Project Verification Report

2021

COVER PAGE

Project Verification Report Form (VR)

BASIC INFORMATION	
Name of approved UCR Project Verifier / Reference No.	Enviance Services Private Limited
Type of Accreditation	☐ CDM or other GHG Accreditation ☒ ISO 14065 Accreditation
Approved UCR Scopes and GHG Sectoral scopes for Project Verification	01 Energy industries (Renewable/Non-Renewable Sources)
Validity of UCR approval of Verifier	30/09/2027
Completion date of this VR	17/03/2025
Title of the project activity	60 MW solar Power Plants in Karnataka M/s Asian Fab Tec Limited.
Project reference no. (as provided by UCR Program)	437
Name of Entity requesting verification service (can be Project Owners themselves or any Entity having authorization of Project Owners, example aggregator.)	UCR ID – 437 Viviid Emissions Reductions Universal Pvt. Ltd. Name: Lokesh Jain Email ID – lokesh.jain@viviidgreen.com
Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)	UCR ID – 437 Viviid Emissions Reductions Universal Pvt. Ltd. Name: Lokesh Jain Email ID – lokesh.jain@viviidgreen.com
Country where project is located	India

Applied methodologies (approved methodologies by UCR Standard used)	ACM0002: Grid-connected electricity generation from renewable sources version 21.0
GHG Sectoral scopes linked to the applied methodologies	01 Energy industries (Renewable/Non-Renewable Sources)
Project Verification Criteria: Mandatory requirements to be assessed	☒ UCR Standard ☒ Applicable Approved Methodology ☒ Applicable Legal requirements /rules of host country ☒ Eligibility of the Project Type ☒ Start date of the Project activity ☒ Meet applicability conditions in the applied methodology ☒ Credible Baseline ☒ Do No Harm Test ☒ Emission Reduction calculations ☒ Monitoring Report ☒ No GHG Double Counting ☐ Others (please mention below)
Project Verification Criteria: Optional requirements to be assessed	☒ Environmental Safeguards Standard and do-no-harm criteria ☒ Social Safeguards Standard do-no-harm criteria
Project Verifier's Confirmation: The *UCR Project Verifier* has verified the UCR project activity and therefore confirms the following:	The UCR Project Verifier *Enviance Services Private Limited*, certifies the following with respect to the UCR Project Activity [60 MW Solar Power Plants in

	Karnataka M/s Asian Fab Tec Limited*].* ☒ The Project Owner has correctly described the Project Activity in the Project Concept Note version 2 (dated *10/07/2024*) including the applicability of the approved methodology [*ACM0002: Grid-connected electricity generation from renewable sources version 21.0*] and meets the methodology applicability conditions and has achieved the estimated GHG emission reductions, complies with the monitoring methodology and has calculated emission reductions estimates correctly and conservatively. ☒ The Project Activity is likely to generate GHG emission reductions amounting to the estimated [*not calculated as this is a second monitoring period*] tCO_2e, as indicated in the PCN version 2, which are additional to the reductions that are likely to occur in absence of the Project Activity and complies with all applicable UCR rules, including ISO 14064-2 and ISO 14064-3. ☒ The Project Activity is not likely to cause any net-harm to the environment and/or society ☒ The Project Activity

	complies with all the applicable UCR rules[1] and therefore recommends UCR Program to register the Project activity with above mentioned labels.
Project Verification Report, reference number and date of approval	Verification Report UCR Reference number: 437 Date of approval: 28/03/2025
Name of the authorised personnel of UCR Project Verifier and his/her signature with date	 Vidhya Murali Krishna Quality Manager Date: 28/03/2025

1

PROJECT VERIFICATION REPORT

Executive summary

The project activity is titled- “60 MW solar Power Plants in Karnataka M/s Asian Fab Tec Limited”. The project is spread across different villages in Karnataka state of India.

Company’s Name	Plant Capacity (MW)	Commissioning Date	Location	Geo co-ordinates of Location
M/s Asian Fab Tec Limited	10	02/01/2018	Village-Kavalahalli Taluka-Doddaballapura Bengaluru Rural, State- Karnataka, India	13.372064 ˚N & 77.594575˚E
	15	08/02/2018	Village-Bevinahalli, Taluka- Sira District- Tumkur, State- Karnataka, India	13.916178˚N & 76.817135˚E
	15	29/12/2017	Village- Halalu, Taluka-Nagamangala, District-Mandya, State-Karnataka, India	12.953343˚N & 76.798480˚E
	20	06/01/2018	Village-Alakapura & Bommasandra, Taluka-Gowribidanur, District-Chikkaballapura State- Karnataka, India	13.554484˚N & 77.514103˚E

The Project Activity is a greenfield solar project and the electricity generated by the project is exported to the national grid of India. According to the power purchase agreements/7/, the electricity is being exported to the Indian grid [Karnataka Power Transmission Corporation, KPTCL] which is then purchased by Bangalore Electricity Supply Company Ltd (BESCOM). The power produced by the 10MW, 15MW, 15MW and 20MW plants are evacuated respectively at Tubagere, Bevinahalli, Vaderahally and Gowribidanur substations (66/11 KV) located in the Karnataka state of India.

