NON-PERMANENCE RISK REPORT FRESH BREEZE AFFORESTATION PROJECT

Document Prepared By CO2 Solutions

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Project Title	Fresh Breeze Afforestation Project
Version	02
Date of Issue	22/March/2016
Project ID	N/A
Monitoring Period	N/A
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1 INTERNAL RISK

The risk analysis has been conducted in accordance with the VCS AFOLU Non-Permanence Risk Tool version 3.2, dated 8 October 2013. This tool assesses a project's internal risk, external risk, natural risk and mitigation measures which help to reduce risk. The risk ratings and supporting evidence are detailed in Section 1, 2, and 3, below, and apply specifically to the initial project instances. Letters in the risk factor column correspond to the risk factor explained in the VCS Risk Tool.

Project Management		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a)	Specie planted Tectona Grandis, is non-native but is commonly planted in Mexico and according to the document "Management of Teak Plantations" from the FAO (Food and Agriculture Organization of the United Nations)[1] is proved that the Teak adapts very well to sites with the same conditions of the project lands. Furthermore, the soil study performed by a third party has confirmed the successful adaptation of Teak plantations in Mexican lands.	0
b)	In order to prevent encroachment by outside actors all the areas of the project activity will be protected.	2
c)	Proteak management team involved in the project management includes individuals with significant experience in sustainable forestry. The company was founded in 2001 in Mexico, which means that its management team has more than 11 years of experience in the forestry sector.	0
d)	Proteak Management team has its main office in Mexico city, located in a very centric and strategic location in the Host country. Also, the forest management team is local and visits the project sites to monitor the project progress several times a year.	0
e)	Proteak management team works alongside with CO2 Solutions, a carbon consulting firm. With experience in carbon accounting and reporting, and AFOLU project design. CO2 Solutions has successfully validated and verified several projects under VCS and CDM programs. CO2 Solutions was the consultant that help in the validation of this project.	-2
f)	Mitigation: Adaptive management plan in place. [2]	0
Total Project Management (PM) [as applicable, (a + b + c + d + e + f)] Total may be less than zero.		**0**

[1] "Management of Teak Plantations" FAO Corporate Document Repository, http://www.fao.org/docrep/005/AC773E/ac773e08.htm

[2] There is not adaptive management plan in place, therefore, this mitigation value is not counted in the management risk.

Financial Viability		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a), b), c), d)	The investment analysis of the project shows that the breakeven point is reached in the year 2020, these years is when the project cash flow turns positive. This means that the breakeven point will be reach in 5 years.	2
e), f), g), h)	Project has secured 100% of the funding needed to cover the total cash out for the plantations establishments, these funds will be provided by Proteak sale of shares[3].	0
i)	**Mitigation**: Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven. Incentives from CONAFOR (National Forestry Commission) are callable, also if necessary Proteak has the option to call for more resource from the stock exchange.	-2
Total Financial Viability (FV) [as applicable, ((a, b, c or d) + (e, f, g or h) + i)] Total may not be less than zero.		**0**

Opportunity Cost		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a), b), c), d), e), f)	NPV from project activities is expected to be at least 50% more profitable than the most profitable alternative land use activity	-4
g)	**Mitigation:** Project proponent is a non-profit organization.	0
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. The project proponent has an FSC (Forest Stewardship Council) certificate which includes a legal commitment to continue with the sustainable management of the project activity during the length of the project activity. However, due the FSC Certificate doesn't include all the project plantations is not counted as mitigated option	0
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.[4]	0

[3] Equities. Proteak Uno S.A.B. DE C.V.. Available at: http://markets.ft.com/research/Markets/Tearsheets/Summary?s=TEAKCPO:MEX

[4] Since there is not a legally binding commitment to continue the management practices over at least 100 years, this mitigation value is determined as 0

Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e or f) + (g + h or i)] Total may be less than 0.	**-4**

Project Longevity		
a), b)	The project longevity is 54 years. There is a commitment related with the FSC Certificate, however, due the FSC Certificate doesn't include all the project plantations. It is stated that the project activity doesn't have a legal agreement	13.2
Total Project Longevity (PL) May not be less than zero		**13.2**

Internal Risk	
Total Internal Risk (PM + FV + OC + PL) Total may not be less than zero.	**9.2**

