

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	<input type="checkbox"/> CDM or other GHG Accreditation <input checked="" type="checkbox"/> 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	08/07/2025
Title of the project activity	Vaayu India Wind Power Project in Gujarat
Project reference no. (as provided by UCR Program)	UCR 500
Name of Entity requesting verification service (can be Project Owners themselves or any Entity having authorization of Project Owners, example aggregator.)	Viviid Emissions Reductions Universal Pvt. Ltd.
Contact details of the representative of the Entity, requesting verification service (Focal Point assigned for all communications)	Name: Lokesh Jain Email ID – lokesh.jain@viviidgreen.com
Country where project is located	India
Applied methodologies (approved methodologies by UCR Standard used)	ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources - Version 22.0
GHG Sectoral scopes linked to the applied methodologies	01 Energy industries (Renewable/Non-Renewable Sources)
Project Verification Criteria: Mandatory requirements to be assessed	<input checked="" type="checkbox"/> UCR Standard <input checked="" type="checkbox"/> Applicable Approved Methodology <input checked="" type="checkbox"/> Applicable Legal

	<p>requirements /rules of host country</p> <p><input checked="" type="checkbox"/> Eligibility of the Project Type</p> <p><input checked="" type="checkbox"/> Start date of the Project activity</p> <p><input checked="" type="checkbox"/> Meet applicability conditions in the applied methodology</p> <p><input checked="" type="checkbox"/> Credible Baseline</p> <p><input checked="" type="checkbox"/> Do No Harm Test</p> <p><input checked="" type="checkbox"/> Emission Reduction calculations</p> <p><input checked="" type="checkbox"/> Monitoring Report</p> <p><input checked="" type="checkbox"/> No GHG Double Counting</p> <p><input type="checkbox"/> Others (please mention below)</p>
<p>Project Verification Criteria:</p> <p>Optional requirements to be assessed</p>	<p><input checked="" type="checkbox"/> Environmental Safeguards Standard and do-no-harm criteria</p> <p><input checked="" type="checkbox"/> Social Safeguards Standard do-no-harm criteria</p>
<p>Project Verifier's Confirmation:</p> <p>The <i>UCR Project Verifier</i> has verified the UCR project activity and therefore confirms the following:</p>	<p>The UCR Project Verifier Enviance Services Private Limited, certifies the following with respect to the UCR Project Activity Vaayu India Wind Power Project in Gujarat.</p> <p><input checked="" type="checkbox"/> The Project Owner has correctly described the Project Activity in the Project Concept Note 1.3 (dated 04/07/2025) including the applicability of the approved methodology <i>ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources - Version 22.0</i> and meets the methodology applicability conditions</p>

	<p>and has achieved the estimated GHG emission reductions, complies with the monitoring methodology and has calculated emission reductions estimates correctly and conservatively.</p> <p><input checked="" type="checkbox"/> The Project Activity is likely to generate GHG emission reductions amounting to the estimated 92,238 tCO_{2e} annually, as indicated in the PCN, 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.</p> <p><input checked="" type="checkbox"/> The Project Activity is not likely to cause any net-harm to the environment and/or society</p> <p><input checked="" type="checkbox"/> The Project Activity complies with all the applicable UCR rules¹ and therefore recommends UCR Program to register the Project activity with above mentioned labels.</p>
<p>Project Verification Report, reference number and date of approval</p>	<p>Verification Report</p> <p>UCR Reference number: 500</p> <p>Date of approval: 09-07-2025</p>

¹https://a23e347601d72166dcd6-16da518ed3035d35cf0439f1cdf449c9.ssl.cf2.rackcdn.com/Documents/UCRtermsandconditionsMay2025Ver11_230525172325112351.pdf

Name of the authorised personnel of UCR Project Verifier and his/her signature with date



Vidhya Muralikrishna
Quality Manager
Date: 09-07-2025

PROJECT VERIFICATION REPORT

Executive summary

The project activity is titled- “Vaayu India Wind Power Project in Gujarat”. It is a wind-power Project which is spread across villages Chattar, Narmana, Seth Wadala, Jam Ambardi, Mevasa, Dhun Dhoraji, Sadodar, Bodi, Padavala and Machharda in Jamnagar and Rajkot Districts of Gujarat state in India. The project consists of 64 machines of Enercon make E-53 type Wind Energy Converters (WECs) each of capacity 800 KW. The project has been effectively commissioned by Vaayu India Power Corporation Pvt Ltd. The project involves the supply, erection, commissioning, and operation of these machines, managed by Wind World (India) Limited (WWIL), which serves as the equipment supplier and Operation and Maintenance contractor. The wind farm generates approximately **115,312.44 MWh** of clean electricity annually, which is supplied to the state electricity utility, Gujarat Energy Transmission Corporation (GETCO). Addressing the energy demand-supply gap in Gujarat and supporting the region’s sustainable growth.

The first machine under the project activity was commissioned on 25th June 2010 and last machine under the project activity was commissioned on 04th July 2011. The project has been operational since the earliest commissioning date.

The project activity is registered under Clean Development Mechanism (CDM) project with registration number 4700², as well as Gold Standard (GS) with reference number 3958³. The crediting period of this project under CDM & GS is 01/06/2011 to 31/05/2021. PP seeks verification under UCR from 01/06/2021 onwards, i.e., crediting period for UCR starts from 01/06/2021.

Hence, there is no double counting for said project activity.

The project consists of 64 machines of Enercon make E-53 type Wind Energy Converters (WECs) each of capacity 800 KW.

Commissioning dates of the project activity are mentioned in the table below:

Sr. No.	Location No.	WTG-ID No.	Commissioning Date
1	3020	EIL/800/10-11/1826	12/07/2010
2	3021	EIL/800/10-11/1827	12/07/2010
3	3022	EIL/800/10-11/1828	12/07/2010
4	3072	EIL/800/09-10/1738	25/06/2010
5	3073	EIL/800/09-10/1739	25/06/2010
6	3075	EIL/800/09-10/1740	25/06/2010
7	3076	EIL/800/09-10/1741	25/06/2010
8	3088	EIL/800/09-10/1742	25/06/2010
9	62	EIL/800/09-10/1766	27/06/2011

² [CDM 4700](#)

³ [GS 3958](#)

