



BUNDLED SOLAR POWER PROJECT BY VECTOR GREEN SUNSHINE PRIVATE LIMITED AND POLEPALLY SOLAR PARKS PRIVATE LIMITED

Project title	Bundled Solar Power Project by Vector Green Sunshine Private Limited and Polepally Solar Parks Private Limited
Project ID	1745
Crediting period	24-March-2026 to 23-March-2036
Original date of issue	02-January-2026
Most recent date of issue	18-February-2026
Version	05
VCS Standard Version	4.7
Prepared by	Vijay Shankar, Climatex

CONTENTS

1	PROJECT DETAILS.....	4
1.1	Summary Description of the Project	4
1.2	Audit History.....	5
1.3	Sectoral Scope and Project Type	6
1.4	Project Eligibility	6
1.5	Project Design	7
1.6	Project Proponent	7
1.7	Other Entities Involved in the Project	8
1.8	Ownership.....	8
1.9	Project Start Date	9
1.10	Project Crediting Period	9
1.11	Project Scale and Estimated GHG Emission Reductions or Removals	9
1.12	Description of the Project Activity	10
1.13	Project Location	12
1.14	Conditions Prior to Project Initiation	13
1.15	Compliance with Laws, Statutes and Other Regulatory Frameworks	13
1.16	Double Counting and Participation under Other GHG Programs	14
1.17	Double Claiming, Other Forms of Credit, and Scope 3 Emissions.....	15
1.18	Sustainable Development Contributions	16
1.19	Additional Information Relevant to the Project	17
2	SAFEGUARDS AND STAKEHOLDER ENGAGEMENT	17
2.1	Stakeholder Engagement and Consultation.....	17
2.2	Risks to Stakeholders and the Environment.....	22
2.3	Respect for Human Rights and Equity	23
2.4	Ecosystem Health	26
3	APPLICATION OF METHODOLOGY.....	28
3.1	Title and Reference of Methodology	28
3.2	Applicability of Methodology	29
3.3	Project Boundary	43

3.4	Baseline Scenario	44
3.5	Additionality	46
3.6	Methodology Deviations	47
4	QUANTIFICATION OF ESTIMATED GHG EMISSION REDUCTIONS AND REMOVALS.....	47
4.1	Baseline Emissions	47
4.2	Project Emissions	52
4.3	Leakage Emissions	52
4.4	Estimated GHG Emission Reductions and Carbon Dioxide Removals	52
5	MONITORING	55
5.1	Data and Parameters Available at Validation	55
5.2	Data and Parameters Monitored.....	56
5.3	Monitoring Plan.....	58
	APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION.....	61
	APPENDIX 2: CALIBRATION AND METER DETAILS	62

1 PROJECT DETAILS

1.1 Summary Description of the Project

The main purpose of this project activity is to generate clean form of electricity through renewable solar energy source. Vector Green Sunshine Private Limited and Polepally Solar Parks Private Limited are the promoters of the proposed project activity. The project is a bundled project activity which involves installation of 20 MW AC solar project by Vector Green Sunshine Private Limited at Mansa district, Punjab and 25 MW AC solar power project by Polepally Solar Parks Private Limited at Mahabubnagar district, Telangana.

Over the second crediting period of 10 years, the project is estimated to replace approximately 60,030 tCO_{2e} of anthropogenic greenhouse gas emission annually. This is achieved by displacing 73,584 MWh/year of electricity from the generation mix of power plants connected to the Indian grid, a grid that is predominantly reliant on fossil fuel-based generation.

The details of the project and the state of installation are mentioned in the table:

Project Proponents Name	Capacity in MW (AC)	COD	Connection with Grid	State	Usage
Vector Green Sunshine Private Limited	20	24/03/2016	Indian Grid	Punjab	Sale to Grid
Polepally Solar Parks Private Limited	25	27/06/2016	Indian Grid	Telangana	Sale to Grid

Sectoral Scope : 01-Energy Industries (renewable/non-renewable sources)

Project Type : I- Renewable Energy Projects

Project Category : Grid- connected electricity generation from renewable sources
ACM0002, Version 22.0

Tools referred with above methodology are:

Tool to calculate the emission factor for an electricity system – Version 07.0 (EB 100, Annex 4)

Tool for the demonstration and assessment of additionality-Version 7.0.0 (EB 70, Annex 8)

Assessment of the validity of the original/baseline and update of the baseline at the renewal of the crediting period – Version 3.0.1 (EB 66 Annex 47)

Scenario existing prior to the implementation of project activity:

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”.

Baseline Scenario re-assessment as per Section 3.9.8 of VCS standard, v4.7:

a) Validity of the baseline scenario-

- a. The original baseline scenario—electricity generation from the regional grid dominated by fossil fuel-based power plants—has been reassessed, including an evaluation of new and relevant national and sectoral policies and circumstances applicable since the previous crediting period. This assessment considered developments such as renewable energy targets, must-run status of solar power, grid regulations, and prevailing electricity market conditions in India. The assessment confirms that these policies do not mandate the implementation of the project activity type nor eliminate the displacement of grid electricity as the appropriate baseline. Accordingly, the original baseline scenario remains valid.

b) Reassessment of baseline emissions using latest CDM tools

- a. As the original baseline scenario has been determined to remain valid, the GHG emissions associated with the baseline have been reassessed using the latest applicable version of the CDM tool for baseline emission factor determination. The baseline emissions have been updated using the most recent CEA CO₂ Baseline Database i.e version 21 which is applicable at the time of renewal, in line with VCS requirements.

Further assessment of applicability conditions and justification of the current baseline scenario is done in Section 3.2 of the PD.

Total estimated emission reductions in the second crediting period are 60,030 tCO₂e annually, resulting from the generation of 73,584 MWh of electricity per year.

1.2 Audit History

Audit type	Period	Program	Validation/verification body name	Number of years
Joint Validation and Verification	24-March-2016 to 31-January-2018	VCS	LGA Technological Center, S.A.(Applus+Certification)	1 year 10 months
Verification	01-February-2018 to 22-January-2020	VCS	Earthhood Services Private Limited	11 months 22 days

Verification	23-January-2020 to 22-March-2021	VCS	Earthhood Services Private Limited	1 year 2 months
Verification	23-March-2021 to 31-October-2022	VCS	VKU Certification Pvt. Ltd.	1 year 7 months
Verification	01-November-2022 to 30-April-2024	VCS	LGA Technological Center, S.A.(Applus+ Certification)	1 year 6 months
Verification	01-May-2024 to 28-February-2025	VCS	Ecolance Private Limited	1 year 2 months
Total	24-March-2016 to 28-February-2025	-	-	8 years 2 months 22 days

1.3 Sectoral Scope and Project Type

Sectoral scope ¹	01-Energy Industries (Renewable/non-renewable)
Project activity type	Renewable energy projects

The project activity is not a grouped project.

Sectoral scope	Not applicable as it is not a AFLOU Project.
AFOLU project category ²	Not applicable as it is not a AFLOU Project.
Project activity type	Not applicable as it is not a AFLOU Project.

1.4 Project Eligibility

1.4.1 General eligibility

The project activity is a grid-connected solar photovoltaic power generation project and falls within the scope of activities permitted under the VCS Program requirements. It is listed as excluded activity under the Table 1 of the VCS Standard but the project is already registered and it is undergoing renewal of crediting period so this is not applicable. The first crediting period of

¹ Projects, activities, or methodologies may be developed under any of the 16 VCS sectoral scopes: <https://verra.org/programs/verified-carbon-standard/vcs-program-details/#sectoral-scopes>

² See Appendix 1 of the VCS Standard

the project activity is from 26-March-2016 to 23-March-2026. Therefore, the validation for renewal of the crediting period is done in accordance with VCS program requirements.

The project activity is a large-scale project as per methodology (as per VCS it falls under “project category”) with capacity of 45 MW in total. The applied methodology is ACM0002, version 22.0 which is eligible under the VCS program. The project activity does exceed any scale or capacity limits specified in the applied methodology.

1.4.2 AFOLU project eligibility

This is a non-AFOLU project. This section is not applicable.

1.4.3 Transfer project eligibility

This project is not registered under any other GHG program and it is not a CPA project. Hence, this section is not applicable.

1.5 Project Design

Indicate if the project has been designed as:

- ☐ Single location or installation
- ☒ Multiple locations or project activity instances (but not a grouped project)
- ☐ Grouped project

1.5.1 Grouped project design

This is not a grouped project. Hence this section is not applicable.

1.6 Project Proponent

Organization name	Vector Green Sunshine Private Limited
Contact person	Mr. Rajeev Kumar Singh
Title	Manager-Carbon Team
Address	316-317, 'C' Wing, Kanakia Zillion, L.B.S. Road, BKC Annex, Kurla (W), Mumbai-400070
Telephone	+91-9789183888
Email	Rajeevkumar.Singh@sembcorp.com

Organization name	Polepally Solar Parks Private Limited
Contact person	Mr. Rajeev Kumar Singh
Title	Manager-Carbon Team
Address	316-317, 'C' Wing, Kanakia Zillion, L.B.S. Road, BKC Annex, Kurla (W), Mumbai-400070
Telephone	+91-9789183888
Email	Rajeevkumar.Singh@sembcorp.com

1.7 Other Entities Involved in the Project

Organization name	Sembcorp Green Infra Ltd
Role in the project	Authorized representative
Contact person	Shivanjali Anubhuti Mishra
Title	Assistant Manager- Renewable Business
Address	Building 7A, Level 5, DLF Cyber City
Telephone	+91 1246986700
Email	Shivanjali.Mishra@sembcorp.com

Organization name	Climatex
Role in the project	Consultant
Contact person	Mr. Vijay Shankar
Title	Director
Address	Sail City, Ranchi
Telephone	+91-9810105468
Email	vijay@climatex.in

1.8 Ownership

The Project is owned by Sembcorp Green Infra Ltd. As Vector Green Sunshine Private Limited and Polepally Solar Parks Private Limited are entities within the Sembcorp Group, the Group holds the right of use and ownership of the emission reductions (ERs) generated by the Project. The Ownership is demonstrated through the following documents.

