

المجلس العالمت للبصمة الكربونية GLOBAL CARBON COUNCIL

> Project Submission Form

> > V4.0-2022

CONTENTS

| SECTION A | DESCRIPTION OF THE PROJECT ACTIVITY | 12 |
|-----------|--|-----|
| | | |
| A.1. | PURPOSE AND GENERAL DESCRIPTION OF THE PROJECT ACTIVITY | 12 |
| A.2. | LOCATION OF THE PROJECT ACTIVITY | 14 |
| A.3. | TECHNOLOGIES/MEASURES | 15 |
| A.4. | PROJECT OWNER(S) | 17 |
| A.5. | DECLARATION OF INTENDED USE OF APPROVED CARBON CREDITS (ACCS) GENERA | TED |
| | BY THE PROJECT ACTIVITY | 17 |
| A.6. | ADDITIONAL REQUIREMENTS FOR CORSIA | 17 |
| SECTION B | APPLICATION OF SELECTED METHODOLOGY(IES) | 19 |
| B.1. | REFERENCE TO METHODOLOGY(IES) AND TOOLS APPLIED IN THE PROJECT | 19 |
| B.2. | APPLICABILITY OF METHODOLOGY (IES) AND TOOLS APPLIED IN THE PROJECT | 19 |
| B.3. | PROJECT BOUNDARY, SOURCES AND GREENHOUSE GASES (GHGS) | 24 |
| B.4. | ESTABLISHMENT AND DESCRIPTION OF THE BASELINE SCENARIO | 25 |
| B.5. | DEMONSTRATION OF ADDITIONALITY | 26 |
| B.6. | ESTIMATION OF EMISSION REDUCTIONS | 34 |
| B.6.1. | EXPLANATION OF METHODOLOGICAL CHOICES | 34 |
| B.6.2. | DATA AND PARAMETERS FIXED EX ANTE | 37 |
| B.6.3. | EX-ANTE CALCULATION OF EMISSION REDUCTIONS | 37 |
| B.6.4. | SUMMARY OF EX ANTE ESTIMATES OF EMISSION REDUCTIONS | 39 |
| B.7. | MONITORING PLAN | 40 |
| B.7.1. | DATA AND PARAMETERS TO BE MONITORED EX-POST | 40 |
| B.7.2. | DATA AND PARAMETERS TO BE MONITORED FOR E+/S+ ASSESSMENTS (NEGATIVE | - |
| | IMPACTS) | 50 |
| B.7.3. | SAMPLING PLAN | 51 |
| B.7.4. | OTHER ELEMENTS OF THE MONITORING PLAN | 51 |
| SECTION C | START DATE, CREDITING PERIOD TYPE AND DURATION | 54 |
| C.1. | START DATE OF THE PROJECT ACTIVITY | 54 |
| C.2. | EXPECTED OPERATIONAL LIFETIME OF THE PROJECT ACTIVITY | 54 |
| C.3. | CREDITING PERIOD OF THE PROJECT ACTIVITY | 54 |
| C.3.1. | START AND END DATE OF THE CREDITING PERIOD | 54 |
| C.3.2. | DURATION OF CREDITING PERIOD | 54 |
| SECTION D | ENVIRONMENTAL IMPACTS | 55 |

| D.1. D.2. | ANALYSIS OF ENVIRONMENTAL IMPACTS ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT ACTION PLANS | 55 55 |
|-------------------|---|----------|
| D. 2. | ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT ACTION PLANS | 55 |
| SECTION E. | ENVIRONMENTAL AND SOCIAL SAFEGUARDS | 55 |
| E.1. | ENVIRONMENTAL SAFEGUARDS | 56 |
| E.2. | SOCIAL SAFEGUARDS | 66 |
| <u>SECTION F.</u> | UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDG) | 74 |
| SECTION G. | LOCAL STAKEHOLDER CONSULTATION | 79 |
| G.1. | MODALITIES FOR LOCAL STAKEHOLDER CONSULTATION | 79 |
| G.2. | SUMMARY OF COMMENTS RECEIVED | 81 |
| G.3. | CONSIDERATION OF COMMENTS RECEIVED | 81 |
| SECTION H. | APPROVAL AND AUTHORIZATION | 82 |
| APPENDIX 1. | CONTACT INFORMATION OF PROJECT OWNERS | 83 |
| APPENDIX 2. | AFFIRMATION REGARDING PUBLIC FUNDING | 83 |
| APPENDIX 3. | (-) | 83 |
| APPENDIX 4. | FURTHER BACKGROUND INFORMATION ON EX ANTE CALCULATION OF EMISSION REDUCTIONS | 83 |
| APPENDIX 5. | FURTHER BACKGROUND INFORMATION ON MONITORING PLAN | 84 |
| APPENDIX 6. | | |
| APPENDIX 7. | SUMMARY OF DE-REGISTERED CDM PROJECT OR PROJECTS FROM OTHE GHG / NON-GHG PROGRAMS (TYPE B) | |
| Appendix 8. | FURTHER INFORMATION ON DETERMINATION OF BUNDLE IN PROJECT ACTIVITY. | 88 |
| Appendix 9. | PUBLIC DECLARATION FOR A2 (Sub Type 2 and 3), B1 & B2 PROJECTS ON NON-CONTINUATION FROM CDM/GHG/NON-GHG PROGRAMS. | 88 |
| | | |

| COVER PAGE- Project Submission Form (PSF) | | | | | |
|---|--|--|--|--|--|
| Complete this form in a | Complete this form in accordance with the instructions attached at the end of this form. | | | | |
| | BASIC INFORMATION | | | | |
| Title of the Project Activity as per LON/LOA | AGV and BH Solar Power Projects by AES | | | | |
| PSF version number | Version 02 | | | | |
| Date of completion / Updating of this form | 14/11/2022 | | | | |
| Project Owner(s) as per LON/LOA (Shall be consistent with De- registered CDM Type B Projects) | AES Brasil Operações S.A. Kosher Climate India Private Limited | | | | |
| Country where the Project Activity is located | Brazil | | | | |
| GPS coordinates of the project site(s) | Refer Section A2 | | | | |
| Eligible GCC Project Type as per the Project Standard (Tick applicable project type) | Type A: Type A1 Type A2 Sub-Type 1 Sub-Type 2 Sub-Type 3 Sub-Type 4 Type A3 | | | | |

¹ Owners of Type B projects shall fill in the form provided in Appendix 7.

| | П Туре В2 |
|--|--|
| Minimum compliance requirements | Real and Measurable GHG Reductions National Sustainable Development Criteria (if any) Apply credible baseline and monitoring methodologies Additionality Local Stakeholder Consultation Process Global Stakeholder Consultation Process No GHG Double Counting Contributes to United Nations Sustainable Development Goal 13 (Climate Action) |
| Choose optional and additional requirements (Tick applicable label categories) | Do-no-net-harm Safeguards to address Environmental Impacts Do-no-net-harm Safeguards to address Social Impacts Contributes to United Nations Sustainable Development Goals (in addition to Goal 13) |
| Applied methodologies including version No. (Shall be approved by the GCC or the CDM) | ACM0002 Grid-connected electricity generation from renewable sources, Version 20.0 |
| GHG Sectoral scope(s) linked to the applied methodology(ies) | GHG Sectoral Scope 1- Energy Industries (Renewable/Non- Renewable sources) |

| Applicable Rules | Rules and Requirements | | Version |
|--|---|---|----------|
| and Requirements for Project Owners | ⊠ ISO 14064-2 | | |
| (Tick applicable Rules and Requirements) | Applicable host country legal requirements /rules | | |
| | GCC Rules and | Project Standard | V3.1 |
| | Requirements ² | Approved GCC Methodology (XXXXX) | |
| | | Program Definitions | V3.1 |
| | | Safeguards Standard | V3.0 |
| | | Standard Project Sustainability | V3.0 |
| | | Instructions in Project Submission Form (PSF)- template | V.4.0 |
| | | Clarification No. 01 | V.1.3 |
| | | Clarification No. 02 | |
| | | Clarification No. 03 | |
| | | Clarification No. 04 | |
| | | Clarification No. 05 | |
| | | Standard on avoidance of double counting | V.1.0 |
| | | Add rows if required | |
| | CDM Rules ³ | Approved CDM Methodology ACM002 - <u>Grid-connected electricity</u> generation from renewable sources | V.20.0 |
| | | TOOL 1- Tool for the demonstration and assessment of additionality | V.07.0.0 |
| | | TOOL 02- Combined tool to identify the baseline | |

 ² GCC Program rules and requirements: <u>http://www.globalcarboncouncil.com/resource-centre/</u>
 ³ CDM Program rules: <u>https://cdm.unfccc.int/Reference/index.html</u>

| | | scenario and demonstrate additionality | |
|---|--|--|-------|
| | | TOOL 07- Tool to calculate the emission factor for an electricity system | V07.0 |
| | | TOOL 19- Demonstration of additionality of microscale project activities | |
| | | TOOL 21- Demonstration of additionality of small-scale project activities | |
| | | TOOL 23- Additionality of first-of-its-kind project activities | |
| | | TOOL 24- Common practice | V3.1 |
| | | TOOL 27- Investment analysis | V11.0 |
| | | TOOL 32- Positive lists of technologies | |
| | | Guidelines for objective demonstration and assessment of barriers | |
| | | Add rows if required | |
| Choose Third Party Project Verification by approved GCC Verifiers ⁴ | GHG emission reductions (i.e., Approved Carbon Credits (ACCs)) ☑ Environmental No-net-harm Label (E⁺) ☑ Social No-net-harm Label (S⁺) | | |
| (Tick applicable verification categories) | United Nations Sustainable Development Goals (SDG+) Bronze SDG Label Silver SDG Label Gold SDG Label Platinum SDG Label Diamond SDG Label | | |

⁴ **Note:** GCC Verifiers under the Individual Track are not eligible to conduct verifications for GCC Project Activities whose owners intend to supply carbon credits (ACCs) for use within CORSIA.

| | CORSIA requirements (C ⁺) |
|--|--|
| Declaration by the 'Authorized Project Owner ⁵ and focal point' (Tick all applicable statements ⁶) | The Project Owner(s) declares that: Generic Requirements applicable to all Project Types: We confirm that the Project Activity complies with the eligibility of the applicable project type (A1, A2, A3, B1 or B2) as stipulated by the Project Standard and relevant clarifications. We confirm that the Project Activity shall start or have started operations, and shall start or have started generating emission reductions, on or after 1 January 2016. We confirm that the Project Activity is eligible to be registered under the GCC program. We shall ensure the following for the Project Activity (tick at least one of the two options): No outcomes (e.g. emission reductions, environmental attributes) generated by the Project Activity under GCC will be claimed as carbon credits or environmental attributes under any other GHG/non-GHG⁷ program, either for compliance or voluntary purposes, during the entire GCC crediting period; or If the project activity has been issued with carbon credits or environmental attributes of compensating nature⁸ by any other programs and GCC program, for the remaining crediting period (subject to a maximum of 10 years of crediting period including the periods under other programs and GCC program) for which carbon credits/ environmental attributes of compensating nature have not been issued by any other GHG/ non-GHG program, for which carbon credits/ environmental attributes of compensating nature have not been issued by any other GHG/ non-GHG program. |

⁵ The Project Owner means the legal entity or organization that has overall control and responsibility for the Project Activity

⁶ Consequences in case of Non-compliance with declaration statements:

If at any point of time non-compliance with the declared statements is established as a result of negligence, fraud or wilful misconduct of the GCC Project Owner/s the GCC project activity will be disqualified and the registration of the proposed Project Activity will be rejected.

⁷ Non-GHG program could be such as I-REC facilitating reliable energy claims with Renewable Energy Certificate (REC) schemes

⁸ The environment attributes of compensating nature are those which are used by captive users (e.g. corporates/industries) for offsetting their GHG emissions

| For Project Type A1, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other voluntary program and has not issued or will not issue credits under any other program. |
|---|
| For Project Type A2 (Sub-Type 1): |
| For Project Type A2 Sub-Type 1, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other voluntary program and has not issued or will not issue credits under any other program. |
| For Project Type A2 (Sub-Type 2 or Sub-Type 3): |
| For Project Type A2 Sub-Type 2 or Project Type A2 Sub-Type 3, we confirm that for Project Activity, which has been registered with CDM or any GHG/non-GHG Program and we shall (tick at least one of the two options): |
| Submit a proof for deregistration from CDM; or |
| Submit a signed & stamped public undertaking, stating that the Project Owner will never submit any request for Issuance of ACCs or request for renewal of crediting period to CDM-EB or under article 6.4 or any authority after submission to GCC Program and shall formally inform CDM-EB or authority under article 6.4 or any authority after submission to GCC Program. |
| For Project Type A2 Sub-Type 2 or Project Type A2 Sub-Type 3, we confirm that the Project Activity is NOT included as a component Project Activity (CPA) in any registered GHG Programme of Activities (PoA) or any other functionally equivalent grouped/aggregated activities under any GHG program (such as the CDM or any other voluntary program). |
| For Project Type A2 (Sub-Type 4): |
| For Project Type A2 Sub-Type 4, we confirm that the Project Activity has been included in a registered CDM-POA and we shall (tick at least one of the two options): |
| Submit the proof for exclusion of CPA(s) from registered CDM-POA prior to the date of initial submission to the GCC Program; or |
| Submit the proof of exclusion of CPA(s) from the registered CDM-PoA after the request for registration has been submitted to GCC Program but before the final decision is made by the GCC Steering Committee. |
| For Project Type A3: |
| For Project Type A3, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other voluntary program and has not issued or will not issue credits under any other program. |
| For Project Type B1 or B2: |

| For Project Type B1 or Project Type B2, we confirm that for Project Activity, which has been registered with CDM or any GHG/non-GHG Program and we shall (tick at least one of the two options): |
|---|
| Submit a proof for deregistration from CDM; or |
| Submit a signed & stamped public undertaking, stating that the Project Owner will never submit any request for Issuance of ACCs or request for renewal of crediting period to CDM-EB or under article 6.4 or any authority after submission to GCC Program and shall formally inform CDM-EB or authority under article 6.4 or any authority after submission to GCC Program. |
| Requirements to avoid double counting: |
| We intend to submit or have submitted a written attestation ⁹ (Host Country Letter of Authorization - HCLOA) from the host country's national focal point or focal point designee for CORSIA eligible units generated beyond 31 December 2020 at the following stages ¹⁰ (tick at least one of the three options): |
| The initial submission for GSC; or |
| Along with the submission for a request for registration (after Project Verification is completed); or |
| Along with the submission for a request for the first or subsequent issuance of ACCs. |
| Project specific requirements: |
| CORSIA specific requirements: |
| We confirm that bundled projects or grouped projects shall have registered crediting period starting on or after 1 Jan 2016 for the grouped/aggregated project as a whole. |
| We confirm that the Project Activity meets all the requirement of the CORSIA Eligible Emissions Units ¹¹ required for GCC projects and does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes. |
| We confirm that the Project Activity aims to achieve at least Silver or higher SDG+ label (i.e. positively impact at least 3 or more United Nations Sustainability Development Goals). |
| We confirm that the Project Activity will be implemented in a country which is UN member state ¹² . |

⁹ In case of any change of Host Country Letter of Authorisation (HCLOA) the project owner shall inform the GCC operations team immediately

¹⁰ If the host country attestation is not submitted at the initial submission of GSC, the project can be tagged with an indicative CORSIA flag if its confirmed to be submitted later. If the host country attestation is not submitted at the request for registration, the project can be tagged with an indicative CORSIA flag if at least the PSF and Verification Report confirms to submit this letter, at first issuance. If the host country attestation is not submitted at request for first issuance, the ACCs will not be tagged as CORSIA (C+) compliant if this letter is not submitted.

