

VCS PROJECT REVIEW REPORT

Project ID	1577
Project Name	Fujian Yong'an Improved Forest Management Project
Project Proponent	Yong'an Forestry Bureau of Fujian province, P.R. China
Methodology	VM0010 Methodology for Improved Forest Management: Conversion from Logged to Protected Forest
Sectoral Scope(s)	14: Agriculture, Forestry, and Other Land Use
Validation/Verification Body (VVB)	China Environmental United Certification Center Co., Ltd. (CEC)
Registry	Markit

Assessment Criteria	VCS Standard, v3.5; VM0010 Methodology for Improved Forest Management: Conversion from Logged to Protected Forest, v1.2
Date of First Issue	18 November 2016
Date of Second Issue	22 December 2016
Date of Final Issue	22 December 2016

Summary:

An accuracy review of the *Fujian Yong'an Improved Forest Management Project* registration and issuance request has been conducted by VCS in accordance with Section 4.3 of the *Registration and Issuance Process*.

The accuracy review has raised 5 assessment findings and one minor finding, detailed below. The VVB, in coordination with the project proponent, is hereby required to provide a response to the assessment findings presented in Section 1. The 5 assessment findings must be addressed to the satisfaction of VCS. The VVB need not address the minor finding(s) during this review. Please note, however, that where VCS finds consistent minor findings by the VVB in future reviews, minor findings shall be escalated to assessment findings.

This findings report may be made publically available. Confidential information may be provided as separate attachments.

1 ASSESSMENT FINDINGS

Finding 1

Section 5.3.6 of the *VCS Standard* requires that VVBs produce a validation report using the *VCS Validation Report Template* and adhere to all instructional text within the template.

Section 5.1.2 of the *VCS AFOLU Requirements* requires VVBs to conduct an assessment of the risk analysis produced by the project proponent in accordance with the *VCS AFOLU Non-Permanence Risk Tool*.

Section 3.3 of the *VCS Validation Report Template* requires VVBs to provide the following information for each risk factor included in the AFOLU Non-Permanence Risk Report: an assessment of all rationale, assumptions and justifications used to support the risk score; an assessment of any documentation and data provided to support the risk score; and, a conclusion regarding the appropriateness of the risk score.

Though Section 3.3 of the validation report includes a summary of the non-permanence risk assessment conducted, the VVB is requested to update the validation report to include information on the assessment of each risk score in accordance with the VCS reporting requirements described above.

VVB Response:

The assessment of each risk score in accordance with the VCS reporting requirements is in section 3.3 of the validation report. Please refer to the footnote of each score for details.

Through reviewing the documents provided by PP (e.g. the business license, the management regulation, development agreement signed between the farmers and PP, financial analysis calculation, etc.), and other public available information (e.g. WGI published by World Bank, etc.), CEC confirmed that the risk score of every risk factor is appropriate, the non-permanence risk analysis is correctly conducted according to the AFOLU Non-Permanence Risk Tool (version 3.2) based on the actual situation of the project.

VCS Response:

VCS recognizes that the assessment of some risk ratings has been included in footnotes in section 3.3 of the validation report. However, the assessment of all risk ratings has not been included; for example, no information has been included on the assessment of the appropriateness of natural risk ratings.

The VVB is requested to update section 3.3 to include information about the assessment of each risk rating, including but not limited to natural risk, in accordance with VCS reporting requirements.

VVB Response:

The information about the assessment of each risk rating has been updated in section 3.3 of the validation report.

VCS Response:

Section 3.3 of the validation report has been updated to include additional information about the assessment of each risk rating. No further action is required in respect of this finding.

Finding 2

Section 5.3.6 of the *VCS Standard* requires that VVBs produce a validation report using the *VCS Validation Report Template* and adhere to all instructional text within the template.

Section 3.2.8 of the *VCS Validation Report Template* requires VVBs to “Identify the parameters to be monitored and describe the steps taken to validate the suitability and eligibility of monitoring equipment and procedures”.

Though Section 3.2.8 of the validation report does identify the parameters to be monitored, it does not describe the steps taken to validate the suitability and eligibility of monitoring equipment and procedures. The VVB is requested to update the information included in Section 3.2.8 of the validation report in accordance with VCS reporting requirements described above.

VVB Response:

In section 3.2.8 of the validation report, CEC checked the China Forest Law against the actual implementation of the project forest and confirmed the suitability and eligibility of such parameters as 1) Illegal Logging PRA Results; 2) $A_{burn,i,t}$; 3) $A_{dist,i,t}$; 4) $A_{DIST_IL,i}$; 5) $C_{DIST_IL,i,t|PRJ}$; 6) AP_i ; 7) PMP_i ; 8) A_i ; 9) DBH.