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. The majority of the terrains involved in the project are property of Proteak UNO SAB de C.V. The land tenure contract of each terrain is provided to demonstrate that the ownership and use rights are held by same entity	0
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)	0
c)	There are no disputes over land ownership or land tenure for any part of the project area. This is proved through the land tenure contracts, for each land involved in the project activity.	0
d)	No disputes exist. This can be proved through the Land tenure contracts.	0
e)	The project doesn't fall in the Wetland Restoration and conservation category. Thus, this section is not applicable.	0
f)	**Mitigation:** Project area is protected by legally binding commitment (eg, a	0

	conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period	
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	0
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
a), b)	Community engagement risk has been assessed as zero because no people live in the project area and the population living within 20km of the project is no reliant on the project area for food, fodder, fuel, medicine, or building materials.	0
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	0
Total Community Engagement (CE) [where applicable, (a + b + c)] Total may be less than zero.		**0**

Political Risk		
Risk Factor	Risk Factor and/or Mitigation Description	Risk Rating
a), b), c), d), e)	Mexico governance score is -0.1633. This is the mean of the six indicators obtained from the World Bank Institute's Worldwide Governance indicator.	2
f)	Mitigation: Country is implementing REDD+ Readiness or other activities, as set out in this Section 2.3.3. Mexico is participating in the REDD program.	-2
Total Political (PC) [as applicable ((a, b, c, d or e) + f)] Total may not be less than zero.		**0**

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

3 NATURAL RISKS

For the Natural Risk section assessment, each state is evaluated separately since the some of the information found is different for each region involved in the project activity.

It is important to state that Proteak UNO S.A.B. de C.V. has implemented several prevent measurements in order to decrease the natural risk.

1. The project plantations are selected in a strategic way, therefore, if something does happen in the area, only a small percentage of the total plantation is affected. Therefore, the selection of plantations is based on the risk analysis of the region, is presented as evidence the hurricane and fire risk analysis.
2. For the fire prevention, the PP makes "Guardarrayas"[5] in all the plantations, in other case for hurricane and inundation preventions the PP makes road works and drainage to prevent any damage.
3. Proteak UNO S.A.B. de C.V. has requested training to the National Forestry Commission (CONAFOR) in order to be capacitated for preventing and fighting forest fires.
4. Additionally in the case of a forest fire, there are always 5 members of Proteak that form the fire brigade, they have some tools to combat the fire such as rakes, fire pumps, chainsaw, shovels, sprayers, pumps for water extraction thousand liter water tank.

. a) Natural risk in Tabasco

Natural Risk (Fire risk)	
Significance	Insignificant Statistics on the number of Forest hectares affected by a Fire in Tabasco state are provided by the CONAFOR (National Forest Commission), which is part of the SEMARNAT (Secretary of Environment and Natural Resources), Mexico's Designated National Authority. According to INEGI data, the surface forest in Tabasco comprehends a total of 932,828 ha[6]. Based on the INEGI and Forestry Annual Report of CONAFOR (Forestry Entity in Mexico), the value of hectares that had a fire were the following: • 2012: 1,525 ha (0.16%) • 2013: 4,339 ha (0.46%) • 2014: 4,659 ha (0.49%) The significance of fire risk can be assessed as Insignificant (less than 5% of loss of carbon stock).

[5] Edge between two plantations, used as practice for forest fire prevention to prevent the fire from spreading to other areas.

[6] Instituto Nacional de Estadística y Geografía (INEGI). Información Nacional, por entidad Federativa y Municipios. Page 46, chapter 1.4. Available at: http://www.inegi.org.mx/prod_serv/contenidos/espanol/bvinegi/productos/integracion/pais/aepef/2014/702825063986.pdf
It's necessary to select the state, the value correspond to the Forest Surface (Superficie de Bosque y Superficie Selva). The information of INEGI corresponds to the last official available information of the country (2010).