¹¹ CORSIA Eligible Emissions Units containing approval and conditions for GCC Program: <u>https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx</u>

¹² The list of UN member states countries can be found at https://www.un.org/en/about-us/member-states

| | Provide details (if any) below for the boxes ticked above: |
|--|--|
| | |
| | |
| | The Project Owner(s) declares that: |
| | All of the information provided in this document, including any supporting documents submitted to the GCC or its registry operator IHS Markit at any time, is true and correct; |
| | They understand that a failure by them to provide accurate information or data, or concealing facts and information, can be considered as negligence, fraud or wilful misconduct. Therefore, they are aware that they are fully responsible for any liability that arises as a result of such actions. |
| | Provide details below for the boxes ticked above |
| | |
| Appendixes 1-9 | Details about the Project Activity are provided in Appendixes 1 through 9 to this document. |
| Name, designation, date and signature of the Focal point (as per LON/LOA) | Kosher Climate India Private Limited |
| | COX * OF |
| | Narendra Kumar Ramaraj Head-Operations 14/11/2022 |
| | |

1. PROJECT SUBMISSION FORM

Section A. Description of the Project Activity

A.1. Purpose and general description of the Project Activity

The Purpose of this project activity is to generate electricity by harnessing the solar energy by using of solar photovoltaic technology and there by feed the generated electricity to the Brazilian national grid.

Project activity involves installation of five Solar photovoltaic power generation projects in São Paulo at same locations with installed capacities of 15.2 MW, 30.4MW, 23.04MW, 23.04MW and 23.04MW each with total project capacity of 114.72 MW. The projects are installed in Rod. Percy Waldir Semeguini, km 602, Ouroeste, São Paulo, Brazil. The Project activity has installed the Solar Photovoltaic based Panels to convert the available solar radiation into the DC power and there by installed the Inverters to convert the DC power to the AC Power.

All the five projects are commissioned and are currently operational. All the five projects have been connected to the National Grid.

The generated power from the project activity is supplying to the third-party consumers through the wheeling agreement with the DISCOM. Project Owners have signed a Power Purchase agreement with the consumer organizations to supply the generated solar power at contracted unit of price.

| Project | Capacity | Substation | Commissioning | Project | Power Purchasing |
|-----------------------|----------|--|---------------|--|--|
| Name | (MW) | | date (COD) | Owner | Agency |
| Project Activity 1 | 15.2 | LT CD 138 kV Água Vermelha - Jales, DIT | 29/11/2019 | AGV SOLAR IV GERADORA DE ENERGIA S.A. | Companhia Energética de Alagoas - CEAL |
| Project Activity 2 | 30.4 | SS Água Vermelha and SS Jales | 29/11/2019 | AGV SOLAR V GERADORA DE ENERGIA S.A. | ELEKTRO REDES S.A. |
| Project Activity 3 | 23.04 | SS Água Vermelha and SS Jales | 14/08/2019 | BOA HORA 1 GERADORA DE ENERGIA SOLAR S.A. | CCEE (Electric Energy Chamber of Commerce) |
| Project Activity 4 | 23.04 | SS Água Vermelha and SS Jales | 14/08/2019 | BOA HORA 2 GERADORA DE ENERGIA SOLAR S.A. | CCEE (Electric Energy Chamber of Commerce) |

| Project | 23.04 | SS Água | 14/08/2019 | BOA HORA 3 | CCEE (Electric |
|------------|-------|--------------|------------|------------|-------------------|
| Activity 5 | | Vermelha | | GERADORA | Energy Chamber of |
| | | and SS Jales | | DE ENERGIA | Commerce) |
| | | | | SOLAR S.A. | |

The project is promoted by AES Brasil Operações S.A. and the above companies are the SPVs of AES Brasil Operações S.A.

The entire capacity of 114.72 MW is a single project implemented by AES Brasil Operações S.A. through its SPVs with capacities of 15.2 MW, 30.4MW, 23.04MW, 23.04MW and 23.04MW each. The investment decision making of all the projects is on same date and all projects are commissioned within the same year of 2019 and located in São Paulo, Brazil. All the projects are of same technology (solar power) and applies same methodology (ACM0002, v 20.0) and has same baseline (which is national electricity grid), generate the same output (Electricity), apply the same additionality approach (Investment analysis).

As per the paragraph 9 of the GCC "clarification No.1 v 1.2" and Guideline on "Non-binding examples of bundling", all the activities in the project by default 'homogeneous' and is not a bundled project. Hence, project proponent developed this project as a single project with multiple sites.

The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 87,788 tCO₂e per year, thereon displacing estimated average of 248,227 MWh/year amount of electricity from the generation-mix of power plants connected to the Brazilian grid. Project activity will mitigate the total GHG emission reductions of 877,879 tCO₂e over the entire crediting period.

Baseline Scenario:

The scenario existing prior to the implementation of the project activity, is electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the **"Tool to calculate the emission factor for an electricity system"**. This is a green field project activity. There was no activity at the site of the project participant prior to the implementation of this project activity. Hence pre-project scenario and baseline scenario is the same.

Sustainable Development Indicators:

In addition to contribution to the sustainable environment by reducing the GHG emissions and reducing the dependency on fossil fuels, this project activity also contributing to the sustainable development though supporting the local community and local economy.

Social well-being: The project activity provided / provides job opportunity to local people during erection, commissioning and maintenance of the solar project. This will result in improvement of living standards of the local community. The installation of the renewable energy project also leads to the development of basic infrastructure like roads and communication with the nearby cities, which will also improve the living standards of the local population

Environmental well-being: Solar power is one of the cleanest renewable energy powers and does not involve any fossil fuel. There are no GHG emissions. The impact on land, water, air and soil is negligible. Thus, the project activity contributes to environmental well-being without causing any negative impact on the surrounding environment.

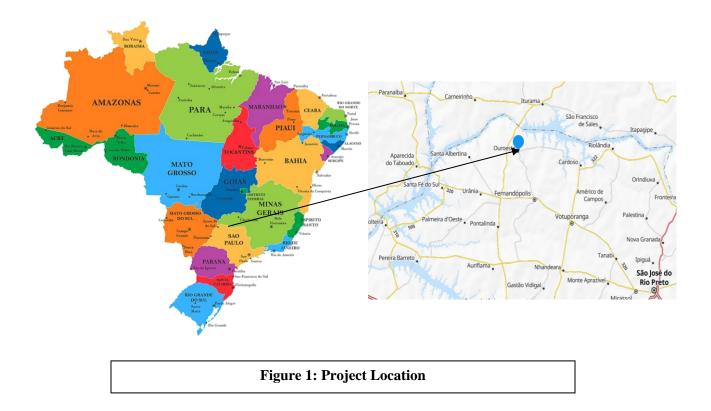
Economic well-being: The project activity generates permanent and temporary employment opportunity within the vicinity of the project. The electricity supply in the nearby area improves which directly and indirectly improves the economy and life style of the area.

Technological well-being: The project activity is step forward in harnessing the untapped solar potential and further diffusion of the solar technology in the region. The project activity leads to the promotion and demonstrates the success of solar projects in the region which further motivate more investors to invest in solar power projects. Hence, the project activity leads to technological well-being.

A.2. Location of the Project Activity

| Address and geographic coordinates of the physical site of the project activity | | | | |
|---|----------|---|-------------------------------|------------------------------|
| Project Activity | Capacity | Physical address | Latitude | Longitude |
| Project Activity 1 | 15.2MW | Rod. Percy Waldir Semeguini, km 602, Ouroeste, SP, Brazil | -19°52'52.68''S (-19.8813) | -50°23'31.2''W (-50.3920) |
| Project Activity 2 | 30.4MW | Rod. Percy Waldir Semeguini, km 602, Ouroeste, SP, Brazil | -19°52'52.68''S (-19.8813) | -50°23'31.2"W (-50.3920) |
| Project Activity 3 | 23.04MW | Rod. Percy Waldir Semeguini, km 602, Ouroeste, SP, Brazil | -19°52'52.68"S (-19.8813) | -50°23'31.2''W (-50.3920) |
| Project Activity 4 | 23.04MW | Rod. Percy Waldir Semeguini, km 602, Ouroeste, SP, Brazil | -19°52'52.68''S (-19.8813) | -50°23'31.2''W (-50.3920) |
| Project Activity 5 | 23.04MW | Rod. Percy Waldir Semeguini, km 602, Ouroeste, SP, Brazil | -19°52'52.68''S (-19.8813) | -50°23'31.2"W (-50.3920) |

All the five projects are located in the state of São Paulo, Brazil.



A.3. Technologies/measures

Project activity used Poly-Crystalline Photovoltaic technology which converts the solar radiation into the electricity. The solar PV plant has the PV modules, Central Inverters, Transformers and other relay and protection system.

Technical specifications of the components used during the project commissioning are given below

| Parameter | Project Capacity | Technology | PV Modules | Central Inverter | Lifetime of the Project |
|------------|--------------------------|---------------------|-------------------------|---------------------|-------------------------------|
| Project- 1 | DC Capacity- 18.8 MW | Poly Crystalline | CHSM6612P/HV | 1690TL B650 | 25 Years |
| | AC Capacity- 15.2 MW | | Rating- 340 Wp & 345 Wp | Rating- 1690kW | |
| | | | Total No- 44,058 | Total No- 9 | |
| Project- 2 | DC Capacity- 36.16 MW | Poly Crystalline | CHSM6612P/HV | 1690TL B650 | 25 Years |
| | AC Capacity- 30.4 MW | | Rating- 340 Wp & 345 Wp | Rating- 1690kW | |

| | | | Total No- 88,116 | Total No- 18 | |
|------------|--------------------------|---------------------|-------------------------|---------------------|----------|
| Project- 3 | DC Capacity- 27.33 MW | Poly Crystalline | CHSM6612P/HV | Sun 2000 - 60KTL | 25 Years |
| | AC Capacity- 23.04 MW | | Rating- 340 Wp & 345 Wp | Rating- 1690kW | |
| | | | Total No- 66,783 | Total No- 14 | |
| Project- 4 | DC Capacity- 27.33 MW | Poly Crystalline | CHSM6612P/HV | Sun 2000 - 60KTL | 25 Years |
| | AC Capacity- | - | Rating- 340 Wp & | | |
| | 23.04 MW | | 345 Wp | Rating- 1690kW | |
| | | | Total No- 66,783 | | |
| | | | | Total No- 14 | |
| Project- 5 | DC Capacity- 27.33 MW | Poly Crystalline | CHSM6612P/HV | Sun 2000 - 60KTL | 25 Years |
| | AC Capacity- | - | Rating- 340 Wp & | | |
| | 23.04 MW | | 345 Wp | Rating- 1690kW | |
| | | | Total No- 66,783 | | |
| | | | | Total No- 14 | |

Solar PV Modules Coverts the available solar radiation into the DC power. Installed Central Inverters will convert the generated DC power into the AC Power. Total AC power from all the inverter blocks will be pooled into the common switchyard. Total Power will be stepped up to 138 KV in the switchyard by using step-up transformers and transmitted to the nearest substation.

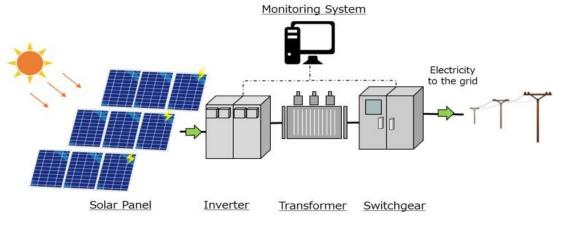


Figure 2: Solar power plant flow diagram

An intelligent automatic monitoring and alarm system (SCADA) has been already installed in the project control room which will monitor and record the real time data from the plant and alerts the staff in case of any malfunctioning in the equipment operation. However Separate Energy meters

have been installed by the DISCOM people to record the import export of electricity from the plant. Monitoring and metering system is explained in detail in the below section B.7.4

This is a green field project activity generating the electricity from the solar energy and supplying it to the national grid. In the baseline scenario the equivalent of electricity would have been generated from the grid connected power projects to which the project activity is connected. There is no technology transfer occurred in the proposed project activity.

A.4. Project Owner(s)

| Location/ Country | Project Owner(s) | Where applicable ¹³ , indicate if the host country has provided approval (Yes/No) |
|----------------------|--------------------------------------|---|
| Brazil | AES Brasil Operações S.A. | No |
| India | Kosher Climate India Private Limited | No |

A.5. Declaration of intended use of Approved Carbon Credits (ACCs) generated by the Project Activity

The Project Activity is expected to generate ACCs for a full 10-year crediting period and supply the credits to offset the following GHG emissions:

| Period | | Name of the Entities | Purpose and Quantity of ACCs |
|------------|------------|---|--|
| From | То | | to be supplied |
| 14/08/2019 | 13/08/2029 | AES Brasil Operações S.A. & Kosher Climate India Private Limited | For offsetting Greenhouse gasses 877,879 tCO ₂ for 10-year period |

Project proponent hereby confirms that the proposed project activity is neither applied nor registered under any other GHG reduction certification mechanism. Hence, the ACCs generated from this project activity will not be double counted under any other mechanism.

A.6. Additional requirements for CORSIA

¹³ For example, *Project Coordination Form* is to be filled-in by Project Owners for projects located in Qatar. A written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA (Refer section A.5 of the PSF guidelines).

The proposed project activity is solar energy-based power project, by supplying the clean energy displacing the equivalent amount of electricity in the national grid which is being otherwise supplied by the grid-connected power projects. The project activity is the installation of an environmentally safe and sound technology since there are no GHG emissions associated with the electricity generation. The project activity complies with all relevant environmental and social safeguard standards and does not cause any net harm to the environment and society.

CORSIA pilot phase vintage eligibility criteria require that first crediting period of Project must start on or after 1 January 2016. The GCC Program also started on 1 Jan 2016. The proposed project activity starts operations after 1st January 2016 and thus complies with the requirement.

| Additional CORSIA Criteria | Justification for the project |
|---|---|
| Comply with the Environment and Social | Please refer section E of this PSF. |
| Safeguards Standard to ensure that the Project | |
| Activity does not cause any net harm to the | |
| environment or society and provides an opportunity | |
| to demonstrate this achievement by obtaining the | |
| additional certification labels E + and S+. Please | |
| refer to Section E of this document. | |
| Comply with the Project Sustainability Standard to | Please refer section F of this PSF. |
| ensure that the Project Activity demonstrates the | |
| level of contribution towards achieving the United | |
| Nations Sustainability Development Goals (SDGs) | |
| and provides an opportunity to demonstrate this | |
| achievement by obtaining the additional SDG+ label | |
| (Bronze, Silver, Gold, Platinum, or Diamond). | |
| Please refer to Section F of this document. | |
| Obtain and provide to the GCC and its Registry | Such attestation shall be provided during |
| (operated by IHS Markit), a written attestation from | ER verification when the host country |
| the host country's national focal point or the focal | provides such provision. |
| point's designee, as required by CORSIA Emissions | |
| Unit Eligibility Criteria ¹⁴ (paragraph 7 (c) of the | |
| Carbon Offset Credit Integrity Assessment Criteria) | |
| and Programme Application Form – Appendix A – | |
| Supplementary Information Form ¹⁵ (refer to section | |
| 3.7.8. with respect to the Host Country Attestation | |
| on Double Counting), which shall be made publicly | |

¹⁴ ICAO document 'CORSIA Emissions Unit Eligibility Criteria':

https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO%20document%2009.pdf

¹⁵ https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx

| available prior to the use of units from the host |
|---|
| country under CORSIA. |

Section B. Application of selected methodology(ies)

B.1. Reference to methodology(ies) and tools applied in the project

The UNFCCC approved consolidated baseline methodology applicable to this project is ACM0002 "Grid-connected electricity generation from renewable sources", Version – 20.0^{16} Following tools have been referred during the estimation of emission reduction calculations as per the methodology ACM0002.

