



Verified Carbon Standard

DAK PSI 3 AND 4 HYDROPOWER PROJECT



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Client	Dak Psi Hydropower Investment and Development Joint Stock Company
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Summary:

A brief description of the verification of the project.

Verification: Dak Psi Hydropower Investment and Development Joint Stock Company has appointed Carbon Check (India) Private Ltd. /03/ to carry out the third (3rd) periodic verification of the registered VCS project “Dak Psi 3 and 4 Hydropower Project” (VCS ID: 1031), with regards to the relevant requirements of VCS Standard Version 4.5 (dated 04-October-2023).

Project: The project “Dak Psi 3 and 4 Hydropower Project”, is a project-scale project activity which employs approved CDM methodology ACM0002 version. 12.1.0, "Grid-connected energy generation from renewable sources."/**B02/** The purpose of the project activity is to generate electricity from renewable energy which is distributed to the national grid of Vietnam. The installed capacity of the project is 45MW. The project is a run-of-river hydropower project with 2 cascades namely Dak Psi 3 and Dak Psi.

The project was earlier registered as a CDM project (number 4891) on 06-November-2011 and started commercial operation on 09-October-2010(Dak Psi 4) and 29-August 2012 (Dak Psi 3).

The total electricity generation during this monitoring period i.e., from (01-January-2015 to 31-August-2018) is 562,472 MWh and the actual emission reduction is 324,209 tCO_{2e} for this monitoring period.

The project is located in Dak Ha and Tu Mo Rong Districts, Kon Tum Province, Socialist Republic of Viet Nam. The turbine house of the project activity has a Latitude of 14° 46'30"N and a longitude of 107° 59'50"E and the map for the location of the project activity is presented in section 1.8 of the MR./01/

Purpose: The purpose of the verification is to review the monitoring results and verify that the monitoring methodology was implemented according to the monitoring plan and monitoring data, used to confirm the reductions in anthropogenic emissions by sources are sufficient, definitive, and presented concisely and transparently. In particular, the monitoring plan, monitoring report and the project’s compliance with relevant VCS, UNFCCC and host Party criteria are verified in order to confirm that the project has been implemented in accordance with previously registered design and conservative assumptions, as documented.

Scope: The verification scope is defined as an independent and objective review of the monitoring report (MR) against the relevant criteria and guidance documents provided by VCS which include the following: VCS Program Guide (v4.4, dated 29-August-2023), VCS Standard (v4.5, dated 04-October-2023), Program Definitions (v4.4), Registration & Issuance Process (v4.4, dated 04-October-2023), VCS Validation and Verification Manual (v3.2, dated 19-October-2016) applicable at the time in order to confirm the emission reductions produced during the monitoring period are in accordance with the project activity as provided in the registered VCS PD/**B03/**. The CDM approved methodology ACM0002, Version 12.1.0 /**B02/** has been applied for the project activity.

The method and criteria used for verification.

The verification consists of the following four phases:

- I. A desk review of the project description documents
 - A review of data and information.

Cross-checks between information provided in the monitoring report and information from sources with all necessary means without limitations to the information provided by the project proponent.

II. On-site Audit/Interviews

- Interviews with relevant stakeholders in the host country with personnel having knowledge of the project development via direct on-site visits.
- Cross-checking information provided by interviewed personnel with all necessary means without limitations to the information provided by the project proponent.

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

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

The number of findings raised during the verification -

During the course of verification, a total of 07 findings were raised, which include:

- Corrective Action Requests (CARs): 06
- Clarification Requests (CLs): 01
- Forward Action requests (FARs): 00

All the raised findings have been successfully closed.

Any uncertainties associated with the verification -

There are no uncertainties associated with the verification of the project activity. The verification has been done with a reasonable level of assurance.

Summary of the verification conclusion

Carbon Check (India) Private Ltd. concludes the verification with a positive opinion that the VCS project scale project activity “Dak Psi 3 and 4 Hydropower Project” as described in the monitoring report (version 1.2, dated 14-March-2024)/**01**/ and registered VCS PD (version 2.3, dated 27-February-2013) /**B03**/, and CDM PDD (Version 4.1, dated 19-November-2012) meets all applicable VCS requirements, including those specified in the VCS Standard (v4.5, dated 04-October-2023),/**B01-2**/ relevant methodology, tools and guidelines.

The project activity and its emission reduction calculation were correctly implemented and meet all requirements for the VCS standard and guidelines and correctly applies the baseline and monitoring methodology ACM0002 version 12.1.0, "Grid connected energy generation from renewable sources."/**B02**/ The monitoring system is in place and the emission reductions are calculated without material misstatement. Carbon Check (India) Private Ltd. (CC IPL) therefore requests the issuance of the project as a VCS project activity, with a reasonable level of assurance.

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1 INTRODUCTION

1.1 Objective

Dak Psi Hydropower Investment and Development Joint Stock Company has appointed Carbon Check (India) Private Ltd., /03/ to carry out the third (3rd) periodic verification of the registered VCS project “Dak Psi 3 and 4 Hydropower Project” located in Dak Ha and Tu Mo Rong Districts, Kon Tum Province, Socialist Republic of Viet Nam.

Verification is the periodic independent review and ex post determination of both quantitative and qualitative information by a Validation and Verification Body (VVB) of the monitored reductions in GHG emissions that have occurred as a result of the VCS project activity during a defined monitoring period.

The purpose of verification is to review the monitoring results and verify that the monitoring methodology was implemented according to the monitoring plan and monitoring data and used to confirm the reductions in emissions is sufficient, definitive and presented in a concise and transparent manner. Carbon Check’s objective is to perform a thorough, independent assessment of the registered projects activities. In particular the, monitoring plan, monitoring report and the project’s compliance are verified against the relevant criteria and guidance documents provided by VCS. This allows for the confirmation that the project has been implemented in accordance with the VCS registered VCS PD/**B03-2/** and conservative assumptions, as documented. And, also to confirm if the monitoring plan is in compliance with the VCS PD/**B03-2/** and approved monitoring methodology/**B02/**, the baseline is established using the approved methodology ACM0002 (version 12.1.0), "Grid connected energy generation from renewable sources" /**B02/**. The objective of this verification was to verify and certify emission reductions reported for the “Dak Psi 3 and 4 Hydropower Project” for the period 01-January-2015 to 31-August-2018.

