PROJECT REVIEW REPORT

This project review report includes findings raised during Verra's review of the project specified below. The VVB must address the findings before the project request can be considered for approval by Verra. The project review report will be made publicly available on the Verra Registry. Confidential information may be provided in separate attachments.

Project ID	4559
Project Name	Anhui Zhujixi CMM Utilization Project
Review Type	Registration and Verification
Program(s)	VCS Program
Crediting Period	14 December 2021 to 13 December 2031
Project Proponent	Huainan Huamei Pushi New Energy Technology Co., Ltd
Methodology	ACM0008 – Abatement of methane from coal mines version 8.0
VVB	China Classification Society Certification Co. Ltd.
Assessment Criteria	*VCS Standard, v4.5*
Date of First Issue	09 July 2024
Date of Second Issue	02 October 2024
Review Conclusion	Approved
Date of Final Issue	15 November 2024

FINDINGS

#	Finding Description	VVB Response	Status
1	Sectoral Scope		
	<u>Issue</u> In section 1.3 of the PDMR, it is not clear how sectoral scope 1 is relevant for the project. In the Joint VVR, the VVB assesses the project against sectoral scope 8. <u>Action Required</u> The VVB must provide its assessment of whether sectoral scope 1 is relevant for the project. Further, the VVB must ensure that the project proponent updates section 1.3 of the PDMR should it deem necessary. <u>Program Rule(s)</u> *ACM0008 – Abatement of methane from coal mines version 8.0.*	**Round 1** <u>VVB Response</u> The project applies CDM methodology ACM0008 v08.0 dated 21-Feb-2014. As per the CDM standard Applicability of sectoral scopes v01.0 dated 11-March-2016, ACM0008 falls under sectoral scope 1 Energy industries (renewable - / non-renewable sources) and scope 8 Mining/mineral production. The project utilizes coal mine methane to generate hot air to dry the coal slime, meaning the heat generated by the project is used to meet the energy demand, thus falls under both scope 1 and 8. Section 3.1 of the Joint VVR has been updated accordingly. No revision to the joint PDMR is needed. <u>Verra Response</u> As per CDM's *ACM0008 v8.0,* the methodology falls under sectoral scopes 8 and 10. 1. The VVB must ensure that the project proponent aligns the project's sectoral scopes as per the methodology. 2. The VVB must update the Joint VVR accordingly. The finding remains open. **Round 2** <u>VVB Response</u> 1. It is confirmed that the methodology falls under sectoral scopes 8 and 10 as per CDM's ACM0008 v8.0. 2. The Joint PDMR and Joint VVR has been revised accordingly. The description in section 3.1 has been	Closed

		modified. The latest version of PDMR and IRR was added in the reference.	
		Verra Response The VCS joint PD/MR and VCS joint VR/VR have been updated. This finding is now closed, and no further response is required.	

#	Finding Description	VVB Response	Status
2	**Estimated ERs not aligned between the PDMR and ER calculations spreadsheet**		
	Issue In section 1.11 of the PDMR, the estimated ERs are not aligned with the ER calculations spreadsheet. Action Required The VVB must ensure that the project proponent corrects the ER calculations values in section 1.11 of the PDMR and the ER calculations spreadsheet ensuring they are aligned throughout the project documents.	**Round 1** VVB Response The estimated ERs in section 1.11 of the joint PDMR has been updated and confirmed to be consistent with the ER calculations spreadsheet and VVR. Verra Response The correction made to the MR has been reviewed and accepted. The finding is closed.	Closed

#	Finding Description	VVB Response	Status
3	**Treatment capacity**		
	Issue In section 1.12 of the PDMR, it is unclear why the project will treat the CMM at a lower capacity than its total installed treatment capacity. The project proponent describes that each set of RTOs have a treatment capacity of about 30,000Nm3/h totaling to 120,000Nm3/h for the four sets of RTOs operating at 7200 hours per year. However, the project expects to destroy 10.368 million Nm3 pear year.	**Round 1** VVB Response The audit team confirm that the actual installed capacity of the RTOs is consistent with project design and deemed reasonable. The said 10.368 million Nm3 **METHANE** pear year in the joint PDMR refers to pure methane with 100% CH4 content, not the coal mine methane entering the RTOs with CH4 content of around 1.2%.	Closed

	Action Required The VVB must provide its detailed assessment and justification of the above-described and ensure the project proponent updates the PDMR should it deem necessary.	The capacity of 30,000Nm3/h for installed RTOs refers to the gas volume of coal mine methane with 1.2% CH4 content. The installed four sets of RTOs are designed to destroy 864 million Nm3 (=30,000*4*7200/1,000,000) coal mine methane with CH4 content of around 1.2% annually, which amounts to 10.368 (=864*1.2%) million Nm3 pure methane with 100% CH4 content, therefore consistent with project design. Verra Response The response provided justifies the issue related to the finding. Therefore, the response has been reviewed and accepted. The finding is closed.	

