. Approval and Authorization- Host Country Clearance

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

D.8. Project Owner- Identification and communication

Means of Project Verification	Desk Review, Interview																	
Findings	CAR 10 was raised, and finding is closed. Please refer to Appendix 4 for further details.																	
Conclusion	<table border="1"> <tr> <td>Project Owner name (as per LON/LOA)</td> <td>AES Brasil Operações S.A.</td> </tr> <tr> <td>Country</td> <td>Brazil</td> </tr> <tr> <td>Address</td> <td>Rodovia Percy Waldir Semeguini (SP-543), Fazenda São José, s/nº, Lotes 1-5, Zona Sul, Distrito de Arabá, Município de Ouroeste, Estado de São Paulo city of Ouroeste, state of São, Paulo, Brazil.</td> </tr> <tr> <td>Telephone</td> <td>+55 11 2195-2604</td> </tr> <tr> <td>Fax</td> <td>-</td> </tr> <tr> <td>E-mail</td> <td>josecarlos.reis@aes.com</td> </tr> <tr> <td>Website</td> <td>https://www.aesbrasil.com.br/pt-br</td> </tr> <tr> <td>Contact person</td> <td>José Carlos de Souza Reis Junior</td> </tr> </table>		Project Owner name (as per LON/LOA)	AES Brasil Operações S.A.	Country	Brazil	Address	Rodovia Percy Waldir Semeguini (SP-543), Fazenda São José, s/nº, Lotes 1-5, Zona Sul, Distrito de Arabá, Município de Ouroeste, Estado de São Paulo city of Ouroeste, state of São, Paulo, Brazil.	Telephone	+55 11 2195-2604	Fax	-	E-mail	josecarlos.reis@aes.com	Website	https://www.aesbrasil.com.br/pt-br	Contact person	José Carlos de Souza Reis Junior
Project Owner name (as per LON/LOA)	AES Brasil Operações S.A.																	
Country	Brazil																	
Address	Rodovia Percy Waldir Semeguini (SP-543), Fazenda São José, s/nº, Lotes 1-5, Zona Sul, Distrito de Arabá, Município de Ouroeste, Estado de São Paulo city of Ouroeste, state of São, Paulo, Brazil.																	
Telephone	+55 11 2195-2604																	
Fax	-																	
E-mail	josecarlos.reis@aes.com																	
Website	https://www.aesbrasil.com.br/pt-br																	
Contact person	José Carlos de Souza Reis Junior																	

	Project Owner name (as per LON/LOA)	Kosher Climate India Private Limited
	Country	India
	Address	Zee Plaza, No.1678, Ground and 1st Floor, 27th Main Rd, near Andhra Bank, Sector 2, HSR Layout, Bengaluru, Karnataka 560102
	Telephone	+91 96328 03444
	Fax	
	E-mail	narendra@kosherclimate.com
	Website	www.kosherclimate.com
	Contact person	Mr. Narendra Kumar Ramaraj
<p>This is in compliance with the Para 10 (i) of the Project Standard Version 3.1. The information and contact details of the representation of the project owner and project owners themselves has been appropriately incorporated in Appendix 1 of the PSF which was checked and verified by the verification team from Authorization letter signed by the project owners. All information was consistent between these documents.</p>		

D.9. Global stakeholder consultation

Means of Project Verification	Desk Review, Interview
Findings	No findings in this section. Please refer to Appendix 4 for further details.
Conclusion	<p>The process for global stakeholder consultation was conducted in accordance with the requirements of section 3.2.4 of the Verification Standard (version 03.1) /B01-2/. The PSF was published for global stakeholder consultation from 12/12/2022 – 26/12/2022. During the above period no Global stakeholders’ comments were received.</p> <p>PSF was published on the GCC website and invited comments by affected parties, stakeholders, and non-governmental organizations from 12/12/2022 – 26/12/2022. No comments were received during this period.</p> <p>The verification team confirm that no comments were received during the Global stakeholder consultation. Verification team is of the opinion that the changes in the PSF during the validation process do not require the publication of the revised PSF for global stakeholder consultation.</p>

D.10. Environmental Safeguards (E+)

Means of Project Verification	Desk Review, Interview			
Findings	CL 04 and CAR 11 were raised, and findings are closed. Please refer to Appendix 4 for further details.			
Conclusion	The Project owner has chosen to apply for the Environmental No-net-harm Label (E+). The assessment of the impact of the project activity on the environmental safeguards has been carried out in section E.1 of the PSF. Out of all the safeguards no risks to the environment due to the project implementation were identified and the following environmental impacts were considered for the project activity.			
	Indicators for environmental impacts	Legal Requirement Status	Monitoring	Do no harm assessment Evaluation and Score

	Environment – Air; CO ₂ emissions	Brazil's National Policy on Climate Change (PNMC) Law No. 12,187/2009.	The project is expected to reduce the CO ₂ emission throughout the crediting period/1/ /2/. The parameter will be monitored on monthly basis /1/. Calculation details provided in PSF/1/ and ER sheet/2/. The monitoring approach found acceptable.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Environment – Land; Solid waste Pollution from Hazardous wastes	Law 12.305/2010 (which amends Law 9.605/1998) /19/	The project activity may generate Hazardous waste during the operation of the project activity. Hazardous waste will be handled according to the national regulations: Law 12.305/2010 (which amends Law 9.605/1998) /19/; All kinds of the solid wastes generated during the project activity will be collected, sorted, stored and disposed to the licensed vendor as per the regulation pertaining to the respective hazardous waste management rules of state and central pollution control board whichever precedes.. The same is confirmed from the EIA reports/06/.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Environment – Land; Solid waste Pollution from E-wastes	Law 12.305/2010 (which amends Law 9.605/1998) /19/.	The project activity may generate E-waste during the operation of the project activity. E-wastes will be handled according to the national regulations: Law 12.305/2010 (which amends Law 9.605/1998)/19/; All kinds of the E-wastes generated during the project activity will be collected, sorted, stored and disposed to the authorized vendor for the recycling or to dump at the legacy MSW sites as per the regulation pertaining to the respective E- waste management rules of state and central pollution control board whichever precedes. It will be continuously monitored and recorded in the EMP /13/. The same is confirmed from Hazardous waste management Agreement/20/ and EIA reports/06/.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Environment – Land; Solid	Law No. 12305.	This project does not have any battery storage facility to store the	Evaluation found

	waste Pollution from Batteries	Brazilian National Policy on Solid Waste (batteries) /19/	generated power. However, there are few batteries used to start the inverters and for the standby power to the computers used in the project office at the site. At the end of lifetime, the batteries will be handed over to the recycler or manufacturer to replace with new batteries. Old batteries will not be disposed to the open landfill. Hence the impact is harmless. The same will be handled according to the national regulations: Management of waste and discarded materials, 2015 /19/; Battery waste quantity generated and disposed will be continuously monitored and recorded in the EMP /13/. The same is confirmed from and EIA reports/06/.	Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Environment – Land; Solid waste Pollution from end-of-life products/ equipment	Law 12.305/2010 (which amends Law 9.605/1998)/19/	The project activity may generate end-of-life products/equipment during the operation of the project activity. The same will be handled according to the Law 12.305/2010. Project Owner will collect, store and dispose the E- waste to the licensed vendors/manufacturers at the end of life of products/equipment's in compliance to the E-waste Management rules. The same is confirmed from Hazardous waste management records/20/ and EIA reports/06/.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Environment – Water; Water Consumption from ground and other sources	National Hydric Resources Policy – Law 9.433/1997	Project activity needs for cleaning of the solar modules with minimal requirement for domestic usage. Project is not located in the residential or rural area hence there is no impact on the existing usage pattern. Parameter will be monitored, and data will be recorded in the plant logbooks. Hence the impact is mitigated and harmless.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Environment – Natural Resources; Replacing fossil fuels with renewable	No mandatory law/regulation is related to the same.	The project activity will replace fossil fuel with the installation of renewable solar energy for the power generation, which would have been otherwise generated by the operation of grid-connected power plants and by the addition of new generation sources,. The	Evaluation found Harmless. The same is acceptable to the GCC project verification

	sources of energy		same is monitored through the monthly power generation report /18/. The same is confirmed during the onsite visit/15/.	team. Hence the scoring +1 is acceptable.
	The verification team confirm that the project activity will not cause any net harm to the environment and net score for project activity comes out to be +7.			

