Verified Carbon Standard

A VERRA STANDARD

Procedure for Applying the AFOLU Non-Permanence Risk Tool

Version 5.0

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1 INTRODUCTION AND SCOPE

This document provides the procedure for analyzing non-permanence risk and determining buffer contributions for agriculture, forestry, and other land use (AFOLU) projects using the digital AFOLU Non-Permanence Risk Tool (NPRT) available in the Verra Project Hub. The document sets out the requirements for project proponents, implementing partners, and validation/verification bodies to assess risk and determine the appropriate risk rating. This procedural document should be used to understand the underlying requirements which are embedded in the tool itself.

The first version of the AFOLU NPRT was developed from 2007–2008 by the VCS AFOLU Advisory Group – a working group of leading experts in each AFOLU project category – and involved an extensive peer review process. In 2010, the tool underwent public stakeholder consultation and was revised as part of VCS Program Version 3. More than 25 independent reviewers, including preeminent risk experts, investors, NGO representatives, and project developers, supported these efforts and provided detailed feedback. The VCS AFOLU Steering Committee also provided oversight.

In 2023, Verra revised the tool to include projected future climate change impacts, sea-level rise (SLR), and agricultural land management-specific risks, among other changes. Future climate and SLR impacts are predicted based on information provided by the Intergovernmental Panel on Climate Change (IPCC) in the contribution of Working Group I (the physical science basis) of the Sixth Assessment Report (AR6) and the Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC, 2019). Input was sought through Verra's Nature-Based Solutions working groups and two public stakeholder consultations. Along with these revisions, Verra introduced a digital version of the AFOLU NPRT in the Verra Project Hub. Project proponents must use the digital tool to prepare their non-permanence risk report.

This document is updated periodically, and readers should ensure that they are using the current version.

1.1 Scope

1.1.1 This document sets out the procedure for completing a non-permanence risk analysis to determine the non-permanence risk rating ("risk rating"), which shall be used to determine the number of buffer credits that an AFOLU project shall deposit into the AFOLU pooled buffer account (the procedure for depositing buffer credits is set out in the *Registration and Issuance Process*). Risk ratings are based on an assessment of risk factors that are added together to determine the total risk rating, as set out in Section 2. This document and the AFOLU pooled buffer account are subject to periodic reconciliation and revision based on a review of existing AFOLU verification reports and an assessment of project performance, as set out in the *VCS Program Guide*.

1.1.2 In addition to the requirements set out in this document, AFOLU projects shall conform to all applicable VCS Program rules.

1.1.3 Project proponents shall clearly document and substantiate the risk score selected for the project. Supporting records shall include all relevant assumptions, parameters, and data sources so that the reader can reproduce the results.

1.1.4 The validation/verification body shall evaluate the risk assessment undertaken by the project proponent and assess all data, rationales, assumptions, justifications, and documentation provided by the project proponent to support the non-permanence risk rating.

1.1.5 Non-permanence risk analysis shall only be applied to removals or avoided emissions through carbon sinks. Project activities generating emissions reductions of N_2O, CH_4, or fossil-derived CO_2 are not subject to buffer withholding since these GHG benefits cannot be reversed.

2 RISK ANALYSIS AND BUFFER DETERMINATION

2.1 Step 1: Risk Analysis

2.1.1 Potential transient and permanent losses in carbon stocks shall be assessed over a period of 100 years based on present conditions and the information available at the time of the risk analysis, unless otherwise specified in Sections 2.2 to 2.4. Projects with a project start date in the past, or projects analyzing risk at a subsequent verification event shall assess the potential transient and permanent losses for the next 100 years.

2.1.2 The risk analysis shall be conducted as follows:

1) Risk factors are classified into three categories: internal risks, external risks, and natural risks, and further into sub-categories such as project management, financial viability, and stakeholder engagement. The project shall be evaluated against each of the risk factors in each category and sub-category as set out in Sections 2.2 (internal risks), 2.3 (external risks), and 2.4 (natural risks). A risk score shall be assigned for each risk category and sub-category and shall follow the calculation formulas in each table to determine the risk rating for the category and sub-category.

2) The digital *AFOLU Non-Permanence Risk Tool*, available in the Verra Project Hub (https://projecthub.verra.org/), shall be used to assess risk and complete the *Non-Permanence Risk Report*. This document is intended to assist project proponents in understanding and applying the digital AFOLU NPRT.

3) Where applicable, and where the project proponent demonstrates that related mitigation activities will be (at validation) or are being (at verification) applied, the risk rating for the sub-category will be reduced, as determined in Sections 2.2–2.4.

4) As set out in Sections 2.2–2.4, all sub-categories set a minimum rating of zero, even when the calculation would otherwise result in a rating lower than zero.

5) The total risk rating for each category (internal, external, and natural) shall be determined by summing the ratings for each sub-category in the category. The total rating for any category shall not be less than zero.

6) Projects assessed as Risk Failed for any risk factor shall fail the entire risk analysis. Where the overall risk rating or the summed risk rating for each category is unacceptably high, as set out in Section 2.5.3, the project shall fail the risk analysis. Projects that fail the risk assessment shall not be eligible for crediting until the project has adequately addressed the risk to the extent that it would no longer be assessed as Fail.

7) An overall risk rating percentage shall be determined based on the ratings from each risk category as set out in Section 2.5.

2.1.3 Where risks are relevant to only a portion of the project area in a grouped project, the project area shall be divided into sub-areas with similar risk profiles for the non-permanence risk assessment (Further requirements on non-permanence risk analysis for grouped projects are set out in the *VCS Standard*).

2.1.4 Where a risk or mitigation factor does not apply to the project, the score shall be zero for that factor.

2.2 Internal Risks

2.2.1 Project management (PM) shall be assessed using Table 1, noting the following:

1) Each project management risk factor set out in Table 1 shall be assessed.