1.2 Scope and Criteria

The verification of this project is based on the registered VCS Project Description/**B03-2/**, the Monitoring Report of this monitoring period /**01/**, emission reduction calculation spreadsheet/**02/**, supporting documents made available to the verifier and information collected through performing interviews and during the on-site assessment. Furthermore, publicly available information was considered as far as available and required.

The verification is carried out on the basis of the following requirements (latest available on VCS website at the time of verification), applicable for this project activity:

- VCS Program Guide (v4.4, dated 29-August-2023)/**B01-1/**
- VCS Standard (v4.5, dated 04-October-2023)/**B01-2/**

- Program Definitions (v4.4, dated 29-August-2023) / B01-3/
- Registration & Issuance Process (v4.4, dated 04-October-2023) / B01-4/
- VCS Validation and Verification Manual (v 3.2, dated 19-October-2016)/**B01-5/**
- CDM Methodology: ACM0002: Grid-connected electricity generation from renewable sources.(Version 12.1.0) /**B02/**
- Other relevant rules, including the host country legislation.

The scope of this verification, by independent checking of objective evidence, is as follows:

- To verify that the project is implemented as described in the project description
- To assess the project's compliance with other relevant rules including the host country legislation.
- To assess the implementation of the monitoring plan content as mentioned in the VCS-PD/**B03/**
- To confirm that the monitoring system is implemented and fully functional to generate voluntary emission reductions (VERs/VCUs) without any double counting and
- To establish that the data reported are accurate, complete, consistent, transparent, and free of material error or omission by checking the monitoring records and the emissions reduction calculation /**02/**.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.
- To verify that reported GHG emission data is sufficiently supported by evidence.
- The verification shall ensure that the reported emission reduction is complete and accurate to be certified.

The method and criteria used for verification consisted of the following phases:

- 1) Completeness check and desk review:
- 2) On-site Audit/ Interviews
- 3) Resolution of outstanding issues and issuance of final verification report and applicable VCS Validation and verification Deeds of Representation.

Carbon Check (India) Private Ltd. conducts all its work under strict rules to safeguard impartiality and ensure the independence of the verification team. The verification does not provide any consulting or recommendations for the client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the monitoring activities.

1.3 Level of Assurance

VVB has concluded this verification with a reasonable level of assurance in line with section 4.1.2 (b) of the VCS Standard v4.5. /**B01/**

The threshold of materiality was evaluated based on §4.1.10 of VCS Standard v4.5 /**B01/**. It was concluded that the materiality threshold applicable to the project activity based on actual emission reductions achieved is 5% of 324,209 tCO_{2e} is 16,210 tCO_{2e}.

1.4 Summary Description of the Project

The purpose of the project activity is to generate renewable electricity from a run-of-river hydropower plant. Renewable electricity is exported to the Vietnamese national grid system and, in doing so, the project reduces greenhouse gas emissions. Since the Project generates electricity from renewable energy resources, it makes contribution to climate protection. According to the validated CDM PD/**B03-1/**, the Project (at 45 MW capacity) was expected to generate 112,034 MWh of electricity annually for the first two years and 170,755 MWh from 3rd year onward and as per the CDM PDD (v.2.3 dated 27-February-2013), **/B03-1/** the estimated annual Emission reduction over the 10-year crediting period is 89,961 tCO_{2e} which is considered as reference for this verification. **/B03-2/**

The project activity is a run-of-river hydropower project with 2 cascades namely Dak Psi 3 and Dak Psi 4. Dak Psi 4 started commercial operation on 09-October-2010 which is considered as the start date of the crediting period under the VCS programme and Dak Psi 3 started commercial operation on 29-August-2012. The project was registered as a CDM project (number 4891) on 06-November-2011 under which the crediting period extended from 01-July-2011 to 30-June-2018, which was revised under the VCS programme.

The third monitoring period covers the duration from 01-January-2015 to 31-August-2018 (both days included) and the total electricity generation for the monitoring period is 562,472 MWh and the actual emission reduction is 324,209 tCO_{2e}.

Verification team confirms that there will be no double counting occur and the same has been verified on the basis of review of the CDM project page, GCC, GS and other standards and also a declaration of no double counting has also been submitted by the PP.**/04/**

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification consists of the following three phases:

- 1) Completeness check and desk review of the validation report, monitoring plan, monitoring report, monitoring methodology, VCS PD, **/B03-2/** applicable tools in particular attention to the frequency of measurements, quality of metering equipment's including calibration requirements, QA/QC procedures and other relevant documents.
- 2) On-site audit (including interviews with project stakeholders, when deemed necessary).
- 3) The on-site audit assignment includes the following:
 - An assignment of implementation and operation of project activity with respect to validated VCS PD; **/B03-2/**, CDM PD/**B03-1/** and MR **/01/**
 - Review of information flows for generating, aggregating, and reporting the monitoring parameters.

- Interview with relevant personals to determine whether the operational and data collection procedures are implemented and in accordance with the monitoring plan of the validated VCS PD /B03-2/.
 - Cross check of information and data provided in the monitoring report with plant logbooks, inventories, purchase records or similar data sources.
 - Check of monitoring equipment’s calibration frequency and monitoring practice in-line with methodology and validated VCS PD/B03-2/ and CDM PDD/B03-1/.
 - Review of assumptions made in calculating the emission reduction.
 - Implementation of QA/QC procedure in-line with the validated VCS PD and methodology requirement.
- 4) Resolution of outstanding issues and the issuance of the final Verification report and if applicable, the VCS Validation and Verification Deeds of Representation.

Verification Schedule	
Submission of initial documents	19-January-2024
Kick-off meeting	25-January-2024
Desk Review	29-January-2024
On site Visit	17-February-2024
Submission of 1 st DVR	21-February-2024

2.2 Document Review

The registered VCS PD /B03-2/, CDM PDD/B03-01/, VCS MR /01/, emission reduction calculation spreadsheet/02/ and supporting documents related to the project implementation, project design, monitoring and baseline were reviewed as per VCS standard (version 4.5)/B01-2/ requirements.

The desk review included.

- A review of the data and information presented to verify completeness and consistency in accordance with VCS standard (version 4.5) requirements/B01-2/
- A review of the approved monitoring plan and monitoring methodology, paying particular attention to the frequency of the measurements, quality of the monitoring methodology

2.3 Interviews

The table below describes the interview process and further identifies personnel, including their roles, who were interviewed and/or provided information additional to that provided in the project description /B03/ and any supporting documents.