Project Verification Report

10	63	EIL/800/09-10/1767	27/06/2011
11	64	EIL/800/09-10/1768	04/07/2011
12	539	EIL/800/09-10/1789	14/02/2011
13	540	EIL/800/09-10/1790	14/02/2011
14	541	EIL/800/09-10/1791	14/02/2011
15	543	EIL/800/09-10/1792	18/02/2011
16	544	EIL/800/09-10/1793	14/02/2011
17	545	EIL/800/09-10/1794	18/02/2011
18	546	EIL/800/09-10/1795	18/03/2011
19	547	EIL/800/09-10/1796	18/02/2011
20	548	EIL/800/09-10/1797	18/02/2011
21	903	EIL/800/09-10/1747	04/05/2011
22	904	EIL/800/09-10/1748	04/05/2011
23	905	EIL/800/09-10/1749	04/05/2011
24	906	EIL/800/09-10/1750	05/03/2011
25	907	EIL/800/09-10/1751	05/03/2011
26	908	EIL/800/09-10/1752	05/03/2011
27	909	EIL/800/09-10/1753	05/03/2011
28	910	EIL/800/09-10/1754	05/03/2011
29	912	EIL/800/09-10/1746	14/02/2011
30	926	EIL/800/09-10/1769	10/06/2011
31	927	EIL/800/09-10/1770	10/06/2011
32	928	EIL/800/09-10/1771	10/06/2011
33	929	EIL/800/09-10/1772	10/06/2011
34	931	EIL/800/10-11/1870	10/06/2011
35	932	EIL/800/09-10/1773	10/06/2011
36	933	EIL/800/09-10/1774	10/06/2011
37	934	EIL/800/09-10/1775	10/06/2011
38	935	EIL/800/09-10/1776	10/06/2011
39	936	EIL/800/09-10/1777	27/06/2011
40	937	EIL/800/09-10/1778	27/06/2011
41	938	EIL/800/09-10/1779	27/06/2011
42	939	EIL/800/09-10/1760	24/05/2011
43	941	EIL/800/09-10/1761	24/05/2011
44	942	EIL/800/09-10/1762	24/05/2011
45	943	EIL/800/09-10/1763	24/05/2011
46	944	EIL/800/09-10/1764	24/05/2011
47	945	EIL/800/09-10/1765	24/05/2011
48	947	EIL/800/09-10/1755	06/05/2011
49	948	EIL/800/09-10/1756	06/05/2011
50	950	EIL/800/09-10/1757	06/05/2011

Project Verification Report

51	951	EIL/800/09-10/1758	06/05/2011
52	952	EIL/800/09-10/1759	06/05/2011
53	958	EIL/800/09-10/1743	04/05/2011
54	959	EIL/800/09-10/1744	04/05/2011
55	960	EIL/800/09-10/1745	04/05/2011
56	992	EIL/800/09-10/1782	18/03/2011
57	993	EIL/800/09-10/1783	18/03/2011
58	994	EIL/800/09-10/1784	18/03/2011
59	995	EIL/800/09-10/1785	18/03/2011
60	996	EIL/800/09-10/1786	18/03/2011
61	997	EIL/800/09-10/1787	18/03/2011
62	1028	EIL/800/09-10/1788	04/05/2011
63	1045	EIL/800/09-10/1780	04/07/2011
64	1046	EIL/800/09-10/1781	04/07/2011

Geo Co-ordinates of the project activity are mentioned in the table below:

Sr. No.	Location No.	WTG-ID No.	Village	Latitude	Longitude
1	3020	EIL/800/10-11/1826	Machharda	N22°06'19.0"	E70°18'45.7"
2	3021	EIL/800/10-11/1827	Machharda	N22°06'23.5"	E70°18'43.7"
3	3022	EIL/800/10-11/1828	Machharda	N22°06'29.7"	E70°18'44.6"
4	3072	EIL/800/09-10/1738	Padavala	N21°57'19.6"	E70°15'05.0"
5	3073	EIL/800/09-10/1739	Padavala	N21°57'14.9"	E70°15'11.7"
6	3075	EIL/800/09-10/1740	Padavala	N21°56'43.1"	E70°15'20.6"
7	3076	EIL/800/09-10/1741	Padavala	N21°55'59.2"	E70°15'33.7"
8	3088	EIL/800/09-10/1742	Padavala	N21°56'19.3"	E70°14'38.0"
9	62	EIL/800/09-10/1766	Chattar	N22°07'40.2"	E70°15'10.7"
10	63	EIL/800/09-10/1767	Chattar	N22°07'46.6"	E70°15'00.6"
11	64	EIL/800/09-10/1768	Chattar	N22°07'53.3"	E70°14'57.1"
12	539	EIL/800/09-10/1789	Seth Wadala	N22°04'46.7"	E70°05'34.3"
13	540	EIL/800/09-10/1790	Seth Wadala	N22°04'33.3"	E70°05'43.1"
14	541	EIL/800/09-10/1791	Seth Wadala	N22°04'27.4"	E70°05'47.6"
15	543	EIL/800/09-10/1792	Seth Wadala	N22°04'17.3"	E70°05'53.7"
16	544	EIL/800/09-10/1793	Seth Wadala	N22°04'13.5"	E70°06'00.7"
17	545	EIL/800/09-10/1794	Seth Wadala	N22°03'31.5"	E70°05'32.6"
18	546	EIL/800/09-10/1795	Jam Ambardi	N22°03'40.2"	E70°05'31.0"

Project Verification Report

19	547	EIL/800/09-10/1796	Jam Ambardi	N22 °03'45.3"	E70 °05'31.9"
20	548	EIL/800/09-10/1797	Jam Ambardi	N22 °03'50.7"	E70 °05'34.2"
21	903	EIL/800/09-10/1747	Mevasa/Haripar	N22 °01'23.0"	E70 °15'35.2"
22	904	EIL/800/09-10/1748	Mevasa/Haripar	N22 °01'30.2"	E70 °15'41.0"
23	905	EIL/800/09-10/1749	Mevasa/Haripar	N22 °01'36.6"	E70 °15'27.2"
24	906	EIL/800/09-10/1750	Mevasa/Haripar	N22 °01'30.7"	E70 °14'55.0"
25	907	EIL/800/09-10/1751	Mevasa/ Haripar	N22 °01'37.9"	E70 °14'56.8"
26	908	EIL/800/09-10/1752	Mevasa/ Haripar	N22 °01'44.8"	E70 °14'54.1"
27	909	EIL/800/09-10/1753	Mevasa/ Haripar	N22 °01'51.2"	E70 °14'51.2"
28	910	EIL/800/09-10/1754	Mevasa/ Haripar	N22 °01'57.7"	E70 °14'55.7"
29	912	EIL/800/09-10/1746	Dhun Dhoraji	N22 °02'09.1"	E70 °15'04.4"
30	926	EIL/800/09-10/1769	Chattar	N22 °06'57.6"	E70 °16'33.0"
31	927	EIL/800/09-10/1770	Chattar	N22 °06'59.3"	E70 °16'23.3"
32	928	EIL/800/09-10/1771	Chattar	N22 °07'10.0"	E70 °16'16.5"
33	929	EIL/800/09-10/1772	Chattar	N22 °07'15.9"	E70 °16'11.3"
34	931	EIL/800/10-11/1870	Chattar	N22 °07'12.7"	E70 °15'23.5"
35	932	EIL/800/09-10/1773	Chattar	N22 °07'05.5"	E70 °15'27.2"
36	933	EIL/800/09-10/1774	Chattar	N22 °06'59.3"	E70 °15'31.5"
37	934	EIL/800/09-10/1775	Chattar	N22 °06'53.9"	E70 °15'27.9"
38	935	EIL/800/09-10/1776	Chattar	N22 °06'46.0"	E70 °15'22.7"
39	936	EIL/800/09-10/1777	Chattar	N22 °06'40.3"	E70 °15'25.7"
40	937	EIL/800/09-10/1778	Chattar	N22 °06'32.0"	E70 °15'23.4"
41	938	EIL/800/09-10/1779	Chattar	N22 °06'25.7"	E70 °15'22.1"
42	939	EIL/800/09-10/1760	Jamvadi	N22 °08'19.5"	E70 °19'02.3"
43	941	EIL/800/09-10/1761	Jamvadi	N22 °08'07.2"	E70 °18'57.8"
44	942	EIL/800/09-10/1762	Jamvadi	N22 °08'08.6"	E70 °19'30.2"
45	943	EIL/800/09-10/1763	Jamvadi	N22 °08'00.9"	E70 °19'25.4"
46	944	EIL/800/09-10/1764	Jamvadi	N22 °07'53.9"	E70 °19'26.0"
47	945	EIL/800/09-10/1765	Jamvadi	N22 °07'49.5"	E70 °19'31.4"
48	947	EIL/800/09-10/1755	Moti Vavdi	N22 °06'04.0"	E70 °18'16.9"
49	948	EIL/800/09-10/1756	Moti Vavdi	N22 °05'57.0"	E70 °18'17.8"
50	950	EIL/800/09-10/1757	Moti Vavdi	N22 °05'45.7"	E70 °18'21.5"
51	951	EIL/800/09-10/1758	Moti Vavdi	N22 °05'38.3"	E70 °18'18.4"
52	952	EIL/800/09-10/1759	Moti Vavdi	N22 °05'31.6"	E70 °18'16.9"

