

Non-Permanence Risk Assessment for Rimba Raya

Table 1. Risk Factors for ALL VCS Projects

Risk factors for ALL VCS Projects		
Project Risk	Risk Rating	Notes
Risk of unclear land tenure and potential for disputes	Low	InfiniteEARTH will hold an Ecosystem Restoration Concession License over the project zones and area. This license will provide InfiniteEARTH usage rights for a period of up to 60 years with an option to renew for an additional 30 years beyond that.
Risk of financial failure	Low	The company has executed forward sales triggered upon the first verification that will create an endowment that will sufficiently fund the operational budget through an annuity for the entire life of the project and possibly in perpetuity. Confidential contracts and budgets will be shared with the validator.
Risk of technical failure	Low	No new technologies will be introduced that play a significant or vital role in the implementation of activities on the ground. Forest protection and monitoring activities on the ground invoke best practices from other protected and conservation areas utilized in other parts of Indonesia and internationally. Thus, risk of technical failure is low.
Risk of management failure	Low	InfiniteEARTH has established an experienced management team at the executive, managerial and operational field levels. Where key staff positions are not currently filled, a systematic plan for role and function of the remaining positions has been identified and the persons responsible for those duties in the interim period have been assigned. Apart from its core team, InfiniteEARTH has secured either

		partnerships or contractual agreements with relevant NGOs and expert consulting firms to support its core staff.
Economic Risk		
Risk of rising land opportunity costs that cause reversal of sequestration and/or protection	Low	Although rising land opportunity costs are expected to rise with the price of Oil Palm, the land tenure agreement held by InfiniteEARTH over the Rimba Raya area gives rights to the land for a period of up to 60 years with the opportunity to renew for an additional 30 years beyond that. While the government does have the right to cancel Ecosystem Restoration Concession Licenses, such cancellations can only result from evaluations of performance and a lack of compliance with required environmental impact assessments. Land opportunity costs are not a basis for license cancellation.
Regulatory and social risk		
Risk of political instability	Medium	<p>In the post-Suharto era starting in 1998, Indonesia entered into a process of steady democratization. Since then Indonesia has maintained steady increasing political stability at national and regional levels and rapid political and commercial engagement with the West. Several national forestry sector policies decentralizing control of forest areas to local levels have been but under renewed central government control, in particular those regarding spatial planning and new national policies on Reducing Emissions from Deforestation and Degradation.</p> <p>With the re-election of President Susilo Bambang Yudhoyono in</p>

		<p>2009, political stability in Indonesia is expected to continue to grow. While corruption at all levels continues to be an significant problem in Indonesia, the central government has taken strong steps to tackle the issue through the creation of the Corruption Eradication Commission (Komisi Pemberantasan Korupsi) Indonesia has received intense international attention specifically with respect to REDD, making it further accountable to achieve transparency and stability as a national process.</p> <p>InfiniteEARTH (IE) initially evaluated this to be a low risk factor. However, IE accepts the recommended medium risk rating for political instability at project initiation, given that positive trends in political stability and transparency have yet to be fully demonstrated. IE will monitor indicators of political stability and transparency, which are expected to continue improving in the near-term. IE anticipates that a low risk ranking for this component may be demonstrated in subsequent monitoring year evaluations.</p>
Risk of social instability	Low	<p>Since the end of the Suharto period, there has existed no history of large social unrest in or around the project area, the Province of Central Kalimantan or on a national level that would cause any significant risk to the project. InfiniteEARTH has focused intensively the mitigation of social conflict in the design and approach to community development in Rimba Raya.</p> <p>InfiniteEARTH has already begun to engage with local communities on the ground and involved them directly in project development activities. Local Government and community information gathering</p>