Date	Name	Organisation	Topic
17-February-2024	<ul style="list-style-type: none"> • Dương Đình Biểu • Nguyễn Thanh Tân • Nguyễn Phi Cường 	Dak Psi Hydropower Investment and Development Joint Stock Company	<ul style="list-style-type: none"> • Project Design • Project Implementation status • Project start date and Project Location • Roles and responsibility, Project Implementation and Operation status • Qualification and Training, Roles and responsibility. • Involved in Emissions Trading Programs and Other Binding Limits or Other forms of Environmental Credit. • On going grievance mechanism (maintained by Nguyễn Phi Cường)
17-February-2024	Mr. Binh Bui	Dak Psi Hydropower Investment and Development Joint Stock Company	<ul style="list-style-type: none"> • Project design • Turbine details • Monitoring plan • Monitoring procedures and monitoring equipment • Maintenance and operation plan • Data and information flow, Data input device,

			<ul style="list-style-type: none"> • Roles and responsibilities, Project implementation and operation, monitoring procedure.
17-February-2024	Mr. Abraham Antony	Kyoto Energy Pte Ltd	<ul style="list-style-type: none"> • VCU calculation and completeness of monitoring report, • Project implementation and operation, Project design monitoring procedure, data and information flow, compliance of monitoring plan with monitoring methodology and VCS-PD. • Project Implementation status
17-February-2024	<ul style="list-style-type: none"> • Atheo • Anun 	Local Stakeholders	Interview for ongoing communication with stakeholders.

17-February-2024	<ul style="list-style-type: none"> • Bui Van Luong (operator) • Nguyen Van Binh (operator) • Nguyen Phi (operator) 	Employees	<ul style="list-style-type: none"> • Training • Working conditions • Human Rights & labor laws verification
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2.4 Site Visits

The VVB team conducted an on-site inspection on 17-February-2024. The on-site verification was conducted in line with the requirements set in para 4.1.10 of VCS Standard v4.5./B01-2/

2.5 Resolution of Findings

This section summarizes the findings from the verification of the project activity. In this section the findings from the document review, assessments and remote interviews are provided.

Material discrepancies identified in the course of the verification are addressed either as CARs, CLs or FARs.

Corrective action requests (CAR) are issued, where:

- i. Mistakes have been made with a direct influence on project results requiring adjustments of the VERs/VCU monitoring report.
- ii. Applicable methodological-specific requirements have not been met.

A Clarification request (CL) may be used where additional information is needed to fully clarify an issue or where the information is not transparent enough to establish whether a requirement is met.

A total (06) CAR, and (01) CLs had been raised by the verification team. Please refer to Appendix 4 below for the details of the CARs/CLs and their closure.

2.5.1 Forward Action Requests

No FAR has been raised during this monitoring period.

2.6 Eligibility for Validation Activities

Validation/Verification body (VVB), Carbon Check (India) Private Ltd. holds accreditation for verification for the relevant sectoral scope 1 and is eligible for validation/verification for the project activity.

Please refer: <https://verra.org/project/carbon-check-india-private-ltd/>.

3 VALIDATION FINDINGS

3.1 Methodology Deviations

No methodology deviation has been applied.

3.2 Project Description Deviations

No project deviation has been applied.

3.3 New Project Activity Instances in Grouped Projects

This is not a grouped project, hence not applicable.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

Yes

No

4 VERIFICATION FINDINGS

4.1 Project Details

Item	Evidence gathering activities, evidence checked, and assessment conclusion:
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Audit history	(Given in appendix-4 of this report)
Double counting and participation under other GHG programs	<p>The project was registered on CDM on 06-November-2011. Although it is not seeking for any credits through CDM or any other standard.</p> <p>PP has provided a declaration on avoidance of double counting in this aspect. /04/ Moreover, VVB has cross verified other standard registries such as Gold Standard, Global Carbon Council and IREC, /B04/ and have found that this project is not registered in any of these standards.</p>
No double claiming with emissions trading programs or binding emission limits	PP is not claiming with any other emission trading programs; hence this section is not applicable.
No double claiming with other forms of environmental credit	The project has not sought, received, or is planning to receive credit from another GHG-related environmental credit system, and have provided a declaration on avoidance of double claiming.
Supply chain (scope 3) emissions double claiming	<p>The project is a renewable energy generation project/B03/ thus there is no supply chain involved.</p> <p>Hence, no scope 3 emissions double counting is possible here.</p>
Sustainable development contributions	The implementation of project activity has produced renewable energy displacing carbon which would have been generated from fossil fuel operated power plants and thus has contributed to SDG 13 (Tonnes of greenhouse gas emissions avoided or removed) /B03/, /01/
Additional information relevant to the project	There is no commercially sensitive information, hence appendix 1 has been left blank intentionally.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
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Stakeholder identification	NA
Legal or customary tenure/access rights	NA
Stakeholder diversity and changes over time	NA
Expected changes in well-being	NA
Location of stakeholders	NA
Location of resources	NA

4.2.2 Stakeholder Consultation and Ongoing Communication

Subsequently the initial stakeholder consultation on 09-April-2010, the project assigned a representative to address community concerns and issues on-site. During the on-site it was cross verified that PP is maintaining continuous communication with the local stakeholders.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	As a part of ongoing communication, PP has a designated representative on the site in charge of taking in and addressing any complaints or problems brought up by the locals.
Date(s) of stakeholder consultation	09-April-2010, confirmed from registered PDD, and invitation letter/13-1/
Communication of monitored results	A designated representative (Nguyễn Phi Cường) is present at the site, and residents communicate with him. During the on-site inspection, the verification team interviewed the designated representative at site and locals and confirmed that PP has maintained an easy communication channel for on going communication.
Consultation records	PP has maintained the following consultation records 1- Invitation letter, dated 07-April-2010

	2- Stakeholder meeting minutes, dated 09-April-2010
	3- Attendance sheet, dated 09-April-2010
	4- Community consultation form/Feedback forms
Stakeholder input	Stakeholder inputs are recorded through grievance redress procedure.

4.2.3 Free, Prior, and Informed Consent

Consultations, in line with National regulations, were conducted with local inhabitants and stakeholders involved both directly as well as through local government representation.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	During the first stakeholder meeting, local stakeholders were asked for their views, opinions and consent to participate.
Outcome of FPIC discussion	The project proponent took stakeholder’s consent in line with the § 3.18.7 of the VCS Standard v4.5. Moreover, as a part of on going communication with the stakeholders, PP has informed all the minimum required information about the project given in section the § 3.18.8 of the VCS Standard v4.5

4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	No grievances were received during the respective monitoring period./13-5/
Grievance redress procedure	A designated representative (Nguyễn Phi Cường) is present at the site, and residents communicate with him and register their grievances.