2) Management teams are the individuals responsible for day-to-day management and implementation of project activities. Management teams may include the project proponent, the implementing partner (see the *VCS Program Definitions* for the definition of implementing partner), or carbon project development partners who have contractual commitments to support the project activities.

3) Evidence that species planted are adapted to the same or similar agro-ecological zone(s) in which the project is located and that ALM practices are appropriate to the agro-ecological zone(s), soil types, and cropping/grassland systems may be demonstrated through publications in scientific journals; technical reports from government agencies, NGOs or research groups; or successful use over time by other projects registered with the VCS Program.

4) Ongoing enforcement refers to protecting carbon stocks in the project area from encroachment by outside actors; for example, where a REDD project faces risk from external actors entering the project area for illegal logging.

5) Projects shall have an adaptive management plan. Adaptive management plans identify, assess, and create a mitigation plan for potential risks to the project, including those identified in this document, and any other obstacles to project implementation. They include a process for monitoring progress, documenting lessons learned or corrections that may be needed, and incorporating them into project decision-making in future monitoring periods. The onus is on the project proponent to demonstrate that such plans are in place and have considered potential risks and obstacles to the project. Further, a system is in place for adapting to changing circumstances.

Table 1. Project management

Project Management		Score
Q1	Does the project have an adaptive management plan in place that includes a monitoring plan? If *No,* the project fails the risk assessment. If *Yes*, proceed to Q2.	
Q2	Do any of the following project management risks apply to the project?	
a)	Species planted (where applicable) associated with more than 25% of the stocks on which GHG credits have previously been issued are not native nor proven to be adapted to the same or similar agro-ecological zone(s) as the project area.	2
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.	2
c)	Management team does not include individuals with significant experience in all skills necessary to successfully undertake the project activities (i.e., any area of required experience is not covered by an individual with at least five years' experience in that area).	2
d)	Management team does not maintain a presence in the country or is located more than one day of travel from the project site, considering all parcels or polygons in the project area.	2
e)	Management team has previously failed to submit a loss report within two years of detecting a loss event.	2
f)	**ALM projects:** Some or all the farmers participating in the project have not received training on the improved ALM practices implemented as part of the project or the monitoring and reporting procedures implemented during the crediting period.	2
g)	**ALM projects:** Some or all the farmers participating in the project are unaware of the potential for yields to decrease temporarily due to the transition to improved agricultural practices.	2
Q3	Do any of the following mitigations apply to the project?	
h)	**Mitigation:** Management team includes individuals with significant (i.e., more than five years) 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) with the VCS Program or other GHG programs.	−2
i)	**Mitigation (ALM projects):** A comprehensive training plan for all farmers participating in the project is in place, covering implementation of planned ALM practices, monitoring and reporting obligations and their potential costs.	−2
Total Project Management (PM) = [as applicable, (a + b + c + d + e + f + g + h + i)] Total shall not be less than zero.		

2.2.2 Financial viability (FV) shall be assessed using Table 2, noting the following:

1) The financial viability of a project is based on 1) the number of years until breakeven is reached (i.e., the payback period) and 2) the funding secured relative to what is needed to implement and operate the project until reaching breakeven.

2) Breakeven is the point at which total cost equals total revenue. The length of time it takes to breakeven is the payback period. The payback period shall be calculated following generally accepted accounting principles (i.e., Payback period = initial investment/net cash flow per year). In the calculation of cash flow per year, cash in may include commercial revenue streams associated with the project, secured revenue, and conservatively projected revenues from the sale of GHG credits and other funding sources, such as donor funds, and carbon prepayments. Cash out shall include, at a minimum, project implementation costs, costs associated with GHG credit generation (e.g., validation, verification, and registration), and, where applicable, interest expenses, repayment of loans, and any required equity distributions.

3) The percentage of needed funding secured shall be calculated by summing all funding and revenue secured and dividing this by the total cash out up to and including the year the project reaches breakeven.

4) Projects may demonstrate that funding has been secured through, for example, financial statements, bank records, executed commodity purchase agreements, executed emission reduction purchase agreements, or other signed contractual agreements. Evidence shall be provided showing agreement counterparties are in good financial standing and can meet their financial obligations. Given execution uncertainties, options contracts shall not be counted as secured funding. The assumptions made for revenue from both carbon and other commercial sources (e.g., timber, agricultural commodities) must be conservative. The source, pricing assumptions, frequency of verification, and other relevant variables shall be clearly documented.

5) Callable financial resources are those not included in secured funding but readily available to the project. The availability of such resources may be indicated through letters of credit, revolving credit lines or other financial backing. Signed agreements shall be provided as evidence to demonstrate the project's ability to access funding as needed.

Table 2. Financial viability

Financial Viability		Score
Q1	How long is the project's payback period (i.e., how many years will it take to breakeven)?	
a)	The payback period is greater than 20 years from the current risk assessment.	Risk failed
b)	The payback period is greater than 10 years from the current risk assessment, but less than or equal to 20 years.	3

Financial Viability		Score
c)	The payback period is greater than seven and up to and including 10 years from the current risk assessment.	2
d)	The payback period is greater than four and up to and including seven years from the current risk assessment.	1
e)	The payback period is four years or less from the current risk assessment.	0
Q2	What percentage of funding has the project secured to cover the total cash out required before the project reaches breakeven?	
f)	Project has secured less than 15% of the funding needed to cover the total cash out required before the project reaches breakeven.	3
g)	Project has secured from 15% to less than 40% of the funding needed to cover the total cash out required before the project reaches breakeven.	2
h)	Project has secured from 40% to less than 80% of the funding needed to cover the total cash out required before the project reaches breakeven.	1
i)	Project has secured 80% or more of the funding needed to cover the total cash out before the project reaches breakeven.	0
Q3	Does the following mitigation apply to the project?	
j)	**Mitigation**: Project has available, as callable and secured financial resources, at least 80% of total cash out before the project reaches breakeven.	−2
Total Financial Viability (FV) = [as applicable, ((b, c, d, or e) + (f, g, h or i)+ j)] Total shall *not* be less than zero and the sub-total for question two with the mitigation j shall *not* be less than zero (note: the mitigation only applies to Q2)		