Likelihood	Every 10 to less than 25 years
Score (LS)	1
Natural Risk (Pest and disease risk)	
Significance	Insignificant According to INEGI data, the surface forest in Tabasco comprehends a total of 932,828 ha. The evidence show that Tabasco has 1,560 ha affected in 2014 (about 0.16%), and in 2013 about 817 ha affected (0.08%). Considering this, the significance of pests can be assessed as Insignificant (less than 5% of loss of carbon stock).
Likelihood	Less than every 10 years
Score (LS)	2
Natural Risk (Extreme weather risk)	
Significance	Minor Extreme weather risks affecting this project area include rain induced flooding and drought. According to the "Indice de Competitividad Forestal Estatal" of México, the risk of flood in Tabasco state is medium, and likely to occur less than every 10 years. According to the reference of the map, the CENAPRED states that the medium risk means and effect without deceases and moderate damage[7]. The effect on the planted trees is not considered to be severe, since the terrain selected for the project activity are chosen with a natural topography that it's not prone to flooding. Due this, the effects on the tree plantations in case of a flood are likely to have a minor impact. The highest likelihood and greatest significance (that of flooding) is used to assess the risk of extreme weather.
Likelihood	Less than every 10 years
Score (LS)	5
Natural Risk (Geological risk)	
Significance	Insignificant. Geological risks in Tabasco include only earthquakes, since there aren't any Volcanoes neither landslide within this region. Earthquake intensity in Tabasco is low according to the map "Seismic zones and regions" of the "Servicio Geologico Mexicano"[8] Furthermore, earthquakes in this region are unlikely to result in a significant loss to projects carbon stocks due to

[7] Sistema Mesoamericano de información Territorial para la Reducción de Riesgos de Desastres Naturales. SMIT. Available at: http://smit.cenapred.gob.mx:8080/geonetwork/srv/es/main.home?uuid=e57c69b5-3733-47f5-ab53-a6a2c201f211

[8] Servicio Geologico Mexicano. Sismologia de México. Available at: http://mapasims.sgm.gob.mx/sismotectonica/

	its very low intensity. The significance of geologic risk is estimated at insignificant with a likelihood frequency of every 10 to less than 25 years.
Likelihood	Every 10 to less than 25 years
Score (LS)	1
Mitigation	Prevention measures applicable to the risk factor are implemented

Score for each natural risk applicable to the project (Determined by (LS × M)	
Fire (F)	0.5
Pest and Disease Outbreaks (PD)	1
Extreme Weather (W)	2.5
Geological Risk (G)	0.5
Other natural risk (ON)	0
Total Natural Risk (as applicable, F + PD + W + G + ON)	**4.5**

b) Natural risk in Nayarit

Natural Risk (Fire risk)	
Significance	Insignificant Statistics on the number of Forest hectares affected by a Fire in Nayarit state are provided by the CONAFOR (National Forest Commission), which is part of the SEMARNAT (Secretary of Environment and Natural Resources), Mexico's Designated National Authority. According to INEGI data, the surface forest in Nayarit comprehends a total of 1,506,366 ha[9]. Based on the INEGI and Forestry Annual Report of CONAFOR (Forestry Entity in Mexico), the value of hectares that had a fire were the following: • 2012: 4,766 ha (0.31%) • 2013: 5,478 ha (0.36%) • 2014: 357 ha (0.02%) The significance of fire risk can be assessed as Insignificant (less than 5% of loss

[9]Instituto Nacional de Estadística y Geografía (INEGI). Información Nacional, por entidad Federativa y Municipios. Page 46, chapter 1.4. Available at: http://www.inegi.org.mx/prod_serv/contenidos/espanol/bvinegi/productos/integracion/pais/aepef/2014/702825063986.pdf
It's necessary to select the state, the value correspond to the Forest Surface (Superficie de Bosque y Superficie Selva). The information of INEGI corresponds to the last official available information of the country (2010).

	of carbon stock).
Likelihood	Every 10 to less than 25 years
Score (LS)	1
Natural Risk (Pest and disease risk)	
Significance	Insignificant According to INEGI data, the surface forest in Nayarit comprehends a total of 1,506,366 ha. The evidence show that Nayarit has 4,734 ha affected in 2014 (about 0.31%), and in 2013 about 3,149 ha affected (0.20%). Considering this, the significance of pests can be assessed as Insignificant (less than 5% of loss of carbon stock).
Likelihood	Less than every 10 years
Score (LS)	2
Natural Risk (Extreme weather risk)	
Significance	Minor Extreme weather risks affecting this project area include rain induced flooding and drought. According to the "Indice de Competitividad Forestal Estatal" of México, the risk of flood in Tabasco state is medium, and likely to occur less than every 10 years. According to the reference of the map, the CENAPRED states that the medium risk means and effect without deceases and moderate damage[10]. The effect on the planted trees is not considered to be severe, since the terrain selected for the project activity are chosen with a natural topography that it's not prone to flooding. Due this, the effects on the tree plantations in case of a flood are likely to have a minor impact. The highest likelihood and greatest significance (that of flooding) is used to assess the risk of extreme weather.
Likelihood	Less than every 10 years
Score (LS)	5
Natural Risk (Geological risk)	
Significance	Insignificant. Geological risks in Nayarit include only earthquakes and Volcanoes, since there