For parameter Illegal Logging PRA Results, $A_{burn,i,t}$, $A_{dist,i,t}$, $A_{DIST_IL,i}$, $C_{DIST_IL,i,t|PRJ}$ and AP_i , the Chinese government has established a set of laws and regulations to protect the national Forest. In China Forest Law, it regulates that all the local government in China should set up the forest protection organizations. During the on-site inspection, CEC confirmed that the local forest authority has taken comprehensive forest protection measures to prevent the illegal logging, fire and other disease & insect pest. The measures include routine patrol conducted by the forest police, automatic monitoring system, etc.

For parameter PMP_i , CEC validated the exclusion of activity shifting leakage and market leakage, and confirmed that the calculation of PMP_i is not applicable.

For parameter A_i , CEC reviewed the National Forest Resource Continuous Investigation Technical Regulation, the local second class forest investigation, and the certification of Yunnan Institute of forest Inventory and Planning, and confirmed that the suitability and eligibility of the source of A_i is justified.

For parameter DBH, CEC reviewed the Forest Resource Continuous Investigation Technical Regulation and confirmed that the measurement method is in line with the national regulations.

VCS Response:

Section 3.2.8 of the validation report has been updated to include assessments of the

appropriateness of each parameter to be monitored. No further action is required in respect of this finding.

Finding 3

Section 5.3.7 of the *VCS Standard* requires that VVBs produce a verification report using the *VCS Verification Report Template* and adhere to all instructional text within the template.

Section 4.2 of the *VCS Verification Report Template* requires VVBs to describe the steps taken to assess the appropriateness of any default values used in the monitoring report.

Though section 4.2 of the verification report does identify the default parameters (ie 'data and parameters available at validation') used, it does not describe the steps taken to assess the appropriateness of the default values used in the monitoring report. The VVB is requested to update the information included in section 4.2 of the validation report in accordance with VCS reporting requirements described above.

VVB Response:

The steps taken to assess the appropriateness of the default values used in the monitoring report has been complemented in the verification report.

- 1) $V_{l,j,i,sp}$, Merchantable volume for tree l of species j in sample plot spin stratum i
This value is from the local second forest inventory issued by the qualified investigation institute. CEC checked the inventory and certification of the investigation institute and confirmed the appropriateness.
- 2) CF_j , Carbon fraction of dry matter for species j
This value applied is 0.5 $tc \cdot tdm^{-1}$, which is from the default value of the methodology.
- 3) D_j , Basic wood density of species j in $t \cdot d.m. \cdot m^{-3}$
Three methods have been recommended by the methodology, for the project activity, method a) National species-specific or group of species-specific values, with the highest preference is adopted. The value from the GHG inventory of land use change and Forestry from the "the second national information notice on China's climate change" is applied to the project activity. CEC checked the Chapter "Land Use Change and Forestry GHG Inventory (2013)" and confirmed the application value of 0.307, 0.38 and 0.482 with Chinese Fir, Masson Pine and Broad-leaf Tree is correct.
- 4) $f_i(X,Y,...)$, Allometric equation(s) for species j linking measured tree variable(s) to aboveground biomass of living trees
As for the project tree species, there are no allometric equation applied in the project area, the average annual growth is adopted for the estimated calculation of carbon stock change.
The average annual growth is adopted from the statement by the local forest authority. During the monitoring period, the average annual growth will be monitored by the total growth divided by the length of the monitoring period.

- 5) Fraction of wood products that will be emitted to the atmosphere between 3 and 100 years after production (OF)

Fraction of wood products that will be emitted to the atmosphere within 3 years of production (SLF)

Fraction of extracted biomass effectively emitted to the atmosphere during production (WW)

These values applied is listed as followed, which is from the default value of the methodology.

WW:24%

SLF: 0.12

OF: 0.62

CEC checked the methodology and confirmed the appropriateness.

- 6) $BCEFR$, Biomass conversion and expansion factor applicable to wood removals in the project area

Three methods have been recommended by the methodology, for the project activity, method b) National species-specific or group of species-specific values, is adopted. The value from the GHG inventory of land use change and Forestry from the "the second national information notice on China's climate change" is applied to the project activity. CEC checked the Chapter "Land Use Change and Forestry GHG Inventory (2013)" and confirmed the application value of 0.502, 0.559 and 0.730 with Chinese Fir, Masson Pine and Broad-leaf Tree is correct.

- 7) G_{gi} , Emission factor for stratum i for gas g

As no fire occurs during the monitoring period, This parameter is not applicable to the project activity.

- 8) RGR_i , Forest re-growth rate post timber harvest for stratum i

Three methods have been recommended by the methodology, for the project activity. Method b is applied. The average annual regrowth is confirmed by the local forest authority based on their expertise.

And the RGR_i can therefore be calculated by the biomass expansion factor, density and carbon fraction of the separate species.