The project activity displaces an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. The estimated lifetime of the project activity is considered as 25 years for solar technology. In the Pre- project scenario the entire electricity, consumed by the customers or delivered to the grid by, would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources.

The main components of project activity are solar PV modules, inverter, set-up transformer, module mounting system and power conditioning units. The generation of power from solar photovoltaics is a clean technology as there is no fossil fuel-fired or no GHG gases are emitted during the process. Thus, project activity leads to a reduction the GHG emissions as it displaces power from fossil fuel-based electricity generation in the regional grid. Since the project activity generates electricity through solar energy, it will not cause any negative impact on the environment and thereby contributes to climate change mitigation efforts. The project activity also contributes to SDG goals 7,8 and 13.

The crediting period of the project activity is 10 years in which total estimated electricity generation is 11,05,038 MWh and the total GHG emission reduction estimated is 9,94,534 tCO_2e. Also, the annual average estimated emission reductions from project activity are 99,453 tCO_2e with the average plant load factor of 21.70%. During this second monitoring period which is from 01/01/2024 to 31/12/2024, 57,550 tCO_2e of emission reduction has been reported.

Scope of Verification

The scope of the services for the project is to perform Project Verification of concerned Project Activity. The scope of verification is to assess the claims and assumptions made in the Project Concept Note (PCN) and Monitoring Report (MR) against the UCR criteria, including but not limited to, UCR program verification guidance document, UCR Standard, UCR Program Manual, and related rules and guidelines established under Program process.

Verification Process and Methodology

The verification process was undertaken by a competent verification team and involved the following,

- Desk review of documents and evidence submitted in context of the reference rules and guidelines issued by UCR,
- Undertaking/conducting site visit/remote audit, interview or interactions with the representative of the project owners/representatives,
- Reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate and preparing a draft verification opinion based on the auditing findings and conclusions
- Finalization of the verification opinion (this report)

Desk/Document review

A detailed desk review of the PCN, MR, Methodology and all other associated documentation and references took place in advance of the site visit, and additional documents that were not available for the desk review were requested for review during the site visit. Additional information can be required to complete the verification, which may be obtained from other public and reliable sources or through telephone and face to face interviews with key stakeholders (including the project developers and where necessary, government and NGO representatives in the host country).

A list of all documents reviewed or referred to in the course of this verification is included in Appendix 3 below.

Follow up interviews/site visit

The verifier conducted remote audit and had requested for site photographs, short videos. A remote interview was conducted with the project owners and stakeholders.

Conclusion

Based on the work performed, the verifier concludes that the “60 MW Solar Power Plants in Karnataka M/s Asian Fab Tec Limited”. The information and data presented in the MR version 2 dated 01/03/2025 is in line with the Project Concept Note Version 2 dated 10/07/2024 and meets all relevant requirements of the UCR for UCR project activities. The UCR project activity correctly applies the methodology “ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/” leading to result in real, measurable and long-term emission reductions achieved for the current monitoring period.

For the current monitoring period (second issuance period), verified emission reductions achieved by the project activity were as below;

Start date of monitoring period	01/01/2024
End date of monitoring period	31/12/2024
Emission reductions achieved	57,550 tCO_2 eq

Project Verification team, technical reviewer and approver

Project Verification team

No.	Role	Last	First	Affiliation	Involvement in

		name	name	(e.g. name of central orother office of UCR Project Verifier or outsourced entity)	Document review	Off-Site inspection	Interviews
1.	Team Leader/ Technical Expert	Singh	Ritu	Enviance Services Private Limited	Yes	Yes	Yes
2.	V-V Trainee / Technical Expert in Trainee	Mahajan	Swati	Enviance Services Private Limited	Yes	Yes	Yes

Technical reviewer and approver of the Project Verification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of UCR Project Verifier or outsourced entity)
1.	Technical reviewer	Internal	Kumar	Pankaj	Enviance Services Private Limited

Means of Project Verification

Desk/document review

A detailed desk review of the PCN, MR, methodology and all other associated documentation and references took place in advance of the remote audit, and additional documents that were not available for the desk review were requested for review during the remote audit. Additional information can be required to complete the verification, which may be obtained from other public and reliable sources or through telephone and face-to face interviews with key stakeholders (including the project developers and where necessary, Government and NGO representatives in the host country).

A list of all documents reviewed or referred to in the course of this verification is included in Appendix 3 below.