#	Finding Description	VVB Response	Status
4	Various on additionality in the PDMR and Joint VVR		
	Issue 1. In section 3.4.5 of the Joint VVR, the VVB has not assessed whether the project meets regulatory surplus. 2. In section 3.5.2 of the PDMR, the project proponent has not included the date of investment nor has this date been assessed by the VVB in section 3.4.5 of the Joint VVR. 3. The project's IRR sheet has not been submitted for review. 4. In section 3.4 and 3.5 of the PDMR, the footnote links 19 and 28 are not accessible. 5. In section 3.5 of the PDMR, the project proponent provides a value for static investment. The same value is provided in the section 3.4.5 of the Joint VVR under the "value column, however, the VVB refers to a different value for total static investment in the "justification" column.	**Round 1** VVB Response 1. The regulatory surplus has been demonstrated in section 3.4.5 of the joint VVR. 2. The investment decision date of the project has been added in section 3.5.2 of the PDMR, and verified by the VVB in section 3.4.5 of the joint VVR. 3. The project's IRR sheet has been submitted along with this response. 4. The VVB double checked the link in footnote links 19 and 28, and confirms the two links are both accessible within the boundary of mainland China. There's possibility of IP block from visitors outside mainland China. 5. The value of 82,961,811CNY in the column "Justification" in the section 3.4.5 of the Joint VVR refers to the actual project cost which has been detailed in column "Crosscheck" for the same parameter. The description in the column "Justification" has been rephrased to avoid	Closed

	6. In section 3.4.5, the VVB under "OM costs" the VVB has not assessed the Material Fee. Action Required 1. In section 3.4.5 of the Joint VVR, the VVB must provide its assessment of whether the project meets regulatory surplus. 2. In section 3.5.2 of the PDMR, the VVB must ensure that the project proponent provides the date of investment of the project. Further, in section 3.4.5 of the Joint VVR, the VVB must provide its assessment of the date of investment. 3. The VVB must ensure that the project proponent submits an IRR sheet. 4. The VVB must ensure that the project proponent ensures links 19 and 28 are accessible in the PDMR sections 3.4 and 3.5. 5. The VVB must provide a justification of its assessment of 'total static investment" and reference of two values in section 3.4.5 of the Joint VVR and update the document should it deem appropriate. 6. In section 3.4.5, the VVB must provide its assessment of the Material Fee. Program Rule(s) *VCS Standard v4.5, section 3.14* *TOOL07 Combined tool to identify the baseline scenario and demonstrate additionality, version 7*	misunderstanding. 6. It is validated that the so-called "Material Fee" of the "OM costs" actually refers to electricity consumption. The material consumed by the project only includes recovered low-concentration coal mine methane, which is supplied by the coal mine free of charge, therefore, to avoid misunderstanding, the "Material Fee" in the joint PDMR and the IRR sheet has been revised to "Energy cost". The energy cost (electricity fee) has already assessed in the joint VVR. Verra Response The Investment Analysis value names in the PDMR, IRR calculations sheet and Joint VVR, are not consistent throughout the documents. 1. The VVB must ensure that the project proponent updates the PDMR and IRR calculations sheet to ensure that all value names are consistent throughout all project documents. 2. The VVB must update the Joint VVR to ensure that the value names are consistent as per the PDMR and IRR calculations sheet. The finding remains open. **Round 2** VVB Response (Pending) 1.The PDMR and IRR have been checked, and the project proponent reconciled the value names in the documents. Value names of the parameters in PDMR have been revised to be consistent with IRR sheet. Revised value (in table 3 of the PDMR and other paragraphs) names include: -From "Annual dry coal slime output" to "Annual coal slime output" -From "Coefficient of welfare" to "Welfare rate (of salary)" -From "OM cost" to "Breakdown of annual operation and	

		management cost" -From "Project lifetime (excluded the construction period) "to "*Operation Period"* -From "Coal slime drying tariff "to "Coal slime drying tariff (including VAT)" The parameter "Insurance rate" was added in table 3 of the PDMR to be consistent with IRR sheet "Annual O&M cost". 2.The Joint VVR has been updated according to the PDMR and IRR. Revised value (in the table of section 3.4.5) names include: -From "Annual dry coal slime output" to "Annual coal slime output" -From "Coefficient of welfare" to "Welfare rate (of salary)". -From "OM cost" to "Breakdown of annual operation and management cost". -From "Project lifetime (excluded the construction period) "to "*Operation Period".* -From "Coal slime drying tariff "to "Coal slime drying tariff (including VAT)". -From "Insurance fee" to "Insurance rate".	
		Verra Response This finding is now closed, and no further response is required.	

#	Finding Description	VVB Response	Status
5	**Incorrect start date in section 4.1 of the PDMR**		
	Issue In section 4.1 of the PDMR, the project proponent has indicated the incorrect start date.	**Round 1** VVB Response The start date in section 4.1 of the PDMR has been corrected.	

	Action Required The VVB must ensure that the start date of the project indicated in section 4.1 of the PDMR is correct.	Verra Response The correction made has been reviewed and accepted. The finding is closed.	Closed

#	Finding Description	VVB Response	Status
6	IPCC sources		
	Issue The PDMR, Joint VVR and ER calculations sheet refer to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Action Required The VVB must ensure that the PDMR, Joint VVR and ER calculations sheet use the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Program Rule(s) *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories*	**Round 1** VVB Response The data source in the PDMR, Joint VVR and ER calculations has been revised to 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. By comparing the two versions of IPCC guidelines, the audit team confirms that the values of relevant parameters sourced from 2006 IPCC guidelines are the same to the ones in 2019 Refinement to 2006 IPCC guidelines, therefore the ER calculation results remains still in the updated the PDMR, Joint VVR and ER calculations. Verra Response The changes made have been reviewed and accepted. The finding is closed.	Closed