- 1) Installation report/Commissioning certificate for Solar Plant in the name of respective PP issued by the state electricity board.
- 2) Power Purchase Agreement with the state electricity board for sale of electricity by the respective PP.

1.9 Project Start Date

Project start date	24-March-2016
Justification	The start date of the project activity is earliest interconnection with the grid and commissioning of 20MW solar PV project by Vector Green Sunshine Private Limited.

1.10 Project Crediting Period

Crediting period	☐ Seven years, twice renewable ☐ Ten years, fixed ☒ Other (Renewable crediting period of 10 years which can be renewed twice ³)
Start and end date of first or fixed crediting period	24-March-2026 to 23-March-2036

1.11 Project Scale and Estimated GHG Emission Reductions or Removals

Indicate the estimated annual GHG emission reductions/removals (ERRs) of the project:

- ☒ < 300,000 tCO₂e/year (project)
☐ ≥ 300,000 tCO₂e/year (large project)

³ The project was registered under the VCS standard and guideline version 3.7, under which renewable crediting period of 10 years is applicable and can be renewed twice.

Project Proponent has opted for ten years crediting with two times renewable.

Calendar year of crediting period	Estimated GHG emission reductions or removals (tCO ₂ e)
24-March-2026 to 23- March-2027	62,144
24-March-2027 to 23-March-2028	61,665
24-March-2028 to 23-March-2029	61,189
24-March-2029 to 23-March-2030	60,717
24-March-2030 to 23-March-2031	60,248
24-March-2031 to 23-March-2032	59,783
24-March-2032 to 23-March-2033	59,322
24-March-2033 to 23-March-2034	58,864
24-March-2034 to 23-March-2035	58,864
24-March-2035 to 23-March-2036	57,959
Total estimated ERRs during the 2nd crediting period	600300
Total number of years	10
Average annual ERRs	60,030

1.12 Description of the Project Activity

The project activity involves the installation of Solar PV project. The total installed capacity of the project is 45 MW of Solar PV plant located at Punjab and Telangana state in India. The project is owned by Sembcorp Green Infra Ltd which is promoted by two sub-entities Vector Green Sunshine Private Limited (20MW) and Polepally Solar Parks Private Limited (25MW).

The Project activity is a new facility (Greenfield) and the electricity generated by the Project is be exported to the Indian electricity grid. The Project therefore displaces an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. The Project Proponent plans to avail the VCS benefits for the Project.

In the Pre- project scenario, the entire 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.

The project result in replacing anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 60,030 tCO₂e per year, thereon displacing 73,584 MWh/year amount of electricity from the grid over the 10 years crediting period.

Solar PV Project Technology Details –

The project activity aims to harness solar energy through installation of PV with total installed capacity of 45 MW (AC).

The technical specification of 20 MW plant interconnection with grid on 24-Mar-2016 by Vector Green Sunshine Private Limited are as follows:

Sl.No.	Technical details of the equipment ⁴	Comments
1	Technology used	Multi crystalline
2	Number of modules installed	67740
3	Sources of the module installed	Renesola
4	Make & Number of Inverters	TMEIC-23 Nos.
5	Make & Number of Power Transformers	CG-10 MVA, 2 Nos.
6	Make & Number of Inverter Transformer	Esennar-3 MVA, 1.5 MVA, 750MVA, 7 Nos.
7	HT Panel	ABB
8	Make & Number of UPS	EMERSON, 8 Nos.
9	Modules Efficiency %	16.0%

The technical specification of 25 MW plant interconnection with grid on 27-Jun-2016 by Polepally Solar Parks Private Limited are as follows:

Sl.No.	Technical details of the equipment ⁵	Comments
1	Technology used	Multi crystalline
2	Number of modules installed	290430 95Wp= 29880(FS-395-PLUS) 97.5Wp = 189180 (FS-397-PLUS) 100WP = 71370 (FS-3100-PLUS)
3	Sources of the module installed	First Solar

⁴ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 20 MW (AC).

⁵ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 20 MW (AC).

4	Make & Number of Inverters	SMA-30 Nos.
5	Make & Number of Power Transformers	Schneider Electric-25/30 MVA, 1 Nos.
6	Make & Number of Inverter Transformer	Silchar Technologies-1.8 MVA, 15 Nos.
7	HT Panel	Technocraft-24 Nos.
8	LT Panel	Arrow Engineers-16 Nos.
9	Make & Number of UPS	Delta, 3 Nos. (10 KVA, 3 KVA & 3 KVA)
10	Modules Efficiency %	12.9% to 13% ⁶

The operation lifetime of the project is 25 years based on the Manufacturer's specifications for the major equipment and prevailing industry standards for utility scale solar power plants.

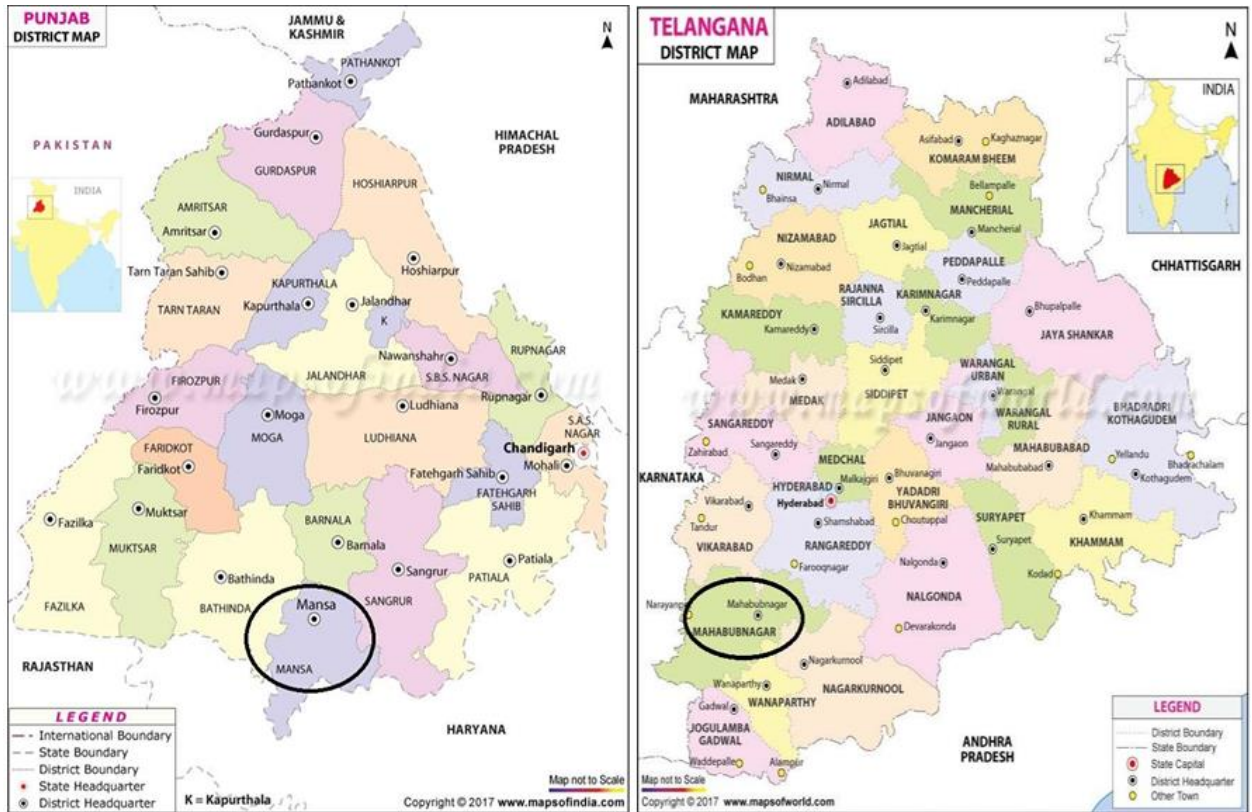
1.13 Project Location

The details of the project locations are mentioned in the table below:

Project Proponents Name	Village	Mandal	District	State	Latitude (N)	Longitude (E)
Vector Green Sunshine Private Limited	Boha		Mansa	Punjab	29° 47' 52.47"	75° 31' 16.63"
Polepally Solar Parks Private Limited	Ippatru	Nawabpet	Mahabubnagar	Telangana	16.9°	78.1°

The project locations have been shown in the map below:

⁶ https://www.pv-tech.org/first_solars_series_3_cdte_thin_film_module_platform_offers_harsh_environment/?



1.14 Conditions Prior to Project Initiation

The project is a Greenfield solar power project and does not involve generation of GHG emissions for the purpose of their subsequent reduction, removal or destruction. Thus, prior to project initiation, there was nothing at site.

In absence of project activity, the continuation of current practice i.e. generation of equivalent amount electricity would have been generated from grid connected fossil fuel dominated power plants. Thus, for project activity baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources.

1.15 Compliance with Laws, Statutes and Other Regulatory Frameworks

The Project has received necessary approvals for development and commissioning for the proposed 45 MW Solar PV project from the state Nodal agencies and is in compliance to the local laws and regulations.