- 9) $V_{EX,j,i|BSL}$, Mean volume of extracted timber per unit area for species j in stratum i

The timber harvest and management plan sets the allowable mean extracted volume from the merchantable volume of timber in the forest second class investigation ($V_{j,i|BSL}$), based on legal limits. CEC checked the timber harvest and management plan and confirmed the appropriateness.

- 10) $A_{i,p}$, Area covered by stratum i over land parcel p

This value is calculated from the forest second class investigation issued by the qualified

investigation institute. CEC checked the investigation and confirmed the appropriateness.

VCS Response:

Section 4.2 of the verification report has been updated to include assessments of the appropriateness of each default value. No further action is required in respect of this finding.

Finding 4

Section 5.3.6 of the *VCS Standard* requires that VVBs produce a validation report using the *VCS Validation Report Template* and adhere to all instructional text within the template.

Section 3.1 of the *VCS Validation Report Template* requires VVBs to identify, discuss and justify conclusions regarding other entities involved in the project.

Section 3.1 of the validation report does not identify, discuss or justify conclusions regarding other entities involved in the project. The VVB is requested to update section 3.1 of the validation report to include this information about the two 'other entities' identified in section 1.4 of the monitoring report.

VVB Response:

In 1.4 of PD and MR, two entities involved in the project activity. They are the project consultant, CITIC Environment Investment Group Co., Ltd (CITIC Environment) and the partner of the PP, China Green Carbon Foundation (CGCF).

As the PP representative, Forestry Bureau is not able to apply the emission reductions from their IFM project for GHG-related environmental credit under the VCS Program, they committed their partner-CGCF to help them. The CGCF then choose CITIC Environment as the consultant to be responsible for the GHG credits application under the VCS program.

By reviewing the VCS development agreement signed between PP and CGCF, as well as the agreement between CGCF and CITIC Environment, CEC confirmed the roles of these two entities involved in the project activity.

VCS Response:

Section 3.1 of the validation report has been updated to include assessment of and conclusion on the other entities involved with the project. No further action is required in respect of this finding.

Finding 5

Section 5.3.7 of the *VCS Standard* requires that VVBs produce a verification report using the *VCS Verification Report Template* and adhere to all instructional text within the template.

Section 6 of the *VCS Verification Report Template* requires VVBs to provide a conclusion on the quantity of GHG emission reductions or removals in tCO₂ equivalents achieved by the project during the

verification period.

Section 5 of the verification report includes a conclusion on the post-buffer quantity of GHG emission reductions or removals achieved by the project during the verification period. The VVB is requested to update section 5 of the verification report to also include the pre-buffer quantity of GHG emission reductions or removals achieved by the project during the verification period.

VVB Response:

The pre-buffer quantity of GHG emission reductions or removals achieved by the project during the verification period has been updated in section 5 of the verification report.

Year	GHG _{NET,BS} L,t	GHG _{NET,PR} J,t	GHG _{LK,LtPF,t}	GHG _{CREDITS,LtP} F,t	U _{total,LtP} F	Credits _{total,Lt} PF	Risk score	BU _{IFM,VC} S	VCU _{net,IF} M
01/07/2011-31/12/2011	4,941	-29,964	-	34,906	12.67%	34,906	25	8,726	26,180
01/01/2012-31/12/2012	10,027	-59,603	-	69,630	12.67%	69,630	25	17,408	52,222
01/01/2013-31/12/2013	10,422	-59,603	-	70,025	12.67%	70,025	25	17,506	52,519
01/01/2014-31/12/2014	10,816	-59,603	-	70,419	12.67%	70,419	25	17,605	52,814
01/01/2015-31/12/2015	11,211	-59,603	-	70,814	12.67%	70,814	25	17,703	53,111
01/01/2016-30/06/2016	5,672	-29,639	-	35,311	12.67%	35,311	25	8,828	26,483
Total	53,089	-298,015	-	351,104		351,104		87,776	263,328
Average									52,666

VCS Response:

Section 5 of the verification report has been updated to include both pre- and post-buffer GHG emission reductions/removals achieved during the monitoring period. No further action is required in respect of this finding.

2 MINOR FINDINGS

Finding 1

Section 5.2.3 of the *VCS Standard* requires projects to be listed on the project pipeline before the opening meeting between the VVB and project proponent and the beginning of the validation process.

The project was listed on the project pipeline on 7 November 2016; the date of issue of the validation report is listed as 12 June 2016 and per section 2.3 of the validation report the opening meeting was held

on 4 February 2015. Please ensure that all projects are listed on the project pipeline before beginning the validation services going forward.

3 ASSESSMENT CONCLUSION

All findings were deemed closed on 22 December 2016. Updates to both the validation and verification reports provided sufficient information to close findings 1, 2, 3, 4 and 5. No further VVB actions are required.