[10] Sistema Mesoamericano de información Territorial para la Reducción de Riesgos de Desastres Naturales. SMIT. Available at: http://smit.cenapred.gob.mx:8080/geonetwork/srv/es/main.home?uuid=e57c69b5-3733-47f5-ab53-a6a2c201f211

	are no landslides within this region. Earthquake intensity in Nayarit is low according to the map "Seismic zones and regions" of the "Servicio Geologico Mexicano"[11] Furthermore, earthquakes in this region are unlikely to result in a significant loss to projects carbon stocks due to its low impact intensity. The significance of geologic risk is estimated at insignificant with a likelihood frequency of less than every 10 years. The Volcanoes located in Nayarit state are Sangangüey and Ceboruco, the first one is inactive and the second one had its last eruption in 1870. This means that the likelihood of volcano eruptions is less than once every 100 years, considering that last eruption was more than 140 years ago and that there are no prognostic of future eruptions. The highest likelihood and greatest significance (that of earthquakes) is used to assess the risk of geological risk.
Likelihood	Less than every 10 years
Score (LS)	2
Mitigation	Prevention measures applicable to the risk factor are implemented

Score for each natural risk applicable to the project (Determined by (LS × M)	
Fire (F)	0.5
Pest and Disease Outbreaks (PD)	1
Extreme Weather (W)	2.5
Geological Risk (G)	1
Other natural risk (ON)	0
Total Natural Risk (as applicable, F + PD + W + G + ON)	**5**

c) Natural risk in Chiapas

Natural Risk (Fire risk)	
Significance	Insignificant. Statistics on the number of Forest hectares affected by a Fire in Chiapas state are provided by the CONAFOR (National Forest Commission), which is part of the SEMARNAT (Secretary of Environment and Natural Resources), Mexico's Designated National Authority. According to INEGI data, the surface forest in Chiapas comprehends a total of

[11] Servicio Geologico Mexicano. Sismologia de México. Available at: http://mapasims.sgm.gob.mx/sismotectonica/

	2,972,156 ha[12]. Based on the INEGI and Forestry Annual Report of CONAFOR (Forestry Entity in Mexico), the value of hectares that had a fire were the following: • 2012: 8,969 ha (0.30%) • 2013: 20,313 ha (0.68 %) • 2014: 2,260 ha (0.07%) The significance of fire risk can be assessed as Insignificant (less than 5% of loss of carbon stock).
Likelihood	Every 10 to less than 25 years
Score (LS)	1
Natural Risk (Pest and disease risk)	
Significance	Insignificant. According to INEGI data, the surface forest in Chiapas comprehends a total of 2,972,156 ha. The evidence show that Chiapas has 4,428 ha affected in 2014 (about 0.14%), and in 2013 about 3,545 ha affected (0.11%). Considering this, the significance of pests can be assessed as Insignificant (less than 5% of loss of carbon stock).
Likelihood	Less than every 10 years
Score (LS)	2
Natural Risk (Extreme weather risk)	
Significance	Minor. Extreme weather risks affecting this project area include rain induced flooding and drought. According to the "Indice de Competitividad Forestal Estatal" of México, the risk of flood in Chiapas state is medium, and likely to occur less than every 10 years. According to the reference of the map, the CENAPRED states that the medium risk means and effect without deceases and moderate damage[13]. The effect on the planted trees is not considered to be severe, since the terrain selected for the project activity are chosen with a natural topography that it's not