"Tool to calculate the emission factor for an electricity system", Version 7.0¹⁷.

"Tool for the demonstration and assessment of additionality", Version 7.0.018

"Tool for the Investment analysis" Version 11.0¹⁹

"Common practice", Version 3.1²⁰

B.2. Applicability of methodology(ies) and tools applied in the project

The methodology ACM0002, Version 20.0 is applicable to the project activity under the following conditions:

| Applicability Criteria | Applicability status | |
|--|---|--|
| 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) | The proposed project activity is a green field, Brazilian grid connected renewable power plant. Therefore, it confirms to the said criteria | |
| The methodology is applicable under the following conditions: The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, solar power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit | The project activity is the installation of a new grid connected renewable solar power project. Thus, it meets the first applicability condition | |

¹⁶ <u>https://cdm.unfccc.int/methodologies/DB/XP2LKUSA61DKUQC0PIWPGWDN8ED5PG</u>

¹⁷ <u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf</u>

¹⁸ <u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf</u>

¹⁹ https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v11.0.pdf

²⁰ <u>https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf</u>

| 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 or retrofit or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity | The proposed project activity is the installation of a new solar power plants/units. Therefore, the said criteria is not applicable |
|--|---|
| In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of reservoirs; or (b) The project activity is implemented in an existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3) is greater than 4 W/m2; or (c) The project activity is an integrated hydro power project activity is an integrated hydro power project involving multiple reservoirs, where the power density calculated using equation (3), is lower than or equal to 4 W/m2, all of the following conditions shall apply. (i) The power density calculated using the total installed capacity of the integrated project, as per equation (4) is greater than 4W/m2; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2; (iii) Less than 10% of the total installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2; | The proposed project activity is the installation of solar power plants/units. Therefore, the said criteria is not applicable |
| In the case of integrated hydro power projects, project proponent shall: | The proposed project activity is the installation of a solar power plants/units. Therefore, the said criteria is not applicable |

| (a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or | | | |
|--|--|--|--|
| (b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability indifferent seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity. | | | |
| The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site. (b) Biomass fired power plants; | The proposed project activity is the installation of solar power plants/units. Therefore, the said criteria is not applicable | | |
| In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance". | The proposed project activity is the installation of solar power plants/units. Therefore, the said criteria is not applicable | | |
| In addition, the above applicability conditions, the applicability conditions of tool referred in the methodology ACM0002, version 20.0 has been referred here under: | | | |
| Tool07: Tool to calculate the emission factor for an | | | |
| This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g., demand- side energy efficiency projects). | The project activity is a greenfield solar power generation plant and hence, according to the applied methodology, 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 | | |

| 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 | addition of new generation sources, as reflected in the combined margin (CM) calculations described in "TOOL07: Tool to calculate the emission factor for an electricity system". Since the project activity is grid connected, this condition is applicable and the emission factor has been calculated accordingly. |
|--|---|
| 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. | |
| 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. | The project activity is located in Brazil, a non-Annex I country. Therefore, this criterion is not applicable for the project activity |
| Under this tool, the value applied to the CO ₂ emission factor of bio fuels is zero | The project activity is a grid connected solar power project and therefore, this criterion is not applicable for the project activity |
| Tool 01: Tool for the demonstration and assessmen | t of additionality; Version 7.0.0, |
| The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool. | Since the applied technology is not a new methodology project proponent has applied this tool for the demonstration 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 |
| Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory. | In line with the methodology requirement Project developer has applied this tool for the demonstration of additionality assessment. |
| Tool 24: Common Prostico version 2.1 | Hence this tool is applicable |
| Tool 24: Common Practice version 3.1This methodological tool is applicable to project | Project activity applies "Tool for the |
| | |

| activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality. | demonstration and assessment of additionality". Hence this tool is applicable. |
|--|--|
| 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. | Applied methodology ACM0002 version 20.0 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. |
| Tool27: Investment analysis version 11. | |
| This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", the guidelines "Non-binding best practice examples to demonstrate additionality for SSC project activities", or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario. | Project activity applies "Tool for the demonstration and assessment of additionality". Hence this tool is applicable. |
| In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail. | Applied methodology ACM0002 version 20.0 doesn't specify any approach for the demonstration of 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 10.0 Hence Justified. |

B.3. Project boundary, sources and greenhouse gases (GHGs)

The project boundary includes the solar project, sub-stations, grid and all power plants connected to grid. The proposed project activity will evacuate power to the Brazilian grid. Therefore, the entire Brazilian grid and all connected power plants have been considered in the project boundary for the proposed project activity.

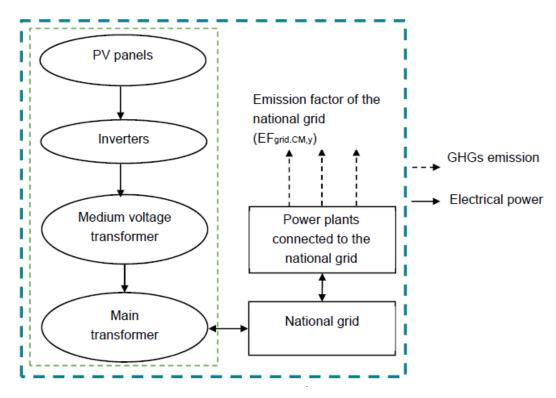


Figure: Project Boundary

The table below provides an overview of the emissions sources included or excluded from the project boundary for determination of baseline and project emissions.

The project does not involve any other emissions sources not foreseen by the methodologies. The greenhouse gases and emission sources included in or excluded from the project boundary are shown in table below.

| Source | | GHG | Included? | Justification/Explanation |
|---------------------|----------------------------|------------------|-----------|--|
| := | Grid Connected Electricity | CO_2 | Yes | Main Emission Source |
| Baseli ne | Generation | CH_4 | No | Minor Emission source |
| Ba | | N ₂ O | No | Minor Emission source |
| t Þ | Greenfield Solar PV Power | CO_2 | No | No CO ₂ emissions are emitted |
| Project Activity | Project activity | | | from the project |
| Pro Acti | | CH_4 | No | Project activity does not emit |
| ₽₹ | | | | CH4 |

| | N ₂ O | No | Project activity does not emit N ₂ O |
|--|------------------|----|---|
|--|------------------|----|---|

B.4. Establishment and description of the baseline scenario

An Approved large-scale baseline CDM methodology ACM0002 "Grid-connected electricity generation from renewable sources", Version 20.0.has been followed along with the "tool to calculate the emission factor for an electricity system, version 7" is used to establish the baseline scenario.

According to the methodology baseline scenario has been identified as "Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".

The project activity involved setting up of solar Power generation Plant to harness the power of solar energy to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied to the electricity grid by the operation of gridconnected power plants (mainly by fossil fuel fired plants) and by the addition of new generation sources, as reflected in the combined margin (CM) calculations.

Hence, the baseline scenario for the project activity is the equivalent amount of electricity generated from the Brazilian national grid.

The baseline case is in compliance with all applicable legal and regulatory requirements references as per the methodology, The combined margin ($EF_{grid,CM,y}$) has to be determined as per the Tool to calculate the emission factor for an electricity system. However, in case of non-availability of the data required to calculate grid emission factor as per the CDM Tool 07: "Tool to calculate the emission factor for an electricity system". GCC has provided the clarification No.3²¹ provided the options for the project owner to determine the baseline grid emission factor, where applicable:

- a) Using CDM Tool 07: "Tool to calculate the emission factor for an electricity system";
- b) Latest available emission factor of the Grid in a country as approved by CDM standardized baseline.
- c) Latest available emission factor of the Grid in a country as approved by its relevant National Authority or Designated National Authority (DNA) under CDM or UNFCCC focal point in case DNA doesn't exist.
- d) Latest IFI combined margin emission factors published on UNFCCC website²²;
- e) Latest published Emission factor derived by International Energy Agency (IEA)²³

²¹ <u>https://www.globalcarboncouncil.com/wp-content/uploads/2022/04/Clarification-No.-03.pdf</u> ²² <u>https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting/ifi-twg-</u>

listof-methodologies

²³ <u>http://data.iea.org/payment/products/122-emissions-factors.aspx</u>

Project Owner has chosen the option (c) "Latest available emission factor of the Brazilian national grid approved 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 2020."²⁴

As per the DNA the latest grid emission factor of Brazil 2020 is 0.3649 tCO₂/MWh

EFgrid, CO2 = 0.3649 tCO2/MWh

B.5. Demonstration of additionality

The additionality of the proposed project activity is demonstrated by following the guidance provided in the GCC project Standard V 3.1.

As per the GCC Project Standard additionality can be demonstrated using the following two components

- a) A legal requirement test
- b) An Additionality Test either based on a Positive List test or a projects-specific additionality test.

a) Legal requirement test

As per the paragraph no 46 of the project standard V3.1 the project is not implemented by the force of law. This is a voluntary activity undertaken by the project owner in compliance with all the legal requirement in the host country. Hence project complies with the legal requirement test.

b) Additionality Test

As per the GCC Project standard V3.1 this project needs to be demonstrating the additionality test based on the Project specific additionality test.

Additionality has been demonstrated as per the applied methodology ACM0002 (Version 20.0). Methodology requires the project participant to determine the additionality based on "Tool for the demonstration and assessment of additionality", Version 7.0.0.

The stepwise approach to establish additionality of the project activity has been followed, details of which are provided in the following paragraphs:

As per the applied methodology requirement, Additionality of the project activity is demonstrated using the Methodological tool "Tool for the demonstration and assessment of additionality" Version 7.0.0. The tool defines the following steps:

Sub Step 0: Demonstration whether the proposed project activity is the first-of-its-kind.

²⁴ <u>https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao_despacho.html</u>

The proposed project activity is not the first of its kind as implementation of solar power project in the State is not first of its kind.

Step 1: Identification of alternatives to the project activity consistent with current laws and regulations

Sub-step 1a: Define alternatives to the project activity

As per the applied ACM 0002 version 20.0; Para 22, *if the project activity is the installation of a Greenfield power plant, 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 plant and by the addition of new generation sources.*

However, for the assessment of additionality the following alternatives are identified:

Alternative 1: The proposed project activity undertaken without being registered as a GCC project activity.

Alternative 2: No project activity is undertaken.

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

| Alternative | Compliance with laws & regulation | | |
|---|--|--|--|
| Alternative 1: The proposed project activity | Government of Brazil does not restrict | | |
| undertaken without being registered as a GCC project activity | implementation of Solar power project. | | |
| Alternative 2: No project activity is undertaken. | No law or regulation mandate PP to invest in | | |
| | this project. | | |

Hence, all the alternatives identified above comply with mandatory laws and regulations in Brazil. The financial attractiveness of Alternative 1 is demonstrated though investment analysis explained below:

Step 2: Investment Analysis

As per para 29 of "Tool for the demonstration and assessment of additionality" it is determined that the proposed project activity is not an economically attractive or financially feasible option. To conduct the investment analysis, Methodological tool: Investment analysis, version 11.0, EB 112 Annex 2 has been referred.

Sub-step 2a: Determine appropriate analysis method

As per "Tool for the demonstration and assessment of additionality" (version 7.0.0), for financial analysis of the project, the following three options are available:

Option I: Simple Cost Analysis

Option II: Investment Comparison Analysis

Option III: Benchmark Analysis

The project will generate revenues from sale of electricity therefore Option I is not applicable in line with para 32 of the Methodological tool: "Tool for the demonstration and assessment of additionality", version 7.0.0. Same applies to the Option II which is applied in case there are alternatives to the project activity as per para 42 of the "Tool for the demonstration and assessment of additionality", version 7.0.0.

Since, identified baseline for the proposed project activity is continuation of current practice (i.e. equivalent amount of energy would have been generated by grid electricity system through its currently operating power plants and by new capacity addition) and which is outside the direct control of the project participant, hence benchmark analysis (option III), where the returns on investment in the project activity are compared to benchmark returns that are available to any investors in the country is selected as the most appropriate method.

Sub-step 2b: Option III. Apply benchmark analysis

As per para 15 of EB 105 Annex 6 states that Required/expected returns on equity are appropriate benchmarks for equity IRR. The project participant has chosen benchmark analysis to demonstrate the additionality of the project. The project is promoted by private limited company and hence the return on equity and the risks associated with the investments for their shareholder is of primary concern. Hence, in order to analyze the financial viability of the project activity, the prime financial indicator that has been used is the post-tax equity IRR of the project activity.

Selection of Appropriate Benchmark:

The benchmark has been considered in accordance with Guidance 19 of EB 112 Annex 2, "The values in the table in the Appendix may also be used, as a simple default option".

Methodology deployed for arriving at a suitable value of Benchmark using Default Value has been described below:

- As the proposed project activity generates power utilizing solar energy, Group 1 as per para 5a of Appendix of EB 112 Annex 2 has been identified as a suitable category.
- The investment analysis has been carried out in Nominal terms. Accordingly, Default value as given in table under the Appendix, EB 112 Annex 2 has been adjusted by adding suitable forecasted inflation rate taken from Banco Central Do Brasil.

The benchmark has been computed in the following manner:

Default Value of Benchmark:

The cost of equity is determined by selecting the values provided in the table of the Appendix, i.e.,

Default values for cost of equity (expected return on equity) in the 'Methodological tool: Investment analysis.

Benchmark estimation:

The Cost of Equity has been considered using the "Methodological tool: Investment analysis" available at the time of decision making as well as the latest available value. As a conservative approach, the minimum value of benchmark has been considered as calculated using these 2 approaches.

Table under Appendix in EB112, Annex 2 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in Brazil = $11.22\%^{25}$

Thus, minimum cost of equity considered for calculation of Benchmark = 11.22%

The Required return on equity (benchmark) was computed in the following manner:

Nominal Benchmark²⁶ = {(1+Real Benchmark) * (1+Inflation rate)} -1

Where:

Default value for Real Benchmark = 11.22% (as per Appendix of EB 112, Annex 2)

Inflation Rate:

In line with investment analysis tool, Project owner has considered the targeted inflation rate published by the Banco Central Do Brasil²⁷ at the time of project start date of project i.e 09/03/2018.

Since the start date of all the projects are same and considered in the FY 2018-19 Inflation rate for Banco Central Do Brasil²⁸ and corresponding benchmark values applicable at the time of investment decision time are provided below.

The applicable inflation rate and corresponding benchmark values are provided below

| Project Activity | Inflation Forecast | Benchmark |
|------------------|--------------------|-----------|
| All the projects | 4.5% | 16.22% |

As a conservative approach, benchmark of **16.22%** has been selected for all the three projects.

