



**Verified Carbon
Standard**

NON-PERMANENCE RISK REPORT GUANGXI HUANJIANG IFM (CONVERSION OF LOGGED TO PROTECTED FOREST) PROJECT



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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 (i.e., 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 (e.g., 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

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. And during 01-Jul-2016-31-Dec-2020, the PP has abide by rules well.

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
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

² Based on Huanjiang 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.

³ According to section 3.5.2 of Project Description, the NPV from baseline scenario is 19090*10⁴ Yuan, and the NPV from project is -17206*10⁴ Yuan

		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 0) 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 0) 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.		

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 ⁵ /2)=15
Total Project Longevity (PL)		15
May not be less than zero		

⁴ The contract of developing VCS project signed between Huanjiang Maonan Autonomous County Huashan Forestry Investment Co., Ltd. and Guangzhou Guangtan Carbon Emission Development & Investment Co., Ltd. demonstrated that the credited carbon stocks will be protected over the length of the project crediting period.

⁵ According to the owner's forest ownership document, each owner had more than 60 years of ownership of forest in the project site since the project started. Therefore, the project lifetime can be considered as at least 30 years base on conservative principles.

Internal Risk	
Total Internal Risk (PM + FV + OC + PL)	-2+3+6+15=22
Total may not be less than zero.	

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) (e.g., land is government owned and the project proponent holds a lease or concession)	2 ⁶
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 (e.g., a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period	-2 ⁷
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	Not applicable

⁶ All the forests in the projects belong to different owns, some forests are state-owned and some are privately-owned. The owners authorized the project proponent Huanjiang Maonan Autonomous County Huashan Forestry Investment Co., Ltd. to access this project on their behalf.

⁷ The VCS development consultation and service agreement signed between Huanjiang Maonan Autonomous County Huashan Forestry Investment Co., Ltd. and Guangzhou Guangtan Carbon Emission Development & Investment Co., Ltd. and confirmed that project is protected by legal binding commitment with at least 20 years over the length of the project crediting period.

claims	
Total Land Tenure (LT) [as applicable, ((a or b) + c + d + e + f + g)]	0
Total may not be less than zero.	

Community Engagement		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
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 ⁸
Total Community Engagement (CE) [where applicable, (a + b + c)]		-5
Total may be less than zero.		

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 ⁹
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

⁸ Based on the survey of forest management implemented by the project proponent in 2015, the local communities have positive attitude towards the implementation of the project

⁹ <http://info.worldbank.org/governance/wgi/index.aspx#home>

		applicable
f)	Mitigation: Country is implementing REDD+ Readiness or other activities, as set out in this Section 2.3.3.	-2 ¹⁰
Total Political (PC) [as applicable ((a, b, c, d or e) + f)]		2
Total may not be less than zero.		

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

3 NATURAL RISKS

Explain the significance and likelihood of the natural risk and any mitigation activities implemented, (copy table for each natural risk).

3.1 SIGNIFICANCE

The project may involve some risk category factors about fire, pest and disease outbreak, extreme weather and geological risk. And the corresponding significance of risk category factors are listed as below.

Fire

Pest and disease outbreak

Extreme weather

Geological risk

3.2 LIKELIHOOD

And the corresponding likelihood of risk category factors are listed as below.

Fire

¹⁰ 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/>)

Pest and disease outbreak

Extreme weather

Geological risk

According to the spreadsheet Risk Report Calculation Tool, the corresponding Score (LS) of risk category factors are listed as below.

3.3 SCORE (LS)

Fire

LS = 0.

Pest and disease outbreak LS = 0.

Extreme weather LS =0.

Geological risk LS =0.

3.4 MITIGATION

And the corresponding mitigation of risk category factors are listed as below.