4.2.5 Public Comments

PP received comments during the stakeholder consultation meeting held on 09-February-2010. The summary of those comments is given below:

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
<p>During the stakeholder consultation meeting, locals raised concern on the following points as given in section 2.1.5 of MR.</p> <ul style="list-style-type: none"> 1- Noise Pollution 2- Accidents during construction and operation phase 3- Area that might be important for them, culturally, will get impacted. 4- And visibility of project 	<p>Following actions/justification were performed/provided for the raised concern:</p> <ul style="list-style-type: none"> 1- The use of advanced technology and good maintenance and operation would minimize this. 2- Use of advanced techniques would minimize the possibility of these. 3- As per the EIA, no such areas were identified. 4- The location of the project is not highly visible, so no action required 	<p>As per the on-site inspection, VVB team can conclude that the project is located in a secluded place, where there is no residential area nearby. Thus, the possibility of noise pollution, vibration and visibility is not possible.</p> <p>Moreover, with the interviews of workers in the plant and onsite inspection, it was confirmed that that PP is putting use of advanced technology for avoidance of accidents.</p>

4.2.6 Risks to Local Stakeholders and the Environment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
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<p>Risks to stakeholder participation</p>	<p>No risk has been identified here, as the stakeholder consultation was held in a convenient location after being advertised through multiple sources, and it was well-attended by stakeholders.</p> <p>VVB has also confirmed it through the validation report, /B03-3/ and LSC documents. /13/ Moreover, PP has maintained an open communication for local stakeholders for participation.</p>
<p>Working conditions</p>	<p>Regarding this project, not any specific risks were found. Maintaining operational and safety best practices as well as compliance with all applicable requirements.</p> <p>During the on-site inspection and onsite interviews as well, it was confirmed that PP is maintaining all necessary regulations for better working conditions.</p>
<p>Safety of women and girls</p>	<p>Because of the nature of the project—hydropower facilities in a remote area—there is no direct connection with women.</p> <p>During the onsite inspection it was confirmed that no women work onsite.</p>
<p>Safety of minority and marginalized groups, including children</p>	<p>Because of the nature of the project—hydropower facilities in a remote area—there is no direct connection with these groups.</p>
<p>Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)</p>	<p>In line with section D of the registered CDM PDD /B03-1/, PP is maintaining water treatment tanks to restrict wastewater going in downstream before any treatment.</p>

4.2.7 Respect for Human Rights and Equity

4.2.7.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
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Discrimination and sexual harassment	During the onsite inspection, VVB interviewed workers and have found there has been no instances of discrimination and sexual harassment.
Management experience	Not applicable. No new entity has been involved in the project management.
Gender equity in labor and work	PP follows all national laws and regulations to provide no discrimination on workplace.
Human trafficking, forced labor, and child labor	PP follows all national laws and regulations to provide no discrimination in the workplace. Also, as per the on-site inspection, no child labour or forced labour is working on the site.

4.2.7.2 Human Rights

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	During the on-site inspection it was confirmed that there is no human right violation on the plant site. Moreover, VVB cross-checked with the national laws and interviewed workers (see section 2.3 of this report) in plant to verify protection of human right and compliance of labour laws.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection	The project activity is in a very secluded place, where there is no human residence nearby. As identified in the EIA /05/ as well, this land does not hold any cultural significance to any people group.

of cultural heritage

4.2.7.4 Property Rights

During the validation it was confirmed that plant location has no dispute on land. Hence this section is not applicable.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	N/A
Respect for property rights	N/A

4.2.7.5 Benefit Sharing

In the validated plan, /B03/ no benefit sharing plan was agreement was signed. Thus, this section is not applicable.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	NA
Benefit sharing during the monitoring period	NA

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
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Impacts on biodiversity and ecosystems	As per the EIA no risk on biodiversity and ecosystem were identified.
Soil degradation and soil erosion	As per the validated plan, project has adhered to best practices during the construction and operation phases.
Water consumption and stress	As per the validated plan, project has to the operational regime to avoid adverse effects.
Usage of fertilizers	No risk identified as nature of the project does not involve use of fertilizer

4.2.8.1 Rare, Threatened, and Endangered species

As per the registered PDD, /B03/ and cross verification of the EIA, /05/ the project area is devoid of any rare, threatened, or endangered animals and plants.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	NA
...	

4.2.8.2 Introduction of Species

As per the validated plan, no introduction of species is part of the project. Hence, this section is not applicable.

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
	Not applicable.

4.2.8.3 Ecosystem conversion

Project is a Scope 1 project. Hence, this section is not applicable.

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	

4.3 Accuracy of Reduction and Removal Calculations

The leakage emissions are zero, as per the applied methodology.

The baseline emissions have been calculated as per the applied methodology formula no.6 as given below:

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

Where:

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

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

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for the grid connected power generating in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system” (tCO₂/MWh)

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

$$\begin{aligned} \text{Hence, } BE_y &= EG_{facility,y} \times EF_{grid,CM,y} \\ &= 562,472 \text{ MWh} \times 0.5764 \text{ tCO}_{2e}/\text{MWh} \end{aligned}$$

$$BE_y = 324,209 \text{ tCO}_{2e}$$

Project emissions

As per the applied methodology, “If the power density of the project activity (PD) is greater than 10 W/m²” the project density of project activity is calculated as follows:

$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}}$$

Where:

PD = Power density of the project activity (W/m²)

CapPJ = Installed capacity of the hydro power plant after the implementation of the project activity (W)

CapBL = Installed capacity of the hydro power plant before the implementation of the project activity (W). For new hydro power plants, this value is zero

APJ = Area of the single or multiple reservoirs measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m²)

ABL = Area of the single or multiple reservoirs measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m²). For new reservoirs, this value is zero

$$PD = 45,000,000 - 0 / 475,000 - 0$$

$$PD = 94.7 \text{ W/m}^2$$

As the power density is greater than 10/m², the project emission are zero

So,

$$PE_y = 0$$

Emission Reductions

$$ER_y = BE_y = PE_y$$

$$ER_y = 324,209 \text{ tCO}_{2e} - 0$$

$$ER_y = BE_y$$

So,

$$ER_y = 324,209 \text{ tCO}_{2e}$$

During this monitoring period, the total actual generation is 562,472 MWh and the total ER achieved is 324,209 tCO₂.