2.2.3 Opportunity cost (OC) shall be assessed using Table 3, noting the following:

1) Opportunity cost analysis shall be based on the net present value (NPV) of the alternative land uses identified in the project's additionality assessment except where most baseline activities are subsistence driven (see 3 below). The onus is on the project proponent to demonstrate and substantiate what constitutes credible alternative land use scenarios. The alternative land use scenarios shall be the activities identified in the baseline scenario.

2) The NPV analysis shall cover the project crediting period, compare credible alternatives to the project and use a conservative estimate of revenue from GHG credit sales and other

project revenue streams. Estimates of GHG credit prices shall be based on market intelligence reports or other published sources.

3) The NPV analysis shall also compare potential price fluctuations of commodities impacted by the project. The financial discount rates used shall be based on published sources and represent the appropriate risk for the relevant land use scenario. Where the project proponent is not the landowner or tenant, the NPV to the landowner or tenant shall be compared.

4) Where most baseline activities are subsistence-driven, an NPV analysis is not required. Instead, a quantitative assessment of the net impacts of the project on the social and economic well-being of the communities that derive livelihoods from the project area (see Section 2.3.2) shall be undertaken within five years of the date of the previous risk assessment. The analysis shall be based on social assessments such as household surveys and participatory rural appraisals that follow best practices. Baseline scenario assumptions of household revenue shall be based on third-party data (e.g., household surveys or national statistics). The impact of carbon revenues on communities shall only be considered where the communities have designed and agreed on a benefit-sharing plan.

Table 3. Opportunity cost

Opportunity Cost		Score
Q1	Are the baseline activities subsistence-driven? If *No*, proceed to Q2. If *Yes*, proceed to Q3.	
Q2	What is the NPV of the most profitable alternative land use activity compared to the NPV of the project activity? A response is only required if the answer to Q1 is *No*	
a)	Net present value (NPV) of the most profitable alternative land use activity is expected to be at least 100% more than that of the project activities.	8
b)	NPV of the most profitable alternative land use activity is expected to be greater than 50% and up to 100% more than that of project activities.	6
c)	NPV of the most profitable alternative land use activity is expected to be greater than 20% and up to and including 50% more than that of project activities.	4
d)	NPV of the most profitable alternative land use activity is expected to be 20% or less than that of project activities.	0
e)	NPV of project activities is expected to be greater than 20% and up to 50% more profitable than that of the most profitable alternative land use activity.	−2
f)	NPV of project activities is expected to be over 50% more profitable than that of the most profitable alternative land use activity.	−4

Opportunity Cost		Score
Q3	Does the project have net positive community impacts? A response is only required if the answer to Q1 is *Yes*	
g)	Net positive community impacts of project activities are not demonstrated.	8
h)	Net positive community impacts of project activities are demonstrated.	0
Q4	Do any of the following mitigations apply to the project?	
i)	**Mitigation**: Project is protected by a legally binding agreement (see Section 2.2.4) to continue management practices that protect the credited carbon stocks over the duration of the project crediting period.	−2
j)	**Mitigation**: Project is protected by legally binding agreement (see Section 2.2.4) to continue management practices that protect the credited carbon stocks for at least 100 years.	−4
k)	**Mitigation:** Where there is potential for revenue loss compared to the most profitable alternative land use activity, project is a non-profit[1] or has additional financial support (e.g., via grants, government funding, ecosystem services payments or SD VISta assets) to overcome expected revenue loss.	−2
Total Opportunity Cost (OC) = [as applicable, (a, b, c, d, e, f, g, or h) + (i or j) + k] Total shall *not* be less than zero.		

2.2.4 Project longevity (PL) shall be assessed using Table 4, noting the following:

1) The project longevity score shall be determined by the formulas set out in Table 4.

2) Evidence shall be provided demonstrating that the right to operate (see the *VCS Standard* for right to operate requirements) can be maintained for the entire project longevity (e.g., where the right to operate is secured through a concession that is shorter than the project longevity, the concession is renewable for the entire longevity period being claimed).

3) For all AFOLU project types, the entire project longevity shall be covered by management, financial, and monitoring plans submitted to local government, financial institutions, or made public. The intention to continue management practices shall be stated and planned for in these documents. They may include external evidence such as municipal land-use

[1] A non-profit is an organization that does not distribute any surplus funds to owners or shareholders, but instead uses them to pursue its goals, such as poverty alleviation, community development, or biodiversity conservation. Although governments and government agencies may meet this definition, they are not considered non-profit organizations in this tool.

plans, institutional structures, ecological-economic zoning, etc. For ARR and IFM projects with harvesting, the project longevity is the number of years that project activities that maintain carbon stocks will be maintained, either through the continuation of the project activity or replanting or re-growth of trees after the last harvest or cutting cycle in the project crediting period. Projects shall demonstrate their commitment to continue the management practice or to replant or allow re-growth through evidence. Evidence may include certification of sustainable forest management by the Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC), or other internationally recognized schemes, a detailed management plan outlining practices that will be implemented to maintain or increase carbon stocks over the long term, or contractual agreements for timber supply beyond the last harvest in the project crediting period. Re-growth may be considered only where project areas, after harvesting, will be managed for regeneration (naturally or with assistance), maintaining the current species mix and allowing trees to re-grow at least to the age at which trees were harvested, as demonstrated in management plans.