53	958	EIL/800/09-10/1743	Dhun Dhoraji	N22 °02'32.4"	E70 °16'42.8"
54	959	EIL/800/09-10/1744	Dhun Dhoraji	N22 °02'26.2"	E70 °16'44.6"
55	960	EIL/800/09-10/1745	Dhun Dhoraji	N22 °02'19.0"	E70 °16'44.4"
56	992	EIL/800/09-10/1782	Sadodar	N22 °03'13.6"	E70 °10'37.3"
57	993	EIL/800/09-10/1783	Sadodar	N22 °03'09.5"	E70 °10'40.0"
58	994	EIL/800/09-10/1784	Sadodar	N22 °02'59.6"	E70 °10'36.4"
59	995	EIL/800/09-10/1785	Sadodar	N22 °02'54.2"	E70 °10'33.5"
60	996	EIL/800/09-10/1786	Sadodar	N22 °02'47.4"	E70 °10'22.2"
61	997	EIL/800/09-10/1787	Sadodar	N22 °02'41.3"	E70 °10'32.4"
62	1028	EIL/800/09-10/1788	Seth Wadala	N22 °03'06.0"	E70 °08'36.9"
63	1045	EIL/800/09-10/1780	Bodi	N22 °08'43.4"	E70 °15'11.4"
64	1046	EIL/800/09-10/1781	Bodi	N22 °08'48.8"	E70 °15'08.5"

Proposed wind power project has evolved as a result of the policies of Government of India and Government of Gujarat, which encourages energy development from renewable sources. These policies have given fresh impetus to wind power generation.

The Project Activity is a greenfield wind project and the electricity generated by the project is supplied to the state electricity utility GETCO. Addressing the energy demand-supply gap in Gujarat and supporting the region's sustainable growth. A Power Purchase Agreement has been signed between the PP 'M/s Vaayu (India) Power Corporation Pvt. Ltd.' & 'Gujarat Urja Vikas Nigam Ltd.'. The project activity involves 64 numbers wind energy converters (WECs) of Enercon make (800 KW, E53) with internal electrical lines connecting the project activity with local evacuation facility. The 51.2 MW wind power project involves 64 E-53 Wind Energy Converters (WECs), each with an 800-kW capacity, set up by WWIL in India. These wind turbines convert wind energy into electricity using synchronous generators, which are manufactured at WWIL's is spread across villages of Gujarat in Rajkot district. Plant using advanced vacuum impregnation technology for better insulation and durability. The turbines have rotor blades, a nacelle with the generator and control systems, a tower, and a concrete foundation. The electricity generated is fed into the Indian grid through transformers. Without this project, the same amount of electricity would come from fossil fuel-based power plants, which is the baseline scenario. This renewable energy project reduces emissions and supports local manufacturing through technology transfer.

The WEGs generates 3-phase power at 400V, which is stepped up to 33 KV. The project activity can operate in the frequency range of 47.5–51.5 Hz and in the voltage range of 400 V \pm 12.5%. The average lifetime of the WEG is around 20 years as per the industry standards. As per DPR plant load factor is of 25.71%. The project being a renewable energy generation activity, leads to reduction in fossil fuel dominated electricity generation from the Indian grid.

The core objective of this project activity is to displace 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 20 years for wind 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 project activity consists of 64 Wind turbines of 800kW manufactured and supplied by Enercon. This project generates 51.2 MW power which is supplied to the state electricity utility GETCO delivered by the Project Proponent. The applied technology is one of the most environment friendly technologies available as the operation of the wind power plant does not emit any GHGs or any other harmful gases unlike the operation of conventional power plant. The project activity has used the reliable and proven technology to ensure that an environmentally safe and sound technology has been implemented.

The main component of this project activity is wind turbine which consists of components like main tower, blades, nacelle, hub, main shaft, gear box, bearing and housing, brake and generator. The generation of power from wind turbines 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 wind 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 first crediting period of the project activity in UCR is 03 years, 06 months, 12 days in which total estimated electricity generation is 115,312 MWh annually and the total GHG emission reduction estimated is 92,238 tCO₂e annually.

The electricity generation for the current monitoring period is 306,121 MWh and total GHG emission reduction is 2,64,161 tCO₂e.

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 in the project activity “Vaayu India Wind Power Project in Gujarat”, the information and data presented in the MR version 1.2 dated 05/07/2025 is in line with the Project Concept Note Version 1.3 date 04/07/2025 and meets all relevant requirements of the UCR for UCR project activities. The UCR project activity correctly applies the methodology “ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0” leading to result in real, measurable and long-term emission reductions achieved for the current monitoring period.

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

Start date of monitoring period	01/06/2021
End date of monitoring period	31/12/2024
Emission reductions achieved	2,64,161 tCO ₂ eq

Project Verification team, technical reviewer and approver

Project Verification team

No.	Role	Last name	First name	Affiliation	Involvement in
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Project Verification Report

				(e.g. name of central or other office of UCR Project Verifier or outsourced entity)	Doc review	Off-Site inspection	Interviews
1.	Team Leader/ Technical Expert	Singh	Ritu	Enviance Services Private Limited	Yes	Yes	Yes
2.	Team Leader 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	Mr. Pankaj	Enviance Services Private Limited
2.	Approver	Internal	Krishna	Vidhya Murali	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: 28/06/2025			
No.	Activity performed Off-Site	Site location	Date
1.	a) An assessment of the implementation and	Chattar,	28/06/2025