D.11. Social Safeguards (S+)

Means of Project Verification	Desk Review, Interview			
Findings	CL 04 and CAR 11 were raised, and findings are closed. Please refer to Appendix 4 for further details.			
Conclusion	The Project owner has chosen to apply for the Social No-net-harm Label (S+). The assessment of the impact of the project activity on the social safeguards has been carried out in section E.2 of the PSF. Out of all the safeguards no risks to the Society due to the project implementation were identified and the following have been indicated as positive impacts. The verification team based on the review of the PSF and the supporting document/15/ confirms that the social impacts mentioned in the section E.2 of the PSF is applicable to the Project activity and the monitoring procedures of the parameters are provided.			
	Indicators for social impacts	Legal Requirement Status	Monitoring	Do no harm assessment Evaluation and Score
	Long-term jobs (> 1 year) created/ lost	Host country minimal wage requirements	The project activity generates long term job opportunities during the operation of the project activity with non-discrimination policy. The same is monitored and keep records by employment records/38/ and complying host country minimal wage requirements. The monitoring approach found acceptable.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities	No mandatory law/regulation is related to the same.	Project Owner establishes the policy to ensure that there is no discrimination based on gender, racism, religion etc. during the recruitment process.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.

	Occupational health hazards	Law No. 6,514/1977, Consolidation of Labor Laws (Consolidação das Leis do Trabalho or CLT).	The project activity may have the possibility of accidents/incidents/near miss in project sites due to human intervention or technical failure or emergency. The same will be monitored and verified through employment training records /38/.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Reducing / increasing accidents/incidents/fatality	Law No. 6,514/1977, Consolidation of Labor Laws (Consolidação das Leis do Trabalho or CLT).	There is a possibility of accidents/incidents/near miss in project sites due to human intervention or technical failure or emergency. The same is prevented by establishing EHS policy guidelines and imparting periodic trainings and providing PPE kits to employees and visitors.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	specialized training / education to local personnel	No mandatory law/regulation is related to the same.	The project activity will generate on-job training to the employees. The same will be monitored and verified through employment training records /38/.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Community and rural welfare	No mandatory law/regulation is related to the same.	The project activity will contribute to the Economic, Environmental, Economical, and social well-being for the community. The same will be monitored and verified through community development records at the time of verification.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.

	Women's empowerment	No mandatory law/regulation is related to the same.	The project owner has the non-discrimination policy on recruitment and remuneration. The parameter monitored is Number of jobs provided to women. This parameter will be monitored through the Employment records. The data will be monitored on annual basis.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
	Exploitation of Child labour	Article 7 of the Constitution of Brazil	Project activity provides employment in the region. However, project owner adheres to the The Child Labour (Labour Act - 24 Law Decree No. 5452/1943/32/. Labor Laws Consolidation. ensuring there is no exploitation of child labour. The same will be monitored through employment records and interview with site people and reported annually.	Evaluation found Harmless. The same is acceptable to the GCC project verification team. Hence the scoring +1 is acceptable.
Verification team will be able to confirms that Project activity will not cause any net harm to the society and net score for project activity comes out to be +8.				

D.12. Sustainable development Goals (SDG+)

Means of Project Verification	Desk Review, Interview		
Findings	CL 05 and CAR 11 were raised, and finding is closed. Please refer to Appendix 4 for further details.		
Conclusion	The Project owner has chosen to apply for the United Nations Sustainable Development Goals (S+). The assessment of the impact of the project activity on the SDG's has been carried out in section F of the PSF. The project is expected to contribute 4 SDGs which are SDG 5,7,8 and 13. The verification team confirms that the SDG chose by the project owner is in compliance with the GCC Project sustainability standard V.2.1 and is applicable to the Project activity and the monitoring procedure of each SDG is given in section F and B.7.1 of the PSF.		
	UN- level SDGs	Monitoring	Do no harm assessment Evaluation and Score

	Goal 5. Achieve gender equality and empower all women and girls	Projects are commissioned on 06/01/2018 and thus all policies related to the gender equality and remuneration are in place for implementation. The same is monitored and confirmed from the list of women employees if employed any and organization policy on gender equality and equal remuneration. /38/	Project Owner meets the requirement of UN- level SDG goal. The same is acceptable to the GCC project verification team.
	Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	The project activities that commissioned on 2018 continues to provide clean energy to the global energy mix, thereby complying with the SDG target 7.2. The same is confirmed from the commissioning certificate/04/, PPA/09/ and monitored throughout the technical lifetime of the project activity.	Project Owner meets the requirement of UN- level SDG goal. The same is acceptable to the GCC project verification team.
	Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	The project activity is found to be generating employment opportunities in long term and short term thereby complying to the SDG target 8.5. The same is monitored and confirmed from employment records and HR policy/38/	Project Owner meets the requirement of UN- level SDG goal. The same is acceptable to the GCC project verification team.
	Goal 13. Take urgent action to combat climate change and its impacts.	The project activity reduces greenhouse gas annually by 105,512 tCO ₂ meeting the SDG target 13. a. The same is confirmed from the ER sheet/02/ and monthly electricity generation report/18/.	Project Owner meets the requirement of UN- level SDG goal. The same is acceptable to the GCC project verification team.

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

Means of Project Verification	Desk review and interview
Findings	CAR 12 and FAR 01 were raised, and CAR 10 is closed. Please refer to Appendix 4 for further details.
Conclusion	A declaration under section A.5 of the PSF has been included for offsetting the approved carbon credits (ACCs) for the entire crediting period 06/01/2018 to

	05/01/2028. The host country attestation is yet to be obtained for authorization on double counting. The project owner has clarified the intent of use of carbon credits for CORSIA hence no double counting will take place.
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D.14. CORSIA Eligibility (C+)

Means of Project Verification	Desk review and interview
Findings	CAR 12 was raised, and finding is closed. please refer to Appendix 4 for further details.
Conclusion	<p>The project activity meets eligible criteria for CORSIA (C+) since the crediting period is after 01/01/2016 and the project is applying for registration under GCC which is one of the approved programmes under CORSIA.</p> <p>The verification team confirms that project activity is also likely to achieve following eligibility requirement:</p> <ol style="list-style-type: none"> 1. It will reduce a forecasted amount of greenhouse gases, since project activity is the implementation of renewable energy system. 2. Likely to achieve Environmental No-net harm (E+ label) as discussed in section D.10. 3. Likely to achieve Social No-net harm (S+ label) as discussed in section D.11. 4. Likely to achieve SDG+ label with Gold Certification label. <p>The project activity meets the CORSIA eligibility.</p>

Section E. Internal quality control

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The Final project verification report prepared by the verification team was reviewed by an independent technical review team to confirm if the internal procedures established and implemented by CCIPL were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable GCC rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/ sectoral scope the project activity relates to. All team members of technical review team were independent of the verification team.

The technical review process may accept or reject the verification opinion or raise additional findings in which case these must be resolved before requesting for registration. The technical review process is recorded in the internal documents of CCIPL, and the additional findings gets included in the report. The final report passed by technical reviewer is approved by the authorized personal of Carbon Check and issued to PO and/or submitted for request for registration, as appropriate on behalf of CCIPL.

Section F. Project Verification opinion

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CC IPL was contracted by Kosher Climate India Private Limited on 31/01/2023 for project verification of the project activity “Guaimbe Solar Power Projects by AES”. The project verification was performed based on rules and requirements defined by GCC for the project activity.