[12]Instituto Nacional de Estadística y Geografía (INEGI). Información Nacional, por entidad Federativa y Municipios. Page 46, chapter 1.4. Available at: http://www.inegi.org.mx/prod_serv/contenidos/espanol/bvinegi/productos/integracion/pais/aepef/2014/702825063986.pdf
It's necessary to select the state, the value correspond to the Forest Surface (Superficie de Bosque y Superficie Selva). The information of INEGI corresponds to the last official available information of the country (2010).
[13] Sistema Mesoamericano de información Territorial para la Reducción de Riesgos de Desastres Naturales. SMIT. Available at: http://smit.cenapred.gob.mx:8080/geonetwork/srv/es/main.home?uuid=e57c69b5-3733-47f5-ab53-a6a2c201f211

	prone to flooding. Due this, the effects on the tree plantations in case of a flood are likely to have a minor impact. The highest likelihood and greatest significance (that of flooding) is used to assess the risk of extreme weather.
Likelihood	Less than every 10 years
Score (LS)	5
Natural Risk (Geological risk)	
Significance	Insignificant. Geological risks in Chiapas include only earthquakes and Volcanoes, since there are no landslides within this region. Earthquake intensity in Nayarit is low according to the map "Seismic zones and regions" of the "Servicio Geologico Mexicano"[14] Earthquakes in this region are unlikely to result in a significant loss to projects carbon stocks due to its low impact on planted trees. The significance of geologic risk is estimated as insignificant with a likelihood frequency of less than every 10 years. The Volcanoes located in Chiapas state are Tacana and Chichonal, even though both are active they are located more than 100 Km of the closest project location, which means they don't represent any risk for the project carbon stocks. The highest likelihood and greatest significance (that of earthquakes) is used to assess the risk of geological risk.
Likelihood	Less than every 10 years
Score (LS)	2
Mitigation	Prevention measures applicable to the risk factor are implemented

Score for each natural risk applicable to the project (Determined by (LS × M)	
Fire (F)	0.5
Pest and Disease Outbreaks (PD)	1
Extreme Weather (W)	2.5
Geological Risk (G)	1
Other natural risk (ON)	0
Total Natural Risk (as applicable, F + PD + W + G + ON)	**5**

[14] Servicio Geologico Mexicano. Sismologia de México. Available at: http://mapasims.sgm.gob.mx/sismotectonica/

4 OVERALL NON-PERMANENCE RISK RATING AND BUFFER DETERMINATION

4.1 Overall Risk Rating

a) Overall Risk Rating Tabasco

Risk Category	Rating
a) Internal Risk	9.2
b) External Risk	0
c) Natural Risk	4.5
Overall Risk Rating (a + b + c)	**13.7**

b) Overall Risk Rating Nayarit

Risk Category	Rating
a) Internal Risk	9.2
b) External Risk	0
c) Natural Risk	5
Overall Risk Rating (a + b + c)	**14.2**

c) Overall Risk Rating Chiapas

Risk Category	Rating
a) Internal Risk	9.2
b) External Risk	0
c) Natural Risk	5
Overall Risk Rating (a + b + c)	**14.2**

d) Overall Risk Rating for the project

Risk Category	Ha's per state	Overall risk
Chiapas	751.87	14.2
Nayarit	18.92	14.2
Tabasco	3187.88	13.7
Overall Risk Rating		**14**

As it can be seen in the previous table, the non-permanence risk deduction to be applied for the project is 14%.

For the verification period the PP will continue to recalculate this risk by estate and then it will obtain the overall risk with the conservative assumption. Therefore, for the verification period the PP will present a

risk estimation analysis following the available VCS AFOLU Non-Permanence Risk Tool, the PP compromise to adjust the risk factor according the tool.

The calculation of the Risk factor will be updated annually using the information available of the last year of operation, per state.

4.2 Calculation of Total VCUs

Total VCUs for the first crediting period.

Year	Estimated net GHG emission reductions or removals (tCO_2e)	GHG credits eligible to be issued	AFOLU pooled buffer account.
2009	4,378	3,765	612.90
2010	26,962	23,187	3,774.64
2011	51,897	44,632	7,265.63
2012	67,155	57,753	9,401.66
2013	68,469	58,884	9,585.71
2014	66,781	57,432	9,349.35
Total	285,642	245,652	39,989.89

Round up AFOLU pooled buffer account = 39,990

Net VCUs to be issued 245,652