		and sharing has been a central aspect of passing knowledge about the intentions, activities and benefits of the Rimba Raya project.
Natural disturbance risk		
Risk of devastating Fire	Medium	<p>The Rimba Raya project has been subjected to fires over its recent history. Much of this has been the result of human induced fires for agricultural land clearing. The drainage of the peat swamps creates conditions for intense and long burning fires. Thus, one of the driving carbon mitigation functions of the project is to avoid these fires from occurring. This is achieved through preventing the drainage of peat, and putting in place a fire management system including fire watchtowers to rapidly detect, isolate and extinguish any fires that do occur.</p> <p>InfiniteEARTH (IE) initially evaluated this to be a low risk factor. However, IE accepts the recommended medium risk rating for risk of fire at project initiation, given that the fire program is in the process of being fully implemented. IE expects to be able to demonstrate the effectiveness of the Rimba Raya wildfire prevention and suppression program, following its full implementation, so that a low risk rating can be re-evaluated after project initiation.</p>
Risk of pest and disease attacks	Low	Pest and disease attacks are not believed to have been a historical issue in the Rimba Raya project area. Ecological surveys undertaken throughout the project lifetime are one method of detecting new invasive and destructive pests or diseases that may result in carbon loss from the project area through increased tree mortality.
Risk of extreme weather events (e.g. floods, drought, winds)	Low	Central Kalimantan is subject to seasonal shifts in precipitation. River flooding and mild drying of certain peat areas are the two common extremes of these weather patterns. Flooding presents limited risk to the project area, as it is comprised almost entirely of peat swamp

		forest areas that are already flooded seasonally. Extended droughts would present only indirect risk in that it would make the peat more vulnerable to fire. However, fire management programs that will be invoked as a result of this project will be present to manage such risk.
Geological risk (e.g. volcanoes, earthquakes, landslides)	Low	Extreme geological events in Indonesia are experienced regularly. Most notably regular earthquakes, landslides and the 2004 Tsunami. The Rimba Raya project area is of sufficient distance from coastal waters to be impacted by a Tsunami. Risks to the project from earthquakes and landslides are negligible. Borneo ranges are non-volcanic. Only one extinct volcano exists on the island and is situated in the far northern region of the island over 1,000 km away.
Total Risk Calculation	Medium ¹	InfiniteEARTH (IE) initially evaluated total risk to be low. However, IE accepts the recommended total risk rating of medium and agrees to the required buffer withholding of 20% at the initial project verification. IE plans to re-evaluate the medium risk rating in subsequent monitoring years following full project implementation and monitoring, with special attention to those components evaluated to be medium risk at project start up.

¹ According to the VCS risk tool (VCS 2008) and the updates to the risk tool (VCS 2010a, 2010b) the highest rating determines the project's overall risk class and the required buffer withholding percentage shall be the maximum percentage in the buffer range for the determined risk class. Therefore, the total risk is assessed to be Medium and equal to a 20% withholding buffer.

Table 2. Risk Factors and risk ratings applicable to Avoided Planned Deforestation (APD) REDD projects

Risk factors and risk ratings applicable to Avoided Planned Deforestation (APD) REDD projects			
Risk Factor	APD Risk Rating ²		
Land ownership / land management type			
Land owned by private or public forest conservation organization with a good track record in forest conservation activities and able to obtain and enforce nationally recognized legal protection of the land	Medium	<p>Land is owned by central government. InfiniteEARTH is seeking a license for ecosystem restoration that is valid for 60 years with an option for renewal for an additional 30 years. InfiniteEARTH has a partnership with Orangutan Foundation International (OFI) to undertake forest conservation activities. OFI has a long history of conservation, forest protection and orang-utan habitat management activities in the adjacent National Park, Tanjung Puting, to the west.</p> <p>InfiniteEARTH (IE) initially evaluated this to be a very low risk factor. However, IE accepts the recommendation to set the risk as medium for land ownership and management at initial project verification since IE does not own the land. The legal framework and precedent for securing forest protection in Rimba Raya will be further investigated and presented in future re-evaluations of project risk, as it is IE's opinion that land protection and management can be sufficiently secured to</p>	