Off-site inspection

Date of off-site inspection: 10/03/2025

No.	Activity performed Off-Site	Site location	Date
1.	a) An assessment of the implementation and operation of the project activity as per the PCN and UCR requirements b) Verification of the project design, as documented is sound and reasonable, and meets the identified criteria of UCR Standard	1) 10 MW- Village-Kavalahalli Taluka-Doddaballapura Bengaluru Rural, State-Karnataka, India	10/03/2025

	Requirements andassociated guidance c) Assessment to conformance with the certification criteria as laid out in the UCR Standards; d) Evaluation of the conformance with the certification scope, including the GHG project and baseline scenarios, additionality; GHG sources, sinks, and reservoirs; and the physical infrastructure, activities, technologies and processes of the GHG project to the requirementsof the UCR; e) Evaluation of the calculation of GHG emissions, including the correctness and transparency of formulae and factors used; assumptions related to estimating GHG emission reductions; and uncertainties; and determination whether the project could reasonably be expected to achieve the estimated GHG reduction/removals. f) Review of information flows for generating, aggregating and reporting of the parameters to bemonitored g) To confirm that the operational and data collection procedures can be implemented in accordancewith the Monitoring Plan h) Cross-check of information provided in the submitted documents and data from other sources available at site i) Review of calculations and assumptions made in determining the GHG data and estimated ERs, and an identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters j) Interviews of local Stakeholders	2) 15 MW- Village-Bevinahalli, Taluka- Sira District-Tumkur, State-Karnataka, India 3) 15 MW- Village-Halalu, Taluka-Nagamangala, District-Mandya, State-Karnataka, India 4) 20 MW- Village-Alakapura & Bommasandr, Taluka-Gowribidanur, District-Chikkaballapura State-Karnataka, India	

Interviews

No.	Interview			Date	subject
	Last name	First name	Affiliation		
1.	Prakash	K.V.	M/s Asian Fab Tec Limited	10/03/2025	Project Implementation, Monitoring plan, Project Boundary, Eligibility criteria, Host country requirements, Emission reduction calculations Project implementation, monitoring, Local stakeholder consultation
2.		Shivraj			
3.	S	Sanjay	Site manager		
4.	Mishra	Priya	Vivid emissions reductions universal private Ltd.		
5.		Shrinivas	Local stakeholders		
6.	N M	Munegowda			
7.	D C	Vinaya Kumara			
8.	C	Krishnegowda			

Sampling approach

Not applicable.

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

Areas of Project Verification findings	No. of CL	No. of CAR	No. of FAR
Green House Gas (GHG)			
Identification and Eligibility of project type	-	-	-
General description of project activity	01	-	-
Application and selection of methodologies and standardized baselines	-	-	-
- Application of methodologies and standardized baselines	-	-	-
- Deviation from methodology and/or methodological tool	-	-	-
- Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
- Project boundary, sources and GHGs	-	-	-
- Baseline scenario	-	-	-
- Estimation of emission reductions or net anthropogenic removals	01	01	-
- Monitoring Report	-	01	-
Start date, crediting period and duration	-		-
Environmental impacts	-	-	-
Project Owner- Identification and communication	-	-	-
Others	-	-	-
Total	02	02	-

Project Verification findings

Identification and eligibility of project type

Means of Project Verification	The project has an installation of a 60 MW solar capacity and hence it qualifies as a large-scale project. This is confirmed based on the commissioning certificates/6/ and technical specifications. Since the project is a large-scale project, it has applied approved CDM large scale methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/. The Project owner has used valid MR form available at the UCR website for the preparation of MR for the current project activity. The project has prepared MR in line with UCR guidance and requirements.
Findings	No findings raised
Conclusion	The UCR-approved format is used for description and the project meets the requirement of the UCR verification standard and UCR project standard/12/. UCR project communication agreement /1/ was submitted to the verifier and the same has been verified. Methodology referenced and applied appropriately describing the project type. The eligibility of the project aggregator is verified using the UCR communication agreement, project correctly applies the verification standard, UCR project standard, and UCR regulations/12/. The project activity is overall meeting the requirements of the UCR Verification standard and UCR project standard.

General description of project activity

<table>
<tr><td>Means of Project Verification</td><td>The project activity involves the operation of a 60 MW of large-scale solar power project and its commissioning date and power evacuation at the substation were verified through the commissioning certificate/6/ of the project. The power purchase agreement/7/ confirms the companies/entities involved in the agreement for purchase of electricity from the 60MW (10 MW + 15 MW + 15 MW and 20 MW) project.

Assessment team conducted documentation review of the PCN against the UCR program verification standard version 2.0 and UCR project eligibility criteria version 6.0 and the UCR-PCN-FORM Version 1.0/12/. By checking the supporting documents, it is confirmed that the project is a greenfield solar power project, the project is spread across different villages in Karnataka state of India. The approximate geo-coordinates of the project locations are mentioned below.