As per Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India)⁷, final document on revised classification of Industrial Sectors under Red, Orange, Green and White Categories (January 2025)

The newly introduced White category of industries pertains to those industrial sectors which are practically non-polluting such as Biscuit trays etc. from rolled PVC sheet (using automatic vacuum forming machines), Cotton and woollen hosiers making (Dry process only without any dying/washing operation), Electric lamp (bulb) and CFL manufacturing by assembling only, Scientific and mathematical instrument manufacturing, Solar power generation through photovoltaic cell, wind power and mini hydel power (less than 25 MW).

There shall be no necessity of obtaining the Consent to Operate” for White category of industries. An intimation to concerned SPCB / PCC shall suffice. Since project activity falls under white category and the non-polluting nature of project fulfils the compliance to the local laws and regulations. The state nodal agency approval is submitted to VVB.

1.16 Double Counting and Participation under Other GHG Programs

1.16.1 No Double Issuance

Is the project receiving or seeking credit for reductions and removals from a project activity under another GHG program?

☐ Yes ☒ No

1.16.2 Registration in Other GHG Programs

Has the project registered under any other GHG programs?

☐ Yes ☒ No

If yes, provide the registration number and the date of project inactivity under the other GHG program.

Is the project active under the other program?

☐ Yes ☒ No

Project proponents, or their authorized representative, must attest that the project is no longer active in the other GHG program in the Registration Representation.

1.16.3 Projects Rejected by Other GHG Programs

Has the project been rejected by any other GHG programs?

⁷ <https://dghindia.gov.in/assets/downloads/687a44d57baeecdcb.pdf>

☐ Yes ☒ No

1.17 Double Claiming, Other Forms of Credit, and Scope 3 Emissions

1.17.1 No Double Claiming with Emissions Trading Programs or Binding Emission Limits

Are project reductions and removals or project activities also included in an emissions trading program or binding emission limit? See the *VCS Program Definitions* for definitions of emissions trading program and binding emission limit.

☐ Yes ☒ No

1.17.2 No Double Claiming with Other Forms of Environmental Credit

Has the project activity sought, received, or is planning to receive credit from another GHG-related environmental credit system? See the *VCS Program Definitions* for definition of GHG-related environmental credit system.

☐ Yes ☒ No

1.17.3 Supply Chain (Scope 3) Emissions

Do the project activities specified in Section 1.12 affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

If yes:

Is the project proponent(s) or authorized representative a buyer or seller of the product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

If yes:

Has the project proponent(s) or authorized representative posted a public statement on their website saying, "Carbon credits may be issued through Verified Carbon Standard project [project ID] for the greenhouse gas emission reductions or removals associated with [project proponent or authorized representative organization name(s)] [name of product(s) whose emissions footprint is changed by the project activities]."

☐ Yes ☒ No

1.18 Sustainable Development Contributions

Contribution to sustainable development:

Ministry of Environment and Forests, has stipulated economic, social, environment and technological well-being as the four indicators of sustainable development. The project contributes to sustainable development using the following ways.

Social well-being: The project helps generate employment opportunities during both construction and operation phases. The project activity leads to infrastructure development in the region like development of roads and also may also promote local business with improved power generation.

Economic well-being: The project is a clean technology investment in the region, that would not have been taken place in the absence of the VCS benefits the project activity also helps to reduce the demand supply gap of electricity in the state.

Technological well-being: The successful operation of project activity promotes Solar based power generation and encourages other entrepreneurs to participate in similar renewable energy projects.

Environmental well-being:

The project activity generates power using zero-emission solar PV-based technology, which helps reduce greenhouse gas emissions and specific pollutants such as SO_x, NO_x, and SPM associated with conventional thermal power generation facilities. As solar energy is a renewable source, the project reduces dependence on fossil fuels and conserves natural resources that are nearing depletion.

The various contributions by the Project Proponent (PP) towards the SDGs have been given below:

1. SDG 7 Affordable and Clean Energy⁸: Since the project activity is a solar power project, it generates clean energy. The Project activity is a new facility (Greenfield) and the electricity generated by the project is exported to the Indian electricity grid. The project therefore displaces an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid.

For the second crediting period 24-March-2026 to 23-March-2036 (Inclusive of both dates), it is estimated that 73,584 MWh of electricity will be supplied to Indian grid.

2. SDG 13 Climate Action⁹: The main purpose of this project activity is to generate a clean form of electricity through renewable solar energy sources. The project activity involves installation of 20 MW solar project by Vector Green Sunshine Private Limited at Mansa district, Punjab, India

⁸ <https://sdgs.un.org/goals/goal7>

⁹ <https://sdgs.un.org/goals/goal13>

and 25 MW solar power project by Polepally Solar Parks Private Limited at Mahabubnagar district, Telangana, India.

The project supplies clean electricity from the solar power plants to the Indian Grid, hence displacing the electricity generated from grid connected fossil fuel power plants and thereby avoiding the equivalent Carbon dioxide which is a greenhouse gas.

By supplying 73,584 MWh/year clean electricity to Indian grid, the project will avoid release of 60,030 tCO_{2e} into the atmosphere during the second crediting period: 24-March-2026 to 23-March -2036 (inclusive of both dates).

3. SDG 8 Employment and decent work: The implementation of the project activity has led to increase in the employment and skill upliftment in the surrounding areas. Every year 1 employment will be generated and 2 trainings will be conducted.

1.19 Additional Information Relevant to the Project

1.19.1 Leakage Management

There is no leakage emission involved in the project. Thus, leakage management is not required in this case.

1.19.2 Commercially Sensitive Information

There is no commercial sensitive information related the project activity. All information is provided in the public version of the project documents.

1.19.3 Further Information

Not applicable.

2 SAFEGUARDS AND STAKEHOLDER ENGAGEMENT

2.1 Stakeholder Engagement and Consultation

2.1.1 Stakeholder Identification

Stakeholder Identification	Villagers located near the project area are identified as the main stakeholders of the project activity. They are identified by the CSR committee of the company in discussion with the Gram Panchayat and the Block level Government officers. As the villagers are in the vicinity of the project activity, they would be likely be the most impacted by the implementation of the project.									
Legal or customary tenure/access rights	The 20 MW project located in Punjab is established on land obtained through a legally executed lease agreement for a period of 30 years, granting the Project Proponent full legal access and usage rights for project implementation and operation. The 25 MW project located in Telangana is situated on land that is fully owned by the Project Proponent, providing complete legal ownership and control. No customary tenure applies, and no disputes or conflicts have been identified for either project.									
Stakeholder diversity and changes over time	The project owner has conducted and stakeholder meeting during the start of registration process of this project under the VCS mechanism. In this stakeholder meeting, diverse stakeholders such as local villagers (villages nearby the project site), state utility officials, NGOs were invited. The project owner has explained the various benefits and advantages of this project including the economic impact on the local area. Over the period of the year, the nature of the stakeholders has not changed. <table> <tr> <th>Project</th> <th>Date of Meeting</th> <th>Location of meeting</th> </tr> <tr> <td>20 MW solar power at Punjab</td> <td>20-May-2016</td> <td>Project site, Punjab</td> </tr> <tr> <td>25 MW solar power at Telangana</td> <td>22-Aug-2016</td> <td>Project site, Telangana</td> </tr> </table>	Project	Date of Meeting	Location of meeting	20 MW solar power at Punjab	20-May-2016	Project site, Punjab	25 MW solar power at Telangana	22-Aug-2016	Project site, Telangana
Project	Date of Meeting	Location of meeting								
20 MW solar power at Punjab	20-May-2016	Project site, Punjab								
25 MW solar power at Telangana	22-Aug-2016	Project site, Telangana								
Expected changes in well-being	Over the course of the project implementation, there has been considerable and positive impact on the livelihood of the local people. The project activity has generated employment to the local people, development of new skills for the locals by providing trainings and exposing to various awareness programs.									

Location of stakeholders	The main stakeholders of this project are: - State utility which includes transmission and distribution companies which have offices at local (block level) and as well as State Capital. - Villagers/local citizens- they are located near the project area. The project has positive impact on the local people as it has generated employment (temporary/permanent) opportunities for them. Local Vendors: They are located in the vicinity of the project site and continue to receive business opportunities during the operational phase of the project, contributing to their ongoing economic benefit.
Location of resources	The 20 MW project in Punjab is on 30-year leased land, while the 25 MW project in Telangana is on land fully owned by the Project Proponent. The locations of all Solar Panels are provided in Section 1.13.

2.1.2 Stakeholder Consultation and Ongoing Communication

Date of stakeholder consultation	Local stakeholder consultation was conducted during the registration of the project. The Project Proponent had conducted local stakeholder’s consultation at two different project sites. <table><tr><td>Project</td><td>Date of Meeting</td><td>Location of meeting</td></tr><tr><td>20 MW solar power at Punjab</td><td>20-May-2016</td><td>Project site, Punjab</td></tr><tr><td>25 MW solar power at Telangana</td><td>22-Aug-2016</td><td>Project site, Telangana</td></tr></table>	Project	Date of Meeting	Location of meeting	20 MW solar power at Punjab	20-May-2016	Project site, Punjab	25 MW solar power at Telangana	22-Aug-2016	Project site, Telangana
Project	Date of Meeting	Location of meeting								
20 MW solar power at Punjab	20-May-2016	Project site, Punjab								
25 MW solar power at Telangana	22-Aug-2016	Project site, Telangana								
Stakeholder engagement process	The LSC invitation were put on public notice to the local people. The consultation attendees were given sufficient time and scope to discuss the project and clarify their doubts related to the project and provide their feedbacks on the project.									

