



The American Carbon Registry™ Technical Standard

**2009
Version 1.0**

The American Carbon Registry's™ technical eligibility requirements for registration of project-based carbon offsets.

An enterprise of Winrock International



Foreword

The *American Carbon Registry*[™] ("ACR") is an enterprise within Winrock International's Environment Group and is a sister enterprise of the Environmental Resources Trust (ERT). Winrock International ("Winrock") works with people in the U.S. and around the world to empower the disadvantaged, increase economic opportunity, and sustain natural resources. Winrock developed the *American Carbon Registry Technical Standard* to provide requirements for the registration of project-based carbon offsets on the ACR.

The ACR is also publishing an *American Carbon Registry Standard* to provide additional guidance as to the ACR operating procedures, as well as other sector-based standards such as the published *American Carbon Registry Forest Carbon Project Standard* (FCPS). The ACR's intent with these documents is to support the development of the voluntary and pre-compliance U.S. carbon markets. The requirements in ISO 14064, Parts 2-3:2006 and ISO 14065:2007 are the foundation for all of the ACR's offset standards.

Development of the *American Carbon Registry Technical Standard* would not have been possible without the support, loyalty, and commitment of the American Carbon Registry's Founding Members and the Winrock International Board of Directors.



American Carbon Registry™ Eligibility Rules and Criteria for GHG Project Registration and Offset Issuance

Greenhouse gas (GHG) reduction and removal projects must meet the American Carbon Registry™ (“ACR”) eligibility criteria below in order to qualify for project registration and GHG offset (carbon offset) issuance.

ACR recommends the adoption of and compliance with Registry methodologies where they exist. ACR does consider baseline, quantification, and monitoring methodologies and tools from other systems including the Clean Development Mechanism (CDM), GHG Protocol, International Standards Organization 14064-2 (ISO), U.S. EPA Climate Leaders and the Voluntary Carbon Standard (VCS) to the extent they conform to the *American Carbon Registry Technical Standard*. The ACR reserves the right to reject a specific methodology and/or tool.

ACR accepts a variety of project types from locations worldwide and does not issue carbon offsets based on renewable energy credits (RECs) and other indirect emissions reductions or removals from U.S. projects.¹ ACR makes no quality distinction between voluntary and pre-compliance offsets.

Criteria	Definition	Requirement
Project Document	A project document (PD) defines how, what, and when a Project Proponent shall measure, monitor, and report the GHG project in order for an independent third party to verify project outcomes.	<p>ACR requires a <i>GHG Project Plan</i> for projects using an ACR methodology and tool, or an ACR approved methodology and tool.</p> <p>ACR requires a <i>Monitoring, Reporting and Verification (MRV) Project Protocol</i> for projects that fall outside of any ACR sector standard, and whose basis is a site-specific approach to GHG quantification and monitoring.</p> <p>All PDs shall address all ACR eligibility criteria in this table and include content in accordance with ISO 14064-2:2006, Clause 5.2.</p>
Start Date	ACR defines project start date for non-forest / land-use-change projects as the date by which the project began to reduce GHG emissions against the project’s baseline.	Non-forest / land use change projects with a start date of 01 January 2000 or later are eligible for ACR registration.

¹ ACR registers emissions reductions from projects in the developing world including renewable energy projects 100 MW or less and energy efficiency projects in which the baseline includes indirect emissions. Projects in developing countries require host country approval from the Designated National Authority (DNA) for that country in countries that are signatories to the UN Framework Convention on Climate Change.