<table>
<tr><td>Plant Capacity (MW)</td><td>Geo – coordinates of plant</td></tr>
<tr><td>10</td><td>13.372064 ˚N
&
77.594575˚E</td></tr>
<tr><td>15</td><td>13.916178˚N
&
76.817135˚E</td></tr>
<tr><td>15</td><td>12.953343˚N
&
76.798480˚E</td></tr>
<tr><td>20</td><td>13.554484˚N
&
77.514103˚E</td></tr>
</table>

Assessment team performed an offsite inspection of project and confirmed that the location described in the PCN are accurate.

The Project is a solar power project, that utilize solar energy to generate zero carbon emission electricity which is mainly dominated by fossil fuel power output. The project includes integrated power transmission mechanism, photovoltaic (PV) modules, inverters, transformers, other relay & protection systems, microprocessor based fully automatic control system with user friendly operation and central monitoring system. Quality, Safety and Health plan for construction, installation, commissioning and Operation & Maintenance.</td></tr>
<tr><td>Findings</td><td>CL 01 was raised and closed successfully. More information presented appendix below.</td></tr>
<tr><td>Conclusion</td><td>The description of the project activity is verified to be true based on the review of PCN/2/, MR/3/, Commissioning Certificate/6/ and power purchase agreement/7/.</td></tr>
</table>

Application and selection of methodologies and standardized baselines

(.a.i) Application of methodology and standardized baselines

Means of Project Verification	The project has taken the reference of CDM methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/. CDM website is referred to check the latest version of the methodology. For the applicability mentioned in the PCN/2/ and MR/3/, technical Specification, and commissioning certificate/6/.
Findings	No findings raised

Conclusion	The methodology applied is appropriately meeting the requirements of UCR and its standardized baseline. The methodology version is correct and valid. The referenced methodology is applicable to project activity.

(.a.ii) Clarification on applicability of methodology, tool and/or standardized baseline

Means of Project Verification	The documents reviewed are CDM methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/, UCR Program standard, and UCR Verification Standard/12/.
Findings	No findings raised
Conclusion	The verification team confirms that all the applicability criteria set by the applied CDM methodology/13/ and its eligible tools are met. The relevant information against those criteria is also included in the PCN/2/ and MR Ver.2/3/. The selected CDM methodology for the project activity is applicable.

(.a.iii) Project boundary, sources and GHGs

Means of Project Verification	Project owner has considered project boundary as per applicable methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/, "The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the CDM project power plant is connected to." Review of PCN/2/ and MR/3/ confirms that project sites and Indian electricity grid system is considered as a project boundary which is appropriate.
Findings	No findings raised
Conclusion	The project boundary is correctly defined in the PCN/2/ and MR/3/. GHG sources are correctly identified and reported. The project meets the requirements of UCR project standard, Verification standard and methodology requirements for a boundary, GHG sources.

(.a.iv) Baseline scenario

Means of Project Verification	As per the applied methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/ the baseline scenario is as following: 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. Remote audit conducted and document review showed that in absence of the project activity, the generated electricity would have been supplied by the Indian grid which is dominated by fossil fuel fired plants.
Findings	No findings raised
Conclusion	The approved baseline methodology has been correctly applied to identify a realistic and credible baseline scenario, and the identified baseline scenario most reasonably represents what would occur in the absence of the proposed UCR project activity. All the assumption and data used by the project participants are listed in the PCN and/or supporting documents. All documentation relevant for establishing the baseline scenario are correctly quoted and interpreted in the PCN. Assumptions and data used in the identification of the

	baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable.