The verification team confirms that all the values of data other than power density for the monitored parameter is in compliance with the registered monitoring plan as provided in the registered VCS PD/**B03-2/** and CDM PDD/**B03-1/**.

It was observed by the verification team that the actual emission reduction is higher than the estimated emission reduction, The actual amount of GHG emission reduction in years 01-January-2015 to 31-December-2015, 01-January-2016 to 31-December-2016 and 01-January-2018 to 31-December-2018 is less than estimated GHG emission reduction as per the registered PDD. /**B03/** However, the GHG emission reduction from year 01-January-2017 to 31 December 2017 is higher than the estimated amount due to reportedly heavy rain, that is only 6% higher and falls under the sensitivity limit, which lead to the higher energy generation, as confirmed with the Pleiku weather report for the year 2017./**15/** Thus, the same is deemed acceptable by the verification team.

VVB team has cross verified the GHG calculations spreadsheet /02/ and have found that the calculations are in place with the validated plan and registered PDD.

4.4 Quality of Evidence to Determine Reductions and Removals

CCIPL was able to confirm that the calculations are based on authentic data. The spreadsheets /02/ were used to calculate the VCU calculations and all figures were tracked, checked, and found to be consistent.

The quality of supporting evidence submitted to the VVB for verification is adequate and found to be verifiable.

When verifying the reported emission reductions, CCIPL ensured that there was a clear audit trail that contained the evidence and records that verify the stated figures. All source documents that form the basis for assumptions and other information underlying the GHG data were checked by the verification team.

When assessing the audit trails, CCIPL also examined:

1. Whether sufficient evidence was available, both in terms of frequency and in covering the full monitoring period.
2. The source and nature of the evidence.
3. If comparable information was available from sources other than that used in the monitoring report, CCIPL cross-checked the monitoring report against the other sources to confirm that the stated figures were correct.

CCIPL also assessed that the data collection system met the requirements of the monitoring plan as per the applied methodology /B02/.

Proper data management inclusive of data acquisition and aggregation, data management system is being followed for the project activity.

The monitoring personnel at site are well trained and follow reproducible routines. Thus, they are competent to carry out the relevant tasks with sufficient accuracy.

Assessment of Ex-post Monitored Parameters:

Monitoring Parameter Requirement	Assessment/ Observation by the DOE
Data / Parameter: (as in monitoring plan of PDD):	CapPJ

Description of parameter	Installed capacity of the hydro power plant after the implementation of the project activity
Data unit	W
Reported value	45,000,000
Measuring frequency	Once at the beginning of each crediting period
Recording frequency	Yearly
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment	N/A
Is accuracy of the monitoring equipment as stated in the PDD?	N/A
Calibration frequency /interval	N/A
Company performing the calibration	N/A
Did calibration confirm proper functioning of monitoring equipment? (Yes / No)	N/A
Is (are) calibration(s) valid for the whole reporting period?	N/A
If applicable, has the reported data been crosschecked with other available data?	N/A
How were the values in the monitoring report verified	Verification team has crosschecked the value with the commissioning certificate submitted by PP and the same is verified during remote audit
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC Processes in place?	N/A

Monitoring Parameter Requirement	Assessment/ Observation by the DOE
Data / Parameter: (as in monitoring plan of PDD):	EG _{facility,y}
Description of parameter	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y
Data unit	MWh
Reported value	562,472 MWh

Measuring frequency	Continuous
Recording frequency	Monthly reading
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment	See Appendix -2
Is accuracy of the monitoring equipments as stated in the PDD?	N/A
Calibration frequency /interval	As per the Monitoring report Periodic calibration of the meters are done every 2 years. This is in accordance with the decision no. 25/2007/QD-BKHCHN, dated 05/10/2007. /06-4/
Did calibration confirm proper functioning of monitoring equipment?(Yes / No)	yes
Is (are) calibration(s) valid for the whole reporting period?	yes
If applicable, has the reported data been crosschecked with other available data?	Yes, the reported data has been cross-checked with the electricity generation records/08.
How were the values in the monitoring report verified	The values in the monitoring report were verified through the comparison with the values in the ER sheet/02/ and the raw data provided therein, and cross-checked with the electricity generation records /08/
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the data management ensures correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place.

Monitoring Parameter Requirement	Assessment/ Observation by the DOE
----------------------------------	------------------------------------

Data / Parameter: (as in monitoring plan of PDD):	APJ
Description of parameter	Surface area of the reservoirs measured after the implementation of the project activity, when the reservoir is full
Data unit	m ²
Reported value	475,000
Measuring frequency	Once at the beginning of each crediting period
Recording frequency	yearly
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment	Measured from topographical surveys, maps, satellite pictures, etc
Is accuracy of the monitoring equipment as stated in the PDD?	N/A
Calibration frequency /interval	N/A
Company performing the calibration	N/A
Did calibration confirm proper functioning of monitoring equipment? (Yes / No)	N/A
Is(are) calibration(s) valid for the whole reporting period?	N/A
If applicable, has the reported data been crosschecked with other available data?	N/A
How were the values in the monitoring report verified	Verification team has checked the reservoir surface area provided by the PP/15/ and cross verified the same through independent topographical surveys.
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	N/A

4.5 Non-Permanence Risk Analysis

Not Applicable

5 VERIFICATION OPINION

5.1 Verification Summary

The Project Participant, Dak Psi Hydropower Investment and Development Joint Stock Company has commissioned the VVB, Carbon Check (India) Private Ltd. (CC IPL) to perform an independent 3rd monitoring period verification of the VCS Project Activity “Dak Psi 3 and 4 Hydropower Project”. This report summarizes the findings of the verification of the project, performed based on VCS criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. The verification process was performed based on all guidance and criteria as provided in VCS Standard version 4.5/**B01-2/**, VCS Program Guide version 4.3/**B01-1/**, VCS Validation and Verification Manual version 3.2/**B01-5/** and Registration & Issuance Process version 4.0/**B01-4/** The project activity provides the information in MR/01/ as required by the VCS Standard 4.5/**B01-2/** and Validation and Verification Manual 3.2/**B01-5/** and in CC IPL’s opinion meets the requirements of the applied baseline and monitoring methodology, ACM0002 version 12.1.0/**B02/**and is likely to achieve the estimated emission reductions.