² Classifications in accordance with VCS Guidelines on AFOLU Non-Permanence REDD Risk Rating for APD, Table 8, Pp. 9-10.

		warrant a low-risk rating in the future.
Land ownership and management dispute by local communities and/or stakeholders.	Low	Although land is legally owned by central government, local community traditional and customary use rights may arise. Land tenure and zoning is a contentious issue between national and community rights across most of Indonesia. In this case however, since the project does not dissuade or prevent normal community land uses, such as local level wood collection, hunting, fishing, use of agricultural lands, communities have few or no lost opportunity costs as a result of the project. Thus, it is possible, but unlikely that land ownership and management disputes will arise as a result of the project.
Technical capability of project developer/implementer		

No previous experience in the design and implementation of activities that may ensure the longevity of carbon benefits	Medium ³	This is InfiniteEARTH's first project as an organization, however members of InfiniteEARTH team have extensive experience in designing and implementing several elements of the project activities. Additionally, InfiniteEARTH has the direct support of carbon forestry professionals with experience in the design of activities leading to the longevity of carbon benefits, as well as the support of partners with extensive experience designing and implementing the field portion of many project activities.
Net revenues/financial returns from the project to ALL relevant stakeholders		

³ InfiniteEARTH's implementing partners have exceptional experience and technical capacity in forest conservation and this partnership reduces risk. These partners bring extensive knowledge of conservation, forest protection and community development to the project, with long-term field experience in Rimba Raya specifically. InfiniteEARTH currently holds formal working agreements with three key implementing partners, these are:

- a. **Orangutan Foundation International (OFI)** – InfiniteEARTH and OFI continue to collaborate on the implementation of forest monitoring, reporting and protection activities on the ground. The MOU has been in place since 2008.
- b. **Word Education (WE)** – InfiniteEARTH has held an agreement with WE since 2009 to handle all grievances as an independent third party and to support and lead community projects, such as fisheries, education, health and government relations.
- c. **BKSDA** (A Central Government Conservation department with broad powers in fire and forest security) – InfiniteEARTH signed an MoU with BKSDA in 2010 to train communities in community-based fire fighting and will expand this agreement to include forest patrols and protection.

Lower than pre-project or lower than alternative land-uses	Low	It is reasonably assumed that alternative land-uses for the Rimba Raya area would be the conversion of the area for growing and harvesting palm oil. While Palm Oil produces high net revenues and financial returns for the palm oil company, benefits to local communities are limited. The Project proponents are delivering the same tax and royalty revenues for the land-use permit as would palm oil so there is no net loss to governments. Additionally, project proponents have demonstrated a wide range of tangible benefits to the communities (medical, agricultural, technical, etc) that deliver substantial benefits to the communities beyond anything offered by palm oil. Certainly, project benefits to OFI, a principle stakeholder, far exceed the losses it would suffer under conversion to palm oil.
Infrastructure and natural resources		
Low likelihood of new road(s)/rails being built near the REDD project boundary	Low	<p>New roads may be built near the project boundary. This is likely to occur in the northern most region of the project area that is already converted for oil palm plantations.</p> <p>InfiniteEARTH (IE) initially evaluated this to be a very low risk factor since the concession license assures tenure and the patrol plan assures control of road invasion into the concession. However IE accepts the recommended low risk rating for new roads being built as the project is in the beginning stage of implementation. IE anticipates being able to demonstrate the appropriateness of a very low risk rating for this factor following project monitoring early in the project.</p>
High-value non-forest related natural resources (oil, minerals, etc.) known to exist	Low	No non-forest related natural resources are known to exist within the REDD project area.