	<p>ACR defines the start date for forest and land-use-change projects as the date by which the Project Proponent began the project activity on project lands.</p>	<p>Forest and land-use-change projects with a start date of 01 November 1997 or later are eligible for ACR registration.</p> <p>Forest and land-use-change projects with an earlier start date will be evaluated on a case-by-case basis and accepted or rejected based on the conformity of the methodology to best practices for monitoring carbon storage in forestry and agroforestry projects and conformity with ACR Standards.</p>
Real	<p>A real offset yields after-the-fact, quantifiable and verifiable GHG emissions reductions or removals, i.e., after-the-fact atmospheric benefit.</p>	<p>ACR requires that the GHG reduction or removal exist <i>prior</i> to offset issuance. ACR will not forward issue nor forward register a projected stream of future offsets.</p>
Additional	<p>Additionality is a test to ensure that a project-based offset is “in addition to” reductions and/or removals that would have occurred without carbon market incentives.</p>	<p>ACR requires every project to pass either an approved performance standard and a regulatory additionality test or a three-pronged test of additionality in which the project must: 1) exceed regulatory / legal requirements; 2) go beyond common practice; and 3) overcome one of three implementation barriers: institutional, financial or technical.</p>
Direct Emissions	<p>An emission reduction or removal is a “direct emission” if the Project Proponent owns or has control over the source of the emissions (e.g., equipment) or the emissions sink (e.g., project lands).</p>	<p>ACR requires a Project Proponent to own or have control over the GHG sources or sinks from which the emissions reduction or removal originates (note exception in footnote 1).</p>
Project Action	<p>The project action is the action that results in a GHG removal or reduction.</p>	<p>ACR requires that the project demonstrate an accepted and discernable project action, change in activity or process, and/or avoidance of commonly occurring action.</p>



<p>Title</p>	<p>Title is a legal term representing rights and interests in an offset, a future stream of offsets, or a project delivering offsets.</p>	<p>ACR requires documentation and attestation of the Project Proponent's undisputed title to all GHG reductions and removals <i>prior</i> to offsets issuance. Title must be clear, unique, and uncontested.</p>
<p>Approved Methods, Tools and Emissions Factors</p>	<p>Approved methods and tools include a systematic explanation of how a Project Proponent established the project baseline, estimates and monitors emissions reductions or removals, determines reversal risk and estimates leakage by following scientific good practice. Good practice entails that a Project Proponent be conservative, transparent and thorough.</p>	<p>ACR requires use of best practices as incorporated in ACR approved methodologies for baseline determination, baseline update, additionality determination, permanence risk analysis, buffer determination, land eligibility, GHG modeling and measurement, and monitoring and reporting.</p>
<p>Project Baseline</p>	<p>The project baseline is a counterfactual scenario that forecasts the likely stream of GHG emissions reductions or removals to occur if the project proponent does not implement the project, i.e., the "business as usual" case.²</p>	<p>Baseline calculations must be consistent with the WRI / WBCSD GHG Protocol and ISO 14064-2, and consider ACR-approved best practices.</p> <p>Project Proponents shall estimate the baseline for all forest and land use projects at the project start. An approved verifier will verify the baseline at time of offset issuance.</p> <p>Project Proponents shall use appropriate methodologies and tools to estimate and update forest project baselines.</p>
<p>Permanent</p>	<p>Permanence is a reference to the longevity of the atmospheric benefit created by geologic and terrestrial (e.g., carbon that is stored in biomass and soil) sequestration.</p>	<p>Project Proponents must address the risk of reversal by use of one of the following: an approved insurance product to guarantee offsets; a carbon buffer pool; access to a secure source of replacement offsets; or other approved risk management technique.</p>

² The quantity of offsets that a project generates is the difference between actual emissions or removals and the baseline emissions or removals resulting from the project action.



	<p>Fire, disease, pests, tillage and illegal logging can reduce terrestrial carbon stocks and result in the reversal of carbon sequestration, i.e., the atmospheric benefit is not permanent.</p>	<p>ACR requires terrestrial sequestration Project Proponents to use the approved “Tool for AFOLU Non-Permanence Risk Analysis and Buffer Determination” in order to address reversal risk and to determine the size of the buffer.</p> <p>ACR requires geologic sequestration Project Proponents to use approved methodologies that assure permanence including ongoing QA/QC and long-term monitoring.</p>
<p>Net of Leakage</p>	<p>Leakage is the increase in GHG emissions outside the project boundary that occurs because of the project action.</p>	<p>ACR requires Project Proponents to assess, account for, and mitigate leakage, and provide documentation to support mitigation assertions. Project Proponents must deduct all leakage that reduces the GHG emissions reduction and/or removal benefit of the project. ACR assesses leakage on a case-by-case basis.</p>
<p>Crediting Period</p>	<p>Crediting period is the finite length of time for which the project’s PD is valid (i.e., the <i>GHG Project Plan</i> or <i>MRV Project Protocol</i>) and that the ACR can issue offsets for the project.</p>	<p>ACR requires a crediting period of ten (10) years or less for non-forest projects, with opportunities for renewal.</p> <p>ACR requires afforestation / reforestation (AR) projects to have a crediting period of thirty-five (35) years or less, with opportunities for renewal.</p> <p>ACR requires improved forest management (IFM) and reduced emissions from deforestation and degradation (REDD) projects to have a crediting period of ten (10) years or less, with opportunities for renewal.</p> <p>To renew the crediting period, Project Proponents must secure the services of an independent, approved verifier to validate the PD as using Best Practice methodologies, tools, factors, and monitoring processes at that time.</p>