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

²⁵ Guidelines on the assessment of investment analysis, EB112 Annex 2

²⁶ As per Pg. 320 of Corporate Finance, Second Edition of Aswath Damodaran

²⁷ Inflation targeting track record (bcb.gov.br)

²⁸ Inflation targeting track record (bcb.gov.br)

The period considered for Post Tax Equity IRR calculations is 25 years, which corresponds to the operational lifetime of the project activity.

Depreciation, and other non-cash items related to the project activity, which have been deducted in estimating gross profits on which tax is calculated, is added back to net profits for the purpose of calculating the financial indicator.

| Particulars | Value | Unit | Source/Remarks | |
|---------------------------|-------------|------------------|-----------------------------|--|
| Capacity of the project | 114.72 | MW | DPR | |
| Plant Load Factor | 24.70% | % | DPR | |
| Annual Net generation | 248228 | MWh | Calculated | |
| Project cost | 472.56 | BRL Million | DPR | |
| Debt | 70% | % | DPR | |
| Equity | 30% | % | DFR | |
| Debt | 330.79 | BRL Million | Calculated | |
| Equity | 141.77 | BRL Million | Calculated | |
| Interest rate | 12.00% | % | DPR | |
| Debt Repayment tenure | 15 | years | DPR | |
| Moratorium | 1 | year | DFR | |
| Operation and Maintenance | 4.59 | BRL Million | DPR | |
| Escalation in O & M | 5% | % | DPR | |
| Transmission Cost (TUSD) | 4.00 | BRL/kW/month | | |
| VAT on O&M | 17.00% | % | As per prevailing tax rates | |
| Insurance & overhead | 0.71 | BRL Million / Yr | standard practice | |
| Tariff | 233.6131799 | BRL/MWh | DPR | |
| Depreciation Rate | 4.00% | % | DPR | |
| Income tax rate (IRPJ) | 25.00% | % | Calculated | |

Input values considered for the IRR calculation are provided below.

| Applicable Taxes (% of Revenue) | | | |
|--|-------|---|--|
| PIS | 0.65% | % | https://www.taxathand.com/article/10477/Br azil/2018/Tax-authorities-clarify- PISCOFINS-taxation-of-financial-income- from-waivers-of-debt- |
| COFINS | 4.00% | % | https://www.pwcimpuestosenlinea.co/TLSTi mes/boletines/Tax-Incentives-for- Renewable-Energy-LATAM-30-10.pdf |
| ONS/CCEE | 1% | % | |
| Social Contribution CSLL (% Of Taxable Cashflow) | 9% | % | |

Post Tax Equity IRR for the project activities against the benchmark values are shown in table below. Thus, it is evident that the project is not financially attractive as the equity IRR is less below the benchmark value.

| Post tax Equity IRR | Benchmark Value | |
|---------------------|-----------------|--|
| 4.60% | 16.22% | |

Sensitivity Analysis:

The robustness of the conclusion drawn above, namely that the project is not financially attractive, has been tested by subjecting critical assumptions to reasonable variation. As required by Annex 2 of EB 112, only variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation. PP has identified the total revenue from the project activity is dependent on the Tariff, Plant Load Factor, Project Cost and O&M Costs constitute more than 20% of the project costs. These factors have been subjected to a 10% variation on either side and the results of the sensitivity analysis indicate that even after applying such variation the EIRR does not cross the benchmark.

| Variation % | -10% | Normal | 10% | Variation required to reach benchmark | Value required to reach benchmark |
|--------------|-------|--------|-------|--|--|
| Tariff | 3.06% | 4.60% | 6.20% | 68.50% | 393.638 |
| PLF | 3.06% | 4.60% | 6.20% | 68.50% | 41.62% |
| Project Cost | 5.92% | 4.60% | 3.57% | -47.50% | 248.09 |
| O&M Cost | 4.85% | 4.60% | 4.36% | NA | NA |

An analysis has been done to identify the percentage variation at which the financial indicators will equal/breach the benchmark and the probability of its occurrence. Based on sensitivity analysis it can be concluded that the proposed project activity is additional with reasonable variation in values and is not likely to reach the benchmark value. The occurrence of these events is unlikely for the following reasons:

- a) Tariff: The Tariff rate of electricity used for investment analysis i.e., 233.61 BRL/MWh is sourced from the DPR estimate applicable at the time of investment decision. Furthermore, the project will breach the benchmark value at a tariff variation of 68.50%. However, the actual tariff based on the PPAs signed is close to the estimated tariff and much below the tariff value required benchmarking value. Hence, increase in tariff is unlikely.
- b) **PLF:** The PLF value considered is based on DPR which is the Third Party PLF report i.e., 24.70% and the IRR breach the benchmark value at a PLF variation of more than 68.50%. The increase in PLF value to breach the benchmark is highly unlikely as the PLF is estimated with the estimated

annual radiation assessment and equity IRR at normative PLF values are less than the benchmark value and given the analysis above it's highly unlikely that PLF will increase above breaching value.

- c) Project Cost: The project cost considered for investment analysis i.e., 472.56 million BRL. The cost is sourced from DPR which is based on the negotiations with Supplier. A variation of -47.50% is required for IRR to breach benchmark which is not possible as the project is already commissioned. The actual cost incurred in commissioning of the project is higher than the value required to breach the benchmark which is within the sensitivity applied.
- d) O&M Costs: The sensitivity analysis reveals that O&M will breach the benchmark at negative values and is hypothetical case. Since the O&M cost is subject to escalation (as evidence by the O&M agreement) and subject to inflationary pressure, any reduction in the O&M costs is highly unlikely. The O&M contract has been executed at 4.59 BRL Million at which the equity IRR is much below than the benchmark value.

Step 3: Barrier analysis

Barrier analysis has not been used.

Step 4: Common practice analysis

Stepwise approach for common practice analysis has been carried out as per Methodological tool "Common Practice", version 03.1 EB84, Annex 7:

- (a) The projects are located in the applicable geographical area;
- (b) The projects apply the same measure as the proposed project activity;
- (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;
- (*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;
- (e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1;
- (*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.

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 114.72 MW and hence the output range as per the guideline is selected to be 57.36 MW to 172.08 MW.

Step (2): Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step (2) as follows:

- a) As the project is in Brazil, therefore, the applicable geographical area is Brazil and projects in the host country Brazil have been chosen for analysis.
- b) The projects applying same measure (i.e, only renewable energy through Solar) are selected as the proposed project activity is solar power project.
 Therefore, all projects applying same measure (b) as the proposed project activity are candidates for similar projects.
- c) The energy source used by the project activity is Solar. Hence, only solar energy projects have been considered for analysis.
- d) The project activity produces electricity; therefore, all power plants that produce electricity are candidates for similar projects.
- e) The capacity range of the projects is within the applicable capacity range for the project is 57.36 MW to 172.08 MW
- f) The start date of the project is 29/11/2018 and 09/03/2018. As Kyoto Protocol was ratified by Brazil on 23/08/2002²⁹, therefore projects which had started commercial operation between 25/09/2002 to 29/11/2018.

The list of projects considered for the analysis has been sourced from the official website of ANEEL.

Numbers of Similar projects identified which fulfill above-mentioned conditions are $N_{solar} = 0$

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 validation. Note their number, N_{all}.

CDM/VCS/GS/GCC and EU-ETS project activities, which have got registered, submitted for registration or are under validation, have been excluded in this step. The list of the power plants identified is provided to the verifier. After excluding the registered, submitted for registration and under validation projects the total number of projects.

$\mathbf{N}_{all} = 0$

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

 $\mathbf{N}_{diff} = 0$

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

²⁹ <u>http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php</u>

Calculate $F = 1-N_{diff}/N_{all}$ F = 1-(0/1) = 1Nall-Ndiff =0

As per methodological tool "common practice" version 03.1, the proposed project activity is a "common practice" within a sector in the applicable geographical area if the factor F is greater than 0.2 and Nall - Ndiff is greater than 3. Thus, if both conditions are fulfilled, then project activity will be a common practice. Otherwise, the project activity is treated as not a common practice.

Outcome of Step 5:

As,

- i. F = 1; which is greater than 0.2
- ii. Nall Ndiff = 0; which is not greater than 3

The project activity does not satisfy second condition.

Thus, the proposed project activity is not a "common practice" within a sector in the applicable geographical area.

Conclusion:

As described above, the project fulfils all necessary requirements of additionality specified in the 'Tool for the demonstration and assessment of additionality' v7.0.0. Hence, the project is additional

B.6. Estimation of emission reductions

B.6.1. Explanation of methodological choices

As per the paragraph 54 of the methodology ACM0002 Version 20.0 emission reductions are calculated as follows

Emission Reductions

Where,

ERy = Emission reductions in year *y* (t CO2e/yr)

- BEy =Baseline emissions in year *y* (t CO2/yr)
- PEy =Project emissions in year y (t CO2/yr)

Baseline Emissions:

As per the approved consolidated Methodology ACM0002 version 20.0 that Baseline emissions include only CO_2 emissions from electricity generation in grid-connected power plants that are

displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid- connected power plants. The baseline emissions are to be calculated as follows:

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

Where,

| $BE_y =$ | Baseline emissions in year y (t CO ₂ /yr) |
|--------------------|--|
| $EG_{PJ,y}=$ | Quantity of net electricity generation that is produced and fed into the grid as |
| | a result of the implementation of the CDM project activity in year y (MWh/yr) |
| $EF_{grid,CM,y} =$ | Combined margin CO ₂ emission factor for grid connected power generation in |
| | year y calculated using the latest version of the "Tool to calculate the emission |
| | factor for an electricity system" (t CO ₂ /MWh) |

AS per para 41 of ACM0002, version 20.0, when the project activity is installation of Greenfield power plant, then:

Where,

$$\mathsf{EG}_{\mathsf{PJ},\mathsf{y}} = \mathsf{EG}_{\mathsf{facility},\,\mathsf{y}}$$

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

EG_{facility, y} = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

The $EG_{facility, y}$ is estimated from the PLF provided as per the third-party engineering company report as below:

| Project | EG _{facility, y} (MWh) |
|--------------------|---------------------------------|
| Project Activity 1 | 31,956 |
| Project Activity 2 | 64,233 |
| Project Activity 3 | 50,276 |
| Project Activity 4 | 50,881 |
| Project Activity 5 | 50,881 |
| Total | 248,227 |

As per the methodology, The combined margin $(EF_{grid,CM,y})$ has to be determined as per the Tool to calculate the emission factor for an electricity system. However, in case of non-availability of the data required to calculate grid emission factor as per the CDM Tool 07: "Tool to calculate the emission

factor for an electricity system". GCC has provided the clarification No.3³⁰ provided the options for the project owner to determine the baseline grid emission factor, where applicable:

- a) Using CDM Tool 07: "Tool to calculate the emission factor for an electricity system";
- b) Latest available emission factor of the Grid in a country as approved by CDM standardized baseline.
- c) Latest available emission factor of the Grid in a country as approved by its relevant National Authority or Designated National Authority (DNA) under CDM or UNFCCC focal point in case DNA doesn't exist.
- d) Latest IFI combined margin emission factors published on UNFCCC website³¹;
- e) Latest published Emission factor derived by International Energy Agency (IEA)³²

Project Owner has chosen the option (c) "Latest available emission factor of the Brazilian national grid approved 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 2020."³³

As per the DNA the latest grid emission factor of Brazil 2020 is 0.3649 tCO₂/MWh

EFgrid, CO2 = 0.3649 tCO2/MWh

Leakage Emissions:

No other leakage emissions are considered. The emissions potentially arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport etc.) are neglected.

Hence Emission reductions will be calculated as per the below equation

 $ERy = BEy = EG_{PJ, y} \times EF_{grid, CM, y}$

33

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

³⁰ <u>https://www.globalcarboncouncil.com/wp-content/uploads/2022/04/Clarification-No.-03.pdf</u>

³¹ <u>https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting/ifi-twg-listof-methodologies</u>

³² <u>http://data.iea.org/payment/products/122-emissions-factors.aspx</u>

B.6.2. Data and parameters fixed *ex ante*

Data / Parameter Table 1.

| Data / Parameter: | EFgrid,CM,y | | |
|---------------------------------------|--|--|--|
| Methodology | ACM0002: Grid-connected electricity generation from renewable sources, | | |
| reference | Version 20.0 | | |
| Data unit | tCO2/MWh | | |
| Description | Combined Margin CO ₂ emission factor in year y of Brazilian Grid | | |
| Measured/calculated /default | Calculated | | |
| Data source | Designated National Authority (DNA) "Ministry of Science and Technology | | |
| | "CO2 emission factors for electricity generation in the National | | |
| | Interconnected System of Brazil - Base Year 2020."34 | | |
| Value(s) of monitored parameter | 0.3649 | | |
| Measurement/ | | | |
| Monitoring | Not Applicable | | |
| equipment (if | Type of meter NA | | |
| applicable) | Location of meter NA | | |
| | Accuracy of meter NA Serial number of meter NA | | |
| | Serial number of meter NA | | |
| | | | |
| Calculation method (if applicable) | Not Applicable as the value is fixed ex-ante for entire crediting period. | | |
| QA/QC | NA | | |
| procedures | | | |
| Purpose of data | Baseline Emission calculation | | |
| Additional | The combined Margin is calculated ex ante and fixed during the crediting period. | | |
| comments | | | |

B.6.3. Ex-ante calculation of emission reductions

The ex-ante emission reductions (ERy) for the project activity are calculated as follows

$$ERy = BEy - PEy - LEy$$

Where,

ERy = Emission Reduction in tCO2/year

BEy = Baseline emission in tCO2/year

PEy = Project emissions in tCO2/year

LEy = Leakage Emissions in tCO2/year

³⁴ <u>https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao_despacho.html</u>

Baseline Emissions (BEy):

The baseline emissions are the product of electrical energy baseline EG_{PJ}, y expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.

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

AS per para 41 of ACM0002, version 20.0, when the project activity is installation of Greenfield power plant, then:

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

Where,

EG_{facility,y}

 Total quantity of net electricity delivered to the Brazilian grid in year y (MWh/yr)

EF_{grid,CM,y} = Baseline grid emission factor (t CO₂/MWh)

= 0.3649 t CO₂/MWh

| Project Activity | EG _{facility, y} (MWh) |
|--------------------|---------------------------------|
| Project Activity 1 | 31,956 |
| Project Activity 2 | 64,233 |
| Project Activity 3 | 50,276 |
| Project Activity 4 | 50,881 |
| Project Activity 5 | 50,881 |
| Total | 248,227 |

As per section B.6.1 above, the combined margin grid emission factor (EF $_{\rm grid,CM,y})$ is 0.3649 tCO_2/MWh

Hence the annual baseline emission is calculated as below:

| Project | EG _{facility, y} (MWh) | Emission factor (tCO2/MWh | Baseline emission (tCO2) |
|--------------------|---------------------------------|------------------------------|-----------------------------|
| Project Activity 1 | 31,956 | 0.3649 | 11,661 |
| Project Activity 2 | 64,233 | 0.3649 | 23,438 |
| Project Activity 3 | 50,276 | 0.3649 | 18,346 |
| Project Activity 4 | 50,881 | 0.3649 | 18,567 |
| Project Activity 5 | 50,881 | 0.3649 | 18,567 |
| Total | 248,227 | 0.3649 | 90,578 |

BE_y = EG_{PJ,y} * EF_{grid,CM,y} = 248,227 MWh x 0.3649 tCO₂/MWh = 90,578tCO₂

Project Emissions (PEy):

As explained in the above section B.6.2 Project emissions from the project activity is considered Zero.

$$PEy = 0$$

Leakage Emissions (LEy):

As explained in the above section B.6.2 Project emissions from the project activity is consideredZero.