The project activity is a solar power project, which results in reductions of CO₂e emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the

project is not a likely baseline scenario and the emission reductions attributable to the project are, hence, additional to any that would occur in the absence of the project activity. The project correctly applies the approved baseline and monitoring ACM0002 “Grid-connected electricity generation from renewable sources”, Version 21.0 and is assessed against latest valid PS, VS and Environment and Social Safeguards Standard, Project-Sustainability-Standard and/or other applicable GCC/CDM Decisions/Tools/Guidance/Forms.

The project activity is likely to achieve the anticipated emission reductions stated in the PSF provided the underlying assumptions do not change. The expected emission reductions (annual average) from the project activity are estimated to be 1,055,117 tCO₂e over the 10 years crediting period starting from 06/01/2018.

CC IPL has informed the project owners of the project verification outcome through the draft project verification report and final project verification report. The final project verification report contains the information regarding fulfilment of the requirements for project verification, as appropriate.

CC IPL applied the following verification process and methodology using a competent verification team.

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

Carbon Check (India) Private Limited (CC IPL) has verified and hereby certifies that the GCC project activity “Guaimbe Solar Power Projects by AES”.

a. Has correctly described the Project Activity in the Project Submission Form including the applicability of the approved methodology ACM0002, version 21.0 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 1,055,117 tCO₂e as indicated in the PSF, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable GCC rules, including ISO 14064-2 and ISO 14064-3, and therefore requests the GCC Program to register the Project Activity.

c. is not likely to cause any net-harm to the environment and/or society and complies with the environmental and Social Safeguards Standard, and therefore requests the GCC Program to register the Project Activity, which is likely to achieve the requirements of the Environmental Nonet-harm Label (E+) and the Social Nonet-harm Label (S+); and

d. is likely to contribute to the achievement of United Nations Sustainability Development Goals (SDGs), comply with the Project Sustainability Standard, and contribute to achieving a total of 4 SDGs, which is likely to achieve the gold SDG certification label (SDG+)

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

Appendix 1. Abbreviations

Abbreviations	Full texts
ACC	Approved Carbon Credits
ACC+	Approved Carbon Credit Label
BM	Build Margin
CAR	Corrective Action Required
CC IPL	Carbon Check India Private Limited
CDM	Clean Development Mechanism
CL	Clarification Request
CM	Combined Margin
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
EPE	Empresa de Pesquisa Energética
DR	Document Review
E+	Environmental No net harm Label
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Greenhouse Gas
GORD	Gulf Organization for Research and Development
GPS	Global Positioning System
GV	GCC Verifier
GWP	Global Warming Potential
HCA	Host Country Approval
I	Interview
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
KCIPL	Kosher Climate India Private Limited
O&M	Operation and Maintenance
OM	Operating Margin
PPA	Power Purchase Agreement
PSF	Project Submission Form
PVR	Project Verification Report
S+	Social No- net harm Label
SDG+	United Nation Sustainable Development Goal Label
UNFCCC	United Nations Framework Convention on Climate Change
VAT	Value Added Tax
VB	Verification Body

Appendix 2. Competence of team members and technical reviewers



Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vijay Mathew

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC 14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

<input checked="" type="checkbox"/> Validator	<input checked="" type="checkbox"/> Verifier	<input checked="" type="checkbox"/> Team Leader	<input checked="" type="checkbox"/> Technical Expert
<input checked="" type="checkbox"/> Technical Reviewer	<input type="checkbox"/> Health Expert	<input type="checkbox"/> Gender Expert	<input type="checkbox"/> Plastic Waste Expert
<input checked="" type="checkbox"/> SDG+	<input checked="" type="checkbox"/> Social no-harm(S+)	<input checked="" type="checkbox"/> Environment no-harm(E+)	<input type="checkbox"/> CCB Expert
<input checked="" type="checkbox"/> Financial Expert	<input checked="" type="checkbox"/> Local Expert for India		

in the following Technical Areas:

<input type="checkbox"/> TA 1.1	<input checked="" type="checkbox"/> TA 1.2	<input type="checkbox"/> TA 2.1	<input checked="" type="checkbox"/> TA 3.1	<input type="checkbox"/> TA 4.1
<input type="checkbox"/> TA 4. n	<input type="checkbox"/> TA 5.1	<input type="checkbox"/> TA 5.2	<input type="checkbox"/> TA 7.1	<input type="checkbox"/> TA 8.1
<input type="checkbox"/> TA 9.1	<input type="checkbox"/> TA 9.2	<input type="checkbox"/> TA 10.1	<input checked="" type="checkbox"/> TA 13.1	<input checked="" type="checkbox"/> TA 13.2
<input type="checkbox"/> TA 14.1	<input type="checkbox"/> TA 15.1			

Issue Date 1 st January 2023	Expiry Date 31 st December 2023
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 Mr. Vikash Kumar Singh Compliance Officer	 Mr. Amit Anand CEO
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CCIPL_FM 7.9 Certificate of Competency_V2.1_012023



Carbon Check (India) Private Limited

Certificate of Competency

João Luiz Pereira

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:

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Validator | <input type="checkbox"/> Verifier | <input type="checkbox"/> Team Leader | <input type="checkbox"/> Technical Expert |
| <input type="checkbox"/> Technical Reviewer | <input type="checkbox"/> Health Expert | <input type="checkbox"/> Gender Expert | <input type="checkbox"/> Plastic Waste Expert |
| <input type="checkbox"/> SDG+ | <input type="checkbox"/> Social no-harm(S+) | <input type="checkbox"/> Environment no-harm(E+) | <input type="checkbox"/> CCB Expert |
| <input type="checkbox"/> Financial Expert | <input checked="" type="checkbox"/> Local Expert for Brazil | | |

in the following Technical Areas:

- | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> TA 1.1 | <input type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1 | <input type="checkbox"/> TA 3.1 | <input type="checkbox"/> TA 4.1 |
| <input type="checkbox"/> TA 4. n | <input type="checkbox"/> TA 5.1 | <input type="checkbox"/> TA 5.2 | <input type="checkbox"/> TA 7.1 | <input type="checkbox"/> TA 8.1 |
| <input type="checkbox"/> TA 9.1 | <input type="checkbox"/> TA 9.2 | <input type="checkbox"/> TA 10.1 | <input type="checkbox"/> TA 13.1 | <input type="checkbox"/> TA 13.2 |
| <input type="checkbox"/> TA 14.1 | <input type="checkbox"/> TA 15.1 | | | |

Issue Date

03rd May 2023

Expiry Date

02nd May 2024

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO



Carbon Check (India) Private Limited

Certificate of Competency

Mr. Shivaji Chakraborty

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

for the following functions and requirements:

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> Validator | <input type="checkbox"/> Verifier | <input type="checkbox"/> Team Leader | <input checked="" type="checkbox"/> Technical Expert |
| <input checked="" type="checkbox"/> Technical Reviewer | <input type="checkbox"/> Health Expert | <input type="checkbox"/> Gender Expert | <input type="checkbox"/> Plastic Waste Expert |
| <input checked="" type="checkbox"/> SDG+ | <input checked="" type="checkbox"/> Social no-harm(S+) | <input checked="" type="checkbox"/> Environment no-harm(E+) | <input type="checkbox"/> CCB Expert |
| <input checked="" type="checkbox"/> Financial Expert | <input checked="" type="checkbox"/> Local Expert for India | | |

in the following Technical Areas:

- | | | | | |
|--|--|----------------------------------|--|----------------------------------|
| <input checked="" type="checkbox"/> TA 1.1 | <input checked="" type="checkbox"/> TA 1.2 | <input type="checkbox"/> TA 2.1 | <input checked="" type="checkbox"/> TA 3.1 | <input type="checkbox"/> TA 4.1 |
| <input type="checkbox"/> TA 4. n | <input type="checkbox"/> TA 5.1 | <input type="checkbox"/> TA 5.2 | <input type="checkbox"/> TA 7.1 | <input type="checkbox"/> TA 8.1 |
| <input type="checkbox"/> TA 9.1 | <input type="checkbox"/> TA 9.2 | <input type="checkbox"/> TA 10.1 | <input type="checkbox"/> TA 13.1 | <input type="checkbox"/> TA 13.2 |
| <input type="checkbox"/> TA 14.1 | <input type="checkbox"/> TA 15.1 | | | |

Issue Date
1st January 2023

Expiry Date
31st December 2023

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1	AES Brasil Operações S.A.	PSF: Guaimbe Solar Power Projects by AES	Version 02, dated 03/11/2022 (Initial) Version 03, dated 24/08/2023 Version 04, dated 12/10/2023 Version 04, dated 22/11/2023 Version 05, dated 05/12/2023 (final)	Project Owner
2	AES Brasil Operações S.A.	Emission reduction calculation spread sheet of Guaimbe Solar Power Projects by AES	Version 02, dated 03/11/2022 (Initial) Version 03, dated 24/08/2023 Version 04, dated 12/10/2023 Version 04, dated 22/11/2023 (final)	Project Owner
3	AES Brasil Operações S.A.	Financial analysis worksheet of Guaimbe Solar Power Projects by AES	Version 01, dated 30/06/2022 (Initial) Version 03, dated	Project Owner

			24/08/2023 Version 04, dated 12/10/2023 Version 04, dated 22/11/2023 (final)	
4	ANEEL	Commissioning Certificate (COD)/Agreement On commercial operation date of Guaimbe I Commissioning Certificate (COD)/Agreement On commercial operation date of Guaimbe II Commissioning Certificate (COD)/Agreement On commercial operation date of Guaimbe III Commissioning Certificate (COD)/Agreement On commercial operation date of Guaimbe IV Commissioning Certificate (COD)/Agreement On commercial operation date of Guaimbe V	12/03/2018 05/01/2018 03/10/2018 25/04/2018 12/14/2018	Project Owner
5	EPE	EPE document of Guaimbe I EPE document of Guaimbe II EPE document of Guaimbe III EPE document of Guaimbe IV EPE document of Guaimbe V	13/10/2014 13/10/2014 13/10/2014 13/10/2014 13/10/2014	Project Owner
6	Fabiana Agostini Preti	Environment Impact Assessment report of Guaimbe Solar Power Projects by AES	March 2014	Project Owner
7	AES Brasil Operações S.A.	EPC Contract In relation to Guaimbe I & COBRA BRASIL SERVICOS, COMUNICACOES E ENERGIA S.A. EPC Contract In relation to Guaimbe II & COBRA BRASIL SERVICOS, COMUNICACOES E ENERGIA S.A. EPC Contract In relation to Guaimbe III & COBRA BRASIL SERVICOS, COMUNICACOES E ENERGIA S.A. EPC Contract In relation to Guaimbe IV & COBRA BRASIL SERVICOS, COMUNICACOES E ENERGIA S.A. EPC Contract In relation to Guaimbe V &	13/03/2017 13/03/2017 13/03/2017 13/03/2017	Project Owner

		COBRA BRASIL SERVICOS, COMUNICACOES E ENERGIA S.A.	13/03/2017	
8	AES	O&M contract between Guaimbe Solar Power Projects by AES and TOP SERVICE SERVICOS E SISTEMAS S/A https://www.bcb.gov.br/en/monetarypolicy/historicalpath https://assets.kpmg.com/content/dam/kpmg/es/pdf/2017/08/Brasil%202017.pdf	03/09/2018	Project Owner
9	ANEEL	Power purchase agreement of Guaimbe I and CCEE Power purchase agreement Guaimbe II and CCEE Power purchase agreement Guaimbe III and CCEE Power purchase agreement Guaimbe IV and CCEE Power purchase agreement Guaimbe V and CCEE	20/06/2015 20/06/2015 20/06/2015 20/06/2015 20/06/2015	Project Owner
10	AES Brasil Operações S.A.	Letter of Authorization		Project Owner
11	arion	Maintenance of the measurement System https://energiaarion.com.br/2022/08/31/manutencao-do-sistema-de-medicao-servico/		Project Owner
12	GCC	Global Stakeholder consultation on GCC projects https://www.globalcarboncouncil.com/global-stakeholders-consultation/	12/12/2022 – 26/12/2022	GCC
13	AES	Environmental Management Report of Guaimbe Solar Power Projects by AES	March 2014	Project Owner
14	KPMG Auditores Independentes Ltda.	Quarterly financial report of Guaimbe Solar Power Projects by AES	31 December 2021	Project Owner
15	CC IPL	Onsite visit documents dated 09/02/2023	15/02/2023	CC IPL
16	Ministry of Science and Technology	Latest available emission factor of the Brazilian national grid approved by its Designated National Authority (DNA) Ministry of Science and Technology CO ₂ emission factors for electricity generation in the National Interconnected System of Brazil - Base Year 2021 ¹ https://www.gov.br/mcti/pt-br/acompanhe-o-		Publicly available

		mcti/sirene/dados-e-ferramentas/fatores-de-emissao		
17	Aswath Damodaran	Benchmark calculation: "Corporate Finance: Theory and Practice, 2nd Edition" 2 nd edition, by Aswath Damodaran (page 320), Published by Wiley, January, 2001		Others
18	AES Brasil Operações S.A.	Actual energy generation reports of Guaimbe I Actual energy generation reports of Guaimbe II Actual energy generation reports of Guaimbe III Actual energy generation reports of Guaimbe IV Actual energy generation reports of Guaimbe V	01/2018 – 12/2018 01/2018 – 11/2022 10/2018 – 11/2022 03/2018 – 11/2022 03/2018 – 11/2022	Project Owner
19	Federal government of Brazil	Law No. 12305. Brazilian National Policy on Solid Waste (batteries) https://www.iea.org/policies/15805-law-no-12305-brazilian-national-policy-on-solid-waste-batteries		Publicly available
20	AES Brasil Operações S.A.	Hazardous waste management Agreement		Project Owner
21	Banco Central Do Brazil	forecasted inflation rate taken from Banco Central Do Brazil. https://www.bcb.gov.br/en/monetarypolicy/historicalpath		Publicly available
22	AES Brasil Operações S.A.	Minutes of meetings (LSC)	11/04/2022	Project Owner
23	TUST	TUST Charges TUST 2014-2015 (R\$kw)⁶		Project Owner
24	Banco central do Brasil	Review Of COPOM Meetings and Short-Term Interest Rates https://www.bcb.gov.br/en/legacy?url=https:%2F%2Fwww.bcb.gov.br%2FPec%2FCopom%2FIngl%2FtaxaSelic-i.asp		Publicly available
25	TFSEE	TFSEE (Electric Energy Services Inspection Fee) https://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2013/Lei/L12783.htm		Project Owner