(.a.v) Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	The project verification team checked whether the equations and parameters used to calculate GHG emission reductions or net anthropogenic GHG removals for PCN/2/ and MR /3/ are in accordance with applied methodology. Project verification team checked section B.5 and C.5.1 of the PCN/2/ & MR/3/ respectively to confirm whether all formulae to calculate baseline emissions, project emission and leakage have been applied in line with the underlying methodology. The emission reduction calculation has been carried out as per the CDM methodology ACM0002, Version 21.0/13/. $BE_y = EG_{BL\,y}$ X $EF_{CO2,\,y}$ Where, BEy = Baseline Emissions in year y; tCO_2 EG_{BLy} = Quantity of net electricity displaced as a result of the implementation of the CDM project activity in year y (MWh) $EF_{CO2,\,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y. A "grid emission factor" refers to a CO_2 emission factor (tCO_2/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.757 tCO_2/MWh for the vintage year 2024 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program/11/. (https://medium.com/@UniversalCarbonRegistry/ucr-cou-standard-update-2024-vintage-ucr-indian-grid-emission-factor-announced-ddb790cdc603) Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach. **Project emissions**: As per paragraph 35 of the applied methodology, For most renewable energy project activities, $PE_y = 0$. Since solar power is a GHG emission free source of energy project emission considered as Zero for the project activity. **Leakage Emissions:** As per the paragraph 61 of the applied methodology ACM0002 Version 21.0/13/, there are no emissions related to leakage in this project. $LE_y=0$. **Emission reductions:** As per Paragraph 62, equation 17 of the applied methodology, emission reductions are calculated as follows $ER_y = BE_y - PE_y$ Where: ERy = Emission reductions in year y (tCO_2) BE_y = Baseline Emissions in year y (t CO_2) PE_y = Project emissions in year y (t CO_2) LE_y = Leakage emissions in year y (t CO_2) $ER_y = BE_y - PE_y$ $= (EG_{facility,\,y} * EF_{grid,\,CM,\,y}) - PEy$ ERy= (76,024.13*0.757)-0 ERy=57,550 tCO_2 (Actual emission reduction) Therefore, $ER_y = BE_y$ The start date of the Project is from 29/12/2017 which is the earliest Commissioning date. For the ease of the calculation, duration of the crediting period is started from 01/01/2018 to 31/12/2027.

Year	Net Generation with Degradation Factor	Baseline Emissions	Project Emissions	Leakage Emission	Emission Reductions
	MWh	**(tCO_2e)**	**(tCO_2e)**	**(tCO_2e)**	**(tCO_2e)**
Year 1	1,14,029.50	1,02,627	0	0	1,02,627
Year 2	1,13,231.29	1,01,908	0	0	1,01,908
year 3	1,12,438.67	1,01,195	0	0	1,01,195
Year 4	1,11,651.60	1,00,486	0	0	1,00,486
Year 5	1,10,870.04	99,783	0	0	99,783
Year 6	1,10,093.95	99,085	0	0	99,085
Year 7	1,09,323.29	98,391	0	0	98,391
Year 8	1,08,558.03	97,702	0	0	97,702
Year 9	1,07,798.13	97,018	0	0	97,018
Year 10	1,07,043.54	96,339	0	0	96,339
Total Emission reduction	**11,05,038.06**	**9,94,534**	**0**	**0**	**9,94,534**
Annual Average ER	1,10,503.81	99,453	0	0	99,453

The actual emission reduction achieved during the second CoU's period which is from 01/01/2024 to 31/12/2024 as per the Project Activity:

Emission Reduction for second Monitoring Year (01/01/2024 to 31/12/2024):

Vintage Year	Net Generation in MWh	Grid Emission Factor	Emission Reduction(tCO_2)
01/01/2024 to 31/12/2024	76,024.13	0.757	57,550
Total	76,024.13		57,550

Findings	CL 02 and CAR 01 were raised and closed successfully. More information presented appendix below.
Conclusion	In summary, the calculation of emission reductions was correctly demonstrated by the PP according to the methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/ and its tool"Tool to calculate the emission factor for an electricity system" Version 07.0. It is confirmed by the assessment team that: (a) All assumptions made for estimating GHG are listed in the PCN; (b) All documentation used by the project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PCN (c) All values used in the PCN including GWPs are considered reasonable in the context of the proposed UCR project activity; (d) The methodologies and, where applicable, the standardized baselines and the other methodological regulatory documents have been applied correctly to calculate baseline, project and leakage GHG emissions, as well as GHG emission reductions; (e) All estimates of the baseline GHG emissions can be replicated using the data and parameter values provided in the PCN;

(.a.vi.) Monitoring Report

Means of Project Verification

Parameters determined- Ex-ante

The following parameters are determined ex-ante and verified by the verification team:

The baseline emission factor ($EF_{grid, y}$) of the project is reported to be determined ex-ante and would remain fixed for the crediting period. A "grid emission factor" refers to a CO_2 emission factor (tCO_2/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.757 tCO_2/MWh for the vintage year 2024 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program/11/. (https://medium.com/@UniversalCarbonRegistry/ucr-cou-standard-update-2024-vintage-ucr-indian-grid-emission-factor-announced-ddb790cdc603)

Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach. The parameters applied in the calculation were validated by the verification team. The verification team confirms that all relevant parameters have been sufficiently considered and the values of the parameters are real, measurable and conservative.

Parameters monitored ex-post

According to the approved methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/, the following parameters will be monitored:

Parameter	Description
$EG_{PJ,y}$	Quantity of net electricity generation supplied by the projectplant/unit to the grid in year y

The values of the parameters monitored were checked against submitted Joint Meter Readings/8/ and invoices and were found correct.