Consultation outcome	The Project Proponent (PP) conducted inclusive stakeholder meetings to guarantee the unbiased sharing of all project-related information. This approach successfully eliminated barriers to participation for diverse groups, ensuring all stakeholders had equitable access to details. Key topics covered included the project's design, location, objectives, benefits, risks, duration, scope, and the full carbon project cycle, encompassing validation and verification processes. Based on the above information, the stakeholders provided their inputs through open discussions during the meeting. No negative comments have been received for the project activity from the local stakeholders consulted. The feedback on the implementation of the project activity was positive and so no further action was required.
Ongoing communication	For on-going consultation, the project proponent has kept grievance register in plant site office and sought comments/grievances from the local stakeholders. The representative of PP addresses the grievances if any to the stakeholders and communicates them on regular basis. PP has also kept provision for submitting comments/grievances from local stakeholder through direct emails. Below are the details: • Company Website: www.sembcorpindia.com—Green Infra Wind Energy Private Limited • Email: sgil.grievance@sembcorp.com
Stakeholder input	During the stakeholder's consultation process, the below inputs were received for the project: 1. Does the project provide employment opportunities or economic development of the area? PP response: Yes, the project will provide economic development of the area and employment opportunities to the local people. 2. How the project activity will benefit the villages around the project site and their residents? PP response: The project activity will benefit the villagers by providing employment opportunities to local or nearby people like module cleaning, hiring of vehicles and various social activities shall help to uplift the standard of living.

2.1.3 Free Prior and Informed Consent

Obtaining consent	The 20 MW project located in Punjab is established on land-leased for a period of 30 years, while the 25 MW project located in Telangana is situated on land fully owned by the Project Proponent. These arrangements provide the Project Proponent with full legal rights to use the land for project implementation and operation, with no disputes or conflicts related to land or stakeholder rights.
Outcome of FPIC	The project site is legally secured by the Project Proponent through valid land agreements. . The project site for 20 MW is land leased for 30 years and the land owner who receives annual lease payment and has no concerns or objections regarding the project. The project site for 25 MW is legally owned by the Project Proponent. Thus, there has no displacement or relocation of the local villages. Since the start of the project activity there have been many positive economic impacts which has greatly contributed to the upliftment of the region.

2.1.4 Grievance Redress Procedure

Development process	To ensure all stakeholders could safely provide feedback, the project team devised a sensitive, culturally appropriate system, including an accessible grievance register maintained at the site location.
Grievance redress procedure	• A grievance register is maintained at the project site, and stakeholders may submit comments or complaints using the contact details provided. • A publicly displayed mechanism is available at the site to facilitate the submission of feedback. All grievances are formally recorded, heard and responded by the Project Proponent's representative on a timely basis. • Grievances are addressed and attempts for resolution are made within a reasonable period of time. • The project was registered under VCS standard 3.7. The grievance registers and feedback submission are maintained in the local language to enable stakeholders to

	communicate effectively. Culturally appropriate and locally accepted conflict resolution methods are followed while addressing grievances. - The company holds public meetings on continuous basis as a part of CSR activity with the local community and does development activities. - Documentation of grievances received and disputes resolved is maintained and made publicly available.
--	--

2.1.5 Public Comments

Comments received	Actions taken
No negative comments have been received	Since the commissioning, there has been no change in the project design and therefore any updates were not necessary.

2.2 Risks to Stakeholders and the Environment

2.2.1 Management Experience

Sembcorp Green Infra Ltd. has many years of experience in implementing wind and solar energy projects. Some of the other projects implemented by Sembcorp industries are VCS1856, VCS1776, GS7152, GS7468. No entity has been newly involved in project design or implementation during the current monitoring period.

2.2.2 Risk Assessment

	Risks identified	Mitigation or preventative measure(s) taken
Natural and human-induced risks to stakeholders' wellbeing	No risk identified	There are no risks involved to stakeholder's wellbeing by the implementation of the project activity.
Risks to stakeholder participation	No risk identified	The Project team has explained about the project to the stakeholders including project benefits, costs, risks, rights, laws and opportunities on employment generation. The stakeholders are voluntarily willing to participate in

		the project because of benefits like safeguarding the communities from environmental challenges and various other SDG benefits of the project.
Working conditions	No risk identified	The project has taken comprehensive measures to ensure providing safe and healthy working conditions for its employees
Safety of women and girls	No risk identified	The project is a solar power project and its day-to-day operations does not involve any interactions with the local community. Hence, there are no safety related concerns for women and girls.
Safety of minority and marginalized groups, including children	No risk identified	There are no marginalized group or minorities present in the local community. No vulnerable communities were identified as mentioned in the ESIA report
Pollutants (air, noise, discharges to water, generation of waste, and release of hazardous materials and chemical pesticides and fertilizers)	No risk identified	The project does not involve generation of pollutants.

2.3 Respect for Human Rights and Equity

2.3.1 Labor and Work

Risks identified ¹⁰	Mitigation or preventative measure(s) taken
--------------------------------	---

¹⁰ The identified risks and commensurate mitigation or preventative measure(s) for forced labor, child labor, and human trafficking, must be inclusive of staff and contracted workers employed by third parties.

Discrimination	Discrimination on the basis of individual's race, gender, age, disability, ethnicity or cultural affiliation, sexual orientation, belief, educational background, or any other basis.	PP has code of conduct policy in place to prevent discrimination against anyone.
Sexual harassment	Unwelcome acts or behavior (whether directly or by implication)	PP has a prevention of sexual harassment policy in place which is applicable to both permanent and contractual employees.
Equal pay for equal work	No risk identified	The project proponent promotes gender equality in work and pays. Due to the remote location, currently no women are employed on the project sites but It is ensured that equal salary will be given to the men and women whenever employed on the site location.
Gender equity in labor and work	Biasness in hiring, promotions or terminations	PP has fair employment practice policy in place to prevent any such partiality.
Forced labor	No risk identified	Project activity does not involve any victims of forced labour and the same can be confirmed by the local stakeholders living near the site.
Child labor	No risk identified	PP complies with the core labour standards by engaging those contractors and other providers of goods and services who do not employ child labour.
Human trafficking	No risk identified	The PP works with ethical suppliers as per code of conduct policy and no such scenario is envisaged for the project activity.

2.3.2 Human Rights

Risks identified	Mitigation or preventative measure(s) taken
No risk identified	The 20 MW project located in Punjab is established on land leased to the Project Proponent for a period of 30 years, while the 25 MW project located in Telangana is situated on land fully owned by the Project Proponent. There are no resettlement and rehabilitation or involuntary resettlement issues related to the project; and no specific / vulnerable group of community is likely to be affected by the project., hence there are no risks to human rights violation identified.

2.3.3 Indigenous Peoples and Cultural Heritage

Risks identified	Mitigation(s) or preventative measure taken
No risk identified	The project does not affect the indigenous people and their cultural heritage as Indigenous communities like tribes, ethnic minorities, aboriginals etc. are not present in the area.

2.3.4 Property Rights

Risks identified	Mitigation or preventative measure(s) taken
No risk identified	This project does not infringe with property rights and resources. The project land is secured through both ownership and long-term lease arrangements. The 20 MW project located in Punjab is established on land leased to the Project Proponent for a period of 30 years, while the 25 MW project located in Telangana is situated on land fully owned by the Project Proponent. These arrangements provide the Project Proponent with full legal rights to use the land for project implementation and operation, with no disputes or conflicts related to land or stakeholder rights..

Hence, there is no need to implement any measures to protect and preserve the property rights of stakeholders, IPs, LCs, and customary rights holders.

2.3.5 Benefit Sharing

Process used to design the benefit sharing plan	Not applicable
Summary of the benefit sharing plan	Not applicable.
Approval and dissemination of benefit sharing plan	Not applicable.

2.4 Ecosystem Health

	Risks identified	Mitigation or preventative measure(s) taken
Impacts on biodiversity and ecosystems	No risk identified	This project activity does not involve any activity which may negatively impact biodiversity and ecosystem. The locations identified for the solar panels do not comprise of any trees or shrubs in the immediate vicinity. Provision of adequate spaces between each solar panel for movement of birds which reduces the potential for accidental collision has been provided as per the project site layout plan.

Soil degradation and soil erosion	Dispersion of soil	Temporary paved areas are constructed to be used while refueling the machineries, in case of any accidental spill the soil will be cut and stored securely for disposal with hazardous waste.
Water consumption and stress	Contamination of pond and, domestic run-off	Portable toilets are provided with septic tank followed by soak pit. Temporary paved areas are used while refueling the machineries. Storage of oil is undertaken on paved impervious surface and secondary containment shall be provided for fuel storage tanks;

2.4.1 Rare, Threatened, and Endangered Species

Is the project located in or adjacent to habitats for rare, threatened, or endangered species?

☐ Yes ☒ No

Species and habitat	Not applicable
Areas needed for habitat connectivity	Not applicable

	Risks identified	Mitigation or preventative measure(s) taken
Habitats for rare, threatened, and endangered species	No risk identified	The project site and its surrounding areas is not habitat for any rare, threatened or endangered species.
Areas for habitat connectivity	No risk identified	There are no wildlife movement paths near the project site, and the project will not block the movement of animals or birds.

2.4.2 Introduction of Species

This project activity neither involve any planting activities nor introduction of species. Hence, not applicable.

Species introduced	Classification	Justification for use	Adverse effects and mitigation
N/A	N/A	N/A	N/A

This project activity does not involve introduction of any species which may be invasive in nature.

Existing invasive species	Mitigation measures to prevent the spread or continued existence of invasive species
N/A	N/A

	Risks identified	Mitigation or preventative measure(s) taken
Invasive species	N/A	N/A

2.4.3 Ecosystem Conversion

This project activity does not involve ARR, ALM, WRC or ACoGS activities. Hence, not applicable.