⁶ <https://drive.google.com/file/d/1r1ILDZWW5ByD3IntJiDu4Yw4xcFwEX-X/view>

26	Tax foundation	Corporate Tax Rates around the World, 2015 https://taxfoundation.org/data/all/global/corporate-income-tax-rates-around-world-2015/		Publicly available
27	KPMG	Americas indirect tax country guide assets.kpmg.com/content/		Publicly available
28	International Monetary Fund	Tariff inflation Inflation target as per IMF		Project owner
29	EY	world wile corporate tax guide 2017 https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/tax/guides/ey-worldwide-corporate-tax-guide-2017.pdf		Publicly available
30	CÂMARA DE COMERCIALIZAÇÃO DE ENERGIA ELÉTRICA - CCEE	Marketing rules Reserve Energy Contracting Version 2023.3.0		Project Owner
31	Banco Central do Brazil	Annual Escalation https://www.bcb.gov.br/en/monetarypolicy/historicalpath		Publicly available
32	Presidency of the Republic Civil House Sub-Chief for Legal Affairs	Labour Act - 2 Law Decree No. 5452/1943 . Labor Laws Consolidation .		Publicly available
33	The National Electric Energy Agency	Law nº 9.427,1996: The National Electric Energy Agency (ANEEL); https://www.oecd-ilibrary.org/sites/5a130109-en/index.html?itemId=/content/component/5a130109-en		Publicly available
34	National Electric Power Agency (Brazil)	Law nº 9.648,1998: The National Electric System Operator (ONS) https://latinlawyer.com/insight/ll-regulators/regulators/organization-profile/national-electric-power-agency-brazil		Publicly available
35	UN environment programme	Law nº 10.848,2004: Provides for the commercialization of electricity https://leap.unep.org/countries/br/national-legislation/law-no-10848-commercialization-electric-energy		Publicly available
36	SEC	Decree nº 6.353, 2008: Regulates the contracting of reserve energy through auctions https://www.sec.gov/Archives/edgar/data/1499505/000095012311002460/y87804exv10w23.htm		Publicly available
37	Presidency of the Republic Civil House, Sub-Chief for Legal Affairs	Law no. 9.074,1995: The Brazilian Electricity Act, does not influence the choice of fuel and technology used for power generation https://www.planalto.gov.br/ccivil_03/leis/l9074_cons.htm		Publicly available
38	AES Brasil Operações S.A.	1) List of employees 2) Employee Salaries		Project owner

		3) Employee training 4) HR policy 5) records of occurred accidents/ incidents		
39	EY	Salvage value from Worldwide Corporate Tax Guide 2014 https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/tax/guides/ey-worldwide-corporate-tax-guide-2014.pdf	January 2014	Publicly available
40	Dados por Empreendimento	Date of Auction	16/01/2015	Project owner
41		Loan Sanction Agreement		Project owner
42	AES Brasil Operações S.A.	Contract between CCIPL and Kosher Climate Pvt. Ltd.	31/10/2023	Project owner
B01	GCC	1. GCC Project Standard, version 3.1 2. GCC Verification Standard, version 3.1 3. GCC Program Manual, version 3.1 4.Environment-and-Social-Safeguards Standard, version 2 5. Project-Sustainability-Standard, version 2 6. GCC clarification no. 1		Others
B02	UNFCCC	CDM Methodology: ACM0002: Grid-connected electricity generation from renewable sources, version 21		Others
B03	GCC	PSF template V3.2- 2020		Others
B04	UNFCCC	Methodological tool 01: Tool for the demonstration and assessment of additionality, Version 07		Others
B05	UNFCCC	Methodological tool 07: Tool to calculate the emission factor for an electricity system, version 07		Others
B06	UNFCCC	Methodological tool 27: Investment analysis, version 11		Others
B07	UNFCCC	Methodological tool 24: Common practice, version 3.1		Others

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

Table 1. CLs from this Project Verification

CL ID	01	Section no.	D.3.1	Date: 05/06/2023
Description of CL				
<ol style="list-style-type: none"> <i>The latest version of the methodology ACM0002 version 21 is available. Project owner is requested to use the latest version of the methodology ACM0002, version 21.</i> <i>As the latest version of Tool 27 (Investment Analysis version-12.0) available, project owner is requested use the latest version or provide justification/clarification regarding the use of old version.</i> <i>Tool number of CDM tools are not mentioned. Project owner is requested to comply with the paragraph 17 of section B1 of the GCC PSF filling guidelines.</i> 				
Project Owner's response				Date: 24/08/2023

<ol style="list-style-type: none"> 1. The latest version of the methodology ACM0002 i.e., version 21 has been applied and made consistently throughout in the PSF. 2. The latest version of tool 27 i.e., version 12.0 has been applied and made consistently throughout the PSF. 3. CDM Tool numbers has been addressed as per the GCC PSF filling guidelines. 		
Documentation provided by the Project Owner		
<i>Updated PSF</i>		
<table border="1"> <tr> <td>GCC Emission Reduction Verifier's assessment</td> <td>Date: 18/09/2023</td> </tr> </table> <ol style="list-style-type: none"> 1. The latest version of the methodology ACM0002 version 21 has been used by the PO. 2. PO has used tool 27: "Tool for the Investment analysis" Version 12.0 3. Project owner has complied with the paragraph 17 of section B1 of the GCC PSF filling guidelines. <p>The changes made by the PO found acceptable and hence the CL 01 is closed.</p>	GCC Emission Reduction Verifier's assessment	Date: 18/09/2023
GCC Emission Reduction Verifier's assessment	Date: 18/09/2023	

CL ID	02	Section no.	D.3.5	Date: 05/06/2023
Description of CL				
<ol style="list-style-type: none"> 1. <i>As per paragraph 10 of CDM Methodological tool: TOOL27: Investment analysis.</i> <p><i>"Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant. The DOE is therefore expected to validate the timing of the investment decision and the consistency and appropriateness of the input values with this timing. The DOE should also validate that the listed input values have been consistently applied in all calculations."</i></p> <p><i>Project owner is requested to clarify this, while doing so, please provide evidence for.</i></p> <ol style="list-style-type: none"> 1. <i>Actual project cost.</i> 2. <i>Supportive for energy yield assessment report for PLF considered for ER estimation and for Investment analysis.</i> 3. <i>Actual generation for last one year.</i> 4. <i>Source of annual degradation factor.</i> 5. <i>The basis of tariff calculation, depreciation, insurance and overheads considered in the DPR.</i> 6. <i>Weblink/reference for VAT on O&M, ONS/CCE, social contribution CSCC</i> 7. <i>Project owner is requested to provide evidence/supportive documents on common practice analysis.</i> 8. <i>PO is requested to justify why tariff is taken from DPR instead of PPA in section B.5 of the PSF</i> 				
Project Owner's response				Date: 24/08/2023
<p>The investment decision date of the project is 13/03/2017, which is the date of signing of the EPC contract. Input parameters are sourced from the EPE document and PPA. Input values used in the investment analysis are valid and applicable at the time of the investment decision (signing of the EPC contract).</p> <ol style="list-style-type: none"> 1. EPC document has been provided. 2. <i>The PLF was calculated using the next generation mentioned in the EPE Document and the same has been used in the ER sheet and the IRR sheet. The EPE document has been provided for evidence.</i> 3. <i>A monthly actual generation has been provided from the commissioning date.</i> 4. <i>The datasheets for the annual degradation has been sourced from manufacture specification: BYD 325P6K-36B-1500 (https://energypal.com/best-solar-panels-for-homes/byd/byd320p6k-36) and BYD 320P6K-36B-1500 (https://energypal.com/best-solar-panels-for-homes/byd/byd325p6k-36)</i> 5. The project owner has considered the same tariff rate during the auction and won the same tariff rate to all the project activities. Hence, it was available at the time of the investment decision. The source for depreciation has been provided in IRR spreadsheet and insurances and overheads has been removed. 6. Weblink/references for VAT on O&M, social contribution CSCC are given in IRR spreadsheet and 				