Meters details:

Plant Capacity(MW)	Location	Commissioning Date	Calibration Date
10	Kavalahalli Village,Doddaballa Taluk,Bangaluru	02/01/2018	18/05/2024
15	Bevinahalli, Sira, Tumkur, Karnataka	08/02/2018	13/09/2021

	15	Halalu, Nagamangala, Mandya District, Karnataka	29/12/2017	17/04/2021
	20	Alakapura & Bommasandra Village, Gowribidanuru Taluk, Chikkaballapura district, Karnataka State	06/01/2018	08/05/2024

There is no calibration delay for the monitoring period mentioned above.

Management system and quality assurance

The monitoring plan presented in the PCN complies with the requirements of the applicable methodology. The verification team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.

The management system and quality assurance procedures have been reviewed by the verification team through document review and interviews with the project participant. The project participant would train all the monitoring staffs are trained against with related requirement; the training guidelines and monitoring manual are saved and verified.

The monitoring plan outlines in the PCN includes:

- Monitoring Organization
- Monitoring apparatus and installation
- Calibration
- Data collection
- Data Management system

The submitted calibration certificates were checked and it was confirmed that the calibrations are conducted periodically as specified in the PCN/2/ i.e. at least once in 5 years.

Findings	CAR 02 was raised and closed successfully. More information presented appendix below.
Conclusion	The verification team is convinced of compliance of the monitoring plan with the requirements of the monitoring methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/. During the remote audit assessment, the verification team interviewed the PP that the monitoring arrangements described in the monitoring plan are feasible within the project design. The monitoring parameter reported in MR/3/ adequately represents the parameters relevant to emission reduction calculation. The calibration report ensures the accuracy of the data reported. The number of CoUs generation is calculated based on this accurately reported data. The calculation was done using an excel sheet where all the parameters

	were reported. The grid emission factor for electricity is considered as per UCR recommendation for Indian project. In the monitoring report/3/, emission reduction calculations are correctly calculated and reported. The monitoring report meets the requirements of UCR project verification requirements.

Start date, crediting period and duration

Means of Project Verification	The start date and crediting period of project activity was checked based on the commissioning certificate/6/, PCN/2/, MR/3/ and other documents provided.
Findings	No findings raised
Conclusion	The project has chosen crediting period start date as 01/01/2018. The crediting period for this second monitoring period is chosen as 01/01/2024 to 31/12/2024.

Positive Environmental impacts

Means of Project Verification	PP has not claimed any separate positive environmental impact. The project being renewable energy project will reduce fossil fuel use through replacement of the same.
Findings	No findings raised
Conclusion	The project is a renewable energy project and reduces the environmental burden by reducing the dependence on fossil fuel-based power plants.

Project Owner- Identification and communication

Means of Project Verification	PCN/2/, communication agreement/1/, MR/3/, commissioning certificate/6/, power purchase agreement/7/.
Findings	No findings raised
Conclusion	The project owner was identified through a communication agreement/1/ signed between project owner and project aggregator. Commissioning certificates/6/ and Power Purchase Agreement /7/ were also verified and they clearly establish the project ownership. The identification and communication correctly meet the requirement of project verification and UCR project standard. Project owner: M/s Asian Fab Tec Limited

Positive Social Impact

Means of Project Verification	Project has provided temporary employment to local people during its installation and commissioning. Also post commissioning some of people have employed permanently and local people were engaged leading to social financial benefit to surrounding. Overall social impact of project implementation is positive on the surrounding area
Findings	No findings raised
Conclusion	Project has overall positive social impact

Sustainable development aspects (if any)

Means of Project	PP has claimed SDG Goals 7, 8 & 13.

Verification	SDG 7 is affordable and clean energy and it is verified during remote audit as the project is solar power plant. SDG 8 is decent work & economic growth and SDG 13 is climate action. These claims were checked on the basis of supporting documents, JMR & invoice, employment of the local people on the project site and emission reduction calculations respectively.
Findings	No findings raised
Conclusion	The project has the capability to address SDG 7, 8 and 13.

Internal quality control

The verifier confirms that,

- Due professional care has been taken while reviewing the submitted document.
- There is no conflict of interest as the verifier has no other engagement with either the aggregatoror project owner directly or indirectly.
- Verification team consists of experienced personnel.

Project Verification opinion

Assessment team conducted documentation review the PCN/2/ against the UCR program verificationstandard version 2.0 and UCR project eligibility criteria version 6.1 and the UCR-PCN-FORM Version 1.0/12/.

It is confirmed that the project activity is a 60 MW greenfield solar power plant, that is spread across different villages in the state of Karnataka, India. The geo co-ordinates of the 60 MW plant (10 MW + 15 MW + 15 MW + 20 MW) have been mentioned in sections above. Assessment team performed an offsite audit and confirmed that the location described in the PCN is accurate. The verification was performed on the basis of UCR requirements, and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The verification consisted of the following three phases: i) desk review of the PCN, MR and additional background documents; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The project correctly applies the approved baseline and monitoring methodology ACM0002: Grid-connected electricity generation from renewable sources version 21.0/13/.