The validation has been performed with a reasonable level of assurance, as described above. The achieved emission reductions from the project activity for the respective monitoring period are 324,209 tCO_{2e}. Carbon Check (India) Private Ltd concludes the verification with a positive opinion that the VCS Project Activity “Dak Psi 3 and 4 Hydropower Project”, as described in the monitoring report /01/, meets all the applicable VCS requirements, including those specified in the VCS Project Standard /**B01-1/**, relevant methodology, tools, and guidelines. The selected baseline and monitoring methodology (ACM0002, Version 12.1.0)/**B02/** is applicable to the project and correctly applied.

A reasonable level of assurance has been maintained as per 4.1.2 (b) of VCS Standard v4.5 /**B02-2/** for this verification.

Verification period: From 01-January-2015 to 31-August-2018

Verified GHG emission reductions and carbon dioxide removals in the above verification period:

Vintage period	Baseline emissions (tCO _{2e})	Project emissions (tCO _{2e})	Leakage emissions (tCO _{2e})	Reduction VCUs (tCO _{2e})	Removal VCUs (tCO _{2e})	Total VCUs (tCO _{2e})
01-Jan-2015 to 31-Dec-2015	72,862	0	0	72,862	0	72,862

01-Jan-2016 to 31-Dec-2016	88,541	0	0	88,541	0	88,541
01-Jan-2017 to 31-Dec-2017	104,344	0	0	104,344	0	104,344
01-Jan-2018 to 31-Dec-2018	58,461	0	0	58,461	0	58,461
Total	324,209	0	0	324,209	0	324,209

5.2 Ex-ante vs Ex-post ERR Comparison

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
01-Jan-2015 to 31-Dec-2015	98,423	72,862	-26%	Normal variations due to rainfall
01-Jan-2016 to 31-Dec-2016	98,423	88,541	-10%	Normal variations due to rainfall
01-Jan-2017 to 31-Dec-2017	98,423	104,344	6%	Overperformance is within the expected variation due to rainfall. In 2017, rainfall in the vicinity of the facility was significantly higher than in previous years. /15/
01-Jan-2018 to 31-Dec-2018	65,256	58,461	-10%	Normal variations due to rainfall
Total	360,525	324,209	-10%	Normal variations due to rainfall

APPENDIX 1: COMMERCIALY SENSITIVE INFORMATION

No commercially sensitive information

APPENDIX 2: CALIBRATION OF ENERGY METERS

Meter ID	Tag	Model, Serial number and manufacturer	Accuracy Class	Date of Initial Calibration (prior to calibration period)	Date of Subsequent Calibration	Validity Date of Calibration
Main meter	MM1	Manufacturer: Elster Model: A1700 Serial: 100018471	0.2S	23/07/2014	25/07/2016, 24/07/2017 21/05/2019	21/05/2021
Backup Meter	BM1	Manufacturer: Elster Model: A1700 Serial: 11131803	0.5S	23/07/2014	25/07/2016 24/02/2017 21/05/2019	21/05/2021

¹ During the onsite inspection, it was found that the main meter, serial number 10001847, has been replaced with 06202187. The main meter was replaced due to the detection of an error on 04/06/2020. /06-3/. The new main meter was installed on 03/07/2020. /06-02/. This event does not fall under the current monitoring period; thus, the new meter number is not included in the table given above.

Backup Meter	BM2	Manufacturer: Elster Model: A1700 Serial: 11131804	0.5S	23/07/2014	25/07/2016 24/07/2017 21/05/2019	21/05/2021
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The energy meter calibration frequency is once in two years as per decision no. 25/2007/QD-BKHC /06-04/.

Due to the delayed calibration in 2016, there were two days of operations in July without a proper calibration. Thus, as per the §366 of Standard: CDM validation and verification standard for project activities v03.0, for the entire month of July 2016, a conservative 2% decrease in generation and a 2% rise in consumption were applied to the observed data. The maximum permissible error of 0.2% as provided by the equipment supplier was applied. In later year, all the meters have followed the calibration frequency, and no discrepancy has been observed.

APPENDIX 3: REFERENCED DOCUMENTS

S.no	Referenced Document		
/01/	<ol style="list-style-type: none"> 1. 3rd Monitoring Report v01, dated 31-December-2023 2. 3rd Monitoring Report v1.1, dated 24-February-2024 3. 3rd Monitoring Report v1.2, dated 14-March-2024 		
/02/	Emission Reduction Spreadsheet corresponding to /01/		
/03/	Countersigned contract signed between “Dak Psi Hydropower Investment and Development Joint Stock Company”, Kyoto Energy Pte. Ltd. and Carbon Check (India) Private Limited, dated 18/01/2024		
/04/	Declaration on avoidance of double counting by PP, dated 12/02/2024		
/05/	EIA report, dated 18/05/2008		
/06/	<ol style="list-style-type: none"> 1- Calibration certificate <table border="1" style="margin-left: 20px;"> <tr> <td>Meter serial number</td> <td>Calibration certificate date</td> </tr> </table> 	Meter serial number	Calibration certificate date
Meter serial number	Calibration certificate date		

	<p>10001847</p> <p>23/07/2014</p> <p>25/07/2016,</p> <p>24/07/2017</p>
	<p>11131803</p> <p>23/07/2014</p> <p>25/07/2016,</p> <p>24/07/2017</p>
	<p>11131804</p> <p>23/07/2014</p> <p>25/07/2016,</p> <p>24/07/2017</p>
	<p>2- New meter installation report, dated 03/07/2020</p> <p>3- Meter error report, dated 04/06/2020</p> <p>4- Calibration Frequency decision (No. 25/2007/QD-BKHC)</p>
/07/	<p>1- Turbine Manufacturer specification</p> <p>2- Generator meter specification</p>
/08/	Daily electricity generation log and Monthly electricity generation records of electricity prepared by power plant technicians.
/09/	Training records of workers and site employees
/10/	<p>Commissioning Certificate</p> <p>1 - Dak Psi 3, dated 11/12/2012</p> <p>2- Dak Psi 4, dated 08/12/2010</p>
/11/	Letter of approval for Dak Psi 3 and 4 Hydropower Project dated 17 May 2011
/12/	Topographical surveys/maps, and satellite pictures used for measurement of Apj.
/13/	<p>Stakeholder records</p> <p>1- Invitation letter, dated 07/04/2010</p> <p>2- Stakeholder meeting minutes, dated 09/04/2010</p> <p>3- Attendance sheet, dated 09/04/2010</p> <p>4- Community consultation form/Feedback forms</p>