<p>ONS/CCE has been removed.</p> <p>7. The Common Practise Analysis has been addressed in the section B.5 of the PSF.</p> <p>8. The tariff rate has been taken from the auction result as the project owner has considered during the auction period and won the same tariff rate for all the project activities.</p>	
<p>Documentation provided by the Project Owner</p>	
<p><i>EPC document</i> <i>Monthly Actual generation</i> <i>Updated IRR</i> <i>Updated PSF.</i></p>	
<p>GCC Emission Reduction Verifier's assessment</p>	<p>Date: 18/09/2023</p>
<ol style="list-style-type: none"> 1. The justification provided by the PO found acceptable. hence the finding is closed. 2. The clarification provided by the PO found acceptable. hence the finding is closed. 3. The commissioning date of G1 is given as 06/01/2018. But the monthly generation of the same from 2016 and sales revenues from 2017 are provided. <ul style="list-style-type: none"> • The commissioning date of G2 is 13/03/2018. But the monthly generation of G2 from the 2nd month of 2018 is provided. and sales revenues are given from the 10th month of 2018. • The commissioning date of G3 is 13/04/2018. But the monthly generation of G3 only from the 10th month of 2018 is provided. and sales revenues are given from the 4th month of 2018. • Likewise, commissioning date of G4 is 04/10/2018 But the monthly generation and sales revenues are provided from 4th month of 2018 by the PO. • Names of power plants mentioned are different in some of the monthly generation and sales records provided. PO is requested to check the same. 4. The VVB is not able to locate the degradation factor in the site. Can you please mention the page no or section where the same is given. 5. The justification provided by the PO found acceptable. hence the finding is closed. 6. The justification provided by the PO found acceptable. hence the finding is closed. 7. The common practice analysis is addressed in the PSF. But comment is to provide the evidence/ supportive documents for the same. 8. PO is requested to provide the supportive documents for auction results, from where the tariff rate is taken. <p>Hence CL 02 remains open.</p>	
<p>Project Owner's response</p>	<p>Date: 12/10/2023</p>
<p>3. Clarification is provided as follows:</p> <ul style="list-style-type: none"> • Commissioning date for G1 is 13/03/2018 The report of sales revenues indicates, in Column O, the revenues of the project: in Column O, the values are higher than 0 only from March 2018, which confirms the COD. The report of monthly generation indicates, in Column D, the final generation of the project: in Column D, the generation is higher than 0 only from March 2018, which confirms the COD. • Commissioning date for G2 is 06/01/2018. The report of sales revenues indicates, in Column O, the revenues of the project: in Column O, the values are higher than 0 only from February 2018, which confirms the COD. The report of monthly generation indicates, in Column D, the final generation of the project: in Column D, the generation is higher than 0 only from February 2018, which confirms the COD. • Commissioning date for G3 is 04/10/2018. The report of sales revenues indicates, in Column O, the revenues of the project: in Column O, the values are higher than 0 only from October 2018, which confirms the COD. The report of monthly generation indicates, in Column D, the final generation of the project: in Column D, the generation is higher than 0 only from October 2018, which confirms the COD. • Commissioning date for G4 is 26/04/2018. The report of sales revenues indicates, in Column O, the revenues of the project: in Column O, the values are higher than 0 only from April 2018, which confirms the COD. The report of monthly generation indicates, in Column D, the final 	

<p>generation of the project: in Column D, the generation is higher than 0 only from April 2018, which confirms the COD.</p> <ul style="list-style-type: none"> Commissioning date for G5 is 13/04/2018 and the same has been updated the PSF. The report of sales revenues indicates, in Column O, the revenues of the project: in Column O, the values are higher than 0 only from April 2018, which confirms the COD. The report of monthly generation indicates, in Column D, the final generation of the project: in Column D, the generation is higher than 0 only from April 2018, which confirms the COD. Regarding the Names of power plants mentioned in the monthly generation and sales records provided: the names mentioned in the reports are a reflect of the CCEE register, hence a change in the report reflects an alteration of the plant's name by the CCEE data system. The changes consisted in 1) including the prefix "UFV" (<i>photovoltaic power plant</i>) for distinguishing the plant; and 2) including the suffix "15" (<i>"incentivada 50"</i>) also for distinguishing the plant by the CCEE. <p>4. The annual degradation can be calculated from the graph mentioned in page no.</p> <p>7. The CPA document has been provided and the same has been applied in the PSF.</p> <p>8. Supporting document for Auction results has been provided.</p>
Documentation provided by the Project Owner
Updated PSF Auction Results CPA document
GCC Emission Reduction Verifier's assessment Date: 20/11/2023
The information provided by the PO found acceptable. Hence the CL 02 is closed.

CL ID	03	Section no.	D.6	Date: 05/06/2023
Description of CL				
1. <i>LSG date mentioned in section G of the PSF is inconsistent with provided LSG documents. PO is requested to clarify the same.</i>				
Project Owner's response				Date: 24/08/2023
<i>The LSC date in the PSF has been revised and is now consistent with LSC Documents.</i>				
Documentation provided by the Project Owner				
<i>Updated PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
The changes made by the PO were found acceptable. Hence the CL 03 is closed.				

CL ID	04	Section no.	D.10/ D.11	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> <i>Project owner is requested to check if the environmental and social safeguards are in line with Environmental and Social Safeguards Standard version 3.1 requirements.</i> <i>PO is requested to provide supportive documents/evidence related to E+/S+ monitoring.</i> <i>Section B.7.2 is not in line with the PSF filling guidelines. PO is requested to clarify the same.</i> 				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> <i>The Environmental and Social Safeguards are already in line with Environmental and Social Safeguards Standard version 3.1 requirements.</i> <i>The supporting documents for the E+ and S+ monitoring has been provided.</i> <i>Section B.7.2 has been inline with PSF filling guidelines.</i> 				
Documentation provided by the Project Owner				
<i>HR Policy ER sheet EIA Document EMP Document</i>				

<i>List of employees</i> <i>Training Records</i> <i>Actual generation and invoices.</i> <i>Environmental Licenses and Report</i> <i>Updated PSF.</i>	
GCC Emission Reduction Verifier's assessment	Date: 18/09/2023
1. The clarifications provided and changes made in the PSF by the PO found appropriate and hence the CL 04 is closed.	

CL ID	05	Section no.	D.12	Date: 05/06/2023
Description of CAR				
<p>1. <i>Project owner is requested to justify how sustainable development goals are in line with the Project Sustainability Standard version 3.1 requirements.</i></p> <p><i>Further, PO is requested to provide supportive documents/evidence related to SDG monitoring.</i></p> <p>2. <i>The total number of SDGs provided and the certification label given in the section F of the PSF are not consistent. (SDG label for 5 goals is not gold, but platinum). PP is requested to clarify the same.</i></p>				
Project Owner's response				Date: 24/08/2023
<p>1. <i>As per the Project sustainability standard version 3.1 Appendix 1 Table 2, all the Goals considered are in line with the requirements of the standard and the necessary evidence for each goal has been submitted.</i></p> <p>2. <i>The total number of SDGs and the certification label in Section F has been updated and inline with each other.</i></p>				
Documentation provided by the Project Owner				
<i>LOA</i> <i>Monthly generation data</i> <i>List of employees</i> <i>Update PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
The clarifications provided and changes made in the PSF by the PO found appropriate and hence the CL 05 is closed.				

Table 2. CARs from this Project Verification

CAR ID	01	Section no.	D.2	Date: 05/06/2023
Description of CAR				
<p>1. <i>PO is requested to incorporate the requirements of para 9 of the PSF filling guidelines/instruction in section A.3 of PSF.</i></p> <p>2. <i>In section A.3 of the PSF, no. of solar panels is not mentioned.</i></p> <p>3. <i>Capacity mentioned in section G is not consistent with section A.1 of PSF. PP is requested to mention whether it is the difference of AC and DC capacities.</i></p> <p>4. <i>The technologies/measures employed by the Project Activity is not explained in the section A.1 of PSF. PO is requested to confirm the same.</i></p> <p>5. <i>The project boundary is not explained in section A.1 of PSF. PO is requested to justify the same. Project Owner is requested to comply with paragraph 1(c) of the PSF filling Guidelines.</i></p>				
Project Owner's response				Date: 24/08/2023
<p>1. <i>Project Owner(s) doesn't wish to be treated as confidential/proprietary.</i></p> <p>2. <i>The number of solar panels has been addressed in section A.3 of the PSF.</i></p> <p>3. <i>Capacity mentioned in section G is consistent with section A.1 of PSF, which is the AC capacity.</i></p> <p>4. <i>The technologies/measures has been explained in the section A.1 of the PSF.</i></p> <p>5. <i>The project boundary is already explained in the section A.1.</i></p>				
Documentation provided by the Project Owner				

<i>Updated PSF.</i>	
GCC Emission Reduction Verifier's assessment	Date: 18/09/2023
The clarifications provided and changes made in the PSF by the PO found appropriate and hence the CAR 01 is closed.	