4) Legal agreement or requirement to continue the management practice refers to any legally enforceable agreement or requirement, such as a conservation easement or protected area law requiring the continuation of the management practice that sequesters carbon or avoids emissions for the project's longevity. In ARR and IFM projects with harvesting, where allowing re-growth of harvested areas is required by law, this may be demonstrated by citing the appropriate legal statute and common practice.

5) Project longevity may be assessed at the project level (i.e., across aggregated project activity instances) in grouped projects.

6) Grouped projects where contract durations with individual project activity instances are less than the project longevity shall apply the *Without legal agreement or requirement to continue the management practice* formula in Table 4. Further, a plan for ensuring that the GHG benefit of the project is maintained over the full project longevity at the group level shall be established and, at a minimum, include the following:

   a) A description of how the project proponent will incentivize project activity instances to continue their participation in the project (e.g., contract renewal terms, providing ongoing training and support, vesting schedules);

   b) A plan for how project activity instances that do not renew their contracts will be monitored for permanence for at least the project longevity as set out in the *VCS Standard*. Where such monitoring is not possible, projects shall assume a complete loss of carbon stocks when a project activity instance leaves the project and follow the loss event reporting requirements set out in the *Registration and Issuance Process*;

   c) A description of how the project proponent intends to expand the project over time to include additional project activity instances to help compensate for any losses; and

d) A commitment from the project proponent to maintain the project for at least the project longevity.

Table 4. Project longevity

Project Longevity		Score
Q1	Did the project request registration on or after 1 January 2024?	
Q2	Does the project have a legally binding agreement that covers at least a 100-year period from the project's start date? If *Yes*, the project is given a zero score for this risk category. If *No*, proceed to Q2.	
Q3	What is the project longevity in years? If you answered *Yes* to Q1 and the project longevity is less than 40 years, the project fails the risk assessment. If you answered *No* to Q1 and the project longevity is less than 30 years, the project fails the risk assessment. Please note that projects with project longevity of less than 40 years will be ineligible for the Core Carbon Principles label.	Number of years
Q4	Does the project have a management, financial and monitoring plan for the entire project longevity? If *No*, the project fails the risk assessment. If *Yes*, proceed to Q5.	
Q5	Is the project an ARR or IFM project with harvesting? If *No*, proceed to Q7. If *Yes*, proceed to Q6.	
Q6	Can the project demonstrate a commitment to continue the management practice, replant, or allow re-growth? If *No*, the project fails the risk assessment. If *Yes*, proceed to Q7.	
Q7	Does the project have legal agreement or requirement to continue the management practice(s)? If *No*, proceed to a. If *Yes*, proceed to b.	
a)	Without legal agreement or requirement to continue the management practice.	= 25 − (project longevity/5)
b)	With legal agreement or requirement to continue the management practice.	= 25 − (project longevity/4)
Q8	Is the project a grouped project where contract durations with individual project activity instances are less than the project longevity?	
Total Project Longevity (PL) = [as applicable, (a or b)] Total shall *not* be less than zero.		

2.2.5 The total risk rating for internal risk shall be determined using Table 5.

Table 5. Total internal risk

Total Internal Risk	Rating
Total Internal Risk = (PM + FV + OC + PL) Total shall *not* be less than zero.	

2.3 External Risks

2.3.1 Land and resource tenure (LT) shall be assessed using Table 6, noting the following:

1) The project proponent shall select the risk score for the land rights, resource access rights, use rights, and the right to operate demonstration applicable to the project.

2) Land and resource tenure is the system of rights to lands, territories, and resources, including obligations, rules, institutions, and processes regulating ownership of, access to, and use of land and associated resources. Land or resource rights may be synonymous with property rights and encompass full ownership and lesser usufructuary rights to use or have access to the project area and the resources within it, such as rights to fell timber, collect fallen branches, or graze livestock.

3) Land may be government-, community-, or privately owned. Such land tenure may refer to a title or right encompassing full control of the land in perpetuity and may include the right to transfer or sell land or resource access and use rights.

4) A conservation easement or servitude is a permanent, legally binding restriction voluntarily placed on an area of land to protect its associated conservation resources or values. It transfers with the land when the ownership changes.

5) A protected area is a clearly defined area recognized, dedicated, and managed through legal or other means to achieve the long-term conservation of nature and its associated ecosystem services and cultural values. Protected areas include national parks, nature reserves, wilderness areas, wildlife management areas and landscape-protected areas, which the government, communities, or other entities may manage.

6) The right to operate shall be demonstrated as set out in the *VCS Standard*. There may be overlapping claims to land or resource rights, such as where customary rights overlap with legal ownership. Evidence shall be provided that due process has been undertaken to discover any disputes over the right to operate and land or resource rights, including determining whether there are overlapping boundaries or competing claims to land or resource rights that may put the project carbon stocks at risk of reversal. The onus is upon the project proponent to demonstrate such a process has been undertaken, failing which the project shall not pass the risk assessment and shall not be eligible for crediting.

Evidence may include survey responses, correspondence with relevant land title agencies or departments, or proof that the project has secured title insurance.

7) Stakeholder encroachment in the project area impacting project carbon stocks (e.g., tree harvesting, land conversion) after the project start date and within five years of the current risk report is considered a dispute. Disputes also include water use rights that may affect the hydrology or sediment in WRC project areas by causing the project area's water table to drop or otherwise impact the hydrology of the project area, resulting in higher GHG emissions. The project shall demonstrate endorsement (through a legal agreement) from all entities with verified rights claims or land or resource rights (such as customary rights holders).