	5- Record books from 2015 -2018
/14/	Power Purchase Agreement dated July 2012
/15/	Pleiku Weather report for the year 2017,
/16/	Vietnam Labor Law Code; dated 18/06/2012
/B01/	<ol style="list-style-type: none"> 1. VCS Program Guide (v4.4, dated 29-August-2023) 2. VCS Standard (v4.5, dated 04-October-2023) 3. Program Definitions (v4.4, dated 29-August-2023) 4. Registration & Issuance Process (v4.4, dated 04-October-2023) 5. VCS Validation and Verification Manual (v 3.2, dated 19-October-2016)
/B02/	Approved CDM methodology, ACM0002: Grid-connected electricity generation from renewable sources. (Version 12.1.0)
/B03/	<ol style="list-style-type: none"> 1. CDM PDD, v4.1, dated 19-November-2012. 2. VCS PD, 2.3, dated 27-February-2013 3. CDM Validation Report, dated 09/09/2010

APPENDIX 4: AUDIT HISTORY

Audit type	Period	Program	Validation/verification Body name	Number of years
Validation/Verification	09-October-2010 to 05-November-2011	VCS	KBS Certification Services Limited	1 year, 1 month
Verification	09-October-2010 to 05-November-2011	CDM	KBS Certification Services Limited	10 months
Verification	01-September-2012 to 31-December-2014	VCS	Carbon Check (India) Private Limited	2 years, 4 months
Verification	01-January-2015 to 31-August-2018	VCS	Carbon Check (India) Private Limited	3 years, 8 months

APPENDIX 5: FINDINGS LOG

TABLE 1: CORRECTIVE ACTION REQUESTS (CARs) AND CLARIFICATION REQUESTS (CLs)

Finding	CL 01		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (VVB)	<p>In the 2nd Monitoring period report and verification report, ongoing communication has been mentioned, however, in 3rd monitoring period report v1, dated 31/12/2023, section 2.1.2, PP states, “Not applicable, as no plan for ongoing communication was included in the validated plan”.</p> <p>PP is requested to clarify this discrepancy.</p>		
Corrective Action or clarification #1 (PP shall write a detailed and clear corrective action or further information for clarification as per finding)	<p>Updates have been made to section 2.1.2 in version 2 of the MR to reflect the ongoing communication.</p>		
VVB Assessment #1 The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and VVB assessments (#2, #3, etc.) shall be added.	<p>PP has revised section 2.1.2 of the PD, with the ongoing communication information. This information has been found consistent with previous MP and onsite inspection.</p> <p>CL 01 is closed.</p>		
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR 01		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (VVB)	<p>As per VCS Monitoring Report template v4.3, PP is requested to address following findings –</p>		

	<ol style="list-style-type: none"> 1. In section 2,2 guideline states that – “Where no risk was identified, write “No risk identified” in the first column, and provide justification in the second column.” However, in MR v1, dated 31/12/2023, section 2.2., for the first 3 risks, no justification has been provided. 2. As per section 2.3.1, for Gender equity in labor and work, PP needs to “Demonstrate that equal opportunities have been provided in the context of gender equity and pay for labor and work.” However, enough information is not given in MR v1 dated 31/12/2023.
<p>Corrective Action or clarification #1 (PP shall write a detailed and clear corrective action or further information for clarification as per finding)</p>	<ol style="list-style-type: none"> 1. Section 2.2 has been updated in version 2 to include rationale where no risks were identified. 2. Specific reference to labour code provided, and a copy of the code is provided as CAR01_Labour_Code.pdf
<p>VVB Assessment #1 The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and VVB assessments (#2, #3, etc.) shall be added.</p>	<p>1 – PP has added rationale, where no risk was identified, in section 2.2.</p> <p>2 – VVB has cross-verified the Gender Equity in labour and work with labour code of Vietnam.</p> <p>CAR 01 is closed.</p>
<p>Conclusion Tick the appropriate checkbox</p>	<p><input type="checkbox"/> To be checked during the next periodic verification</p> <p><input type="checkbox"/> Outstanding finding (not closed)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>

Finding	CAR 02		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (VVB)	<p>In the section 5.4 for the year 01 January 2017 to 31 December 2017, the emission reduction achieved is 6% greater than expected in registered PDD.</p> <p>PP is requested to explain and provide supporting document to verify the variation.</p>		

<p>Corrective Action or clarification #1 (PP shall write a detailed and clear corrective action or further information for clarification as per finding)</p>	<p>Additional information has been provided in section 5.4. A supporting document CAR02_Pleiku_weather_info_2015_2017.pdf is also provided.</p>
<p>VVB Assessment #1 The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and VVB assessments (#2, #3, etc.) shall be added.</p>	<p>PP has provided explanation of higher emission reductions achieved for the vintage year 2017, in comparison with the registered PDD, in section 5.4 of the MR. This explanation has been cross verified with Pleiku weather report.</p> <p>CAR 02 is closed.</p>
<p>Conclusion Tick the appropriate checkbox</p>	<p><input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed</p>

Finding	CAR 03		
<p>Classification</p>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding (VVB)</p>	<p>During the on-site inspection, it was observed that the backup meter (11131847), has been replaced.</p> <p>PP is requested to provide the meter replacement certificate.</p>		
<p>Corrective Action or clarification #1 (PP shall write a detailed and clear corrective action or further information for clarification as per finding)</p>	<p>The serial numbers in the MR were incorrect (although the calibration certificates and generation records had the correct serial numbers). The correct serial numbers for the main and backup meters are:</p> <p>Main Meter: 10001847</p> <p>Backup Meter 1: 1131803</p> <p>Backup Meter 2: 1131804</p> <p>Of these, the Main Meter was replaced on 3rd July 2020 following a defect identified on 4th June 2020 (after the monitoring period). The backup meters have remained in place. The calibration record and new meter installation report are provided: CAR03_calibration_error.pdf and CAR03_New_meter.pdf</p>		

VVB Assessment #1 The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and VVB assessments (#2, #3, etc.) shall be added.	PP has revised the serial number of the meters in the MR. The calibration records and new meter installation report have verified the replacement of the energy meter. CAR 03 is closed.
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR 04		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (VVB)	PP is requested to provide meter calibration decision.		
Corrective Action or clarification #1 (PP shall write a detailed and clear corrective action or further information for clarification as per finding)	Decision has been provided as CAR04_Calibration_decision.pdf		
VVB Assessment #1 The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and VVB assessments (#2, #3, etc.) shall be added.	PP has provided the meter calibration decision. CAR 04 is closed.		
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR 05		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (VVB)	Last calibration date provided in the appendix 2 of the monitoring report v1, is 25/08/2018.		