CAR ID	02	Section no.	D.3.4	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> 1. <i>Project owner is requested to describe how the relevant national and/or sectoral policies, regulations and circumstances are considered as per paragraph 27 under Section B.4 of the GCC PSF Filling guidelines.</i> 2. <i>PO is requested to provide evidence for the value taken as "latest grid emission factor of Brazil 2020 as per the DNA" in section B.4 of the PSF. And, also please clarify why above two options for the same were not taken in section B.4</i> 				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> 1. <i>relevant national and/or sectoral policies, regulations and circumstances has been updated in the section B.4 as per the GCC PSF filling guidelines.</i> 2. <i>The grid emission factor of year 2020 has been updated and used the latest grid emission factor of year 2021.</i> 				
Documentation provided by the Project Owner				
<i>Updated PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
<ol style="list-style-type: none"> 1. The changes made in the PSF by the PO found appropriate and hence the comment is closed. 2. PO is requested to clarify, why two options a and b for the determination of the baseline grid emission factor were not taken in section B.4 <p>Hence CAR 02 remains open.</p>				
Project Owner's response				Date: 11/10/2023
<ol style="list-style-type: none"> 2. The option A and B are not considered by the project owner, as the host country has directly released the combined margin. Therefore, CDM Tool 07: "Tool to calculate the emission factor for an electricity system" is not applicable to the project activity. In addition, option B is not applicable because the CDM has not published the latest approved emission factor for the grid in the host country. 				
Documentation provided by the Project Owner				
<i>Updated PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 20/11/2023
The information provided by the PO found acceptable. Hence the CAR 02 is closed.				

CAR ID	03	Section no.	D.3.5	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> 1. <i>Under section B.5 of the PSF the relevant national and/or sectoral policies, regulations and circumstances with supportive documents. Project owner is requested to comply to the requirement of paragraph 16 (b) of the GCC project standard v3.1.</i> 2. <i>While providing DPR as reference for the input values considered for the IRR calculation in B.5 of the PSF, PO has not provided the preparation date and details regarding the publisher and PO is requested to provide the same.</i> 3. <i>PO is requested to provide reference link for CPA.</i> 				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> 1. <i>The relevant national and/or sectoral policies, regulations and circumstances has addressed with the supporting document and project owner has submitted the necessary licenses for their implementation of the project.</i> 2. <i>The input parameters has been sourced from the EPE document for the IRR calculation which is used as a reference document.</i> 3. <i>the CPA has been taken from the CCEE data source.</i> 				
Documentation provided by the Project Owner				

<i>Updated PSF</i> <i>Updated IRR</i>	
GCC Emission Reduction Verifier's assessment	Date: 18/09/2023
The clarifications provided and changes made in the PSF by the PO found appropriate and hence the CAR 03 is closed.	

CAR ID	04	Section no.	D.3.5	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> <i>PO is requested to clarify how 10 years ER will be 9,31,018 tCO₂ e if that per year is 93,102 tCO₂ e in B.6.4 of the PSF.</i> <i>As per paragraph 10 of CDM Methodological tool: TOOL27: Investment analysis. "Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant. The DOE is therefore expected to validate the timing of the investment decision and the consistency and appropriateness of the input values with this timing. The DOE should also validate that the listed input values have been consistently applied in all calculations."</i> <p style="text-align: center;"><i>It is found that the values used in the PSF are not at the time of the investment decision.</i></p>				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> <i>The ER table has been updated.</i> <i>Input values used in the investment analysis is taken from the EPE document which is the investment decision date of the project activity. Hence, the EPE document is valid and applicable at the time of the investment document.</i> 				
Documentation provided by the Project Owner				
<i>Updated PSF.</i> <i>Updated IRR</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
The clarifications provided and changes made in the PSF by the PO found appropriate and hence the CAR 04 is closed.				

CAR ID	05	Section no.	D.3.5	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> <i>Breaching points in sensitive analysis are not provided. Project Owner is requested to provide the same.</i> <i>PO should include the major events such as investment date, purchase date etc. in a chronological order in section B.5 of the PSF.</i> <i>PO is requested to provide details regarding the investment decision date and to substantiate the basis of selection of the date.</i> <i>PO is requested to provide the rules, laws and regulations applicable in order to prove the project is not enforced by law in section B.5 of the PSF while performing legal requirement test.</i> 				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> <i>Breaching point in the sensitive analysis has been updated in the PSF.</i> <i>The chronology of the documents has been addressed in section B.5.</i> <i>Project owner has given the details regarding the investment decision date and to substantiate the basis of selection of the date in section B.5.</i> <i>Project owner has provided the rules, laws and regulations applicable in order to prove the project is not enforced by law in section B.5 of the PSF.</i> 				
Documentation provided by the Project Owner				
<i>Updated PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
<ol style="list-style-type: none"> <i>The PO has updated breaching point in the sensitive analysis. The comment is hence closed.</i> 				

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<ol style="list-style-type: none"> 2. <i>The chronology of the documents has been addressed in section B.5 of the PSF. Hence the finding is closed.</i> 3. <i>The clarification given by the PO in section B.5 of the PSF found acceptable. hence the comment is closed.</i> 4. <i>Project owner has provided the rules, laws and regulations. The finding is closed.</i> 5. <p>And hence the CAR 05 is closed.</p>

CAR ID	06	Section no.	D.3.6	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> 1. <i>In section B.6 of PSF, the equation for baseline emission is taken from paragraph 39 of the ACM0002 VERSION 20. The para no. is not mentioned in the PSF.</i> 				
Project Owner's response				Date: 24/08/2023
<i>The baseline emission has been updated as per the latest methodology version 21.0.</i>				
Documentation provided by the Project Owner				
<i>Updated PSF</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
<i>The changes made in the PSF by the PO found appropriate and hence the CAR 06 is closed.</i>				

CAR	07	Section no.	D.3.7	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> 1. <i>Project owner needs to complete section B.7.1 of the PSF complying with paragraph 38, 39 and 40 of the instructions to complete the PSF. While doing so, Project owner needs to provide complete information for all the monitoring equipment (e.g. monitoring instrument type, make, model, location, calibration frequency, accuracy class, etc.) along with evidence.</i> 2. <i>Project owner is requested to fill details of energy meters in the monitoring/equipment section of the Data Parameter "EG_{facility,y}" as per paragraph 48(c) of section B.7.1 of the PSF guidelines.</i> 3. <i>Project Owner is requested to provide the national regulation/standard with respect to calibration frequency of the energy meters.</i> 				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> 1. <i>The section B.7.1 has been updated as per the instruction guideline of the PSF along with the evidence.</i> 2. <i>The Data Parameter "EG_{facility,y}" has been filled as per the PSF guidelines.</i> 3. <i>The national regulation/standard with respect to calibration frequency of the energy meters has been provided in the PSF.</i> 				
Documentation provided by the Project Owner				
<i>Updated PSF. Meter Images Meter calibration</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
<ol style="list-style-type: none"> 1. <i>The changes made in the PSF by the PO found appropriate and hence the comment is closed.</i> 2. <i>The changes made in the PSF by the PO found appropriate and hence the comment is closed.</i> 3. <i>PO is requested to provide the supportive documents or web link for the "ONS Grid procedures", which is the national regulation/standard with respect to calibration frequency of the energy meters mentioned in the PSF.</i> <p>Hence the CAR 07 remains open.</p>				
Project Owner's response				Date: 12/10/2023
<i>3.Supportive document for the ONS Grid Procedures has been provided.</i>				
Documentation provided by the Project Owner				
<i>Updated PSF. Supportive document for the ONS Grid Procedures.</i>				
GCC Emission Reduction Verifier's assessment				Date: 20/11/2023

The information provided by the PO found acceptable. Hence the CAR 07 is closed.