	<p>operation of the project activity as per the PCN and UCR requirements</p> <p>b) Verification of the project design, as documented is sound and reasonable, and meets the identified criteria of UCR Standard Requirements and associated guidance</p> <p>c) Assessment to conformance with the certification criteria as laid out in the UCR Standards;</p> <p>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 requirements of the UCR;</p> <p>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.</p> <p>f) Review of information flows for generating, aggregating and reporting of the parameters to be monitored</p> <p>g) To confirm that the operational and data collection procedures can be implemented in accordance with the Monitoring Plan</p> <p>h) Cross-check of information provided in the submitted documents and data from other sources available at site</p> <p>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</p> <p>Interviews of local Stakeholders</p>	<p>Narmana, Seth Wadala, Jam Ambardi, Mevasa, Dhun Dhoraji, Sadodar, Bodi, Padavala and Machharda Villages in Jamnagar and Rajkot Districts of Gujarat state in India.</p>	
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Interviews

No.	Interview			Date	Subject
	Last name	First name	Affiliation		

Project Verification Report

1.	Kuchhadiya	Dharmesh	Vaayu India Power Corporation Pvt Ltd.	28/06/2025	Project Implementation, Monitoring plan, Project Boundary, Eligibility criteria, Host country requirements, Emission reduction calculations Project implementation, monitoring, Local stakeholder consultation
2.	Kummawat	Ramesh			
3.	Pathak	Nidhi	Viviid emissions reductions universal private Ltd.		
4.	Patel	Harsh	Local Stakeholders		
5.	Joshi	Chirag			
6.	Sonagara	Ramnik			
7.	Kureshi	Rahim			
8.	Shilu	Abhay			
9.	Bapodara	Pratap			
10..	Tiwari	Sarvesh			

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	-	01	-
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	01	02	-
- Project boundary, sources and GHGs	-	-	-
- Baseline scenario	-	-	-
- Estimation of emission reductions or net anthropogenic removals	01	-	-
- Monitoring Report	-	03	-
Start date, crediting period and duration	-	01	-
Environmental impacts	-	-	-
Project Owner- Identification and communication	-	-	-
Others (please specify)	-	-	-

Total	02	08	-
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Project Verification findings

Identification and eligibility of project type

Means of Project Verification	<p>The project has an installation of a 51.2 MW (0.8 MW x 64) wind power capacity and hence it qualifies as a large-scale project. This is confirmed based on the commissioning certificates and technical specifications.</p> <p>Since the project is a large-scale project, it has applied approved CDM large scale methodology ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0.</p> <p>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.</p>
Findings	CAR 02 was raised and closed successfully. More information presented in the appendix below.
Conclusion	The UCR-approved format is used for description and the project meets the requirement of the UCR verification standard and UCR project standard. UCR project communication agreement 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. The project activity is overall meeting the requirements of the UCR Verification standard and UCR project standard.

General description of project activity

Means of Project Verification

The project activity involves the operation of a 51.2 MW (0.8 MW x 64) of large-scale wind power project and its commissioning date and power evacuation at the substation were verified through the commissioning certificate of the project. The power purchase agreement confirms the companies/entities involved in the agreement for purchase of electricity from the 51.2 MW (Chattar, Narmana, Seth Wadala, Jam Ambardi, Mevasa, Dhun Dhoraji, Sadodar, Bodi, Padavala and Machharda in Jamnagar and Rajkot Districts of Gujarat state in India.) project.

Assessment team conducted documentation review of the PCN against the UCR program verification standard version 2.0 and UCR CoU Standard (project eligibility criteria) version 7.0 and the UCR-PCN-FORM Version 1.0.

By checking the supporting documents, it is confirmed that the project is a greenfield wind power project, the project is located in Chattar, Narmana, Seth Wadala, Jam Ambardi, Mevasa, Dhun Dhoraji, Sadodar, Bodi, Padavala and Machharda in Jamnagar and Rajkot Districts of Gujarat state in India.

The approximate geo-coordinates of the project locations are mentioned below.

Details of Latitude &Longitude for the project site: -

Sr. No.	Location No.	WTG-ID No.	Village	Latitude	Longitude
1	3020	EIL/800/10-11/1826	Machharda	N22°06'19.0"	E70°18'45.7"
2	3021	EIL/800/10-11/1827	Machharda	N22°06'23.5"	E70°18'43.7"
3	3022	EIL/800/10-11/1828	Machharda	N22°06'29.7"	E70°18'44.6"
4	3072	EIL/800/09-10/1738	Padavala	N21°57'19.6"	E70°15'05.0"
5	3073	EIL/800/09-10/1739	Padavala	N21°57'14.9"	E70°15'11.7"
6	3075	EIL/800/09-10/1740	Padavala	N21°56'43.1"	E70°15'20.6"
7	3076	EIL/800/09-10/1741	Padavala	N21°55'59.2"	E70°15'33.7"
8	3088	EIL/800/09-10/1742	Padavala	N21°56'19.3"	E70°14'38.0"
9	62	EIL/800/09-10/1766	Chattar	N22°07'40.2"	E70°15'10.7"
10	63	EIL/800/09-10/1767	Chattar	N22°07'46.6"	E70°15'00.6"
11	64	EIL/800/09-10/1768	Chattar	N22°07'53.3"	E70°14'57.1"

Project Verification Report

	12	539	EIL/800/09-10/1789	Seth Wadala	N22 °04'46.7"	E70 °05'34.3"
	13	540	EIL/800/09-10/1790	Seth Wadala	N22°04' 33.3"	E70 °05'43.1"
	14	541	EIL/800/09-10/1791	Seth Wadala	N22°04'27.4"	E70 °05'47.6"
	15	543	EIL/800/09-10/1792	Seth Wadala	N22°04'17.3"	E70 °05'53.7"
	16	544	EIL/800/09-10/1793	Seth Wadala	N22 °04'13.5"	E70 °06'00.7"
	17	545	EIL/800/09-10/1794	Seth Wadala	N22 °03'31.5"	E70 °05'32.6"
	18	546	EIL/800/09-10/1795	Jam Ambardi	N22 °03'40.2"	E70 °05'31.0"
	19	547	EIL/800/09-10/1796	Jam Ambardi	N22 °03'45.3"	E70 °05'31.9"
	20	548	EIL/800/09-10/1797	Jam Ambardi	N22 °03'50.7"	E70 °05'34.2"
	21	903	EIL/800/09-10/1747	Mevasa/Haripar	N22 °01'23.0"	E70 °15'35.2"
	22	904	EIL/800/09-10/1748	Mevasa/Haripar	N22 °01'30.2"	E70 °15'41.0"
	23	905	EIL/800/09-10/1749	Mevasa/Haripar	N22 °01'36.6"	E70 °15'27.2"
	24	906	EIL/800/09-10/1750	Mevasa/Haripar	N22 °01'30.7"	E70 °14'55.0"
	25	907	EIL/800/09-10/1751	Mevasa/ Haripar	N22 °01'37.9"	E70 °14'56.8"
	26	908	EIL/800/09-10/1752	Mevasa/ Haripar	N22 °01'44.8"	E70 °14'54.1"
	27	909	EIL/800/09-10/1753	Mevasa/ Haripar	N22 °01'51.2"	E70 °14'51.2"
	28	910	EIL/800/09-10/1754	Mevasa/ Haripar	N22 °01'57.7"	E70 °14'55.7"
	29	912	EIL/800/09-10/1746	Dhun Dhoraji	N22 °02'09.1"	E70 °15'04.4"
	30	926	EIL/800/09-10/1769	Chattar	N22 °06'57.6"	E70 °16'33.0"
	31	927	EIL/800/09-10/1770	Chattar	N22 °06'59.3"	E70 °16'23.3"
	32	928	EIL/800/09-10/1771	Chattar	N22 °07'10.0"	E70 °16'16.5"
	33	929	EIL/800/09-10/1772	Chattar	N22 °07'15.9"	E70 °16'11.3"
	34	931	EIL/800/10-11/1870	Chattar	N22 °07'12.7"	E70 °15'23.5"
	35	932	EIL/800/09-10/1773	Chattar	N22 °07'05.5"	E70 °15'27.2"