	<p>The last date of the monitoring period is 31/08/2018, as there is a difference of 5 days.</p> <p>PP is requested to provide the next calibration date and calibration certificate as well.</p>
<p>Corrective Action or clarification #1 (PP shall write a detailed and clear corrective action or further information for clarification as per finding)</p>	<p>Additional calibration information has been added in the MR and certificates provided as CAR05_MM.pdf, CAR05_BM1.pdf, and CAR05_BM2.pdf</p>
<p>VVB Assessment #1 The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and VVB assessments (#2, #3, etc.) shall be added.</p>	<p>PP has provided the meter calibration details in the MR and have provided the calibration certificates, confirming there is no delay in calibration.</p> <p>CAR 05 is closed.</p>
<p>Conclusion Tick the appropriate checkbox</p>	<p><input type="checkbox"/> To be checked during the next periodic verification</p> <p><input type="checkbox"/> Outstanding finding (not closed)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>

Finding	CAR 06		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding (VVB)	<p>In section 2.2 of the monitoring report v1, for the risk “Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)”, the mitigation measure provided is not in line with the registered PDD.</p>		
<p>Corrective Action or clarification #1 (PP shall write a detailed and clear corrective action or further information for clarification as per finding)</p>	<p>This has been updated to be in line with the PDD.</p>		
<p>VVB Assessment #1 The assessment shall encompass all open issues in the finding. In case of non-closure, additional corrective action and VVB assessments (#2, #3, etc.) shall be added.</p>	<p>PP has provided the risk mitigation measure in the section in 2.2 of the MR.</p> <p>The measures has been verified during the on site inspection.</p>		


Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the next periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed
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APPENDIX 6: ABBREVIATIONS

BE	Baseline Emissions
CAR	Corrective Action Request
CC IPL	Carbon Check (India) Private Limited
CDM	Development
CL	Clarification Request
EF	Emission Factor
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Green House Gases
GS	Gold Standard
IREC	Interstate Renewable Energy Council
LSC	Local Stakeholder consultation
MR	Monitoring report
MW	Mega watt
MWH	Mega watt per hour
PDD	Project Design Document
PP	Project Proponent
QA	Quality Assurance

QC	Quality Council
SDG	Sustainable Development Goal
TCO2	Tonne carbon dioxide
VCS	Verified Carbon Standard
VCU	Verified Carbon Units
VER	Verified Emission Reduction
VVB	Validation/Verification Body

APPENDIX 7: COMPETENCY CERTIFICATE



Carbon Check (India) Private Limited

Certificate of Competency

Ms. Aparna Choudhary

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

for the following functions and requirements:

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

in the following Technical Areas:

<input checked="" type="checkbox"/> TA 1.1	<input checked="" type="checkbox"/> TA 1.2	<input type="checkbox"/> TA 2.1	<input checked="" type="checkbox"/> TA 3.1	<input type="checkbox"/> TA 4.1
<input type="checkbox"/> TA 4. n	<input type="checkbox"/> TA 5.1	<input type="checkbox"/> TA 5.2	<input type="checkbox"/> TA 7.1	<input type="checkbox"/> TA 8.1
<input type="checkbox"/> TA 9.1	<input type="checkbox"/> TA 9.2	<input type="checkbox"/> TA 10.1	<input checked="" type="checkbox"/> TA 13.1	<input checked="" type="checkbox"/> TA 13.2
<input type="checkbox"/> TA 14.1	<input type="checkbox"/> TA 15.1	<input type="checkbox"/> TA 16.1		

<p>Issue Date</p> <p>5th December 2023</p> <p><i>Priya Suman</i></p> <hr/> <p>Ms. Priya Suman Compliance Officer</p>	<p>Expiry Date</p> <p>31st December 2024</p> <p><i>Sanjay Agarwalla</i></p> <hr/> <p>Mr. Sanjay Kumar Agarwalla Technical Director</p>
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Revision History of the document:

Revision date	Summary of changes
2022 ¹	Annual revision
Jan 2023	Annual revision
Dec 2023	Change in the template due to revision in TA and function

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

¹ Please refer to previous version of FM 7.9 for the revision history



Carbon Check (India) Private Limited

Certificate of Competency

Ms. Jaya Rajput

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

for the following functions and requirements:

- Validator
- Technical Reviewer
- CCB Expert
- SDG+
- Local Expert for India
- Verifier
- Health Expert
- Legal Expert
- Social no-harm(S+)
- Team Leader
- Gender Expert
- Financial Expert
- Environment no-harm(E+)
- Technical Expert
- Plastic Waste Expert
- Environmental, Health and Safety financial matters

in the following Technical Areas:

- TA 1.1
- TA 4. n
- TA 9.1
- TA 14.1
- TA 1.2
- TA 5.1
- TA 9.2
- TA 15.1
- TA 2.1
- TA 5.2
- TA 10.1
- TA 16.1
- TA 3.1
- TA 7.1
- TA 13.1
- TA 4.1
- TA 8.1
- TA 13.2

Issue Date

5th December 2023

Priya Suman

Ms. Priya Suman
Compliance Officer

Expiry Date

31st December 2024

Sanjay Agarwalla

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
2022	Initial Adoption
Jan 2023	Annual revision
Dec 2023	Change in the template due to revision in TA and function



Carbon Check (India) Private Limited

Certificate of Competency

Ms. Indumathi C

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

for the following functions and requirements:

- Validator
- Verifier
- Team Leader
- Technical Expert
- Technical Reviewer
- Health Expert
- Gender Expert
- Plastic Waste Expert
- CCB Expert
- Legal Expert
- Financial Expert
- Environmental, Health and Safety financial matters
- SDG+
- Social no-harm(S+)
- Environment no-harm(E+)
- Local Expert for India and Sri Lanka

in the following Technical Areas:

- TA 1.1
- TA 1.2
- TA 2.1
- TA 3.1
- TA 4.1
- TA 4. n
- TA 5.1
- TA 5.2
- TA 7.1
- TA 8.1
- TA 9.1
- TA 9.2
- TA 10.1
- TA 13.1
- TA 13.2
- TA 14.1
- TA 15.1
- TA 16.1

Issue Date

5th December 2023

Expiry Date

31st December 2024

Priya Suman

Ms. Priya Suman
Compliance Officer

Sanjay Agarwalla

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
2022 ¹	Annual revision
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Dec 2023	Change in the template due to revision in TA and function

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¹ Please refer to previous version of FM 7.9 for the revision history