LEy =0

Emission Reductions (ERy):

Since the project and leakage emissions are estimated as zero

| Project Activity | Emission Reductions (tCO2) |
|--------------------|----------------------------|
| Project Activity 1 | 11,661 |
| Project Activity 2 | 23,438 |
| Project Activity 3 | 18,346 |
| Project Activity 4 | 18,567 |
| Project Activity 5 | 18,567 |
| Total | 90,578 |

Considering the different commissioning date of each project and annual degradation, the emission reduction estimation for the entire crediting period is provided in the below section.

B.6.4. Summary of ex ante estimates of emission reductions

| Year | Baseline emissions | Project emissions | Leakage | Emission reductions |
|--------------------------|-----------------------|----------------------|----------------------|----------------------|
| | (tCO ₂ e) | (tCO ₂ e) | (tCO ₂ e) | (tCO ₂ e) |
| 14/08/2019 to 13/08/2020 | 90,680 | 0 | 0 | 90,680 |
| 14/08/2020 to 13/08/2021 | 89,944 | 0 | 0 | 89,944 |
| 14/08/2021 to 13/08/2022 | 89,315 | 0 | 0 | 89,315 |
| 14/08/2022 to 13/08/2023 | 88,689 | 0 | 0 | 88,689 |
| 14/08/2023 to 13/08/2024 | 88,069 | 0 | 0 | 88,069 |
| 14/08/2024 to 13/08/2025 | 87,452 | 0 | 0 | 87,452 |
| 14/08/2025 to 13/08/2026 | 86,840 | 0 | 0 | 86,840 |
| 14/08/2026 to 13/08/2027 | 86,232 | 0 | 0 | 86,232 |
| 14/08/2027 to 13/08/2028 | 85,629 | 0 | 0 | 85,629 |
| 14/08/2028 to 13/08/2029 | 85,029 | 0 | 0 | 85,029 |
| Total | 8,77,879 | | | 8,77,879 |

| Total number of Crediting years | | 10 |) | |
|--|--------|----|---|--------|
| Annual Average over the crediting period | 87,788 | | | 87,788 |

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored *ex-post*

Data / Parameter Table 2.

| Data / Parameter: | EG _{facility,y} | | | |
|--------------------------------------|--|-----------------------|-----------------------|--|
| Methodology reference | ACM0002: Grid-connected electricity generation from | | | |
| | renewable sources, Version 20.0 | | | |
| Data unit | MWh/Year | | | |
| Description | Quantity of net electricity ((Solar) plant/unit to the gri | | ed by the project | |
| Measured/calculated/default | Measured & calculated | | | |
| Data source | Monthly generation repo | ort | | |
| Value(s) of monitored parameter | Project | EG _{facilit} | _{y, y} (MWh) | |
| applied with basis | Project Activity 1 | 31 | ,956 | |
| | Project Activity 2 | 64 | 1,233 | |
| | Project Activity 3 | 50 |),276 | |
| | Project Activity 4 | 50 |),881 | |
| | Project Activity 5 | 50 |),881 | |
| | Total | 24 | 248,227 | |
| Measurement/ Monitoring equipment | Energy meter details will be provided during the version of PSF. | | during the final | |
| | Project | Main Meter | Check Meter | |
| | Type of meter | | | |
| | Location of meter | | | |
| | Accuracy of meter | | | |
| | Serial number of | | | |
| | meters | | | |
| | Calibration frequency | | | |
| | Date of Calibration/ | | | |
| | validity | | | |
| | Reference No. of | | | |
| | Calibration | | | |
| | Certificate | | | |
| | Calibration Status | | | |
| Frequency of Measuring/reading | Continuous | | | |
| Recording frequency | Monthly | | | |

| Calculation method (if applicable) | This is based on the monthly Joint Meter Report which provides the electricity exported and electricity imported by the project. The Net electricity is based on Export-import Monthly meter readings will be taken from the main and check meter installed at metering point and certified by the representatives of DISCOM Officials and the representatives of the project participant. The export and import values of the Joint Meter Reports is cross checked with the export and import values mentioned at the electricity sales invoice. |
|------------------------------------|---|
| QA/QC procedures | The meter(s) shall be calibrated and maintained by the state utility as per their own schedule, and this frequency of meter calibration is not within the control of the Project Proponent. Calibration of electricity meters is carried out in-line with the Nation standard which recommends at least once in 5-year calibration or whenever abnormal difference/inconsistency is observed between main meter and check meter. |
| Purpose of data | Baseline Emission Calculations. |
| Additional comments | - |

For Parameters to be monitored for E+/S+ assessments and SDG labels (positive impacts)

| Data / Parameter: | CO₂ emissions | | |
|--|---|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | CO ₂ emissions reductions per year | | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any) QA/QC | GHG emission reductions (tCO2/year) Continuously measured and monthly recorded - Monitored data will be stored and archived till the end of the crediting period | |

| Remarks | |
|---------|--|
| | |

| Data / Parameter: | Solid waste Pollution from Hazardous wastes | | |
|--|---|--|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Hazardous waste generation during the operation of the project activity which is treated and disposed of as per the law. | | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any) QA/QC | Hazardous waste generation (tonnes/year) Annual Should be treated as per the Hazardous and waste management rules, 2016 Records will be maintained and archived till the end of the crediting period | |
| Remarks | | | |

| Data / Parameter: | Solid waste pollution from E-wastes | | |
|---|---|----------------------------------|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | E-waste generation during the operation of the project activity, is treated and disposed of as per the law. | | |
| Describe the parameters to be | | | |
| monitored to demonstrate compliance | | | |
| with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored | E-waste generation (tonnes/year) | |
| | Frequency of monitoring | Annual | |
| | Legal /regulatory / E-Waste Management Amendment corporate limits (if any) rules, 2018 | | |

| | QA/QC | Records will be maintained and archived till the end of the crediting period |
|---------|-------|--|
| Remarks | | |

| Data / Parameter: | Solid waste pollution from end-of-life products / equipment | |
|--|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Project Activity may result in E-waste from electronic equipment at the end of its lifetime. | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any) QA/QC | E-waste generation (tonnes) Annual E-Waste Management Amendment rules, 2018 Records will be maintained and archived till the end of the crediting period |
| Remarks | | |

| Data / Parameter: | Replacing fossil fuels w | ith renewable sources of energy |
|--|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Net quantity of renewable energy generated from the power plant, which otherwise would have been generated from the combustion of fossil fuels. | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any) | Electricity generation by the project activity (MWh) Monthly |

| | QA/QC | Energy meters will be calibrated as per schedule. Records will be maintained and archived till the end of the crediting period. |
|---------|-------|---|
| Remarks | | |

Social safeguards

| Data / Parameter: | Long-term jobs (> 1 yea | r) created |
|--|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Long term job opportunities created during the operation of the project activity. | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any) QA/QC | Employment records Annual Employment is in compliance with the Labour Act Records will be maintained and archived till the end of the crediting period |
| Remarks | | <u>· · · · · · · · · · · · · · · · · · · </u> |

| Data / Parameter: | Sources of income generation increased/reduced | |
|--|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Additional employment and O&M services in the project region | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be Employee records, O&M contracts monitored | |

| | Frequency of monitoring | Annual |
|---------|--|--|
| | Legal /regulatory / corporate limits (if any) | Minimum wages in compliance with the Labour Act |
| | QA/QC | Records will be maintained and archived till the end of the crediting period |
| Remarks | | |

| Data / Parameter: | Non-Discrimination Practices | |
|---|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Policy to ensure that there is no discrimination based on gender, racism, religion etc. during the recruitment process | |
| Describe the parameters to be monitored to demonstrate compliance | | |
| with requirements to demonstrate "harmless" condition or demonstrate | Parameter to be monitored | Company policy |
| Impact on SDG | Frequency of monitoring | Continuous |
| | Legal /regulatory / corporate limits (if any) | In compliance with the company policy |
| | QA/QC | Records will be maintained and archived till the end of the crediting period |
| Remarks | | |

| Data / Parameter: | Occupational health hazards | |
|--|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Cause of Physical hazards in project sites due to human intervention or technical failure or emergency | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be Number of trainings monitored | |

| | Frequency of monitoring | Annual |
|---------|--|--|
| | Legal /regulatory / corporate limits (if any) | In compliance with the EHS policy |
| | QA/QC | Records will be maintained and archived till the end of the crediting period |
| Remarks | | |

| Data / Parameter: | Reducing / increasing | accidents/incidents/fatality |
|---|--|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Cause of Physical hazards in project sites due to human intervention or technical failure or emergency | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate | Parameter to be Number of trainings & physical | |
| | monitored | hazards/incidents |
| Impact on SDG | Frequency of monitoring | Annual |
| | Legal /regulatory / corporate limits (if any) | In compliance with the EHS policy |
| | QA/QC | Records will be maintained and archived till the end of the crediting period |
| Remarks | | |

| Data / Parameter: | Job related training imparted or not | |
|--|--|---------------------|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Technical and Non-Technical trainings provided to employees as per the training needs | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored | Number of trainings |

| | Frequency of monitoring | Annual |
|---------|--|--|
| | Legal /regulatory / corporate limits (if any) | - |
| | QA/QC | Records will be maintained and archived till the end of the crediting period |
| Remarks | | |

| Data / Parameter: | Project-related knowled | ge dissemination effective or not | | |
|--|--|-----------------------------------|--|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | O&M Trainings provided to employees | | | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Training Records and O&M ma monitored Frequency of monitoring Annual Legal /regulatory / corporate limits (if any) - QA/QC Records will be maintained and archived till the end of the credit period | | | |
| Remarks | | · · | | |

| Data / Parameter: | Community and rural welfare | | | |
|--|--|--|--|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Contribution of Project activity to the Economic, Environmental, Economical, and social well-being for the community. | | | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be Community Development Activities monitored Frequency of Annual monitoring | | | |

| | Legal /regulatory / corporate limits (if any) QA/QC | - Records will be maintained and archived till the end of the crediting period |
|---------|---|---|
| Remarks | | |

SDG parameters monitoring:

| Data / Parameter: | Amount of renewable energy supplied to grid for consumption | | | |
|--|---|--|--|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Net quantity of renewable energy supplied by the project activity during the year y | | | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Quantity of net electricity general supplied by the plant to the grid in y y Frequency of monitoring Continuously measured and month recorded Legal /regulatory / corporate limits (if any) - QA/QC - | | | |
| Remarks | | | | |

| Data / Parameter: | Average earnings of females and male employees engaged in the project and segregated by age and persons with disabilities |
|---|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Average hourly earnings of employees, by sex, age, occupation, and persons with disabilities. |

| Describe the parameters to be monitored to demonstrate compliance with requirements to | | |
|--|---|--|
| demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored | 1. No of employment (with bifurcation on number by sex, age group and where applicable, persons with disabilities) |
| | | Average earnings Policy for Nondiscrimination and equal pay for the work of equal value. |
| | Frequency of monitoring | Annual |
| | Legal /regulatory / corporate limits (if any) | Minimum Wages in compliance with the Labor Act |
| Remarks | QA/QC | |
| Remarks | | |

| Data / Parameter: | Reductions in Emissions (TCO2e) per unit of product due to project | | | |
|--|---|---|--|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | CO, emissions reductions per year | | | |
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Frequency of monitoring Legal /regulatory / corporate limits (if any) QA/QC | GHG emission reductions (tCO2/year) Continuously measured and monthly recorded - Monitored data will be stored and archived till the end of the crediting period | | |
| Remarks | | | | |

| Data / Parameter: | Amount of emissions reductions achieved by project under UNFCCCs/ GCC market mechanism |
|-------------------|--|
| Purpose: | To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. |

| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | Quantity of CO2 emission | is reduced |
|--|---|---|
| Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG | Parameter to be monitored Frequency of monitoring Legal /regulatory / | GHG emission reductions (tCO2/year) Continuously measured and monthly recorded |
| | corporate limits (if any) QA/QC | Monitored data will be stored and archived till the end of the crediting period |
| Remarks | | |

B.7.2. Data and parameters to be monitored for E+/S+ assessments (negative impacts)

There are no impacts identified as harmful, hence, no monitoring is required.

| Data / Parameter: | XX | | | |
|--|--|--|--|--|
| Purpose: | To demonstrate compliance of XXXX aspects to legal/regulatory/corporate requirements or to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators. | | | |
| Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact. | | | | |
| Describe the | | | | |
| parameters to be monitored to | | | | |
| demonstrate | Parameter to be monitored | | | |
| compliance with requirements to | Frequency of monitoring | | | |
| demonstrate "harmless" condition | Legal /regulatory / corporate limits (if any) | | | |
| or demonstrate Impact on SDG | QA/QC | | | |

| Program of Risk Management Actions to mitigate risk related to aspect (if any for aspects assessed to be harmful) | S.No. | Action and targets | Responsibility | Resource Requirement | Target to be Achieved by (insert date) | Key Performance Indicators (KPI) | Targets achieved on (insert date) |
|--|---------|--------------------------|----------------|-------------------------|--|---|--|
| benannun | 1 | | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | Date of | Closing the | Program: | | · | | · |

B.7.3. Sampling plan

No Sampling plan is required.

B.7.4. Other elements of the monitoring plan

Monitoring has the objective of measuring the emission reductions achieved by the project. The monitoring plan follows the Monitoring Methodology of consolidated baseline methodology for grid connected electricity generation from renewable sources ACM0002, version 20.0. All data collected as part of monitoring should be archived electronically and be kept at least for two years after the end of the last crediting period. All measurements will be conducted with calibrated measurement equipment according to Brazilian industry standards. The main parameters that will be monitored are:

EG_{facility,y} - Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr);

Combined margin emission factor for the grid in year y (EF_{Grid,CM,y})

New project instances should present their monitoring reports when requesting inclusion in this Grouped Project. Monitoring Report should follow Monitoring Methodology of consolidated baseline methodology for grid-connected electricity generation from renewable sources ACM0002, version 20.0, and Brazilian Electricity Standards.

Monitoring of EG_{facility,y}

Operation and Maintenance (O&M) team is responsible for the operation and maintenance activities of the plants. Operation and maintenance team is responsible for measurement activities. It collects and storages all measurement data. Data is collected in real time and is available at the project site.

Commercial team is responsible for monitoring and analyzing EG_{facility,y} information. It monitors data provided and cross-checks it with information provided by Chamber of Electricity Commercialization (CCEE).

Each plant has two measurement instruments (meters) located in the plant. One is the principal meter and the second is a rear. These meters register gross electricity generated by each plant. The WTGs included in this project activity has individual measuring equipment for each facility connected. The substation can also include energy generated by facilities outside the boundary project.

At substation there are two meters (one principal and one rear) that register net electricity supplied to the grid ($EG_{facility,y}$) by all plants that compose the initial project instance. These meters can also include energy generated by facilities outside the project boundary. The total amount dispatched to the SIN monitored by these meters will be prorated between each project facility according to the proportional amount of electricity generation measured in the electrical substation for each facility.

