

HUBEI HONGSHAN IFM (CONVERSION OF LOGGED TO PROTECTED FOREST) PROJECT



Zhong Che (Beijing) Environment Energy Technology Development Co., Ltd.

Add: Room 1006, Tower B, Juanshi Tiandi Mansion, No.502 Wangjing West Street,
ChaoYang District, Beijing, P.R.China

Tel: +86 10 51994158

Project Title	Hubei Hongshan IFM (conversion of logged to protected forest) Project
Version	02
Date of Issue	06/12/2019
Project ID	1935
Monitoring Period	01/01/2015-30/06/2019
Prepared By	Zhong Che (Beijing) Environment Energy Technology Development Co., Ltd.
Contact	Room 1006, Tower B, Juanshi Tiandi Mansion, No.502 Wangjing West Street, ChaoYang District, Beijing, P.R.China Tel:+86 10 51994158, Email : taoyun@zcenergy.net

1 INTERNAL RISK

Project Management		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a)	Species planted (where applicable) associated with more than 25% of the stocks on which GHG credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zone(s) in which the project is located.	Not applicable
b)	Ongoing enforcement to prevent encroachment by outside actors is required to protect more than 50% of stocks on which GHG credits have previously been issued.	Not applicable
c)	Management team does not include individuals with significant experience in all skills necessary to successfully undertake all project activities (ie, any area of required experience is not covered by at least one individual with at least 5 years' experience in the area).	Not applicable
d)	Management team does not maintain a presence in the country or is located more than a day of travel from the project site, considering all parcels or polygons in the project area.	Not applicable
e)	Mitigation: Management team includes individuals with significant experience in AFOLU project design and implementation, carbon accounting and reporting (eg, individuals who have successfully managed projects through validation, verification and issuance of GHG credits) under the VCS Program or other approved GHG programs.	Not applicable
f)	Mitigation: Adaptive management plan in place.	-2 ¹
Total Project Management (PM) [as applicable, (a + b + c + d + e + f)]		-2
Total may be less than zero.		

Financial Viability		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a)	Project cash flow breakeven point is greater than 10 years from the current risk assessment	3 ²
b)	Project cash flow breakeven point is greater than 7 and up to 10 years from the current risk assessment	Not applicable
c)	Project cash flow breakeven point greater than 4 and up to 7 years from the current risk assessment	Not applicable
d)	Project cash flow breakeven point is 4 years or less from the current risk assessment	Not applicable
e)	Project has secured less than 15% of funding needed to cover the total cash out before the project reaches breakeven	Not applicable

¹ Based on the monitoring manual, the project proponent has established a complete set of management regulation in the operation & maintenance, disturbance prevention and the related contingency plan.

² Based on Hongshan comparison NPV sheet, project cash flow is negative in crediting period, so cash flow breakeven point is greater than 10 years from the current risk assessment.

f)	Project has secured 15% to less than 40% of funding needed to cover the total cash out required before the project reaches breakeven	Not applicable
g)	Project has secured 40% to less than 80% of funding needed to cover the total cash out required before the project reaches breakeven	Not applicable
h)	Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven	Not applicable
i)	Mitigation: Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven	Not applicable
Total Financial Viability (FV) [as applicable, ((a, b, c or d) + (e, f, g or h) + i)]		3
Total may not be less than zero.		

Opportunity Cost		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a)	NPV from the most profitable alternative land use activity is expected to be at least 100% more than that associated with project activities; or where baseline activities are subsistence-driven, net positive community impacts are not demonstrated	8 ³
b)	NPV from the most profitable alternative land use activity is expected to be between 50% and up to 100% more than from project activities	Not applicable
c)	NPV from the most profitable alternative land use activity is expected to be between 20% and up to 50% more than from project activities	Not applicable
d)	NPV from the most profitable alternative land use activity is expected to be between 20% more than and up to 20% less than from project activities; or where baseline activities are subsistence-driven, net positive community impacts are demonstrated	Not applicable
e)	NPV from project activities is expected to be between 20% and up to 50% more profitable than the most profitable alternative land use activity	Not applicable
f)	NPV from project activities is expected to be at least 50% more profitable than the most profitable alternative land use activity	Not applicable
g)	Mitigation: Project proponent is a non-profit organization	Not applicable
h)	Mitigation: Project is protected by legally binding commitment (see Section 2.2.4) to continue management practices that protect the credited carbon stocks over the length of the project crediting period	-2 ⁴
i)	Mitigation: Project is protected by legally binding commitment (see Section 2.2.4) to continue management practices that protect the credited carbon stocks over at least 100 years	Not applicable
Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e or f) + (g + h or i)]		6
Total may be less than 0.		

³ According to section 2.5 of Project Description, the NPV from baseline scenario is 4292*10⁴ Yuan, and the NPV from project is -11420*10⁴ Yuan

⁴ The contract of developing VCS project signed between Zhejiang Zhongzheng Forestry Development Co.,Ltd and Zhong Che (Beijing) Environment Energy Technology Development Co., Ltd. demonstrated that the credited carbon stocks will be protected over the length of the project crediting period.