8) WRC projects are subject to upstream and sea impacts (e.g., changes in water and sediment flows, tidal processes, SLR) that may undermine the permanence of carbon stocks. Such impacts can be the result of natural processes or policy decisions. Hydrologically connected areas adjacent to a WRC project shall not significantly negatively impact the project area (see the *VCS Standard* for requirements on hydrological connectivity in WRC projects).

9) Projects located in a country/jurisdiction with a history of national, sub-national, or local government ("Government") intervention in land or resource use have a higher non-permanence risk because such intervention demonstrates that the government is willing and able to upset expectations regarding land or resource rights. That evidence of past practice may reflect political volatility and future potential risk of non-permanence. The risk is mitigated entirely if specific instances of expropriation and government intervention in land rights in the project area have been conclusively resolved against the government in a court of competent jurisdiction.

Table 6. Land tenure (right to operate) and resource access or impacts

Land Tenure (Right to Operate) and Resource Access or Impacts		Score
Q1	Has due process been undertaken to discover any disputes over the right to operate and land or resource rights? If *No*, the project fails the risk assessment. If *Yes*, proceed to Q2.	
Q2	Has the project executed a binding legal agreement(s) (such as a contract) securing the legal right to control and operate project activities over the entire project area with all entities that have verified rights claims or verified land or resource rights (such as customary rights holders)? If *No*, the project fails the risk assessment. If *Yes*, proceed to Q3.	
Q3	Do the same or different entities hold the right to operate and land or resource rights?	
a)	The right to operate and land or resource rights are held by the same entity(ies).	0

Land Tenure (Right to Operate) and Resource Access or Impacts		Score
b)	The right to operate and land or resource rights are held by different entity(ies) (e.g., the government owns the land, and the project proponent holds a lease or concession).	2
Q4	Is the project in a country/jurisdiction with a history of national, sub-national, or local government ("Government") intervention in land or resource use?	
c)	Government has previously expropriated significant areas of land (i.e., 10% or more) in the project area in the past 20 years.	10
d)	Government has previously changed land rights in the project's jurisdiction (e.g., cancelled, or blocked land titles, expropriated land or issued overlapping land titles) in the past 20 years.	5
e)	No instances of Government intervention in the past 20 years or specific instances of expropriation and government intervention in land rights in the project area have been conclusively resolved against the government in a court of competent jurisdiction.	0
Q5	What percentage of the project area is affected by disputes over land tenure or the right to operate?	
f)	Disputes exist in more than 5% of the project area.	10
g)	Disputes exist in up to and including 5% of the project area.	5
h)	No disputes exist.	0
Q6	What percentage of the project area has disputes over access or use rights?	
i)	Disputes exist in more than 5% of the project area.	10
j)	Disputes exist in up to and including 5% of the project area.	5
k)	No disputes exist.	0
Q7	Have the risks of upstream and sea impacts undermining the carbon stocks of a WRC project been demonstrated as insignificant or effectively mitigated for the ten years that follow the risk assessment?	
l)	Potential upstream and sea impacts are not demonstrated to be insignificant or effectively mitigated.	5
m)	Potential upstream and sea impacts are demonstrated to be insignificant or effectively mitigated.	0

Land Tenure (Right to Operate) and Resource Access or Impacts		Score
Q8	Do any of the following mitigations apply to the project?	
n)	**Mitigation**: Project area is protected by a legally binding agreement (e.g., a license, conservation easement, conservation servitude or protected area) to continue management practices that protect carbon stocks for the duration of the project crediting period.	−2
o)	**Mitigation**: Where disputes over land tenure, the right to operate, or land or resource rights exist, documented evidence is provided that demonstrates the project is taking action to try to resolve the disputes or clarify overlapping claims to land or resource rights.	−2
Total Land and Resource Tenure (LT) = [as applicable, ((a or b) + (c, d, or e) + (f, g or h) + (l, j or k) + (l or m) + n + o)] Total shall *not* be less than zero.		

2.3.2 Stakeholder engagement (SE) shall be assessed using Table 7, noting the following:

1) Stakeholder engagement shall be assessed for projects where local populations, including those living in the project area or within 20 km of the boundary of the project area, are reliant on the project area, such as for essential food, fuel, fodder, medicines or building materials. Evidence of stakeholder engagement may include social assessments such as household surveys and participatory rural appraisals.

2) Stakeholders are considered consulted and involved in participatory planning where there have been direct meetings and planning with associations or community groups that are legally recognized to represent the households.

Table 7. Stakeholder engagement

Stakeholder Engagement		Score
Q1	Are local populations, including those living in the project area or within 20 km of the boundary of the project area, reliant on the project area? If No, the risk rating for stakeholder engagement is zero. If Yes, proceed to Q2.	
Q2	Have more or less than 50% of stakeholders living within and reliant on the project area been consulted?	
a)	Less than 50% of stakeholders living within the project area and who are reliant on the project area have been consulted.	10
b)	More than 50% of stakeholders living within the project area and who are reliant on the project have been consulted.	0

Stakeholder Engagement		Score
Q3	Have more or less than 20% of stakeholders living outside the project area within 20 km of the project area, and who are reliant on the project area been consulted?	
c)	Less than 20% of stakeholders living outside the project area within 20 km of the project area, and who are reliant on the project area have been consulted.	5
d)	More than 20% of stakeholders living outside the project area within 20 km of the project area, and who are reliant on the project area have been consulted.	0
Total Stakeholder Engagement (SE) = [as applicable, (a or b) + (c or d)] Total shall *not* be less than zero.		

2.3.3 Political risk (PC) shall be assessed using Table 8, noting the following:

1) A governance score (of between −2.5 and 2.5) shall be calculated from the mean of governance scores across the six indicators of the World Bank Institute's Worldwide Governance Indicators (WGI).[2] The mean should be averaged over the most recent five years of available data. Governance scores shall be translated into risk scores as set out in Table 8.