ONS Grid Procedures (Sub-module 12.3) defines the calibration frequency and other maintenance procedures. All meters of the plants are calibrated according to Brazilian Standards.

Monitoring roles and responsibilities:

The data for the project is compiled by the O&M Contractor and subsequently stored by the PP, the reporting and data flows as per the below mentioned flow chart starting from Site O&M team which monitors day to day operational data and monthly recording. The reporting responsibilities for the project are described as below;

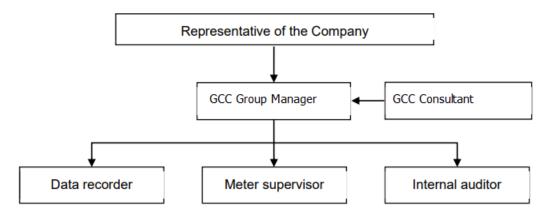


Figure: Structure of the monitoring group

The responsibilities of each person involved are elaborated as follows:

| Person | Responsibility |
|-------------------------------|---|
| Representative of the Company | Legal representative of the Project Company |

| | Review the monitoring report annually |
|-------------------|---|
| GCC group manager | Managing the whole GCC business of the |
| | project, guiding and supervising data recorder |
| | after trained by GCC consultant. |
| GCC consultant | Providing trainings and technical support about |
| | GCC monitoring plan |
| Data recorder | Collecting and recording data every month. |
| Meter supervisor | Checking power meter periodically according to |
| | relevant regulation. |
| Internal auditor | Checking the monitoring procedures, double |
| | checking the collected data. |

Personal Training:

The project employs qualified and experienced persons for plant operation. The training period shall be for three months, as this would be adequate and necessary to ensure proper imparting of the objective. The training course will be thoroughly and meticulously designed, highlighting the objectives, salient features, operational aspects and trouble shooting.

Emergency preparedness:

In case of any unforeseen event that is not covered under this monitoring plan, staff of the operation division will immediately inform the chief of the operation division. The chief of the operation division is then responsible to ensure that the cause for the unforeseen event is detected, the event is remedied and for the period in which the unforeseen event has occurred uncertainty in data gathered is limited as much as possible.

- In normal condition, the data of main power meter will be used as the basis of payment by the DISCOM to the PO and to calculate the emission reductions by the project activity.
- In case the main power meter is in failure and the backup power meter is still in good operation, the result of the backup meter will be used to calculate the emission reduction by the project activity.
- In case of both main and backup power meters are in failure, the Project Owner and the DISCOM will jointly calculate a conservative estimate of power supplied to the grid. The assumptions used to estimate net electricity supply to the grid will be signed by both a representative of the project owner as well as a representative of the DISCOM
- In case any power meters are in failure, the Project Owner will inform DISCOM immediately and contract with the authorized party to verify/ calibrate and/or replace the failed power meter.

Data recording & archiving: The project proponent shall maintain data both in electronic form and hard copies. The monitored data shall be archived till 2 years after the completion of crediting period.

Section C. Start date, crediting period type and duration

C.1. Start date of the Project Activity

As per the paragraph 38 of the project standard V3.1, start of commercial operations has been considered as the start date. Hence, project Commissioning Date (COD) on which project is connected to grid and started generating power and exporting to the grid there by started generating GHG emission reductions is considered as start date.

| Project | Start Date |
|--------------------|------------|
| Project Activity 1 | 29/11/2019 |
| Project Activity 2 | 29/11/2019 |
| Project Activity 3 | 14/08/2019 |
| Project Activity 4 | 14/08/2019 |
| Project Activity 5 | 14/08/2019 |

Start date for all the projects is given in the below table.

All the five project's start date is after 1st January 2016. Hence complies with the GCC project standard guidelines.

The start date for this project is the earliest date of the commercial operation of the first project. i.e 14/08/2019

C.2. Expected operational lifetime of the Project Activity

25 Years 00 Months.

C.3. Crediting period of the Project Activity

Fixed crediting period for 10 Years.

C.3.1. Start and end date of the crediting period

Start date of the crediting period is 14/08/2019

End date of the crediting period is 13/08/2029

C.3.2. Duration of crediting period

10 years i.e., from 14/08/2019 to 13/08/2029

Section D. Environmental impacts

D.1. Analysis of environmental impacts

The project activity does not involve any major construction activity. It primarily requires the installation of the solar PV panels, interfacing the generators with the State Electricity Board by setting up HT transmission lines and installation of other accessories. Solar PV project activity operations do not result in direct air pollution, noise pollution. Thus, there is no any significant impact due to implementation of project activity on air, water, soil quality and ambience are envisaged due to the project activity.

D.2. Environmental impact assessment and management action plans

Project activity has obtained relevant and required environmental approvals and operational licenses in prior to start the construction of the project activity. Applicable impact assessment studies have been carried out before the construction of the project activity.

Section E. Environmental and social safeguards

The main purpose of the environment and social safeguard assessment is to identify, evaluate and manage environmental and social impacts that may arise due to implementation and operation of the project. the Solar power project is not likely to have significant adverse environmental and social impacts during the construction & operation period of the project activity.

E.1. Environmental safeguards

| Impact of F Activity on | | Info | rmation on In | npacts, Do-No | 9-Harm Risk | Assessmen | t and Establishi | ng Safeguards | | Project Owne | r's Conclusion | GCC Project Verifier's Conclusion (To be included in Project Verification Report only) |
|---|---|--|--|--|--|---|--|--|---|--|---|--|
| | | Description of Impact (positive or negative) | Legal/ voluntary corporate requirem | | rm Risk Ass ich ever is a | | Risk Mitigation Action Plans for aspects marked as Harmful | | Performance indicator for monitoring of impact | <i>Ex-ante</i> scoring of environmenta l impact | Explanation of the Conclusion | 3 rd Party Audit |
| | | | ent / regulator y/ voluntary corporate threshold Limits | Not Applicabl e | Harmles s | Harmful | Operational Controls | Program of Risk Managemen t Actions | Monitoring parameter and frequency of monitoring | Ex- Ante scoring of the environmenta I impact (as per scoring matrix Appendix-02) | Ex- Ante description and justification/ex planation of the scoring of the environmental impact | Verification Process |
| Environ mental Aspects on the identifie d categori es ³⁵ indicated below. | Indicators for environme ntal impacts | Describe and identify anticipated and actual significant environmental impacts, both positive and negative from all sources (stationary and mobile) during normal and abnormal/emergency conditions, that may result from the construction and operations of the Project Activity, within and outside the project boundary, over which the Project Owner(s) has/have control. | Describe the applicable national regulatory requireme nts /legal limits / voluntary corporate limits related to the identified risks of environme ntal impacts. | If no environme ntal impacts are anticipate d, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Not Applicabl e | If environm ental impacts exist but are expected to be in complian ce with applicabl e national regulator y /stricter voluntary corporate requirem ents and will be | If negative environ mental impacts exist that will not be in complia nce with the applicab le national legal/ regulato ry require ments or are | Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as ' Harmful at least to a level that is in | Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce or eliminate the risk of impacts that have been | Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmfess of harmful. The frequency of monitoring to be specified as well including the data source. | -1 0 +1 | Confirm the score of environmental impact of the project with respect to the aspect and its monitored value in relation to legal /regulatory limits (if any) including basis of conclusion. | Describe how the GCC Verifier has assessed that the impact of the Project Activity against the particular aspect and in case of "harmful impacts" how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to cause any harm as well as the net positive impacts of |

³⁵ sourced from the CDM SD Tool and the sample reports are available (<u>https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx</u>)

| | | | | | within legal/ voluntary corporate limits by way of plant design and operating principles , then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Harmles s /If the project has a positive impact on the environm ent mark it as "harmles s" as well. | likely to exceed legal limits, then the Project Activity is likely to cause harm (may be un-safe) and shall be indicate d as Harmful | compliance with applicable legal/regulat ory requirements or industry best practice or stricter voluntary corporate requirements | identified as Harmful. | | | | the project with respect to the most likely baseline alternative. |
|---|--|------------------|---------------------|-------------------------|--|---|---|---------------------------|---|--------------|---|--|
| Referenc e to paragrap hs of Environ mental and Social Safeguar ds Standard | | Paragraph 12 (a) | Paragraph 13 (c) | Paragraph 13 (d) (i) | Paragrap h 13 (d) (ii) | Paragra ph 13 (d) (iii) | Paragraph 13 (e) (i) | Paragraph 13 (e) (ii) | Paragraph 12 (c) and Paragraph 13 (f) | Paragraph 22 | | Paragraph 24 and Paragraph 26 (a) (i) |
| Environ ment - <i>Air</i> | SO _x emissions (EA01) | - | - | - | - | - | - | - | - | - | - | |

| NO _x emissions (EA02) | | - | - | - | | - | - | - | - | - | - |
|---|--|---|---|---|---|---|---|---|----|---|---|
| CO2 emissions (EA03) | The project is expected to reduce CO2 emissions wrt to baseline scenario of generation of equivalent amount of power in grid connected power plant | - | - | Harmless The overall impact is positive with respect to the baseline alternativ e. | - | - | - | GHG emission reduction (Tonnes of CO2e / Yr.) The parameter will be monitored on monthly basis | +1 | The overall impact is positive with respect to the baseline and hence the impact is harmless | - |
| CO emissions (EA04) | - | - | | - | | - | - | - | - | - | - |
| Suspende d particulate matter (SPM) emissions (EA05) | - | - | - | - | - | - | - | - | - | - | - |
| Fly ash generation (EA06) | | - | - | - | - | - | - | - | - | - | - |
| Non- Methane Volatile Organic Compound s (NMVOCs) (EA07) | - | - | - | - | - | - | - | - | - | - | - |
| Odor (EA08) | - | - | - | - | - | - | - | - | - | - | - |
| Noise Pollution (EA09) | - | - | - | - | | - | - | - | - | - | - |
| Others (EA10) | | | | | | | | | | | |

| | Add more rows if required and correspond ing notation with EA as prefix) | | | | | | | | | | | |
|----------------------------------|--|---|---|---|---|---|---|---|--|----|---|---|
| Environ ment - <i>Land</i> | Solid waste Pollution from Plastics (EL-01) | - | - | - | - | - | - | - | | - | - | - |
| | Solid waste Pollution from Hazardous wastes (EL02) | Project anticipates generating hazardous waste (transformer oil). | Law 12:305/20 10 (which amends Law 9.605/199 8) | - | Harmless Project owner will dispose the hazardou s waste (transfor mer oil) for recycling through the licensed hazardou s waste vendor | - | - | - | Hazardous waste (Transformer Oil) quantity generated and disposed will be continuously monitored and recorded in the hazardous waste register. | +1 | The impact is unlikely to cause any harm. | - |
| | Solid waste Pollution from Bio- medical wastes (EL03) | - | - | - | - | - | - | - | | - | - | - |

| Solid waste Pollut from L waste (ELO4 | - solar panels, electronic equipment wires and | <u>12.305/20</u> <u>10</u> (which amends | L oppa22PC w c s d tt w tt lii v n u tt oppen c c E M n | Harmless ifetime of the project activity is 25 years. Project Dwner will collect, store and dispose he E- waste to he icensed rendors/ manufact urers at he end of life of products/ equipme nt's in complian ce to the E-waste Manage ment rules. | - | - | - | quantity of E-waste discarded at the end of life time will be monitored and recorded. | +1 | The impact is unlikely to cause any harm. | - |
|---|--|---|---|---|---|---|---|---|----|---|---|
| Solid waste Pollut from Batter (EL05 | es | - | | | - | - | - | | - | - | - |
| Solid waste Pollut from e of-life produ equip. (ELOE | nd- of-life products/ equipment will be ts/ generated. Project activity may result in the | <u>12.305/20</u> <u>10</u> (which amends <u>Law</u> 9.605/199 | L o p a 2 P C W c c d | Harmless ifetime of the project activity is 25 years. Project Dwner will collect, store and dispose he E- | - | - | - | quantity of waste discarded at the end-of-life time will be monitored and recorded | +1 | The impact is unlikely to cause any harm. | - |

| | | | | waste to the licensed vendors/ manufact urers at the end of life of products/ equipme nt's in complian ce to the E-waste Manage ment rules. | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|
| Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07) | - | - | - | - | - | - | - | - | - | - | - |
| land use change (change from cropland /forest land to project land) (EL08) | - | - | - | - | - | - | - | - | - | - | - |
| Others (EL09) | - | - | - | - | - | - | - | - | - | - | - |
| Add more rows if required | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | | | |

| Environ ment - <i>Water</i> | Reliability/ accessibilit y of water supply (EW01) | - | - | - | - | - | - | - | - | - | - | - |
|-----------------------------------|---|--|--|---|---|---|---|---|--------------------|---|-----------------------|---|
| | Water Consumpti on from ground and other sources (EW02) | Water will be consumed for cleaning of modules and domestic use. | National Hydric Resources Policy – Law <u>9.433/199</u> <u>7</u> | | Harmless Ground water will be consume d for the cleaning and domestic needs. Project is not located in the residenti al or rural area hence there is no timpact on the existing usage pattern. Project owner also obtained the required licenses for the use of groundw ater as per the local regulatio ns | - | | | No Action Required | 0 | No Action Required | |
| | Generation of | - | - | | - | - | - | - | - | - | - | - |

| | wastewate r (EW03) | | | | | | | | | | | |
|---|--|---|---|---|---|---|---|---|---|---|---|---|
| | Wastewate r discharge without/wit h insufficient treatment (EW04) | - | - | - | - | - | - | - | - | - | - | |
| | Pollution of Surface, Ground and/or Bodies of water (EW05) | - | - | - | - | - | - | - | - | - | - | - |
| | Discharge of harmful chemicals like marine pollutants / toxic waste (EW06) | - | - | - | - | - | - | - | - | - | - | - |
| | Others (EW07) | - | - | - | - | - | - | - | - | - | - | - |
| | Add more rows if required | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Environ ment – <i>Natural</i> <i>Resourc</i> | Conservin g mineral resources (ENR01) | - | - | - | - | - | - | - | - | - | - | - |
| es | Protecting/ enhancing plant life (ENR02) | - | - | - | - | - | - | - | - | - | - | - |
| | Protecting/ enhancing species | - | - | - | - | - | - | - | - | - | - | - |

| diversity (ENR03) | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|----|---|---|
| Protecting/ enhancing forests (ENR04) | - | - | - | - | - | - | - | - | - | - | - |
| Protecting/ enhancing other depletable natural resources (ENR05) | This is a renewable energy power project generating power through the solar energy which is renewable source of energy and hence there is no impact | - | - | - | - | - | - | | - | - | - |
| Conservin g energy (ENR06) | There is no scope for energy conservation since it is a solar power plant generating and supplying electricity through the grid. | - | - | - | - | - | - | | - | - | - |
| Replacing fossil fuels with renewable sources of energy (ENR07) | Hence not applicable. The solar power project replaces fossil fuel with the renewable solar energy for the power generation by installing the solar power plant which would have been otherwise generated from the fossil fuel dominant | - | - | Harmless The overall impact is positive compare d to the baseline alternativ e | - | - | - | Considering the occurrence of emission reductions through the electricity generation form the Solar power project. This parameter will be monitored through the monthly Power generation from the proposed Solar Project. Monthly electricity generation will be monitored through the energy meters installed at the substation. Energy Generation reports will be provided for the verification of generation. | +1 | The impact is unlikely to cause any harm. | - |

| Replacing ODS with non-ODS | | - | - | - | - | - | - | - | - | - | - |
|----------------------------------|---------------------------------------|----|---|----------|----------|---------------|--------------|---------------------|--------------|---------------|-------------|
| refrigerant s (ENR08) | | | | | | | | | | | |
| Others (ENR09) | | | | | | | | | | | |
| Add more rows if required | | | | | | | | | | | |
| | - | | | | | | | • | | • | • |
| Net Score: | | +5 | | | | | | | | | |
| Project Owner's PSF: | Project Owner's Conclusion in PSF: | | | The Proj | ect Owne | er confirms t | hat the Proj | ect Activity will r | ot cause any | net harm to E | nvironment. |
| GCC Project Ver | | | | | | | | | | | |