	36	933	EIL/800/09-10/1774	Chattar	N22 °06'59.3"	E70 °15'31.5"
	37	934	EIL/800/09-10/1775	Chattar	N22 °06'53.9"	E70 °15'27.9"
	38	935	EIL/800/09-10/1776	Chattar	N22 °06'46.0"	E70 °15'22.7"
	39	936	EIL/800/09-10/1777	Chattar	N22 °06'40.3"	E70 °15'25.7"
	40	937	EIL/800/09-10/1778	Chattar	N22 °06'32.0"	E70 °15'23.4"
	41	938	EIL/800/09-10/1779	Chattar	N22 °06'25.7"	E70 °15'22.1"
	42	939	EIL/800/09-10/1760	Jamvadi	N22 °08'19.5"	E70 °19'02.3"
	43	941	EIL/800/09-10/1761	Jamvadi	N22 °08'07.2"	E70 °18'57.8"
	44	942	EIL/800/09-10/1762	Jamvadi	N22 °08'08.6"	E70 °19'30.2"
	45	943	EIL/800/09-10/1763	Jamvadi	N22 °08'00.9"	E70 °19'25.4"
	46	944	EIL/800/09-10/1764	Jamvadi	N22 °07'53.9"	E70 °19'26.0"
	47	945	EIL/800/09-10/1765	Jamvadi	N22 °07'49.5"	E70 °19'31.4"
	48	947	EIL/800/09-10/1755	Moti Vavdi	N22 °06'04.0"	E70 °18'16.9"
	49	948	EIL/800/09-10/1756	Moti Vavdi	N22 °05'57.0"	E70 °18'17.8"
	50	950	EIL/800/09-10/1757	Moti Vavdi	N22 °05'45.7"	E70 °18'21.5"
	51	951	EIL/800/09-10/1758	Moti Vavdi	N22 °05'38.3"	E70 °18'18.4"
	52	952	EIL/800/09-10/1759	Moti Vavdi	N22 °05'31.6"	E70 °18'16.9"
	53	958	EIL/800/09-10/1743	Dhun Dhoraji	N22 °02'32.4"	E70 °16'42.8"
	54	959	EIL/800/09-10/1744	Dhun Dhoraji	N22 °02'26.2"	E70 °16'44.6"
	55	960	EIL/800/09-10/1745	Dhun Dhoraji	N22 °02'19.0"	E70 °16'44.4"
	56	992	EIL/800/09-10/1782	Sadodar	N22 °03'13.6"	E70 °10'37.3"
	57	993	EIL/800/09-10/1783	Sadodar	N22 °03'09.5"	E70 °10'40.0"
	58	994	EIL/800/09-10/1784	Sadodar	N22 °02'59.6"	E70 °10'36.4"
	59	995	EIL/800/09-10/1785	Sadodar	N22 °02'54.2"	E70 °10'33.5"

	60	996	EIL/800/09-10/1786	Sadodar	N22 °02'47.4"	E70 °10'22.2"
	61	997	EIL/800/09-10/1787	Sadodar	N22 °02'41.3"	E70 °10'32.4"
	62	1028	EIL/800/09-10/1788	Seth Wadala	N22 °03'06.0"	E70 °08'36.9"
	63	1045	EIL/800/09-10/1780	Bodi	N22 °08'43.4"	E70 °15'11.4"
	64	1046	EIL/800/09-10/1781	Bodi	N22 °08'48.8"	E70 °15'08.5"
<p>Assessment team performed an offsite inspection of project and confirmed that the location described in the PCN are accurate.</p> <p>The Project is a wind power project, to utilize wind energy to generate zero carbon emission electricity which is mainly dominated by fossil fuel power output. The project includes integrated power transmission mechanism, high performance rotor blades, dual speed asynchronous generator, 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. Microprocessor controlled high efficiency soft start. Active Yaw gear drives incorporating hydraulic yaw brakes.</p>						
Findings	CAR 04 was raised and closed successfully. More information presented in the appendix below.					
Conclusion	The description of the project activity is verified to be true based on the review of PCN, MR, Commissioning Certificate and power purchase agreement.					

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-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0. CDM website is referred to check the latest version of the methodology. For the applicability mentioned in the PCN and MR, technical Specification, and commissioning certificate.
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-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0, UCR Program standard, and UCR Verification Standard.
Findings	CL 01, CAR 01 and CAR 03 were raised and closed successfully. More information presented in the appendix below.
Conclusion	The verification team confirms that all the applicability criteria set by the applied CDM methodology and its eligible tools are met. The relevant information against those criteria is also included in the PCN and MR Ver.1.2. 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-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0, "the spatial extent of this project activity includes the project site and all the power plants connected physically to the electricity system (grid) that the power project is connected to." Review of PCN and MR 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 and MR. 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 ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources - Version 22.0 the baseline scenario is as following: The baseline scenario is that if the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources to the grid. 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.
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(.a.v) Estimation of emission reductions or net anthropogenic removal

Means of Project Verification	<p>The project verification team checked whether the equations and parameters used to calculate GHG emission reductions or net anthropogenic GHG removals for PCN and MR are in accordance with applied methodology. Project verification team checked section B.5 and C.5.1 of the PCN & MR respectively to confirm whether all formulae to calculate baseline emissions, project emission and leakage have been applied in line with the underlying methodology.</p> <p>The emission reduction calculation has been carried out as per the CDM methodology ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0</p> <p>As per the CDM approved ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0 paragraph 57, encompass solely the CO₂ emissions stemming from electricity generation in power plants displaced by the project activity. The methodology operates on the assumption that any electricity generation exceeding baseline levels would have originated from established grid-connected power plants and the integration of new grid-connected power plants.</p> $BE_y = EG_{PJ, y} \times EF_{grid, CM, y}$ <p>Where;</p> <p>BE_y : Baseline emissions in year y (tCO₂/year) EG_{PJ, y} : Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the UCR project activity in year y (MWh/year) EF_{grid, CM, y} : Combined margin CO₂ emission factor for grid connected power generation in year y (tCO₂/MWh)</p> <p>A "grid emission factor" refers to a CO₂ emission factor (tCO₂/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO₂/MWh for the 2013-2023 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Also, for the vintage 2021, the combined margin emission factor calculated from CEA database in India results into higher emission than the default value. Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach.⁴</p>
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⁴ https://a23e347601d72166dcd6-16da518ed3035d35cf0439f1cdf449c9.ssl.cf2.rackcdn.com/Documents/UCRStandardAug2024updatedVer7_020824191534797526.pdf