The monitoring plan provides for the monitoring of the project's emission reductions. The monitoring arrangements described in the monitoring plan are feasible within the project design, and the project participants are able to implement the monitoring plan. Given that the project is implemented and maintained as designed, the project has achieved the emission reductions of 57,550 tCO2eq during this second monitoring period i.e. from 01/01/2024 to 31/12/2024.

The review of the project design documentation and the subsequent follow-up interviews have provided assessment team with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all applicable UCR requirements. Assessment team thus requests the registration of the proposed UCR project activity.

Appendix 1. Abbreviations

Abbreviations	Full texts
ACM	Approved Methodology for large-Scale CDM project activities
UCR	Universal Carbon Registry
PCN	Project Concept Note
MR	Monitoring Report
t	Tonnes
NGO	Non-Governmental Organization
ISO	International Organization for Standardization
CAR	Corrective Action Request
CL	Clarification Request
GHG	Greenhouse Gas
MWh	Megawatt Hours
CO_2	Carbon Dioxide
CH4	Methane
N2O	Nitrous Oxide

Appendix 2. Competence of team members and technical reviewers

- **Mr. Pankaj Kumar** worked as team leader – Bihar for South Asia Climate Proofing and Growth Development (CPGD) – Climate Change Innovation Programme (CCIP) supported by DFID that seeks to mainstream climate change resilience into planning and budgeting at the national and sub-national level in India, Pakistan, Nepal, and Afghanistan. Pankaj Kumar has worked previously with IL&FS Infrastructure Development Corporation and BUIDCO (Bihar Urban Infrastructure Development Corporation), Govt. of Bihar as Environmental Specialist for WB & ADB funded projects. Prior to this, he worked with Carbon Check (UNFCCC accredited DoE), Johannesburg, RSA, Applus certification as Team Leader for validation, verification of around 100 GHG projects in Asia, Africa, USA, Asia Pacific & Americas. Pankaj is accredited Lead Auditor, Validator, Verifier and Technical Expert for Sectoral Scope/Technical Area – 1.1, 1.2, 3.1, 4.1, 13.1 by Enviance. He is also member of task force on climate change & human health, Health Department, GoB and on roster of UNICEF's WASH experts. He is an experienced, qualified and result oriented Environment Professional having more than 14 yrs. of relevant experience in Climate Change (Mitigation & Adaptation), Environmental Due Diligence, Disaster Risk

Reduction, Validation and Verification of GHG project under CDM, Verified Carbon Standard, Gold Standard & Social Carbon Standard, Brazil. He provides technical support for environmental investigative, consultative and remedial projects involving air, water and soil, Waste management, EIA, Environmental Compliance, ISO 14001, OHSAS 18001, GHG accounting (ISO 14064) and Carbon foot printing. Pankaj Kumar is Masters in Environment Management from Forest Research Institute (University), I.C.F.R.E, Dehradun, which is Centre of Excellence in South East Asia for Forestry education & research and PGDEL from National Law School of India University, Bangalore (India).

- **Ms. Ritu Singh** has done Masters in Environmental Science from Central University of South Bihar, Gaya and bachelor of Science in Zoology from Magadh Mahila College, Patna University, India. She has done Masters' research focused on solid waste management during and post covid-19 pandemic and conducted a survey in Medical Colleges of Bihar to study the trends of waste management. She has more than 2 year working experience in True Quality Certifications Pvt. Ltd. (An outsource entity for LGAI Technological Center, S.A. (Spain) "Applus+ Certification") and has been involved in supporting Audit teams for Validation and Verifications of Project Activities (Renewable and non-Renewable projects) under CDM/VCS/GS4GG/GCC programs. Currently, Ritu is engaged as an internal resource with Enviance Services Private Limited, where she is accredited as a Lead Auditor, Validator, Verifier, and Technical Expert for Sectoral Scope/Technical Area 1.2 by Enviance.

- **Ms. Swati Mahajan** is graduate in Environmental Engineering from Shivaji University, India and previously worked as an Environment Engineer at Eco Designs India Private Ltd., Pune. She is adept in designing of landfill sites for solid waste management. She also has hands on experience in cost benefit analysis and preparation of DPRs for SWM projects. She also has done a certified course in carbon capture and storage from Edinburg University. Currently working as GHG assessor for projects under various GHG mechanisms like GCC, ICR, UCR and VERRA.