E.2. Social Safeguards

| Impact of F | Project Activity on | Information o | on Impacts, Do | Project Ov | GCC project Verifier's Conclusion (to be included in Project Verification Report only) | | | | | | |
|---|-------------------------------|--|---|--|---|--|--|--|---|---|--|
| | | Description of Impact (positive or negative) | Legal requirement /Limit, Corporate policies / Industry best practico | | o-Harm Risk Asses e which ever is app | | Risk Mitigation Action Plans (for aspects marked as Harmful) | Performance indicator for monitoring of impact. | Ex-ante scoring of environmental impact | Explanation of the Conclusion | 3 rd Party Audit |
| | | | practice | Not Applicable | Harmless | Harmful | Operational / Management Controls | Monitoring parameter and frequency of monitoring (as per scoring matrix Appendix-02) | Ex- Ante scoring of social impact of the project | Ex- Ante description and justification/explanation of the scoring of social impact of the project | Verification Process Will the Project Activity cause any harm? |
| Social Aspects on the identified | Indicators for social impacts | Describe and identify actual and anticipated impacts on society and stakeholders, both positive or negative, from all source during normal and abnormal/emergency conditions that may result from constructing and operating of the Project Activity within or outside the project boundary, over | Describe the applicable national regulatory requirements / legal limits or organizational policies or industry best practices related to the identified | If no social impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as | If social impacts exist, but are expected to be in compliance with applicable national regulatory requirements/ stricter voluntary corporate limits by way of plant design and | If negative social impacts exist that will not be in compliance with the applicable national legal/ regulatory requirements | Describe the operational or management controls that can be implemented as well as best practices, focusing on how to implement and operate the | Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of | -1 0 +1 | Confirm the score of the social impacts of the project with respect to the aspect and its monitored value in relation to legal/regulatory limits (if any) including basis of conclusion | Describe how the GCC Verifier has assessed that the impact of Project Activity on social aspects (based on monitored parameters, quantitative or qualitative) and |

| categories ³⁶ indicated below. | | which the project Owner(s) has/have control | risks of social impacts | Not Applicable | operating principles then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as Harmless), project having positive impact on society wrt. To the BAU / baseline scenario must also mark their aspect as " harmless " | or are likely to exceed legal limits then the Project Activity is likely to cause harm and shall be indicated as Harmful | Project Activity, to reduce the risk of impacts that have been identified as Harmful . | monitoring to be specified as well. Monitoring parameters can be quantitative or qualitative in nature along with the data source | | | in case of "harmful aspects how has the project owner adopted Risk Mitigation Action / management actions plans and policies to mitigate the risks of negative social impacts to levels that are unlikely to cause any harm. Also describe the positive impacts of the project on the society as compared to the baseline alternative or BAU scenario. |
|---|--|--|--|-------------------|--|--|---|--|----|--|---|
| Social - Jobs | Long-term jobs (> 10 year) created/ lost (SJ01) | The project activity generates long term job opportunities during the operation the project activity. | The project has ensured to meet the criteria and requirement defined in applicable Brazilian labor laws. ³⁷ | - | Harmless As the impact is positive in nature | - | - | No of Permanent Jobs to be monitored on annual basis. Ex-Ante 5 permanent jobs will be created. | +1 | The project is unlikely to cause any harm. | - |
| | New short-term jobs (< 1 year) created/ lost (SJ02) | Project has created short term job opportunity which is less than a year to the skilled and unskilled people in the project region during the construction of the project activity through contractor. | - | - | Harmless This is a positive impact | - | - | Project is already commissioned and in operation. Hence this has been already achieved and need not be monitored further. | 0 | The project is unlikely to cause any harm. | - |

³⁶ sourced from the CDM SD Tool and the sample reports are available (<u>https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx</u>)

³⁷ 24 Law Decree No. <u>5452/1943. Labor Laws Consolidation</u>

| | Sources of income generation increased / reduced (SJ03) | By creating additional employment and O&M services in the project region it creates the additional sources of income for the people employed for the project activity. | None | - | Harmless This is a positive impact | - | - | Number of employees. HR Records | +1 | The project is unlikely to cause any harm. | - |
|--------------------------------|--|---|------------|---|--|---|--|--|----|---|---|
| | Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities (SJ04) (human rights) | Project Owner establishes the policy to ensure that there is no discrimination based on gender, racism, religion etc. during the recruitment process. | None | - | Harmless Project Owner establishes the policy to ensure that there is no discrimination based on gender, racism, religion etc. during the recruitment process. | - | - | HR Policy | +1 | The project is unlikely to cause any harm. | - |
| Social - Health & Safety | Disease prevention (SHS01) | This is a renewable energy power generation project through solar energy which is clean energy and does not emit any gasses or chemicals impact the livelihood. There is no impact. | - | - | - | - | - | - | - | - | - |
| | Occupational health hazards (SHS02) | There is a possibility of physical hazards in project sites due to human intervention or technical failure or emergency | EHS policy | - | Harmless By establishing EHS policy guidelines, and imparting periodic trainings and providing PPE kits to employees and visitors | - | Establishing EHS Guidelines Imparting Trainings, Keeping Sign boards Providing PPE Kits. | 1. PPEs 2.Trainings to Employees | +1 | BY implementing Risk mitigation measures the project is unlikely to cause any harm | - |
| | Reducing / increasing accidents/Incidents/fatality (SHS03) | There is a possibility of accidents/incidents/near miss in project sites due to human intervention or | EHS Policy | - | Harmless By establishing EHS policy | - | Establishing EHS Guidelines | 1. PPEs 2.Trainings to Employees | +1 | BY implementing Risk mitigation measures the project is unlikely to cause any harm | - |

| | technical failure or emergency. | | | guidelines, and imparting periodic trainings and providing PPE kits to employees and visitors | | Imparting Trainings, Keeping Sign boards Providing PPE Kits. | | | | |
|--|--|---|---|--|---|---|---|---|--|---|
| Reducing / increasing crime (SHS04) | - | - | - | - | - | - | - | - | - | - |
| Reducing / increasing food wastage (SHS05) | - | - | - | - | - | - | - | - | - | - |
| Reducing / increasing indoor air pollution (SHS06) | This is a renewable energy power generation project through solar energy and supplying electricity to the national grid. Hence there is no impact on indoor air pollution. | - | - | - | - | - | - | - | - | - |
| Efficiency of health services (SHS07) | - | - | - | - | - | - | - | - | - | - |
| Sanitation and waste management (SHS08) | Project will generate domestic waste during construction and operation of the project. | As per Factories Act, Solid waste management rules. ³⁸ | - | Harmless The project will have proper sanitation facilities (during construction portable toilets, during operation permanent toilets) as per factories act and domestic waste generated will be disposed as | - | - | - | 0 | The project is unlikely to cause any harm. | - |

³⁸ Law 12.305/2010 (which amends Law 9.605/1998).

| | h | h | | | | | | | | | |
|-----------------------|---|--|------|---|--|---|--|--------------------|----|--|---|
| | | | | | per local regulations. | | | | | | |
| | Other health and safety issues (SHS09) | - | - | - | - | - | - | - | - | - | - |
| | Add more rows if required | - | - | - | - | - | - | - | - | - | - |
| Social - Education | specialized training / education to local personnel (SE01) | The employees will receive on job training as per training needs. It imparts a positive impact by helping employees in all-round development. | None | - | Harmless It is a positive impact. | - | | No of Trainings | +1 | This is a positive impact. | - |
| | Educational services improved or not (SE02) | - | - | - | - | - | - | - | - | - | - |
| | Project-related knowledge dissemination effective or not (SE03) | The employees will receive on job training as per training needs. It imparts a positive impact by helping employees in all-round development. | None | - | Harmless It has a positive impact. | | | No of Trainings | +1 | This has a positive impact. | - |
| | Other educational issues (SE03) | - | - | - | - | - | - | - | - | - | - |
| | Add more rows if required (SE04) | - | - | - | - | - | - | - | - | - | - |
| Social - Welfare | Improving/ deteriorating working conditions (SW01) | Project Owner will create and maintain the healthy and working conditions and try to maintain the work life balance for all the employees working for the project | None | - | Harm less Project Owner ensures and maintain the HR policy to ensure that all the employees are provided with healthy and non- deteriorating working conditions both at the | - | Taking the employee feedback on work life balance. Conducting the employee employee interactive sessions. Addressing the | HR Policy | 0 | The project is unlikely to cause any harm. | - |

| | | | corporate office and the project site as well. | | employee grievances if any on immediate basis. | | | | |
|---|---|------|---|---|---|--|----|---------------------------|---|
| Community and rural welfare (indigenous people and communities) (SW02) | There is a positive impact on the community and rural welfare. | None | Harmless. Project activity implementation contributes to the Economical, and social well- being for the community. 1.Empower and upskill the local people and youth by training and creating the employment to local people during construction and operation of the project activity. 2.Leads to the infrastructure development like internal roads in the nearby villages. 3.Creates economic development by empowering the other project developers to implement more projects in the project sin the project area. | - | Project Owner made the provision to receive any community needs if any and will address the needs during the project operational period. | The records of community development activities will be maintained | +1 | This is a positive impact | - |

| Poverty alleviation (more people above poverty level) (SW03) | Though the project creates certain no of employment the impact is not considerable in scale. | - | - | - | - | - | - | - | - | - |
|--|--|---|---|--|---|---|---------------------------------------|---|--|---|
| Improving / deteriorating wealth distribution/ generation of income and assets (SW04) | Though the project creates certain no of employment the impact is not considerable in scale. | - | - | - | - | - | - | - | - | - |
| Increased or / deteriorating municipal revenues (SW05) | - | - | - | - | - | - | - | - | - | - |
| Women's empowerment (SW06) | - | - | - | - | - | - | - | - | - | - |
| (human rights) | | | | | | | | | | |
| Reduced / increased traffic congestion (SW07) | - | - | - | - | - | - | - | - | - | |
| Exploitation of Child labour (human rights) (SW08) | No Impact | Labour Act - 24 Law Decree No. <u>5452/1943.</u> Labor Laws Consolidation. | - | Harmless Child Labour and forced labour are strictly prohibited by law | - | - | Company HR Policy and interview | 0 | The project is unlikely to cause any harm. | - |
| Minimum wage protection (human rights) (SW09) | - | - | - | - | - | - | - | - | - | - |
| Abuse at work place.(with specific reference to women and people with special disabilities / challenges) (human rights) (SW10) | - | - | - | - | - | - | - | - | - | - |
| Other social welfare issues (SW11) | - | - | - | - | - | - | - | - | - | - |

| GCC Projec | ct Verifier's Opinion: | | | | | | | | | | | |
|------------|---|---|----|--|---|---|---|---|---|---|---|--|
| Project Ow | Project Owner's Conclusion in PSF: | | | The Project Owner confirms that the Project Activity will not cause any net harm to society. | | | | | | | | |
| Net Score: | | | +8 | | | | | | | | | |
| | | | | | | | | | | | | |
| | Add more rows if required | - | - | - | - | - | - | - | - | - | - | |
| | (human rights) (SW14) | | | | | | | | | | | |
| | Provisions of resettlement and human settlement displacement | | - | - | - | - | - | - | - | - | - | |
| | Avoidance of forced eviction and/or partial physical or economic displacement of IPLCs (human rights) (SW13) | - | - | - | - | - | - | - | - | - | - | |
| | (human rights) (SW12) | | | | | | | | | | | |
| | Avoidance of human trafficking and forced labour | - | - | - | - | - | - | - | - | - | - | |

Section F. United Nations Sustainable Development Goals (SDG)

>>

| UN-level SDGs | UN-level Target | Declar ed Countr y-level SDG | | Defining Project-leve | GCC Project Verifier's Conclusion (to be included in Project Verification Report only) | | | |
|--|--|---|--|--|---|---|--|--|
| | | | Project- level SDGs | Project-level Targets/Actions | Contributio n of Project- level Actions to SDG Targets | Monitorin g | Verificatio n Process | Are Goal/ Targets Likely to be Achieve d? |
| Describe UN SDG targets and indicators See: <u>https://unstats.un.org/sdgs/indicato rs/indicators-list/</u> | Describe the UN- level target(s) and correspo- nding indicator no(s) | Has the host country declare d the SDG to be a nationa l priority ? Indicat e Yes or No | Define project- level SDGs by suitably modifying and customizin g UN/ Country- level SDGs to the project scope or creating a new indicator(s). Refer to previous column ofr guidance. | Define project-level targets/actions in line with nee project level indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s). | Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project-level SDG targets | Describe the monitoring approach and the monitoring parameter s to be applied for each project- level SDG indicator and its correspon ding target, frequency of monitoring and data source | Describe how the GCC Verifier has verified the claims that the project is likely to achieve the identified Project level SDGs target(s). | Describe whether the project- level SDG target(s) is likely to be achieve d by the target date (Yes or No) |

| Goal 1: End poverty in all its forms everywhere | | - | - | - | - | - | - | - | - |
|--|---|-----|---|---|--|--|---|---|---|
| Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | | - | - | - | - | - | - | - | - |
| Goal 3. Ensure healthy lives and promote well-being for all at all ages | - | - | - | - | - | - | - | - | - |
| Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | - | - | - | - | - | - | - | - | - |
| Goal 5. Achieve gender equality and empower all women and girls | 5.C Adopt and strengthen sound policies and enforceabl e legislation for the promotion of gender equality and the empowerm ent of all women and girls at all levels | YES | Organizati on Policy for maintainin g Non- discriminat ion and Gender equality during employme nt and remunerati on policy for equal pay for equal work. | Project started commercial operation on 14/08/2019 and thus all policies related to the gender equality and remuneratio n are in place for implementat ion. | Project Owner through the implementa tion of organizatio n policies for gender equality and equal remunerati on targeted to eliminate any non- discriminati on while employing the people and paying the equal remunerati on for equal work. | In the absence of the project activity the additional employment opportunities created for both men and women would have not been occurred as there was no power plant is being operational in the project area. Project Owner has enforced the policy named "Remunerati on and Gender Equality Policy" ensuring the | list of women employees if employed any Organizati on policy on gender equality and equal remunerati on. | Project has already commissio ned to national grid and feeding the renewable power to the grid. Hence complied to the SDG. No 5.C | YES Since the project activity is already operatio nal Project activity targeted SDG is likely to be achieve d during the project entire crediting period. |