	Risks identified	Mitigation or preventative measure(s) taken
Ecosystem conversion	N/A	N/A

3 APPLICATION OF METHODOLOGY

3.1 Title and Reference of Methodology

Type (methodology, tool or module).	Reference ID, if applicable	Title	Version
Methodology	ACM0002	ACM0002: Grid-connected electricity generation from renewable sources	22.0 ¹¹

¹¹ <https://cdm.unfccc.int/methodologies/DB/XB1TX7TAZ6SLWM9B7BC67THHVD16JV>

Tool	01	Tool for the demonstration and assessment of additionality	7.0.0 ¹²
Tool	07	Tool to calculate the emission factor for an electricity system	7.0 ¹³
Tool	11	Assessment of the validity of the original/baseline and update of the baseline at the renewal of the crediting period	3.0.1 ¹⁴

3.2 Applicability of Methodology

The project activity involves generation of grid connected electricity from renewable solar energy. The project activity has a proposed installed capacity of 45 MW (AC) and is implemented under the Verified carbon standard. The project is developed in accordance with the methodology ACM0002 version 22.0 and applicability conditions of methodology are discussed below.

Methodology ID	Applicability condition	Justification of compliance
ACM0002, Version 22	This methodology is applicable to grid-connected renewable energy power generation project activities that: (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s);	The project activity is a Renewable Energy Project i.e. Solar Power Project which falls under applicability criteria option 1 (a) i.e., “Install a Greenfield power plant”. Hence the project activity meets the given applicability criterion.

¹² https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf/history_view

¹³ https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf/history_view

¹⁴ https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf/history_view

	(c) Involve a retrofit of (an) existing operating 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); or (f) Install a Greenfield power plant together with a grid-connected Greenfield pumped storage power plant. The greenfield power plant may be directly connected to the PSP or connected to the PSP through the grid.	
	In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that: a) Integrate BESS with a Greenfield power plant; Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic¹ or wind power plant(s)/unit(s); b) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other	a) The project is the installation of a Greenfield grid connected solar power plants with no BESS integration. Therefore, the methodology is applicable for the project. b) (b) The project is the installation of a Greenfield grid connected solar power plant without any capacity additions, retrofit, rehabilitations or replacements. (c) The project is the installation of a Greenfield grid connected solar power plants with no BESS integration.

	changes to the existing plant(s); c) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s); d) Integrate a BESS together with a Greenfield power plant that is operating in coordination with a PSP. The BESS is located at site of the greenfield renewable power plant.	(d) The project is the installation of a Greenfield grid connected solar power plants with no BESS integration. Therefore, this condition is not applicable.
	The methodology is applicable under the following conditions: a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit; b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit must have started commercial operation prior to the start of a minimum historical reference period of five years. The reference period is used for the calculation	The project activity is the installation of Greenfield grid-connected solar power plants/units. Therefore, the said criterion is applicable.

	of baseline emissions and defined in the baseline emission section. Furthermore, no capacity expansion, 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; c) In case of Greenfield project activities applicable under paragraph 7(a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g., by referring to feasibility studies or investment decision documents); d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies² may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The	
--	---	--

	charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g., week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period. e) In case the project activity involves PSP, the PSP shall utilize the electricity generated from the renewable energy power plant(s) that is operating in coordination with the PSP during pumping mode.	
	In case of hydro power plants, one of the following conditions shall apply: a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or b) The project activity is implemented in existing single or multiple	The project activity is the installation of Greenfield grid-connected solar power plants/units. Therefore, the said criterion is not applicable.

	reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m²; or c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m²; or d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m², and all of the following conditions shall apply: (i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/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 are: a. Lower than or equal to 15 MW; and b. Less than 10 per cent of the total installed capacity of integrated hydro power project.	
	In the case of integrated hydro power projects, project participants shall: a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs	The project activity is the installation of Greenfield grid-connected solar power plants/units. Therefore, the said criterion is not applicable.

	constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of five years prior to the implementation of the CDM project activity.	
	In the case of PSP, the project participants shall demonstrate in the PDD that the project is not using water which would have been used to generate electricity in the baseline.	Not applicable to this project as the project does not employ PSP.
	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/units.	The project is solar power project and thus the criterion is not applicable to this project activity.

	In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”.	The project is solar power project and thus the criterion is not applicable to this project activity.
	In addition, the applicability conditions included in the tools referred to below apply.	Please refer tables below.
Tool 07, version 7.0	This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project that substitutes grid electricity that is where a project supplies electricity to a grid or a project that results in savings of electricity that would have been provided by the grid (e.g., demand-side energy efficiency projects).	The project 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 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 “Tool 07: Tool to calculate the emission factor for an electricity system”, version 7.0. Further calculation is provided in Section 4.1.

	Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two Sub-options under the step 2 of the tool are available to the project participants, i.e., option IIa and option IIb. If option IIa is chosen, the conditions specified in “Appendix 2: Procedures related to off-grid power generation” should be met. Namely, the total capacity of offgrid 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.	Since the project is grid connected, this condition is applicable and the emission factor has been calculated accordingly. Combined margin grid emission factor has been calculated as per the CO2 emission factor database published by the CEA in which for the calculation of emission factor CEA have only considered grid connected plants. Calculation is provided further in Section 4.1.
	In case of CDM projects the tool is not applicable if the project electricity system is	The project activity is located in India, a non-Annex I country. Therefore, this tool is

	located partially or totally in an Annex I country.	applicable for the project activity.
	Under this tool, the value applied to the CO2 emission factor of bio fuels is zero	The project is a grid connected solar power project and therefore, this criterion is not applicable for the project
Tool 01, 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.	Re-assessment of additionality is not required for the renewal of the crediting period.
	Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	The applied methodology, ACM0002, version 22, does not require re-demonstration of the additionality of the project activity.
Tool 11, version 3.0.1	Step 1- Assess the validity of the current baseline for the next crediting period. The validity of the current baseline is assessed using the following Sub-steps: Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies	The current baseline scenario complies with all relevant mandatory national and sectoral policies applicable in India at the time of requesting renewal of the crediting period. There is no mandatory legal or regulatory requirement that obligates power generators to produce electricity exclusively from renewable energy sources.

		Subsequent amendments to the Electricity Act and related regulations continue to permit conventional grid electricity generation while promoting, but not mandating, renewable energy generation, accordingly, the baseline remains in compliance with applicable mandatory policies.
	Step 1.2- Assess the impact of circumstances Assess the impact of circumstances existing at the time of requesting renewal of the crediting period on the current baseline emissions, without reassessing the baseline scenario. In the situation where the baseline scenario identified at the validation of the project activity was the continuation of the current practice without any investment, an assessment of the changes in market characteristics is required for the renewal of the crediting period. Evaluate whether the conditions used to determine the baseline emissions in the previous crediting period are still valid. Assess the availability of new fuels or raw materials	At the time of requesting of the renewal of the crediting period, no material changes in circumstances have occurred that would affect the validity of the current baseline emissions. The baseline scenario identified at validation—continuation of the existing practice of grid electricity generation without investment in renewable energy—remains applicable. There have been no changes in market characteristics that mandate a shift in the baseline scenario. No new fuels or raw materials have become available that would alter the baseline practice, and variations in electricity prices do not make renewable energy generation the default or compulsory option in the absence of the project. The conditions and assumptions used to determine baseline emissions in the previous

	and the impact of electricity or fuel prices in the identification of the current practice for the baseline emissions	crediting period therefore remain valid. Accordingly, the continued validity of the current baseline is plausible, and no update to the baseline is required for the subsequent crediting period.
	Step 1.3: Assess whether the continuation of use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested.	The baseline scenario identified at validation was the continuation of use of the existing baseline equipment without any additional investment. In the absence of the project activity, no replacement or new investment would be required, as the remaining technical lifetime of the baseline equipment is estimated to be 25 years, which exceeds the 10 years of previous crediting period and 10-years of crediting period for which renewal is requested. There is no technical necessity or regulatory requirement that would compel an investment in alternative or new technology during the renewed crediting period. While renewable energy technologies are available in the market, their market penetration does not make them the default baseline option in the absence of the project.

		Accordingly, the continuation of use of the current baseline equipment without any investment remains the most likely scenario for the renewed crediting period.
	Step 1.4: Assessment of the validity of the data and parameters	All data and parameters that were determined at the start of the previous crediting period and not monitored during the crediting period have been reviewed for validity at the time of requesting renewal. Emission factors used for baseline emission calculations have been updated in accordance with the applicable requirements. The latest available CEA CO₂ Emission Factor Database (Version 21) has been applied for the determination of grid emission factors for the renewed crediting period. As the grid emission factor is not based on a historical site-specific condition but on nationally published data that is periodically updated, it is appropriate and consistent with VCS guidance to use the most recent version. Therefore, the requirement to update emission factors determined once per crediting period has been met.