CAR	08	Section no.	D.3.7	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> <i>The project activity started operations from 2018 and the type is A2, PO is requested to provide the JMR details of one year for substantiating actual PLF.</i> <i>The PV module reported in the submission document is the BYD P6C-36-3BB series with 295Wp. The one found in the field was the BYD320P6K-36, with 320Wp. PO is requested to justify the same.</i> <i>The inverters information was diverged from the information reported to GCC. The model declared priorly was the Ingeteam Ingecon Sun Power Max 1165TL B420, and the found in the field was the Ingecon Sun Power Max 1560TL B600, with up to 1500 kW of capacity. PO is requested to justify the same.</i> 				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> <i>MED reports has been provided from the operation date from 2018.</i> <i>The correct document has been provided.</i> <i>The inverters information has been updated in the PSF as per inverters observed in the site.</i> 				
Documentation provided by the Project Owner				
<i>Updated PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
<ol style="list-style-type: none"> <i>Documents provided by the PO found appropriate and hence the finding is closed.</i> <i>PO is requested to specify the name of the provided document.</i> <i>The changes made in the PSF by the PO found appropriate and hence the finding is closed.</i> 				
CAR 08 is closed.				

CAR	09	Section no.	D.4	Date: 05/06/2023
Description of CAR				
<i>The project start date mentioned in section C of the PSF is inconsistent with provided supportive documents and other sections of the PSF. PO is requested to clarify the same.</i>				
Project Owner's response				Date: 24/08/2023
<i>The project start date has been updated and consistently applied in PSF.</i>				
Documentation provided by the Project Owner				
<i>Updated PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
<p>The start date of project activities one and two are being interchanged in the "Appendix 8. FURTHER INFORMATION ON DETERMINATION OF BUNDLE IN PROJECT ACTIVITY".</p> <p>PO is requested to correct the same. Hence CAR 09 remains open.</p>				
Project Owner's response				Date: 12/10/2023
<i>The start date of project activities has been updated and consistently applied in Appendix 8.</i>				
Documentation provided by the Project Owner				
<i>Updated PSF.</i>				
GCC Emission Reduction Verifier's assessment				Date: 20/11/2023
The information provided by the PO found acceptable. Hence the CAR 09 is closed.				

CAR ID	10	Section no.	D.8	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> <i>Project owner has not provided the documentary evidence LOA.</i> 				
Project Owner's response				Date: 24/08/2023
<i>The LOA document has been provided.</i>				

Documentation provided by the Project Owner	
<i>Updated PSF.</i>	
GCC Emission Reduction Verifier's assessment	Date: 18/09/2023
The VVB is not able to locate the document. PO is requested to mention in which folder the subject document is attached. Hence CAR 10 remains open.	
Project Owner's response	Date: 12/10/2023
A separated folder has been created for the LoA Document.	
Documentation provided by the Project Owner	
<i>Updated LOA.</i>	
GCC Emission Reduction Verifier's assessment	Date: 20/11/2023
The information provided by the PO found acceptable. Hence the CAR 10 is closed.	

CAR ID	11	Section no.	D.10/D.11/D.12	Date: 05/06/2023
Description of CAR				
<i>Background: requirements of paragraph 25 and 32 of the GCC project standard version 3.1</i>				
<ol style="list-style-type: none"> 1. <i>Project Owner is requested to demonstrate environmental safeguards and social safeguards as per the latest standard (version 3). Furthermore, Project Owner is requested to demonstrate the SDGs as per the latest standard i.e. project sustainability standard (version 3).</i> 2. <i>PO is requested to address all the Key environmental impacts and Key social impacts as per the Appendix 01: Indicative list of project types and corresponding Environmental and Social aspects and impacts which shall be assessed at a minimum</i> 3. <i>Project owner needs to substantiate each of the stated criteria for Environmental Safeguard, Social Safeguard and SDGs with credible evidence and complete the relevant sections of the PSF in line with the PSF completing guidelines</i> 4. <i>Project owner is requested to provide Credible evidence for each of the applied 5 SDGs for the project activity.</i> 				
Project Owner's response				Date: 24/08/2023
<ol style="list-style-type: none"> 1. <i>Project owner has demonstrated environmental safeguards and social safeguards as per the latest standard (version 3) and SDGs as per the latest standard i.e. project sustainability standard (version 3),</i> 2. <i>Key environmental impacts and Key social impacts has been addressed in the relevant section of the PSF.</i> 3. <i>Project owner has substantiated each of the stated criteria for Environmental Safeguard, Social Safeguard and SDGs with credible evidence in the relevant section.</i> 4. <i>The credible evidence has been provided for the SDG 5.</i> 				
Documentation provided by the Project Owner				
<i>Updated PSF</i>				
GCC Emission Reduction Verifier's assessment				Date: 18/09/2023
<ol style="list-style-type: none"> 1. The clarification made by the PO found appropriate and hence the comment is closed. 2. The changes made in the PSF by the PO found appropriate and hence the comment is closed. 3. The changes made in the PSF by the PO found appropriate and hence the comment is closed. 4. The changes made in the PSF by the PO found appropriate and hence the comment is closed. <p style="text-align: center;">Hence CAR 11 is closed.</p>				

CAR ID	12	Section no.	D.13/D.14	Date: 05/06/2023
Description of CAR				
<ol style="list-style-type: none"> 1. <i>Double Counting has not been discussed in the section A.5 of the PSF as per clarification no. 1 and GCC Standard on Avoidance of Double Counting</i> 				
Project Owner's response				Date: 24/08/2023
<i>Double counting has been discussed in the section A.5 of the PSF.</i>				

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Documentation provided by the Project Owner	
<i>Updated PSF.</i>	
GCC Emission Reduction Verifier's assessment	Date: 20/11/2023
1. The clarification made by the PO found appropriate and hence CAR 12 is closed.	

Table 3. FARs from this Project Verification

FAR ID	01	Section no.	D.13	Date: 05/06/2023
Description of FAR				
1. <i>The ER Verifier should certify that Project shall demonstrate the compliance to CORSIA requirements for the credits claimed beyond 31 December 2020 with respect to double counting and HCLOA requirements and also future CORSIA requirements applicable time to time for the project activity</i>				
Project Owner's response				Date:
Documentation provided by the Project Owner				
GCC Emission Reduction Verifier's assessment				Date:

DOCUMENT HISTORY

Version	Date	Comment
V 3.1	31/12/2020	<ul style="list-style-type: none"> ▪ The name of GCC Program’s emission units has been changed from “Approved Carbon Reductions” or ACRs to “Approved Carbon Credits” or ACCs.
V 3.0	23/08/2020	<ul style="list-style-type: none"> ▪ Revised version released on approval by the Steering Committee as per the GCC Program Process; ▪ Revised version contains the following changes: <ul style="list-style-type: none"> ○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC); ○ Considered and addressed comments raised by the Steering Committee: <ul style="list-style-type: none"> ➢ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and ➢ 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 CORSIA⁷;
V 2.0	25/06/2019	<ul style="list-style-type: none"> ▪ Revised version released for approval by the GCC Steering Committee. ▪ This version contains details and information to be provided, consequent to the latest worldwide developments (e.g., CORSIA EUC).
v1.0	01/11/2016	<ul style="list-style-type: none"> ▪ Initial version released for approval by the GCC Steering Committee under GCC Program Version 1

⁷See 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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