| | | | | | | employees in various positions without discriminatio n and providing equal opportunities , both women, disabled, underprivileg ed.) | | | |
|---|---|----|--|--|---|--|--|---|---|
| Goal 6. Ensure availability and sustainable management of water and sanitation for all | - | - | - | - | - | - | - | - | - |
| Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all | 7.2 Increase global percentag e of renewable energy | No | Amount of renewable energy supplied to grid for consumpti on | Annually generate around 145,328 MWh of renewable energy using Solar energy | Project is already in operation since 14/11/2017 and complies with the SDG target | Annually generate around 145,328 MWh of renewable energy using Solar energy | Measurem ent of monthly energy generation from the project | | |
| Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all | 8.5 Full employme nt and decent work with equal pay | No | Average earning of females and male employee s engaged in the project and segregate d by age and persons with disabilities | Create employment for minimum of 10 people with minimum wages as per the minimum wages act of host country | Project is already in operation since 14/11/2017 and complies with the SDG target | Create employment for minimum of 10 people with minimum wages as per the minimum wages act of host country | No of Employme nt created and wages. Monitored through HR Records. | | |

| Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation | 9.4 Upgrade all industries and infrastructu re for sustainabili ty | No | Reduction s in Emissions (TCO ₂ e) per unit of product due to project | Achieve annual emission reductions of 51,391 tCO ₂ e over the crediting period for the project | Project is already in operation since 14/11/2017 and complies with the SDG target | Achieve annual emission reductions of 51,391 tCO ₂ e over the crediting period for the project. | Measurem ent of monthly energy generation from the project. Calculation of amount of actual emission reductions achieved by the project. | | |
|---|---|----|---|--|---|--|--|---|---|
| Goal 10. Reduce inequality within and among countries | - | - | - | - | - | - | - | - | - |
| Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable | - | - | - | - | - | - | - | - | - |
| Goal 12. Ensure sustainable consumption and production patterns | - | - | - | - | - | - | - | - | - |
| Goal 13. Take urgent action to combat climate change and its impacts | 13.A Amount of emission reduction achieved by project under UNFCCC/ GORD / Domestic market mechanis m | No | Reduction s in Emissions (TCO2e) per unit of product due to project | Achieve annual emission reductions of 513,910 tCO ₂ e over the crediting period for the project | Project is already in operation since 10/08/2021 and complies with the SDG target | Achieve annual emission reductions of 513,910 tCO ₂ e over the crediting period for the project | Measurem ent of monthly energy generation from the project. Calculation of amount of actual emission reductions achieved by the project. | | |

Project Submission Form

| Total Number of SDGs | | | | | +5 Platinum | | +5 | | |
|---|--------|---|---|---|----------------|-------|------|--------------------|-------|
| | SUMMAR | Y | | | | Targe | eted | Likely Achieved | to be |
| Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development | - | - | - | - | - | - | - | - | - |
| Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels | - | - | - | - | - | - | - | - | - |
| Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss | - | - | - | - | - | - | - | - | - |
| Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development | - | - | - | - | - | - | - | - | - |

Section G. Local stakeholder consultation

G.1. MODALITIES FOR LOCAL STAKEHOLDER CONSULTATION

Project owner has conducted the Local stakeholder consultation on 04/05/2022 by considering the GCC rules and requirements. Project Owner has below described and demonstrated the local stakeholder consultation process undertaken for the Project Activity.

Scope of Consultation:

The scope of this Local Stakeholder Consultation meeting is to provide an opportunity to engage stakeholders in a meaningful manner at an early stage of the project activity which helps them to understand the project, participate in decision-making and exchange views and/or concerns regarding the project impacts and opportunities. This also enables or helps the project owner to identify, avoid and minimize adverse impacts and establish ongoing communications with relevant stakeholders during the lifetime of the project activity.

Means of Inviting Stakeholders:

Since the local communities are the predominant stakeholders for the meeting sending individual invitations is not a possible option. So, the local people were invited through the public notice which is more appropriate. For village authorities and officials' invitations were handed over as they were available locally in the project area.

Group of Stakeholders to be Involved

The stakeholders identified and invited for the meeting were relevant and are directly /indirectly affected by the project. The invitees include individuals from the local communities irrespective of caste, creed, gender or community, representatives of local authority and official representatives. Group of stakeholders identified for this project includes following

- 1. Local villagers in the study area, and villagers outside the study area where an existing project is operational (Both men and woman gender were invited to the meeting at the plant site).
- 2. Land sellers
- 3. Village officials such as village/panchayat president and Village development officer
- 4. Electricity Board officials

Meeting Details

LSC meeting details are presented in below table.

| Project Developer | Capacity | Date of LSC | Location |
|---|----------|-------------|---|
| AGV SOLAR IV GERADORA DE ENERGIA S.A. | 15.2 MW | 04/05/2022 | Project Location: Ouroeste - SP, Brazil |

| AGV SOLAR V GERADORA DE ENERGIA S.A. | 30.4 MW | 04/05/2022 |
|--|----------|------------|
| BOA HORA 1 GERADORA DE ENERGIA SOLAR S.A. | 23.04 MW | 04/05/2022 |
| BOA HORA 2 GERADORA DE ENERGIA SOLAR S.A. | 23.04 MW | 04/05/2022 |
| BOA HORA 3 GERADORA DE ENERGIA SOLAR S.A. | 23.04 MW | 04/05/2022 |

Plant In charge welcomed all the panel members and participants and provided the technical description of the Solar power plant including environmental, social and economic impacts on the local community. Further explained the role of this Solar Project over the years in addressing community development and livelihood issues and its contribution towards promoting sustainable development by linking local priorities to global challenges.

He further explained how thermal power plants were contributing to the global warming and provided a comparison between non-renewable and renewable power plants to the stakeholders where it was shown how a solar power plant is beneficial for the environment. Further, he briefed the stakeholders about the precautionary and safety measures to be kept in mind while working or visiting the power plant. Further explained the benefits of Solar Power Plant and its contribution to climate mitigation. further, briefed the stakeholders about the UN Sustainable Development Goals and how this project was contributing towards the UN SDGs.

Feedback questionnaire was distributed to the stakeholders to collect the comments and concerns about the project activity. The following questions were asked in the questionnaire.

Are you aware of the project?

What are the pros and cons of the project?

What's your concern over the project?

Do you face any negative impact due to the project construction and operation?

Do you support the implementation of the project activity?

This was followed by questions and experience sharing from the participating stakeholders. After listening to all the stakeholder comments, suggestions and answering their queries successfully, the meeting reached a closure and thanked everyone for being part of the stakeholder consultation meeting and requested everyone to keep up the momentum towards tackling climate change.

Project owner has requested the stakeholders to contact the site in-charge any time through the email or phone or to the site address mentioned in the invitation to express their grievances in future. Also assured that a grievance register is always made available at the project site to register their

complaints if any in the register and same will be addressed and resolved in the earliest possible time.

Total 42 stakeholders including local villagers were attended the meeting list of stakeholders are provided below.

| | DE PRESENÇA COMUNIDADE OUROESTE |
|--------------------------------------|---|
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| Andrew G. de Olivere | Supernova Ensino |
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| | E PRESENÇA |
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G.2. SUMMARY OF COMMENTS RECEIVED

All the respondents, communities in and around study area were aware about the proposed solar power project and expressed their support and cooperation for project activity. They didn't seem to have any objections or problem related to the development of Solar power project in their area.

Local people were concerned about the employment opportunity from the proposed solar power project. The Project Owner has assured, that they will prefer local people for unskilled labors during project construction period, while based on the skills and education they will provide employment opportunities to eligible youths of the locality.

G.3. CONSIDERATION OF COMMENTS RECEIVED

There were no concerns raised by the local stakeholders. The potential benefits of the project activity for the local stakeholders were acknowledged.

No negative comments have been received on project activity from any of the local stakeholders consulted. As all comments were very positive about the project, no further action is required.

There were no further comments raised by the stakeholders and they were totally in support for setting up of these kinds of projects in the region.

The summary of comments received during the meeting and responses provided by PP representative are provided below:

| Stakeholder comment | Explanation provided by PP representative |
|---|--|
| Does the Solar plant affect the rain in the local area? | No, the Solar panel installation does not |
| | have impact over the rainfall. |
| Will the solar power plant project pose a | No. Solar Power plants do not present any risks |
| risk to human health and the environment? | to public health and the environment. |
| What will be benefits due to upcoming | The proposed project will enhance the economy |
| solar project to local villagers | of the local area It will provide employment |
| | opportunity to local community during |
| | construction period. Monetary gains, education, |
| | health, sanitation, water conservation, plantation |
| | and improvement in general environment |
| | through community development plan. The PP |
| | will provide some Corporate Social |
| | Responsibility's (CSR) activity in the locality to |
| Is there any vacancy in the Solar plant? | improvement livelihoods standard of villagers. Currently there is no vacancy available at the |
| Is there any vacancy in the Solar plant? | plant. However, you can provide your CV to the |
| | plant in-charge. If any vacancy arises in the |
| | future, the first preference will be given to |
| | qualified people from the local area. |

Section H. Approval and authorization

Host country approval will be submitted in later stages as and when required to meet the CORSIA requirements.

APPENDIX 1. CONTACT INFORMATION OF PROJECT OWNERS

| Organization name | 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 | Kosher Climate India Private Limited | | | |
|--------------------|---|--|--|--|
| (as per LON/LOA) | | | | |
| 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 | 9632803444 | | | |
| Fax | - | | | |
| E-mail | narendra@kosherclimate.com | | | |
| Website | - | | | |
| Contact person | Narendra Kumar Ramraj | | | |

APPENDIX 2. AFFIRMATION REGARDING PUBLIC FUNDING

Not Applicable

APPENDIX 3. APPLICABILITY OF METHODOLOGY(IES)

Refer Section B.2

APPENDIX 4. FURTHER BACKGROUND INFORMATION ON EXANTE CALCULATION OF EMISSION REDUCTIONS

Not Applicable

APPENDIX 5. FURTHER BACKGROUND INFORMATION ON MONITORING PLAN

Not Applicable

APPENDIX 6. SUMMARY REPORT OF COMMENTS RECEIVED FROM LOCAL STAKEHOLDERS

Refer Section G.2

APPENDIX 7. SUMMARY OF DE-REGISTERED CDM PROJECT OR PROJECTS FROM OTHER GHG / NON-GHG PROGRAMS (TYPE B)

| >> | |
|---|--|
| Complete this form in a | accordance with the instructions attached at the end of this form. |
| Program Name | |
| Project registration number | |
| Date of registration in the program | |
| Title of the Project Activity | |
| Projectde- registration reference number | |
| Date of de- registration of the Project | |
| Project Participants (authorized by the host / annex 1 country letter of approval) | |
| | |

| Country where the project is located | | | | |
|--|--|---------------------|----------|--|
| Applied methodology(ies) | | | | |
| (provide reference and version number(s)) | | | | |
| Pre-registration changes to the Project Activity | Pre-registration Changes | Reference number | Approved | Provide a summary of pre- registration changes |
| (Tick as applicable) | Deviations from approved baseline and monitoring methodology | | | |
| | Deviations from applied Tool & Guidance | | | |
| | Deviations from the rules | | | |
| | Other | | | |
| Post-registration | | 1 | 1 | |
| changes to the Project Activity (Tick as applicable) | Post registration Changes | Reference number | Approved | Provide a summary of post- registration changes |
| (| Change in project design | | | |
| | Request for revision of monitoring plan | | | |
| | Request for change in start date of crediting period | | | |
| | Renewal of crediting period | | | |
| | Temporary deviations | | | |
| | Other | | | |

| Crediting Period(s) | | | | | | |
|---------------------|--|--|----------------------------------|---|-------------------|--|
| | Crediting period(s) | | Period (start & end dates) | ERs as per registered PDD/MR/Project documents | Credits issued | |
| | Crediting Period (shall start on or after 1 Jan 2016) | Fixed 10 year | | | | |
| | | Renewable (7 years, with 2 approved renewals) | 1 st | | | |
| | | | 2 nd | | | |
| | | | 3 rd | | | |
| | Period for which Credits have been issued | | | | | |
| | Period for which Credits have been requested but not issued | | | | - | |
| | Period for which Credits have never been requested for issuance (no monitoring reports submitted) | | | | - | |
| | Period for which Credits have never been requested for issuance prior to CDM de- registration | | | | - | |
| | Remaining Crediting period, after de-registration, for which Credits have not been issued by the program, subject to a ceiling of 10 years as allowed under the GCC Program | | | | - | |
| | | | | | | |

| Details of Previous | | | | | |
|---|---------------------|-------------------------------|---------------------------------|---|----------------------------------|
| Issuance Requests | Issuance Request | Period (start & end dates) | ERs as per registered PDD | Quantity of Credits requested to be issued | Quantity of Credits issued |
| | 1 st | | | | |
| | 2 nd | | | | |
| | 3 rd | | | | |
| | 4 th | | | | |
| | 5 th | | | | |
| | Add rows | | | | |
| | | | | | |
| | Total | | | | |
| List any open issues in the Validation and last Verification Report (e.g., FARs, if any) and how they have been addressed | | | | | |
| Any other relevant information that has not been reported in the registered documents and that may have adverse impacts on the environmental integrity of the Project Activity | | | | | |
| Provide the list of all the registered documents related to this project, as available on the program's website and the corresponding URLs. | | | | | |

Appendix 8. FURTHER INFORMATION ON DETERMINATION OF BUNDLE IN PROJECT ACTIVITY.

>> Not Applicable

Appendix 9. PUBLIC DECLARATION FOR A2 (Sub Type 2 and 3), B1 & B2 PROJECTS ON NON-CONTINUATION FROM CDM/GHG/NON-GHG PROGRAMS.

>> Not Applicable

| DOCUMENT | HISTORY | |
|----------|------------|---|
| Version | Date | Comment |
| V 4.0 | 27/09/2022 | Revised version released on approval by Steering Committee as per GCC Program Process; Revised version contains following changes: Introduced A3 type projects A2 project sub-types; Included revised Declaration by the 'Authorized Project Owner and focal point' on GCC requirements; Included modified format for E+/S+/ SDG assessment; Revised instructions for filling in the PSF; Editorial changes to the document. |
| V 3.2 | 31/12/2020 | The name of GCC Program's emission units has been changed from "Approved Carbon Reductions" or ACRs to "Approved Carbon Credits" or ACCs. |
| V 3.1 | 17/08/2020 | Editorial revisions made Revised Table in section B.7.2 on Monitoring-program of risk management actions Revised Table in section E.1 on Environmental Safeguards Revised Table in section E.1 on Social Safeguards Revised Table in section F on United Nations Sustainable Development Goals (SDG) |
| V 3.0 | 05/07/2020 | Revised version released on approval by Steering Committee as per GCC Program Process; Revised version contains following changes: Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC); Considered and addressed comments raised by Steering Committee: during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and electronic consultations EC01-Round 01 (15.09.2019 – 25.09.2019), EC01-Round 02 (27.03.2020 – 27.06.2020). Feedback from Technical Advisory Board (TAB) of ICAO on GCC submission for approval under CORSIA³⁹; |

³⁹See ICAO recommendation for conditional approval of GCC at <u>https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf</u>

| V 2.0 | 25/06/2019 | Revised version released for approval by the GCC Steering Committee. Revised version includes additional details and instructions on the information to be provided, consequent to the latest developments world-wide (e.g., CORSIA EUC). |
|-------|------------|--|
| V 1.0 | 01/11/2016 | Initial version released under the GCC Program Version 1 |



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