2) The mitigation discount may be subtracted if all the following apply to the project:

   a) The project is in a country that is a Party to the Paris Agreement, and the country has submitted a Nationally Determined Contribution (NDC) to the UNFCCC Secretariat in the last five years;

   b) The country's NDC includes AFOLU commitments (conditional or unconditional); and

   c) The country has a documented and active climate change plan that includes the project activity (e.g., a climate-smart agriculture program).

Table 8. Political risk

Political Risk		Score
Q1	What is the governance score for the country?	
a)	Governance score of less than −0.79.	6
b)	Governance score of −0.79 to less than −0.32.	4

[2] The World Bank Institute Worldwide Governance Indicators are available at: https://www.worldbank.org/en/publication/worldwide-governance-indicators

Political Risk		Score
c)	Governance score of −0.32 to less than 0.19.	2
d)	Governance score of 0.19 to less than 0.82.	1
e)	Governance score of 0.82 or more.	0
Q2	Does the following mitigation apply to the project?	
f)	**Mitigation**: The project is in a country that: 1) is party to the Paris Agreement and has submitted an NDC to the UNFCCC Secretariat in the last five years; 2) includes AFOLU commitments (conditional or unconditional) in its NDC, and 3) has a documented and active climate change plan that includes the project activity.	−2
Total Political Risk (PC) [as applicable, ((a, b, c, d or e) + f)] Total shall *not* be less than zero.		

2.3.4 The total risk rating for external risk shall be determined using Table 9.

Table 9. External risk

External Risk	Rating
Total External Risk = (LT + SE + PC) Total shall *not* be less than zero.	

2.4 Natural Risks

2.4.1 Natural risk is comprised of historic natural risk, projected future climate change impact, and sea-level rise impact.

2.4.2 Historic natural risks shall be assessed using Table 10 and Table 11, noting the following:

1) Historic natural risk is based on likelihood (i.e., the historical average number of times the event has occurred in the project area over the last 100 years) and significance (i.e., the average size of each event). The frequency and significance of events shall be estimated based on historical records, probabilities, remote sensing data, peer-reviewed scientific literature, survey data or documented local knowledge. Where data are available for at least 20 years but less than 100 years, projects shall conservatively extrapolate using the data. Where data are unavailable for the project area, likelihood and significance shall be determined based on conservative estimates (i.e., not underestimating the possible frequency or severity) of historical events in the project region.

2) The significance of natural risks shall be determined based on the damage that the project would sustain if the event occurred. It shall be estimated by calculating the percentage of average carbon stocks in the project area that would be lost in a single event.

3) The natural risk mitigation factors may be applied where evidence demonstrates that prevention measures are in place, or the project has a history of effectively containing natural risk. Examples of mitigation or prevention measures include the following:

   a) Fire risk: Fuel removal, the establishment of fire breaks and fire towers, and ready access to adequate fire-fighting equipment.

   b) Risk of pest or disease outbreaks: Planting of biodiverse species, selection of pest or disease resistant species and co-planting of vegetation that inhibits pest infestation during the early growing period.

   c) Extreme weather risk: Planting of frost-tolerant species in areas where winter frost is a risk, use of riparian zones or other buffers for flood or storm control and use of species tolerant of wet soil conditions where flooding risks exist.

   d) Other natural risks: Use of plant species tolerant of salinity fluctuations in estuarine wetlands.

2.4.3 Historic natural risk shall be assessed as follows:

1) AFOLU projects shall assess, at a minimum, fire, pest and disease outbreaks, extreme weather events such as droughts and hurricanes, and geological risks such as earthquakes and volcanoes. WRC projects shall also assess changes in the seasonal timing and depth of the water table and, where applicable, wrack deposition in tidal wetlands from storm surges.

2) Likelihood and significance (LS) and mitigation (M) (if any) shall be assessed for each risk factor identified (see Table 10). The sub-total risk value is calculated by multiplying the LS and M for each natural risk applicable to the project.

2.4.4 The projected future climate change impact shall be assessed based on climatic impact drivers (CIDs). The CID approach produces an amplifying factor to increase the historic natural risk score based on projected future climate change impact (see Table 11). Projected future climate change impact shall be assessed, noting the following:

1) For each CID category, the project change value and direction of change (positive or negative) shall be used to specify if it is expected to have a positive or negative impact on the project. For example, increasing mean air temperature can be a risk to successfully establishing seedlings in a reforestation project (negative impact), but could promote better yields for certain crops in an ALM project (positive impact). The impact shall be justified as follows:

a) For CID categories that are expected to positively impact the project, reference an external source(s) (e.g., peer-reviewed literature or a report published by a government agency) to justify the positive impact.

b) For CID categories that are expected to have a negative impact with a CID impact level of one, reference an external source(s) (e.g., peer-reviewed literature or a report published by a government agency) to justify the negative impact.

c) For CID categories that are expected to have a negative impact with a CID impact level of two or greater, no justification of the impact is required.

d) For CID categories that do not apply to the project, provide a brief explanation (e.g., a few sentences) to justify why that category is irrelevant to the project activity.

2) Risk from projected future climate change impacts can be reduced where evidence is provided that the project proponent meets a minimum of five adaptive capacity criteria. To meet each adaptive capacity criterion the project proponent shall answer all interpretation questions and provide supporting evidence. If at least five criteria are met (see Table 12), the amplifying factor fraction is reduced by 40%. Evidence supporting the implementation of adaptive capacity criteria shall be provided.

3) The natural risk affected by climate change (NR-c) is calculated by multiplying the historic natural risk score by the projected future climate change impact amplifying factor. The amplifying factor shall only be applied to natural risks indicated to be affected by climate change (e.g., fire, extreme weather).