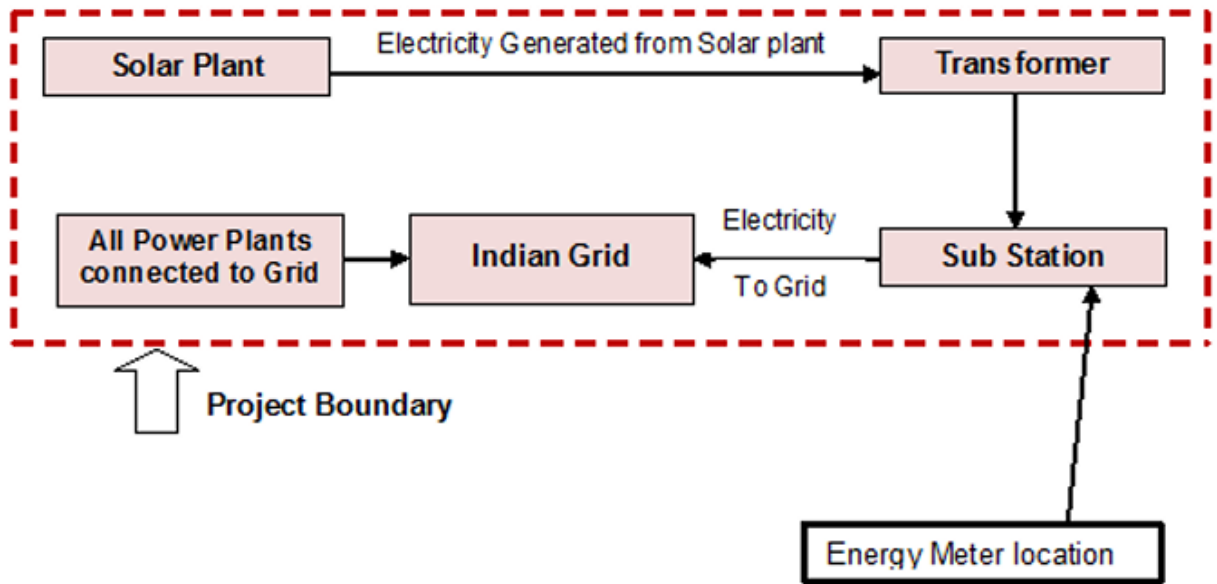
3.3 Project Boundary

As per ACM0002, version 22.0, Project Boundary is defined as “The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system¹⁵ that the CDM project power plant is connected to”.

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		Gas	Included?	Justification/Explanation
Baseline	Grid connected electricity generation.	CO ₂	Yes	Main emission source
		CH ₄	No	Minor emission source
		N ₂ O	No	Minor emission source
		Other	-	-
Project	Greenfield Solar PV Power Project Activity.	CO ₂	No	Project activity does not emit CO ₂
		CH ₄	No	Project activity does not emit CH ₄
		N ₂ O	No	Project activity does not emit N ₂ O
		Other	-	-

¹⁵ Refer to TOOL07 for definition of an electricity system.



3.4 Baseline Scenario

An approved large-scale baseline CDM methodology ACM0002 “Grid-connected electricity generation from renewable sources”, Version 22.0, has been followed along with the Tool 07 “Tool to calculate the emission factor for an electricity system, version 7.0” is used to establish the baseline scenario.

According to the para 27 the baseline scenario applicable for the project activity is as “If the project activity is the installation of a Greenfield power plant with or without a BESS as described under paragraph 5(a) or paragraph 7(a) or paragraph 7(e) above, the baseline scenario is electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in TOOL 07”.

The project activity involves setting up of solar projects to harness the power of sun to produce electricity and supply to the grid.

In the absence of the project activity, the equivalent amount of power would have been supplied by the Indian grid, which is fed mainly by fossil fuel fired plants. Hence, the baseline for the project activity is the equivalent amount of power from the Indian grid.

The combined margin ($EF_{grid, CM, y}$) is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM). Calculations for this combined margin must be based on data from an official source (where available) and made publicly available. The CEA database version 21 is the latest available data

at the time of PD submission to VVB for validation, hence same is considered for emission factor calculations.

The combined margin of the Indian grid used for the project activity is as follows:

Parameter	Value	Nomenclature	Source
EF _{grid,y}	0.8511 tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.75) & build margin (0.25) values, sourced from Baseline CO ₂ Emission Database, Version 21, November 2025 published by Central Electricity Authority (CEA), Government of India
EF _{grid,OM,y}	0.9642 tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system in year y	Calculated as the last 3-year (2022-23,2023-24, 2024-25) generation-weighted average, sourced from Baseline CO ₂ Emission Database, Version 21, November 2025 published by Central Electricity Authority (CEA), Government of India
EF _{grid,BM,y}	0.5119 tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system in year y	Baseline CO ₂ Emission Database, Version 21, November 2025 published by Central Electricity Authority

			(CEA), Government of India
--	--	--	----------------------------

The baseline case is in compliance with all applicable legal and regulatory requirements references.

3.5 Additionality

In accordance with Section 3.9.8 of the VCS Standard, version 4.7, a reassessment of additionality is not required for the renewal of the crediting period. The applied methodology, ACM0002 version 22, does not require re-demonstration of the additionality of the project activity.

:

3.5.1 Regulatory Surplus

Is the project located in an UNFCCC Annex 1 or Non-Annex 1 country?

☐ Annex 1 country ☒ Non-Annex 1 country

Are the project activities mandated by any law, statute, or other regulatory framework?

☐ Yes ☒ No

If the project is located inside a Non-Annex 1 country and the project activities are mandated by a law, statute, or other regulatory framework, are such laws, statutes, or regulatory frameworks systematically enforced?

☐ Yes ☒ No

As per 3.14.1 demonstrating regulatory surplus, the Project conforms to all the applicable laws and regulations in India:

Power generation using renewable energy is not a legal requirement or a mandatory option.

- The Electricity (Amendment) Bill, 22-November-2025¹⁶ does not influence the choice of fuel used for power generation. The amendment provides an enabling policy framework for renewable energy through measures such as RPOs and preferential tariffs but does not mandate the installation of renewable energy projects by generators. Compliance obligations rest with obligated entities rather than the project developers, and renewable energy continues to face financial and operational barriers.
- There is no legal requirement on the choice of a particular technology for power generation.

¹⁶ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2192895®=3&lang=2>

- Both the baseline and project activity are in compliance with laws and regulations required. There is no mandatory requirement to implement the project activity.
- The project activity comes under white category as per local regulation, thus there shall be no necessity of obtaining the Consent to Operate for White category of industries. Since project activity falls under white category and the non-polluting nature of project fulfils the compliance to the local laws and regulations.

As per the section 3.14 of the VCS standard version 4.7, 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 demonstrates regulatory surplus.

3.5.2 Additionality Methods

As stated in Section 3.5, a reassessment of additionality is not required at the time of crediting period renewal. There have been no changes to the project activity since registration.

3.6 Methodology Deviations

There is no methodology deviation.

4 QUANTIFICATION OF ESTIMATED GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

The baseline emissions were quantified in accordance with the methodology ACM0002 version 22.0. For this project, it includes electricity delivered to the Indian national grid. This was calculated as set out in Tool 07, and the calculation steps are described below.

Baseline Emission Calculation

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired 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/or 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 CO₂/yr)

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

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using TOOL07 (t CO₂/MWh)

As per methodology, combined grid emission factor as per the “Tool to calculate the emission factor for an electricity system” version 07 is calculated as below.

CO₂ Baseline Database for the Indian Power Sector, Version 21, Nov 2025 published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission reduction.

As per Methodological tool: Tool to calculate the emission factor for an electricity system (Version 7.0,) following six steps have been followed:

- (a) Step 1: Identify the relevant electricity systems;
- (b) Step 2: Choose whether to include off-grid power plants in the project electricity system (optional);
- (c) Step 3: Select a method to determine the operating margin (OM);
- (d) Step 4: Calculate the operating margin emission factor according to the selected method;
- (e) Step 5: Calculate the build margin (BM) emission factor;
- (f) Step 6: Calculate the combined margin (CM) emission factor.

Step 1: Identify the relevant electricity systems

As described in tool “For determining the electricity emission factors, identify the relevant project electricity system. Similarly, identify any connected electricity systems”. It also states that “If the DNA of the host country has published a delineation of the project electricity system and connected electricity systems, these delineations should be used”. Keeping this into consideration, the Central Electricity Authority (CEA), Government of India has divided the Indian Power Sector into five regional grids viz. Northern, Eastern, Western, North-eastern and Southern.

However, since Aug 2006, however, all regional grids except the Southern Grid had been integrated and were operating in synchronous mode, i.e. at same frequency. Consequently, the Northern, Eastern, Western and North-Eastern grids were treated as a single grid named as NEWNE grid from FY 2007-08 onwards for the purpose of this CO2 Baseline Database. As of 31 December 2013, the Southern grid has also been synchronized with the NEWNE grid, hence forming one unified Indian Grid. Since the project supplies electricity to the Indian grid, emissions generated due to the electricity generated by the Indian grid as per CM calculations will serve as the baseline for this project.

Step 2: Choose whether to include off-grid power plants in the project electricity system (optional)

Project participants may choose between the following two options to calculate the operating margin and build margin emission factor:

Option I: Only grid power plants are included in the calculation.

Option II: Both grid power plants and off-grid power plants are included in the calculation.

The Project Participant has chosen only grid power plants in the calculation.

Step 3: Select a method to determine the operating margin (OM)

The calculation of the operating margin emission factor ($EF_{grid,OM,y}$) is based on one of the following methods, which are described under Step 4:

(a) Simple OM; or

(b) Simple adjusted OM; or

(c) Dispatch data analysis OM; or

(d) Average OM.

The data required to calculate Simple adjusted OM and Dispatch data analysis OM is not possible due to lack of availability of data to project owner. The choice of other two options for calculating operating margin emission factor depends on generation of electricity from low-cost/must-run sources. In the context of the methodology low cost/must run resources typically include hydro, geothermal, wind, low-cost biomass, nuclear and solar generation.

Share of Must-Run (Hydro/Nuclear) (% of Net generation) ¹⁷								
			2019-20	2020-21	2021-2022	2022-23	2023-24	2024-25

¹⁷ https://cea.nic.in/wp-content/uploads/baseline/2025/12/User_Guide_V_21.0.pdf

India			16.5%	15.81%	15.33%	12.52%	13.59%	13.59%
-------	--	--	-------	--------	--------	--------	--------	--------

The above data clearly shows that the percentage of total grid generation by low-cost/ must-run plants (on the basis of average of five most recent years) for the Indian grid is less than 50 % of the total generation. Thus, the Average OM method cannot be applied, as low cost/must run resources constitute less than 50% of total grid generation.