Fire

Pest and disease outbreak

Extreme weather

Geological risk

Natural Risk (Fire)	
Significance	Major. There is a separation zone at a certain distance in the project area. Grass in the biological fire zone, fire roads, forest access roads was shovelled once a year for maintenance, so the fire damage won't be devastating.
Likelihood	Once every 100 years or more, or risk is not applicable to the project area. The project proponent has adopted the necessary measures for fire preventing. There were full-time personnel to carry out regular inspections and investigations and make good forecasts.
Score (LS)	0
Mitigation	According to the Forest Conservation Act of China, local government will set the fireproofing period when using fire is forbidden in the open air; and once a fire disaster occurs, the local government should be responsible for relevant rescuing immediately. And the project proponent is experienced in local natural risk control and has established a Forest Management Manual for the project which includes specific instruction in fire prevention. Therefore, the mitigation is scored as 0.25.

Natural Risk (Pest and Disease outbreaks)	
Significance	Insignificant. According to historical records, the pest and disease risk are not common, and the mixed plantation will prevent the trees from pest and disease outbreaks in a certain way based on technical experience. There were full-time personnel to carry out regular inspections and investigations and make good forecasts.
Likelihood	Once every 100 years or more, or risk is not applicable to the project area. There could hardly be diseases and insects that may damage the planted trees. The diseases and insects will be prevented by routine overseeing.
Score (LS)	0
Mitigation	Upon routine overseeing, the diseases will be treated immediately by biological control once occurred. The chemical pesticides can be used only if there is a serious pest problem erupted in the project area. And the project proponent is experienced in local natural risk control and has established a Forest Management Manual for the project which includes specific instruction in pest and disease prevention and control. Therefore, the mitigation is scored as 0.25.

Natural Risk (Extreme Weather)	
Significance	Insignificant. The potential extreme weather could be frost in winter which might damage the trees that have suffered wounds before, but the damage could be controlled and limited in a relative small scale by adopting warming measures.
Likelihood	Once every 100 years or more, or risk is not applicable to the project area. The project is located in the tropics. According to historical records, the extreme weather is not common in the project area.
Score (LS)	0
Mitigation	If there are frozen branches found after winter, they will be cut off in spring, which enhances their ability of self-healing and is good for the growth of new leaves and branches. And the project proponent is experienced in local natural risk control and has established a Forest Management Manual for the project which includes specific instruction in frost prevention and control. Therefore, the mitigation is scored as 0.25.

Natural Risk (Geological Risk)	
Significance	Minor. The geological risk such as earthquakes around the project area are mostly low intensity, so the damage will be minor.
Likelihood	Once every 100 years or more, According to historical records, there is no earthquakes or volcanoes occurred in recent 100 years around the project area.
Score (LS)	0
Mitigation	If there is an earthquake occurred, the local government will be responsible for the recovery of the forest. And the project proponent is experienced in local natural risk control and has established a Forest Management Manual for the project which includes specific instruction in geological risk control. Therefore, the mitigation is scored as 0.25.

Natural Risk (Other natural risk)	
Significance	0
Likelihood	0
Score (LS)	0
Mitigation	Not applicable

**Score for each natural risk applicable to the project
(Determined by $LS \times M$)**

Fire (F)	0.25
Pest and Disease Outbreaks (PD)	0.25
Extreme Weather (W)	0.25
Geological Risk (G)	0.25
Other natural risk (ON)	0
Total Natural Risk (as applicable, $F + PD + W + G + ON$)	1

4 OVERALL NON-PERMANENCE RISK RATING AND BUFFER DETERMINATION

4.1 Overall Risk Rating

Risk Category	Rating
Internal Risk	22
External Risk	0
Natural Risk	1
Overall Risk Rating (a + b + c)	23

4.2 Calculation of Total VCUs

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emissions or removals (tCO ₂ e)	Buffer pool allocation (tCO ₂ e)	VCUs eligible for issuance
01-Jul-2016-30-Jun-2017	81,411	-72,939	16282	138,068	31,756	106,312
01-Jul-2017-30-Jun-2018	89,099	-72,939	17819	144,219	33,170	111,048
01-Jul-2018-30-Jun-2019	110,088	-72,939	22017	161,010	37,032	123,977
01-Jul-2019-30-Jun-2020	129,639	-72,939	25927	176,651	40,630	136,021
01-Jul-2020-30-Jun-2021	64,353	-36,469	12870	87,952	20,229	67,723
Total	474,591	-328,225	94,915	707,901	162,817	545,081
Average	105,464	-72,938	21,092	157,311	36,181	121,129