2.4.5 The SLR risk shall be assessed where the project is in a coastal zone, noting the following:

1) SLR risk shall be assessed based on the physical and natural conditions of the project (i.e., ecosystem degradation, coastal flooding, coastal erosion, and degree of salinization) and the overall impact level of coastal flood and erosion.

2) The SLR risk rating can be reduced where evidence is provided that the project proponent has taken specific measures to adapt (See Table 14).

3) The sub-total SLR risk score is calculated by multiplying the SLR risk score by the adaptation score.

2.4.6 The total risk rating for natural risk is determined as the sum of natural risk affected by climate change (NR-c), natural risk not affected by climate change (NR-nc) and SLR risk. If the total natural risk is above 35, the project fails the risk assessment and ineligible for crediting.

Table 10. Historic natural risk scores

Significance	Historical Likelihood				
	More than once every 10 years	Once every 10 to less than 25 years	Once every 25 to less than 50 years	Once every 50 to less than 100 years	Once every 100 years or less frequently, or risk is not applicable to the project area
Catastrophic (70% or greater loss of carbon stocks)	FAIL	30	20	5	4
Devastating (50% to less than 70% loss of carbon stocks)	30	20	5	4	3
Major (25% to less than 50% loss of carbon stocks)	20	5	4	3	2
Minor (5% to less than 25% loss of carbon stocks)	5	4	3	2	1
Insignificant (less than 5% loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event)	4	3	2	1	1
Not applicable	0	0	0	0	0

Mitigation Score	
Prevention measures applicable to the risk factor are implemented	0.50
Demonstrated history of effectively containing natural risk	0.50
Both of the above	0.25
None of the above	1

Table 11. Natural risk assessment

Natural Risk		Historic Natural Risk Score (LS)	Mitigation (M)	Sub-total Risk (LS×M)	Affected by Climate Change?
a)	Fire (F)				Yes
b)	Pest and disease outbreaks (PD)				Yes
c)	Extreme weather (W)				Yes
d)	Geological risk (G)*				
e)	Other natural risk (ON1)				
f)	Other natural risk (ON2)				
g)	Other natural risk (ON3)				
h)	Sea-level rise (SLR)				Yes

Projected Future Climate Change Impact on Natural Risk	Aggregated Sub-total Risk	Future Climate Change Impact Factor[3]	Total (Aggregated sub-total risk x future climate change impact factor)
Natural risk associated with climate change impact (NR-c)	Sum of the post-mitigation risk rating of each historical natural risk impacted by climate change	1 to 1.4	
Natural risk NOT associated with climate change impact (NR-nc)	Sum of the post-mitigation risk rating of each historical natural risk not impacted by climate change	1	

Total Natural Risk	Rating
Total Natural Risk = (NR-c + NR-nc + SLR)	

Total shall *not* be less than zero.

* If the geological risk is landslide, please indicate "yes" it is affected by climate change, otherwise indicate "no."

[3] As calculated using the digital AFOLU Non-Permanence Risk Tool

Table 12. Criteria for evaluating adaptive capacity to future climate change[4]

Criteria	Adaptive Capacity	Supporting Evidence Examples
1) Variety	**Description:** Availability of a range of policy options to address climate change that apply directly to the project activity Participation of different actors, levels, and sectors in the climate change governance process **Interpretation:** Are there policies to address climate change at the national and sub-national levels, and has the project proponent taken them into account in the project design? Has the project proponent identified organizational actors responsible for such actions?	A document or report of policies identified at the national or subnational level or internally to address climate change. A role-activity matrix within an adaptive management plan that indicates the staff who will lead the climate change mitigation actions.
2) Learning capacity	**Description:** Ability to address future climate events and learn from past experiences to improve routines regarding climatic experiences Evidence of changes in assumptions that support actions regarding climate change experiences **Interpretation:** Has the project proponent considered results from the calculation models and past experiences of climate events in its internal decision-making processes?	A document, report, or internal communication consolidated into an adaptative management plan in which the project explores and explains how it plans to learn from and adapt to climate events.
3) Room for change	**Description:** Continual access to climate information at different spatial-temporal scales (e.g., early warning systems, climate change projections) **Interpretation:** Has the project proponent included climate change information available at different spatial and temporal scales (e.g., climate change projections presented in national climate assessments or national communications to the United Nations Framework on Climate Change) in its decision-making processes?	A document, report, or internal communication showing how climate change information (at different spatial-temporal scales from national reports to the UNFCCC, local or regional remote sensing systems for monitoring, free-access portals such as Interactive Atlas of IPCC or ThinkHazard!) improved the project's decision-making process and a plan for incorporating new climate change information into project decision-making.

[4] Adapted from Gupta, J., C. Termeer, J., Klostermann, et al. 2010. "The Adaptive Capacity Wheel: A Method to Assess the Inherent Characteristics of Institutions to Enable the Adaptive Capacity of Society." *Environmental Science & Policy* 13 (6): 459–71. https://doi.org/10.1016/j.envsci.2010.05.006