Project Longevity		
a)	Without legal agreement or requirement to continue the management practice	Not applicable
b)	With legal agreement or requirement to continue the management practice	= 30 - (30/2)=15
Total Project Longevity (PL) May not be less than zero		15

Internal Risk	
Total Internal Risk (PM + FV + OC + PL) Total may not be less than zero.	22

2 EXTERNAL RISKS

Land Tenure and Resource Access/Impacts		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a)	Ownership and resource access/use rights are held by same entity(s)	Not applicable
b)	Ownership and resource access/use rights are held by different entity(s) (eg, land is government owned and the project proponent holds a lease or concession)	2 ⁵
c)	In more than 5% of the project area, there exist disputes over land tenure or ownership	Not applicable
d)	There exist disputes over access/use rights (or overlapping rights)	Not applicable
e)	WRC projects unable to demonstrate that potential upstream and sea impacts that could undermine issued credits in the next 10 years are irrelevant or expected to be insignificant, or that there is a plan in place for effectively mitigating such impacts.	Not applicable
f)	Mitigation: Project area is protected by legally binding commitment (eg, a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period	-2
g)	Mitigation: Where disputes over land tenure, ownership or access/use rights exist, documented evidence is provided that projects have implemented activities to resolve the disputes or clarify overlapping claims	Not applicable
Total Land Tenure (LT) [as applicable, ((a or b) + c + d + e + f + g)] Total may not be less than zero.		0

Community Engagement		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating

⁵ The forest right certificate and the business license of Zhejiang Zhongzheng Forestry Development Co.,Ltd

a)	Less than 50 percent of households living within the project area who are reliant on the project area, have been consulted	Not applicable
b)	Less than 20 percent of households living within 20 km of the project boundary outside the project area, and who are reliant on the project area, have been consulted	Not applicable
c)	Mitigation: The project generates net positive impacts on the social and economic well-being of the local communities who derive livelihoods from the project area	-5 ⁶
Total Community Engagement (CE) [where applicable, (a + b + c)] Total may be less than zero.		-5

Political Risk		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a)	Governance score of less than -0.79	Not applicable
b)	Governance score of -0.79 to less than -0.32	4 ⁷
c)	Governance score of -0.32 to less than 0.19	Not applicable
d)	Governance score of 0.19 to less than 0.82	Not applicable
e)	Governance score of 0.82 or higher	Not applicable
f)	Mitigation: Country is implementing REDD+ Readiness or other activities, as set out in this Section 2.3.3.	-2 ⁸
Total Political (PC) [as applicable ((a, b, c, d or e) + f)] Total may not be less than zero.		2

External Risk	
Total External Risk (LT + CE + PC) Total may not be less than zero.	0

3 NATURAL RISKS

Natural Risk

⁶ Based on the survey of forest management implemented by the project proponent in Dec 2014, the local communities have positive attitude towards the implementation of the project

⁷ <http://info.worldbank.org/governance/wgi/index.aspx#home>

⁸ China has an established Designed National Authority under the CDM and has at least one registered CDM Afforestation/Reforestation project. Thus, the mitigation discount can be applied. (<http://cdm.unfccc.int/>)

Significance	Likelihood				
	Less than every 10 years	Every 10 to less than 25 years	Every 25 to less than 50 years	Every 50 to less than 100 years	Once every 100 years or more, or risk is not applicable to the project area
Catastrophic (70% or more loss of carbon stocks)	Not applicable	Not applicable	Not applicable	Not applicable	0
Devastating (50% to less than 70% loss of carbon stocks)	Not applicable	Not applicable	Not applicable	Not applicable	0
Major (25% to less than 50% loss of carbon stocks)	Not applicable	Not applicable	Not applicable	Not applicable	0
Minor (5% to less than 25% loss of carbon stocks)	Not applicable	Not applicable	Not applicable	Not applicable	0
Insignificant (less than 5% loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event)	Not applicable	Not applicable	Not applicable	Not applicable	0
No Loss	Not applicable	Not applicable	Not applicable	Not applicable	0
LS Score					
Mitigation					
Prevention measures applicable to the risk factor are implemented					0.50
Project proponent has proven history of effectively containing natural risk					0.50
Both of the above					0.25
None of the above					Not applicable

Score for each natural risk applicable to the project (Determined by (LS × M))	
Fire (F)	0
Pest and Disease Outbreaks (PD)	0
Extreme Weather (W)	0
Geological Risk (G)	0
Other natural risk (ON)	0
Total Natural Risk (as applicable, F + PD + W + G + ON)	0

4 OVERALL NON-PERMANENCE RISK RATING AND BUFFER DETERMINATION

4.1 Overall Risk Rating

Risk Category	Rating
a) Internal Risk	22
b) External Risk	0
c) Natural Risk	0
Overall Risk Rating (a + b + c)	22

4.2 Calculation of Total VCUs

$$\begin{aligned} VCU_{net|LTPP} &= (Credits_{total,t2|LTPP} - Credits_{total,t1|LTPP}) - Bu_{IFM-VCS} \\ &= (1,195,059-0) - 22\% * (1,195,059-0) = 932,144tCO_2e \end{aligned}$$