The simple OM emission factor is calculated as the generation-weighted average CO₂ emissions per unit net electricity generation (tCO₂/MWh) of all generating power plants serving the system, not including low-cost/must-run power plants/units.

For the simple OM, the simple adjusted OM and the average OM, the emissions factor can be calculated using either of the two following data vintages:

- (a) Ex-ante option: if the ex-ante option is chosen, the emission factor is determined during the registration validation stage, thus no monitoring and recalculation of the emissions factor during the crediting period is required.

OR

- (b) Ex-post option: if the ex-post option is chosen, the emission factor is determined for the year in which the project activity displaces grid electricity, requiring the emissions factor to be updated annually during monitoring.

Project owner has chosen ex-ante option for calculation of Simple OM emission factor using a 3-year generation-weighted average, based on the most recent data available at the time of submission of the PD.

OM determined at registration stage will be the same throughout the crediting period. There will be no requirement to monitor & recalculate the emission factor during the crediting period.

Step 4: Calculate the operating margin emission factor ($EF_{grid,OM,Simple,y}$) according to the selected method:

The operating margin emission factor has been calculated using a 3-year data vintage:

Net Generation in Operating Margin (GWh) (incl. Imports)			
	2022-23	2023-24	2024-25
INDIAN Grid	111,78,45	123,21,63	126,32,33

Simple Operating Margin (tCO ₂ /MWh) (incl. Imports)			
	2022-23	2023-24	2024-25
INDIAN Grid	0.9710	0.9613	0.9609

Weighted Generation Operating Margin	
INDIAN Grid	0.9642

STEP 5: Calculate the build margin emission factor ($EF_{BM,y}$)

Option 1 as described above is chosen to calculate the build margin emission factor for the project activity. BM is calculated ex-ante based on the most recent information available at the time of submission of PD and is fixed for the entire crediting period.

Build Margin (tCO ₂ /MWh) (not adjusted for imports)	
INDIAN Grid	2024-25
	0.5119

STEP 6: Calculate the combined margin (CM) emissions factor:

Combined Margin – The combined margin is the weighted average of the simple operating Margin and the build margin. In particular, for intermittent and non-dispatch able generation types such as wind and solar photovoltaic, Tool 07: Tool to calculate the emission factor for an electricity system, Version 7.0.0, EB 100, Annex 4, allows to weigh the operating margin and Build margin at 75% and 25%, respectively for wind and solar projects and 50% and 50%, respectively for hydro and biomass projects.

The baseline emission factor is calculated using the combined margin approach as described in the following steps:

Calculation of Baseline Emission Factor EF_y

The baseline emission factor EF_y is calculated as the weighted average of the Operating Margin emission factor ($EF_{OM,y}$) and the Build Margin emission factor ($EF_{BM,y}$):

Where,

w_{OM} 75% weight for solar energy projects

w_{BM} 25% weight for solar energy projects

$EF_{OM,y}$ calculated as described in Steps 3&4 above (tCO₂/MWh)

$EF_{BM,y}$ calculated as described in Steps 5 above (tCO₂/MWh)

Baseline Emission factor (INDIAN Grid) = $0.75 \times 0.9642 + 0.25 \times 0.5119 = 0.8511$ tCO₂/MWh

The baseline emission factor is ex-ante parameter and will remain constant throughout the crediting period.

$EF_{grid,CM,y}$ = Combined Margin Grid Emission Factor = 0.8511 tCO₂/MWh

4.2 Project Emissions

As per the approved consolidated Methodology ACM0002, “Grid-connected electricity generation from renewable sources” (Version 22.0) para 40: For most renewable energy power generation project activities, $PE_y = 0$. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted for as project emissions by using the following equation:

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

Where,

PE_y = Project emissions in year y (t CO₂e/yr)

$PE_{FF,y}$ = Project emissions from fossil fuel consumption in year y (tCO₂/yr)

$PE_{GP,y}$ = Project emissions from the operation of dry, flash steam or binary geothermal power plants in year y (tCO₂e/yr)

$PE_{HP,y}$ = Project emissions from water reservoirs of hydro power plants in year y (tCO₂e/yr)

$PE_{BESS,y}$ = Project emissions from charging of a BESS using electricity from the grid or from fossil fuel electricity generators (tCO₂e/yr) As the project activity is the installation of a new grid-connected solar Power plant and does not involve any project emissions from fossil fuel, operation of dry, flash steam or binary geothermal power plants, and from water reservoirs of hydro power plants.

$PE_{PSP,y}$ = Project emissions from utilizing electricity from the grid for pumping operation of PSP in excess to the production of the renewable power plant operating in coordination with the PSP (tCO₂e/yr)

Therefore $PE_{FF,y}$, $PE_{GP,y}$, $PE_{HP,y}$, $PE_{BESS,y}$, $PE_{PSP,y}$ is equal to zero and thus, $PE_y = 0$.

4.3 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.

4.4 Estimated GHG Emission Reductions and Carbon Dioxide Removals

As per the paragraph 72 of the methodology ACM0002 “Grid-connected electricity generation from renewable sources” Version 22.0, emission reductions are calculated as follows:

Emission Reductions

$$ER_y = BE_y - PE_y$$

Where,

ER_y = Emission reductions in year y (tCO₂e/yr) *B*

BE_y = Baseline emissions in year y (tCO₂/yr) *P*

PE_y = Project emissions in year y (tCO₂/yr)

Baseline Emissions (BE_y):

As per the above sections 4.1 Baseline Emission (BE_y) will be calculated as per the below equation

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

Where, ER_y = Emission Reduction in tCO₂/year

BE_y = Baseline emission in tCO₂/year

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

$EF_{grid,CM,y}$ = Baseline grid emission factor (t CO₂/MWh) = 0.8511 tCO₂/MWh

Hence the baseline emission for the entire crediting period of the Project is calculated as below:

Vintage period	Estimated baseline emissions (tCO ₂ e)	Estimated project emissions (tCO ₂ e)	Estimated leakage emissions (tCO ₂ e)	Estimated reduction VCU (tCO ₂ e)	Estimated removal VCU (tCO ₂ e)	Estimated total VCUs (tCO ₂ e)
24-Mar-2026 to 31-Dec-2026	48,183	0	0	48,183	0	48,183
01-Jan-2027 to 31-Dec-2027	61,642	0	0	61,642	0	61,642
01-Jan-2028 to 31-Dec-2028	61,426	0	0	61,426	0	61,426

01-Jan-2029 to 31-Dec-2029	60,823	0	0	60,823	0	60,823
01-Jan-2030 to 31-Dec-2030	60,353	0	0	60,353	0	60,353
01-Jan-2031 to 31-Dec-2031	59,761	0	0	59,761	0	59,761
01-Jan-2032 to 31-Dec-2032	59,552	0	0	59,552	0	59,552
01-Jan-2033 to 31-Dec-2033	58,967	0	0	58,967	0	58,967
01-Jan-2034 to 31-Dec-2034	58,512	0	0	58,512	0	58,512
01-Jan-2035 to 31-Dec-2035	57,938	0	0	57,938	0	57,938
01-Jan-2036 to 23-Mar-2036	13,144	0	0	13,144	0	13,144
Total	600,300	0	0	600,300	0	600,300

For projects required to assess permanence risk:

State the non-permanence risk rating (%)	Example: 20%
Has the non-permanence risk report been attached as either an appendix or a separate document?	☐ Yes ☒ No
For ARR and IFM projects with harvesting, state, in tCO ₂ e, the Long-term Average (LTA).	NA
Has the LTA been updated based on monitored data, if applicable?	☐ Yes ☒ No If no, provide justification.
State, in tCO ₂ e, the expected total GHG benefit to date.	NA
Is the number of GHG credits issued below the LTA?	☐ Yes ☒ No

If no, provide justification.

5 MONITORING

5.1 Data and Parameters Available at Validation

Data / Parameter	EF _{grid,OM,y}
Data unit	tCO ₂ /MWh
Description	Operating Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 21, Nov 2025 ¹⁸
Value applied	0.9642
Justification of choice of data or description of measurement methods and procedures applied	Calculated as per “Tool to calculate the emission factor for an electricity system, version 07” as 3-year generation weighted average using data for the years, 2022-23, 2023-24 and 2024-25. The data are obtained from “CO ₂ Baseline Database for Indian Power Sector” version 21, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of data	Calculation of baseline emissions
Comments	This parameter is fixed ex-ante for the entire crediting period.

Data / Parameter	EF _{grid,BM,y}
Data unit	tCO ₂ /MWh
Description	Build Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 21, November 2025 ¹⁹

¹⁸ https://cea.nic.in/wp-content/uploads/baseline/2025/12/User_Guide_V_21.0.pdf

¹⁹ https://cea.nic.in/wp-content/uploads/baseline/2025/12/User_Guide_V_21.0.pdf

Value applied	0.5119
Justification of choice of data or description of measurement methods and procedures applied	Calculated as per “Tool to calculate the emission factor for an electricity system, version 07” as per the latest data available for the most recent year 2024-25. The data is obtained from “CO2 Baseline Database for Indian Power Sector” version 21, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of data	Calculation of baseline emissions
Comments	This parameter is fixed ex-ante for the entire crediting period.

Data / Parameter	$EF_{grid,CM,y}$
Data unit	tCO ₂ /MWh
Description	Combined Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 21, November 2025 ²⁰
Value applied	0.8511
Justification of choice of data or description of measurement methods and procedures applied	The combined margin emissions factor is calculated as follows: $EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$ Where: $EF_{grid,BM,y}$ = Build margin CO₂ emission factor in year y (tCO₂/MWh) $EF_{grid,OM,y}$ = Operating margin CO₂ emission factor in year y (tCO₂/MWh) W_{OM} = Weighting of operating margin emissions factor (%) = 75% W_{BM} = Weighting of build margin emissions factor (%) = 25%
Purpose of data	Calculation of baseline emissions
Comments	This parameter is fixed ex-ante for the entire crediting period.