within REDD project area		
Palm Oil encroachment	Low	The only palm oil encroachment that could take place is from the plantation that occupies the northern notch of Rimba Raya and three years ago, OFI conducted a boundary check of the plantation and found that they had cleared some area outside of their plantation. This situation was reported in the newspapers and subsequently a meeting between OFI and PT Best representatives took place. Given the continued vigilance of OFI staff and additional staff from PT Rimba Raya, the risk of further incursion is low. The nearby oil palm plantations are owned by PT Best Agro, which could be rated as a mid-sized company that produces export-grade edible palm oil; and thus, are subject to pressure from conservation advocacy groups such as Greenpeace.
Illegal Logging	Low	Avoided planned deforestation methodology utilized for Rimba Raya does not account for community level logging. Some logging for community use will undoubtedly continue. However, logging to supply the communities' internal needs would in no way exceed the re-growth rate of the natural forest. Illegal logging that has taken place to generate cash income for villagers and middlemen will eventually be brought under control once the entire range of community support services are initiated by Infinite Earth.
Population surrounding the project area		
Decreasing or increasing, but with low population density (e.g., <50 people/km ²)	Very Low	Local village populations are few and far between and are believed to be growing at a very low rate.
Incidence of crop failure on surrounding lands from severe droughts, flooding and/or pests/diseases		

Frequent (>1 in 10 years)	Low	Flooding on surrounding lands from intense wet seasons or fires could cause crops to fail, however communities are considered to have agricultural practices adapted to such risks or have alternative land options in neighbouring areas where practices could be temporarily relocated.
Project financial plan		
Credible long-term financial strategy in place (e.g., endowment, annuity-paying investments, and the like)	Medium	<p>InfiniteEARTH has executed forward sales triggered upon the first verification that will create an endowment that will sufficiently fund the operational budget through an annuity for the entire life of the project and possibly in perpetuity. Confidential contracts and budgets will be shared with the validator.</p> <p>InfiniteEARTH (IE) initially evaluated this to be a low risk factor. However, IE accepts the recommended medium risk rating for the financial strategy at initial project verification given the current uncertainty about the compliance market for REDD credits. Through the sale of carbon credits after project verification, IE expects to be able to demonstrate sufficient financial security to achieve a low risk rating for this component at subsequent project verification.</p>
General Risk of Fire		
Fire Risk	Medium	High fire return interval (<50 years) with adequate fire prevention measures in place
Total Risk		

Risk Ranking	Medium ⁴	InfiniteEARTH (IE) initially evaluated total risk to be low. However, IE accepts the recommended total risk rating of medium and agrees to the required buffer withholding of 20% at the initial project verification. IE plans to re-evaluate the medium risk rating in subsequent monitoring years following full project implementation and monitoring, with special attention to those components evaluated to be medium risk at project start up.
--------------	---------------------	--

*Despite the Low-Medium risk assessment by project proponents, an overall risk rating of Medium has been applied and a **20% Non-Permanence Risk Buffer** has been conservatively withheld against carbon stocks.

⁴ According to the VCS risk tool (VCS 2008) and the updates to the risk tool (VCS 2010a, 2010b) the highest rating determines the project's overall risk class and the required buffer withholding percentage shall be the maximum percentage in the buffer range for the determined risk class. Therefore, the total risk is assessed to be Medium and equal to a 20% withholding buffer.

Risk Assessment in Subsequent Verifications

Risk rankings for most factors were assessed to be low for the Rimba Raya project: 9 low-risk versus 2 medium-risk factors applicable to all projects, and 8 low-risk versus 4 medium-risk factors applicable to REDD projects. However, in accordance with the VCS Non-Permanence Risk Analysis and Buffer Determination Tool and Updates, the highest rating determines the project's overall risk class. Therefore, the conservative medium risk rating is applied to the project. Further, while the available buffer withholding range for medium risk projects is 10% - 20%, the maximum percentage is applied to the project for withholding.

This conservative approach is appropriate in general, as REDD projects are yet in their infancy. However, project proponents believe the inherent risk to project permanence is low for Rimba Raya for a number of reasons briefly described in the tables above. Following full project implementation and through demonstrated project stability in initial project years, project proponents plan to reassess risk in subsequent verifications with the potential to re-evaluate the 20% buffer determination set in the first project verification.