	<p>Similarly, for the year 2024, a grid emission factor of 0.757 tCO₂/MWh is to be applied. These conservative factors are used to calculate emission reductions.</p> <p>In order to facilitate adoption of authentic baseline emissions data and in keeping with the principle of “conservativeness,” all UCR Indian RE projects shall use the new conservative grid emission factor of 0.757 tCO₂/MWh in their emission reduction calculations for the 2024 vintage year. https://medium.com/@UniversalCarbonRegistry/ucr-cou-standard-update-2024-vintage-ucr-indian-grid-emission-factor-announced-ddb790cdc603</p> <p>Project emissions: Regarding project emissions, ACM0002 version 22.0 specifies that only emissions related to fossil fuel combustion, emissions from the operation of geothermal power plants due to the release of non-condensable gases, and emissions from water reservoirs of hydroelectric plants should be taken into account. Since the project involves a wind power project, emissions from renewable energy plants are negligible</p> <p>$PE_y = 0$.</p> <p>Since wind power is a GHG emission free source of energy project emission considered as Zero for the project activity.</p> <p>Leakage Emissions: Leakage, as outlined in ACM0002 version 22.0, para 5.6, is considered to be zero as there is no transfer of energy-generating equipment in the project activity</p> <p>Hence ($LE_y = 0$).</p> <p>Emission reductions: As per approved ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0, emission reduction is estimated as difference between the baseline emission and project emission after factoring into leakage.</p> <p>Thus, $ER_y = BE_y - PE_y - LE_y$</p> <p>Where:</p> <table> <tr> <td>ER_y</td><td>= Emission reductions in year y (t CO₂)</td></tr> <tr> <td>BE_y</td><td>= Baseline Emissions in year y (t CO₂)</td></tr> <tr> <td>PE_y</td><td>= Project emissions in year y (t CO₂)</td></tr> <tr> <td>LE_y</td><td>= Leakage emissions in year y (t CO₂)</td></tr> </table> <p>Therefore, $ER_y = BE_y$</p> <p>The earliest commissioning date of the Project is 25/06/2010 when the first installation of the wind turbine was done and the last commissioning date is 04/07/2011. The start date of the crediting</p>	ER_y	= Emission reductions in year y (t CO 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	= Emission reductions in year y (t CO 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)								

period under UCR is considered from 01/06/2021. The project activity is registered under Clean Development Mechanism (CDM) project with registration number 4700, as well as Gold Standard (GS) with reference number 3958. The crediting period of this project under CDM & GS is 01/06/2011 to 31/05/2021.

For the ease of the calculation, duration of the crediting period in UCR is started from 01/06/2021 to 31/12/2024.

The estimated emission reductions are 92,238 CoUs/yr (92,238 tCO₂eq/yr)

Year	Net Generation	EF	Baseline Emissions	Project Emissions	Leakage	Emission Reductions
	MWh	(tCO ₂ /MWh)	(tCO ₂ e)	(tCO ₂ e)	(tCO ₂ e)	(tCO ₂ e)
Year 1	115312.44	0.9	103781.19	0.00	0.00	103781.19
Year 2	115312.44	0.9	103781.19	0.00	0.00	103781.19
Year 3	115312.44	0.9	103781.19	0.00	0.00	103781.19
Year 4	115312.44	0.757	87291.51	0.00	0.00	87291.51
Year 5	115312.44	0.757	87291.51	0.00	0.00	87291.51
Year 6	115312.44	0.757	87291.51	0.00	0.00	87291.51
Year 7	115312.44	0.757	87291.51	0.00	0.00	87291.51
Year 8	115312.44	0.757	87291.51	0.00	0.00	87291.51
Year 9	115312.44	0.757	87291.51	0.00	0.00	87291.51
Year 10	115312.44	0.757	87291.51	0.00	0.00	87291.51
Total Emission reduction	1153124		922384	0	0	922384
Average Emission Reduction	115312		92238	0	0	92,238

The actual emission reduction achieved during the first CoU's period (01/06/2021 to 31/12/2024) as per the Project Activity:

			Actual Total baseline emission reductions (BEy)= 2,64,161 CoUs (2,64,161 tCO2eq)					
S r. N o .	Year	Ca pac ity	Tot al EG y,N et Ge ner a tio n	Tot al EG y,N et Ge ner a tio n	E mis sio n Fac tor	Bas eline Emis sio ns (BE)	Project Emissions (PE)	Emis sion Red uctio ns
		MW	kW h	M Wh	tC O2/ m Wh	tC O2e	tCO2e	tCO2 e
1	01-06-2021 to 31-12-2021	51.2	54272.457	54.272457	0.9	48845	0	48845
2	01-01-2022 to 31-12-2022		85358.398	85.358398	0.9	76822	0	76822
3	01-01-2023 to 31-12-2023		87141.234	87.141234	0.9	78427	0	78427
4	01-01-2024 to 31-12-2024		79349.161	79.349161	0.757	60067	0	60067
	Total		306121.25	30.612125		264161		2,64,161
Findings			CL 02 was 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-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0. 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;
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(.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 CO₂ emission factor (tCO₂/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO₂/MWh for the 2013-2023 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Also, for the vintage 2021, the combined margin emission factor calculated from CEA database in India results into higher emission than the default value. Similarly, for the year 2024, a grid emission factor of 0.757 tCO₂/MWh is to be applied. These conservative factors are used to calculate emission reductions.

In order to facilitate adoption of authentic baseline emissions data and in keeping with the principle of "conservativeness," all UCR Indian RE projects shall use the new conservative grid emission factor of 0.757 tCO₂/MWh in their emission reduction calculations for the 2024 vintage year

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-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0, 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 submittedJoint Meter Readings and invoices and were found correct.

Meter Details:

Calibration Clusters			Meters		
Meter Sr. No.	Sub-station	Accuracy class	Make	Calibration Details	Calibr ation Validit v

	10059208	Padavala	0.2	L & T	06.02.2023	06.02.2027
	10059203	Motivavadi	0.2	L & T	06.02.2023	06.02.2027
	GJU60947	Motivavadi	0.2	SECURE	06.02.2023	06.02.2027
	GJU61707	Padavala	0.2	SECURE	06.02.2023	06.02.2027
	GJU61698	Chhatar	0.2	SECURE	06.02.2023	06.02.2027
	GJU61321	Jamvadi	0.2	SECURE	06.02.2023	06.02.2027
	GJU61313	Motivavadi	0.2	SECURE	06.02.2023	06.02.2027
	GJU61690	Chhatar	0.2	SECURE	06.02.2023	06.02.2027
	GJU61699	Vavadi	0.2	SECURE	07.02.2023	07.02.2027
	GJU61322	Narmana	0.2	SECURE	07.02.2023	07.02.2027
	GJU61696	Laloi	0.2	SECURE	07.02.2023	07.02.2027
	GJU61310	Narmana	0.2	SECURE	07.02.2023	07.02.2027
	GJU61701	Sadodar	0.2	SECURE	07.02.2023	07.02.2027
	GJU61693	Sadodar	0.2	SECURE	07.02.2023	07.02.2027
	GJU61692	Sadodar	0.2	SECURE	07.02.2023	07.02.2027
	GJU61691	Sadodar	0.2	SECURE	07.02.2023	07.02.2027
	GJU69943	Sadodar	0.2	SECURE	07.02.2023	07.02.2027

Sr no	Meter type	No of wtgs	Mtr sr no	Sub-station	Accuracy	Make	Calibration date	Calibration validity
1	Ss main line 2	GJ-2459A	5500 5507 6	Sadodar	0.2	L &T	16.06.2021	17.06.2025
2	ss main line 1	GJ-2458A	5500 5507 6	Sadodar	0.2	L &T	16.06.2021	17.06.2025

There is no calibration delay for the current monitoring period from 01/06/2021 to 31/12/2024.