5.2 Data and Parameters Monitored

Data / Parameter	$EG_{PJ,y}$
Data unit	MWh/yr

²⁰ https://cea.nic.in/wp-content/uploads/baseline/2025/12/User_Guide_V_21.0.pdf

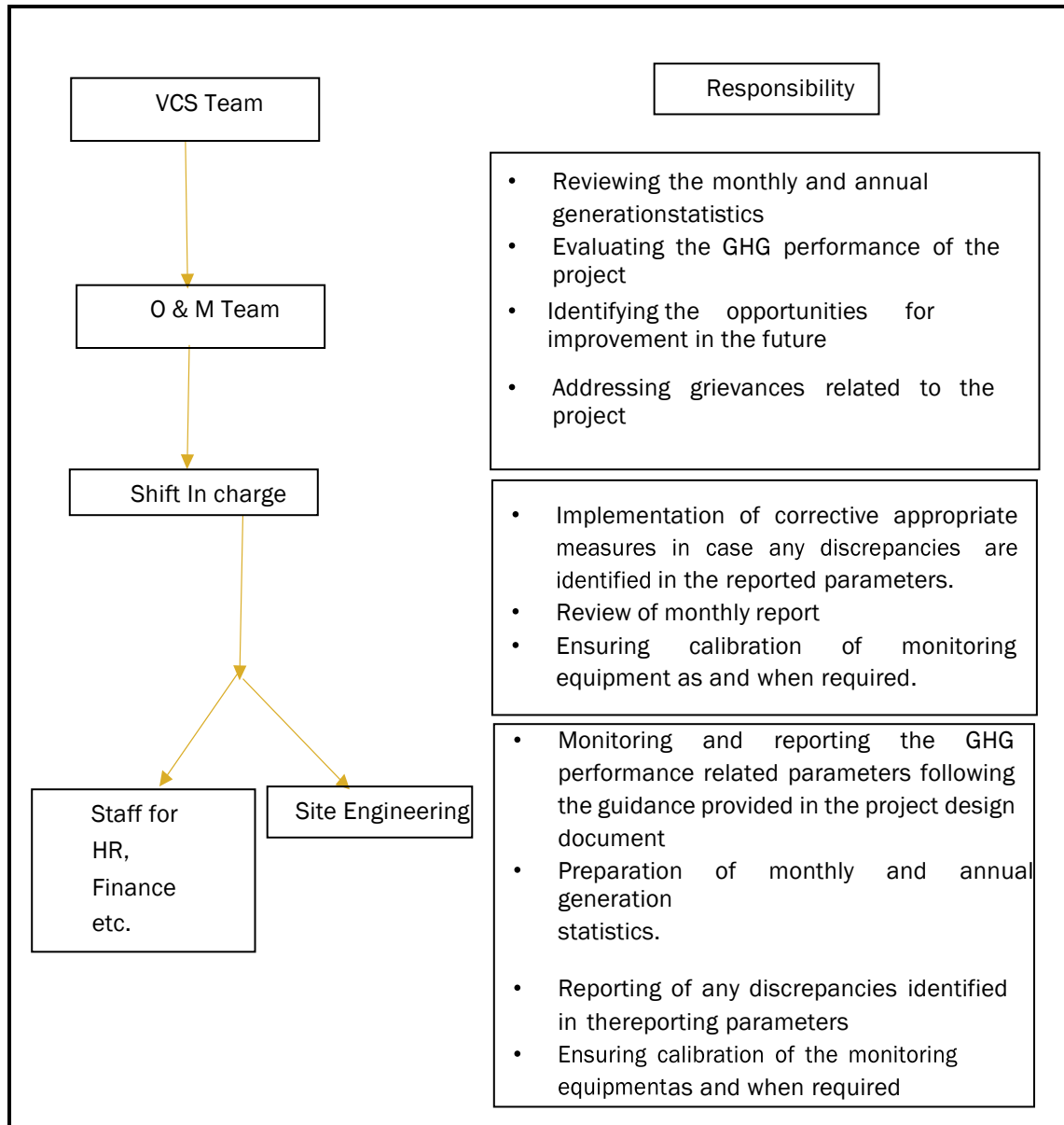
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh
Source of data	Monthly joint meter reading reports issued by the respective state utility (Readings of the meter installed at the plant side will be considered for ER calculation).
Description of measurement methods and procedures to be applied	The difference of final value of export and import is used for monthly values of net electricity supplied to the grid by the project activity and same value will be considered for ER calculations (Readings of the meter installed at the plant side will be considered for ER calculation). The monthly report issuance is done by the State Utilities for both the projects. The accuracy class of the meters is 0.2S. The details about the meters and their calibration is provided in the Appendix -2.
Frequency of monitoring/recording	Continuous measurement & monthly recording
Value applied	73,584 (estimated)
Monitoring equipment	The electricity/energy meter installed at the grid substation and plant end (in case of VGSPL). Energy meter installed at grid substation (in case of PSSPL). This meter also measures electricity imported by the plant from the grid. ABT cum Tri vector meter are used Data Type-measured Type of meters- Static type meter (Main, Check and Standby meter) Accuracy class of meters-0.2s The meter details are mentioned in Appendix- 2.
QA/QC procedures to be applied	The meters are approved, tested & sealed by the State Utility. The frequency of calibration is once in 5 years²¹. The monthly electricity supplied/exported by the project activity in the JMR report is cross checked with the monthly invoices of sale. In the absence or delay in the meter calibration appropriate Guidelines will be applied appropriately to confirm the conservativeness of metering.

²¹ http://www.aegcl.co.in/Metering_Regulations_Of_CEA_17_03_2006.pdf

	The metering arrangement, accuracy class of meters, calibration frequency is under control of state electricity board and PP do not have any control on it. The PP receives the net electricity export values as recorded by the grid meter, which are used as the applicable monitoring parameter. The billing is raised based on substation meters for PSSPL (25 MW) project in Telangana and meters located at switchyard for VGSPL (20 MW) project in Punjab.
Purpose of data	Calculation of baseline emissions
Calculation method	Thus, Net electricity supplied to the grid by the project plant in a given month = Export, kWh – Import, kWh
Comments	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

5.3 Monitoring Plan

The monitoring plan is developed in accordance with the modalities and procedures for CDM project activities and is proposed for grid-connected solar power project being implemented. The monitoring plan, which will be implemented by the project participant describes about the monitoring organization, parameters to be monitored, monitoring practices, quality assurance, quality control procedures, data storage and archiving. The authority and responsibility for registration, monitoring, measurement, reporting and reviewing of the data rests with the project participant. PP proposed the following structure for data monitoring, collection, data archiving and calibration of equipment for this project activity. The team comprises of the following members:



Data Measurement

The export and import energy are measured continuously using above mentioned Main meters. A set of check meter & standby meter are also installed and these serve the purpose of backup meter. Readings of meters are taken on monthly basis by authorized officer of state utility in the presence of PP or representative of PP. Based on the Meter reading state utility issue a statement (JMR) to PP, and PP subsequently raise invoices for the billing. These invoices can be used for cross checking the meter readings taken for the respective project activity.

Data Apportioning

In case of mismatch of date between the start date of the billing cycle and the start date of monitoring period the data will be apportioned in line to the daily generation values for the said mismatch period.

The PP will keep complete and accurate records of operating log at the Power Plant. The data will be archived electronically as well as in log books at the power plant and will be kept for two years after the end of the crediting period or the last issuance of VCU's for this project activity, whichever occurs later. In case the dates of a particular monitoring period do not match with the dates of the billing cycle, the net electricity exported to the grid would be calculated apportioning the net electricity exported to grid, as recorded in the JMR, based on the number of days in the monitoring period and the number of days for which JMR was prepared.

Data collection and archiving

Readings from meters are collected in the presence of the plant in-charge. Export and Import data are recorded and stored in logs as well as in electronic form on a daily basis. The records are checked periodically by the Plant Manager and discussed thoroughly with the plant supervisor. The period of storage of the monitored data will be 2 years after the end of crediting period or till the last issuance of VERs for the project activity whichever occurs later.

Emergency preparedness

The project activity does not result in any unidentified activity that result in substantial emissions from the project activity. No need for emergency preparedness in data monitoring is visualized.

Personnel training

In order to ensure a proper functioning of the project activity and a properly monitoring of emission reductions, the staff are trained. The plant helpers are trained in equipment operation, data recording, reports writing, operation and maintenance and emergency procedures in compliance with the monitoring plan.

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Section	Information	Justification
Not applicable	Not applicable	Not applicable

APPENDIX 2: CALIBRATION AND METER DETAILS

Meter Calibration details of 20 MW solar project by Vector Green Sunshine Private Limited

Meter Details	Main Meter	Check Meter	Standby meter
Sl. No.	15191785	PST00103	PST00449
Make	L& T	Secure	Secure
Accuracy Class	0.2s	0.2s	0.2s
Calibration date	22 nd April 2025	11 th April 2023	11 th April 2023
Due date of calibration	21 st April 2030	10 th April 2028	10 th April 2028

Meter Calibration details of 25 MW solar project by Polepally Solar Parks Private Limited

Meter Details	Main Meter	Check Meter	Standby meter
Sl. No.	0024007901	0024007902	0024007905
Make	Schneider Electric India	Schneider Electric India	Schneider Electric India
Accuracy Class	0.2s	0.2s	0.2s
Calibration date	20 th June 2024	20 th June 2024	20 th June 2024
Due date of calibration	19 th June 2029	19 th June 2029	19 th June 2029