Criteria	Adaptive Capacity	Supporting Evidence Examples
4) Leadership	**Description:** Long-term vision on climate change, or Stimulus for action, entrepreneurship, and collaboration from different stakeholders **Interpretation:** Has the project proponent developed actions on its own or by collaborating with other stakeholders to address climate change impacts, or has the project proponent manifested in the vision or mission statements of the organization elements related to climate change impacts, adaptation, and mitigation?	A report, sustainability agenda, agreements, cooperative agreements, research proposals, consultancies, or other supporting documents in which the project proponent alone or in collaboration has communicated its performance and impacts on a wide range of sustainability topics, including climate change and the risks and opportunities facing the organization.
5) Resources	**Description:** Availability of climate change expertise, knowledge, and human labor force in the field of environmental sciences Availability of financial resources to support policy measures and financial incentives to address climate change **Interpretation:** Has the project proponent included in its financial reports descriptions of both (i) the human labor force with knowledge of environmental sciences and (ii) financial resources to support policy measures to address climate change?	A financial report(s) describing the human labor force and financial resources that will be used to support climate change policy measures.
6) Fair governance	**Description:** Evidence of policies, practices, and behaviors that address climate change effectively Availability of accountability procedures to implement climate change-orientated actions **Interpretation:** Has the project proponent included a set of indicators to assess the impact of policies, practices, and behaviors of the organization that will address climate change relevant to the project activity and report on the project's progress against those indicators?	A document, report, or communication in which the project proponent shows the set of indicators used to measure the impact of its policies, practices, and behaviors or public access to annual management reports where climate change actions are presented (for example, the achievement of SDG targets)

Criteria	Adaptive Capacity	Supporting Evidence Examples
7) Innovation	**Description:** Availability of novel solutions to reduce the threat, or take advantage, of climate change **Interpretation:** Has the project proponent implemented novel solutions to reduce the threat or take advantage of climate change? Note that novel solutions may also include the application of ancestral or traditional practices that could prevent or reduce the impacts of adverse consequences from climate change.	Peer-reviewed literature or a government agency report detailing novel solutions, activities, or practices to reduce the threat of climate change or take advantage of potential opportunities.

Table 13. SLR risk score

Significance	SLR Impact Level				
	High (5)	Major (4)	Minor (3)	Low (2)	Insignificant (1)
Catastrophic (70% or greater loss of carbon stocks)	FAIL	30	20	5	4
Devastating (50% to less than 70% loss of carbon stocks)	30	20	5	4	3
Major (25% to less than 50% loss of carbon stocks)	20	5	4	3	2
Minor (5% to less than 25% loss of carbon stocks)	5	4	3	2	1
Insignificant (less than 5% loss of carbon stocks) or transient (full recovery of lost carbon stocks expected within 10 years of any event)	4	3	2	1	1
Not Applicable	0	0	0	0	0

Table 14. SLR adaptation scores

Type of Measure	Description	Reduction Score
Ecosystem-based adaptation (EbA)	Restoration strategies, creation of new natural buffer areas, preservation, supporting inland migration of impacted coastal plant communities (e.g., mangroves)	0.5
Land use planning, public participation, and conflict resolution approaches	Decision analysis, land use planning, public participation, livelihood support and conflict resolution approaches	0.5
Protection barriers (bioengineering)	Filling of beaches, piers, breakwaters, structures, and barriers against flooding for protection and prevention of erosion, green and blue infrastructure	0.6
Application of two or more measures listed above		0.25
None of the above		1

2.5 Step 2: Overall Non-Permanence Risk Rating and Buffer Determination

2.5.1 The overall non-permanence risk rating shall be determined using Table 15. The overall risk rating shall be rounded up to the nearest whole percent.

Table 15. Overall risk rating

Risk Category		Rating
a)	Internal Risk (from Table 5)	
b)	External Risk (from Table 9)	
c)	Natural Risk (from Table 11)	
Overall Risk Rating = (a + b + c)		

2.5.2 The minimum risk rating shall be 12, regardless of the risk rating calculated using Table 15.

2.5.3 Where the overall risk rating exceeds 60, project risk is deemed unacceptably high, and the project fails the risk analysis. These projects shall not be eligible for crediting until risks are adequately addressed or sufficient mitigation measures are implemented to lower the overall risk rating to less than or equal to 60. Further, where the sum of risk ratings for any risk category is greater than the following thresholds, the project fails the risk analysis and shall not be eligible for crediting (until risks are mitigated to result in totals below these thresholds):

1) Internal risk threshold: 35

2) External risk threshold: 20

3) Natural risk threshold: 35

2.5.4 To determine the number of buffer credits that shall be deposited in the AFOLU pooled buffer account, the overall risk rating shall be converted to a percentage (e.g., an overall risk rating of 35 converts to 35%). This percentage shall be multiplied by the net change in the project's carbon stocks (stated in the monitoring and verification report), as set out in the *Registration and Issuance Process*. Where a project is divided into more than one geographic area or cluster for risk analysis, the overall risk rating percentage for each area shall be multiplied by the net change in the project's carbon stocks (stated in the verification report) in the geographic area.

2.5.5 Buffer credits shall be deposited in the AFOLU pooled buffer account following the procedures set out in the *Registration and Issuance Process*. The same document sets out the rules and requirements for the release and cancellation of buffer credits from the AFOLU pooled buffer account.

DOCUMENT HISTORY

Version	Date	Comment
v5.0	16 Dec 2025	Updated version released under VCS Version 5

ABOUT VERRA

Verra sets the world's leading standards for climate action and sustainable development. We build standards for activities as diverse as reducing deforestation, improving agricultural practices, addressing plastic waste, and achieving gender equality. We manage programs to certify that these activities achieve measurable high-integrity outcomes. We work with governments, businesses, and civil society to advance the use of these standards, including through the development of markets. Everything we do is in service of increasingly ambitious climate and sustainable development goals, and an accelerated transition to a sustainable future.

Verra's certification programs include the Verified Carbon Standard (VCS) Program and its Jurisdictional and Nested REDD+ (JNR) framework, the Climate, Community & Biodiversity Standards (CCBS) Program, the Sustainable Development Verified Impact Standard (SD VISta) Program, and the Plastic Waste Reduction Program.

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Standards for a
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Verified Carbon
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Jurisdictional and Nested
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Scope 3
Standard

Sustainable Development
Verified Impact Standard

Plastic Waste
Reduction Standard