Appendix 3. Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1	NA	Communication agreement		Project Owner
2	NA	Project Concept Note		Aggregator
3	NA	Monitoring report		Aggregator
4	NA	Emission reduction sheet		Aggregator
5	NA	Declaration on avoidance of double counting		Aggregator
6	NA	Commissioning Certificates for the solar power plants		Aggregator
7	NA	Power purchase agreement		Aggregator
8	NA	Joint Meter Readings/invoices for the complete monitoring period		Aggregator

9	NA	Calibration certificates for energy meters		Aggregator
10	NA	Equipment purchase order		Aggregator
11	NA	Grid Emission factor recommended for Indian projects by UCR	https://medium.com/@UniversalCarbonRegistry/ucr-cou-standard-update-2024-vintage-ucr-indian-grid-emission-factor-announced-ddb790cdc603	General project eligibility criteria and guidance UCR standard version 7.0
12	UCR	UCR Program manual version 6.1 UCR COU standard version 7 UCR Verification standard version 2 UCR terms and conditions		Universal Carbon Registry
13	CDM	CDM approved methodology-ACM0002: Grid Connected electricity generation from renewable sources version 21.0		UNFCCC

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

Table 1. CLs from this Project Verification

Classification	☐ **CAR** ☒ **CL/CR** ☐ **FAR**	**Number:**	**01**
Raised by:	**Ms. Ritu Singh**	**Document Reference**	**MR**
Finding Description		**Date:**	**11/03/2025**
PP shall submit an undertaking for no double counting for current monitoring period and for project activity has neither been registered nor seeking registration under any other GHG programs. Kindly Submit.			
Client/Responsible Party/Project Proponent Response		**Date:**	**14/03/2025**
PP has submitted the no double counting for current monitoring period and for project activity has neither been registered nor seeking registration under any other GHG programs			
Validation/Verification Team Assessment		**Date:**	**15/03/2025**
PP has submitted an undertaking for no double counting for current monitoring period and for project activity has neither been registered nor seeking registration under any other GHG programs and the same has been verified by the assessment team. Hence, this part of CL is closed.			

Classification	☐ **CAR** ☒ **CL/CR** ☐ **FAR**	**Number:**	**02**
Raised by:	**Ms. Ritu Singh**	**Document Reference**	**MR**
Finding Description		**Date:**	**11/03/2025**
PP shall submit supporting document of few JMR.			
Client/Responsible Party/Project Proponent Response		**Date:**	**14/03/2025**
PP has submitted the Pending JMR			
Validation/Verification Team Assessment		**Date:**	**15/03/2025**
PP has submitted the supporting documents of few JMR and are found to be consistent with the values mentioned in ER sheet. Hence, this part of CL is closed.			

Table 2. CARs from this Project Verification

Classification	☒ **CAR** ☐ **CL/CR** ☐ **FAR**	**Number:**	**01**
Raised by:	**Ms. Ritu Singh**	**Document Reference**	**MR**
Finding Description		**Date:**	**11/03/2025**
1. Few JMR values in actual emission excel sheet are inconsistent with the supporting document provided. Correction sought. 2. According to revised excel sheet, PP shall change the net energy generation and emission reduction values in MR. Correction sought.			
Client/Responsible Party/Project Proponent Response		**Date:**	**14/03/2025**
1. PP has corrected the net generation value in the MR inline with the Documents Provided. **2.PP has updated the MR as per the modified ER sheet.**			
Validation/Verification Team Assessment		**Date:**	**15/03/2025**
1. PP has made corrections in the inconsistent JMR values and the same has been verified by the assessment team in updated ER sheet. The values are now consistent with the submitted JMR values. 2. PP has updated the energy generation and emission reduction values in MR as per the updated ER sheet. The assessment team has verified this in MR version 2.0 Hence, this part of CAR is closed.			

Classification	☒ **CAR** ☐ **CL/CR** ☐ **FAR**	**Number:**	**02**
Raised by:	**Ms. Ritu Singh**	**Document Reference**	**MR**
Finding Description		**Date:**	**11/03/2025**
As per UCR standards. in section C.5 of MR PP shall add final calculation table from excel sheet in MR. Correction sought.			
Client/Responsible Party/Project Proponent Response		**Date:**	**14/03/2025**

As per UCR standards. in section C.5 of MR PP has added final calculation table from excel sheet in MR.		
Validation/Verification Team Assessment	**Date:**	**15/03/2025**
As per UCR standards. in section C.5 of MR PP has added final calculation table from excel sheet in MR. The assessment team has verified this in MR version 2.0. Hence, this part of CAR is closed.		

Table 3. FARs from this Project Verification

~~**FAR ID**~~	~~xx~~	~~**Section no.**~~		~~**Date:** DD/MM/YYYY~~
~~**Description of FAR**~~				
~~**Project Owner's response**~~				~~**Date:** DD/MM/YYYY~~
~~**Documentation provided by Project Owner**~~				
~~**UCR Project Verifier assessment**~~				~~**Date:** DD/MM/YYYY~~