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.

	<p>The monitoring plan outlines in the PCN includes:</p> <ul style="list-style-type: none"> - Monitoring Organization - Monitoring apparatus and installation - Calibration - Data collection - Data Management system <p>The submitted calibration certificates were checked and it was confirmed that the calibrations are conducted periodically as specified in the PCN i.e. at least once in 5 years. There was no delay in the calibration during the current monitoring period.</p>
Findings	CAR 06, CAR 07 and CAR 08 were raised and closed successfully. More information presented appendix below.
Conclusion	<p>The verification team is convinced of compliance of the monitoring plan with the requirements of the monitoring methodology ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0. 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.</p> <p>The monitoring parameter reported in MR 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, emission reduction calculations are correctly calculated and reported. The monitoring report meets the requirements of UCR project verification requirements.</p>

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, PCN, MR and other documents provided.
Findings	CAR 05 was raised and closed successfully. More information presented appendix below.
Conclusion	The project has chosen crediting period start date in UCR as 01/06/2021. The crediting period is chosen as 01/06/2021 to 31/12/2024 and the crediting period for the current monitoring period is 01/06/2021 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, communication agreement, MR, commissioning certificate, power purchase agreement.
Findings	No findings raised.
Conclusion	<p>The project owner was identified through a communication agreement signed between project owner and project aggregator. Commissioning certificates and Power Purchase Agreement 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.</p> <p>Project owner: Vaayu India Power Corporation Pvt Ltd</p>

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 Verification	<p>PP has claimed SDG Goals 7, 8 & 13.</p> <p>SDG 7 is affordable and clean energy and it is verified during remote audit as the project is solar power plant.</p> <p>SDG 8 is decent work & economic growth and is verified by the supporting documents provided.</p> <p>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.</p>
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 aggregator or project owner directly or indirectly.
- Verification team consists of experienced personnel.

Project Verification opinion

Assessment team conducted documentation review the PCN against the UCR program verification standard version 2.0 and UCR project eligibility criteria version 7.0 and the UCR-PCN-FORM Version 1.0.

It is confirmed that the project activity is a 51.2 MW of large-scale wind power project located at villages Chattar, Narmana, Seth Wadala, Jam Ambardi, Mevasa, Dhun Dhoraji, Sadodar, Bodi, Padavala and Machharda in Jamnagar and Rajkot Districts of Gujarat state in India.

The geo co-ordinates of the project activity have been mentioned in sections above. Assessment team performed a remote 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-Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0.

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 2,64,161 tCO₂eq during the monitoring period i.e. from 01/06/2021 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
AMS	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
CH ₄	Methane
N ₂ O	Nitrous Oxide

Appendix 2. Competence of team members and technical reviewers

❖ **Mr. Pankaj Kumar** is a seasoned Environment and Climate Change professional with over 19 years of experience in Climate Change Mitigation & Adaptation, Environmental Due Diligence, Disaster Risk Reduction, Climate Finance, and capacity building. As the Managing Director of Enviance Services Pvt. Ltd., Pankaj Kumar leads a validation and verification body for GHG projects and also providing consultancy services in various areas including Climate Adaptation, Mitigation, Sustainability, and more. Previously, Pankaj Kumar served as a Climate Adaptation Expert with Deloitte Touche Tohmatsu India LLP, contributing to the World Bank project on Asset Management, Institutional Effectiveness, and Road Safety in Bihar. Mr. Pankaj also led the Bihar team for the South Asia Climate Proofing and Growth Development (CPGD) – Climate Change Innovation Programme (CCIP), supported by DFID, which aimed to integrate climate change resilience into planning and budgeting across South Asia. With a strong background in environmental projects, Pankaj Kumar has worked with IL&FS Infrastructure Development Corporation and BUIDCO (Bihar Urban Infrastructure Development Corporation) as an Environmental Specialist for WB & ADB funded projects. Additionally, Pankaj has extensive experience in GHG project validation and verification, having led over 300 projects globally while with UNFCCC accredited DoEs and as an external expert for Gold Standard and Global Carbon Council. Mr. Pankaj is an accredited Lead Auditor, Validator, Verifier, and Technical Expert for multiple sectoral scopes by UNFCCC DoE ENVIANCE SERVICES PRIVATE LIMITED Form name/no: F-5.04 Team intimation & Change request form Issue No: 01 Issue Date: 20-01-22 Effective from: 27-09-24 Revision Date: 27-09-24 Revision no: 03 Prepared by: Vidhya M Approved by: Pankaj Kumar Page 4 of 6 and is on the roster of WASH experts of UNICEF. Mr. Pankaj's expertise spans across various standards including CDM, Verified Carbon Standard, Gold Standard, Global Carbon Council, Natural Forest Standard, Riverse and Social Carbon Standard.

❖ **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 doublecounting		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	<p>Upto year 2023 - https://a23e347601d72166dcd6-16da518ed3035d35cf0439f1cdf449c9.ssl.cf2.rackcdn.com//Documents/UCRStandardAug2024updatedVer7_020824191534797526.pdf</p> <p>Year 2024 - https://medium.com/@UniversalCarbonRegistry/ucr-cou-standard-update-2024-vintage-ucr-indian-grid-emission-factor-announced-ddb790cdc603</p>	General project eligibility criteria and guidance UCR standard version 7.0
12	UCR	UCR Program manual version 6.2 UCR COU standard version 7 UCR Verification standard version 2 UCR terms and conditions		Universal Carbon Registry
13	CDM	CDM approved methodology- ACM0002- Consolidated baseline methodology for grid-connected electricity generation from renewable sources -Version 22.0.		UNFCCC

Clarification request, corrective action request and forward action request

Table 1. CLs from this Project Verification

Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Ms. Ritu Singh	Document Reference	MR
Finding Description		Date:	03-07-2025
PP to submit following documents: 1. Calibration certificates of each meter installed. 2. Employment records.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
1. PP has Submitted the Calibration Certificates 2. PP has Submitted the Employment Records			
Validation/Verification Team Assessment		Date:	05-07-2025
1. PP has submitted the calibration certificates of each meter. During assessment all the calibration certificates were found to be consistent with the submitted meter pictures. 2. PP has submitted the employment records and it was verified during assessment. Hence, CL 01 is closed.			

Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	02
Raised by:	Ms. Ritu Singh	Document Reference	MR
Finding Description		Date:	03-07-2025
1. Generation certificates for month July 2023, Aug 2023 and Dec 2023 are missing from the submitted documents. 2. In generation certificate of May 2023, the generation values highlighted black, PP to submit clean copy of the certificates to verify the values mentioned in the ER sheet. 3. Generation values mentioned in the ER sheet for month May 2022 are found inconsistent with the submitted generation certificate.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
1. PP has Submitted the Supporting Documents. 2. PP has Submitted the generation certificate of May 2023. 3. PP has Modified			
Validation/Verification Team Assessment		Date:	05-07-2025
1. PP has submitted the JMR documents of July 2023, Aug 2023 and Dec 2023. During assessment all the values in excel sheet were found to be consistent with the submitted documents. 2. PP has submitted the document of May 2023 and the value mentioned is consistent with the value in excel sheet. 3. PP has corrected the JMR value of May 2022 and during assessment the value in excel sheet was found to consistent with the value in submitted JMR.			

Hence, CL 02 is closed.

Table 2. CARs from this Project Verification

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Ms. Ritu Singh	Document Reference	PCN
Finding Description		Date:	03-07-2025
Under section A of the PCN, PP to review and revise the purpose of the project activity as it is not clear. Corrective action sought.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
PP has Revised the PCN Section A & reviewed and revised the purpose of the project activity			
Validation/Verification Team Assessment		Date:	05-07-2025
PP has added detailed purpose of project activity in section A. During assessment it was verified in MR version 1.2. Also, it was observed that in section A.1, PP has not added sub section b. Brief description of the installed technology and equipment. PP shall carefully follow the UCR MR template while preparing the MR. Hence, CAR 01 is open.			
Client/Responsible Party/Project Proponent Response		Date:	05-07-2025
PP has added that section.			
Validation/Verification Team Assessment		Date:	07-07-2025
PP has added detailed purpose of project activity in section A. PP has also added all the missing subsections. During assessment it was verified that now the MR is in line with the UCR MR template and this was observed in MR version 1.2. Hence, CAR 01 is closed.			

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	02
Raised by:	Ms. Ritu Singh	Document Reference	PCN & MR
Finding Description		Date:	03-07-2025
As mentioned in PCN and MR, the project activity has already been registered under the CDM and GS. PP shall provide the relevant documentation with a supporting link included as a footnote in MR and PCN.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
PP has added their Respective Project links Footnotes in PCN & MR			
Validation/Verification Team Assessment		Date:	05-05-2025
PP has added reference links as a footnote in MR. During assessment it was verified that the project activity was registered in CDM and GS for the monitoring period 01/06/2011 to 31/05/2021. In UCR the project is registered from 01/06/2021. Hence, CAR 02 is closed.			

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	03
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Project Verification Report

Raised by:	Ms. Ritu Singh	Document Reference	PCN & MR
Finding Description		Date:	03-07-2025
Under section B.8. of PCN, Egy,net parameter is inconsistent. Corrective action sought.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
PP has Modified the section B.8. of PCN, Egy,net parameter			
Validation/Verification Team Assessment		Date:	05-07-2025
PP has made corrections in Egy,net parameter in section B.8 of PCN and the same was verified in PCN version 1.3. Hence, CAR 03 is closed.			

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	04
Raised by:	Ms. Ritu Singh	Document Reference	PCN & MR
Finding Description		Date:	03-07-2025
Under Section A.4 of the Project Concept Note (PCN), the rotor diameter and rated rotational speed are inconsistent with the values reported in the monitoring report registered under the CDM and Gold Standard (GS) registries for this project.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
PP has Modified the Section A.4 in PCN & MR			
Validation/Verification Team Assessment		Date:	05-07-2025
Under section A.4 of PCN, PP has made corrections in the rotor diameter and rated rotational speed values. During assessment it was found that the values are now consistent with the values mentioned in monitoring report registered under CDM and GS registries. The same was verified in PCN version 1.3. Hence, CAR 04 is closed.			

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	05
Raised by:	Ms. Ritu Singh	Document Reference	PCN & MR
Finding Description		Date:	03-07-2025
Under Section B.6 of the Project Concept Note, the crediting periods mentioned for the project under the CDM and Gold Standard (GS) registries are inconsistent. The Project Proponent (PP) is requested to review and revise this information, and also include the crediting period start date for the project under the UCR registry.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
PP Has Modified			
Validation/Verification Team Assessment		Date:	05-07-2025
PP has made corrected the crediting period in section B.6 of PCN. During assessment it was observed that, under Section B.6 of the Project Concept Note, the crediting periods mentioned for the project under the CDM and Gold Standard (GS) registries are consistent. The PP has also included the crediting period start date for the project under the UCR registry. This was verified in PCN version 1.3.			

Project Verification Report

Hence, CAR 05 is closed.

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	06
Raised by:	Ms. Ritu Singh	Document Reference	PCN & MR
Finding Description		Date:	03-07-2025
PP shall review and revise Section A of the Monitoring Report. Additionally, font size, font type, and line spacing must be consistent throughout the document.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
PP has Modified the Section A of the Monitoring Report. Additionally, font size, font type, and line spacing throughout the document.			
Validation/Verification Team Assessment		Date:	05-07-2025
PP has revised sub section 'a' of section 'A' in MR. But PP has not added sub section 'b'. PP shall review and revise. Hence, CAR 06 is open.			
Client/Responsible Party/Project Proponent Response		Date:	05-07-2025
PP has added that section			
Validation/Verification Team Assessment		Date:	07-07-2025
PP has added all the missing sub sections in section A of MR. During assessment it was verified in MR version 1.2. Hence, CAR 06 is closed.			

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	07
Raised by:	Ms. Ritu Singh	Document Reference	PCN & MR
Finding Description		Date:	03-07-2025
On the cover page of the Monitoring Report, the host country name has been incorrectly placed in the 'Project Participants' column, and the project participants' names have been entered in the 'Host Country' column. Corrective action requested.			
Client/Responsible Party/Project Proponent Response		Date:	04-07-2025
PP has Modified			
Validation/Verification Team Assessment		Date:	05-07-2025
PP has made the suggested corrections. During assessment it was observed that now the host country name and project participants names are added in correct columns. This was verified in MR version 1.2. Hence, CAR 07 is closed.			

Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	08
Raised by:	Ms. Ritu Singh	Document Reference	PCN & MR
Finding Description		Date:	03-07-2025
Under the Monitoring Report, PP has added Section B.5, which is not part of the template and therefore needs to be removed. Corrective action sought.			

Project Verification Report

Client/Responsible Party/Project Proponent Response	Date:	04-07-2025
PP has Removed that Section		
Validation/Verification Team Assessment	Date:	05-07-2025
As suggested, PP has deleted the section B.5 from the MR as it was not a part of the UCR MR template. This was verified in MR version 1.2. Hence, CAR 08 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