		<p>In the absence of a renewed crediting period, the ACR will cease to issue offsets from that project.</p>
<p>Independent Verification</p>	<p>Verification is the independent assessment by a qualified and impartial third party of GHG emissions reduction / removal. The outcome is a verification report and a statement signed by the lead verifier that provides an opinion on the relevance, completeness, accuracy, reliability, and transparency of the GHG quantification data and methods.</p>	<p>ACR requires third party verification by an approved verifier prior to offset issuance and as scheduled in the project's PD.</p> <p>Verifiers must use transparent and replicable verification methods against the relevant ACR standard. ACR reserves the right to reject the verification report from an approved verifier.</p>
<p>Community and Environmental Impacts</p>	<p>Projects have the potential to generate both positive and negative community and environmental impacts.</p>	<p>Prior to registration, ACR requires all projects to document a mitigation plan for any foreseen negative community or environmental impacts. ACR also requires written disclosure by the Project Proponent of any prior negative environmental or community impacts or claims of negative environmental and community impacts.</p> <p>ACR requires written disclosure by the Project Proponent of any unmitigated, or claims of unmitigated, negative community and environmental impacts caused by the project as they become known. Furthermore, the Project Proponent must document plans for mitigation of any such reported negative environmental or community impacts.</p> <p>ACR reserves the right to remove offsets from the Registry on a case-by-case basis.</p>



American Carbon Registry™

Approach to Additionality

Additionality is a test intended to ensure that project offsets are “in addition to” reductions and/or removals that would have occurred in the absence of the project activity and without carbon market incentives. A project developer/proponent must demonstrate to the American Carbon Registry (“ACR”) that the greenhouse gas (GHG) emissions reductions associated with an offset project are not a “business as usual” baseline scenario.

To qualify as additional, ACR requires every project to pass either an approved performance standard and a regulatory additionality test or a three-pronged test of additionality as described below.

ACR Hybrid Approach

For projects not using an approved performance standard, the ACR uses a hybrid approach that combines three key tests to determine project additionality. These three tests help the ACR to identify in particular whether realizing a GHG emissions reduction / sequestration goal was a reason, even if only one among many, to implement the project. The three tests are:

- Regulatory Surplus
- Common Practices
- Implementation Barriers

American Carbon Registry Hybrid Additionality Test

Test	Key Questions
Regulatory Surplus	<p>Is there an existing law, regulation, statute, legal ruling, or other regulatory framework in effect now or as of the project start date that mandates the project or effectively requires the GHG emissions reductions?</p> <p style="text-align: center;">Yes = Fail; No = Pass</p>
Common Practices	<p>In the field or industry/sector, is there widespread deployment of this project, technology, or practice within the relevant geographic area?</p> <p style="text-align: center;">Yes = Fail; No = Pass</p>
Implementation Barriers	<p><i>Choose one (1) of the following three (3):</i></p> <p>Does the project face capital constraints that carbon revenues can potentially address; <u>or</u> is carbon funding reasonably expected to incentivize the project’s implementation; <u>or</u> are carbon revenues a key element to maintaining the project action’s ongoing economic viability after its implementation?</p> <p style="text-align: center;">Yes = Pass; No = Fail</p>



Technological	<p>Is a primary reason for implementation of the technology in question its GHG reduction capabilities or benefits, <u>and</u> is the reduction/sequestration of GHGs one of the goals of the project at the start date?</p> <p style="text-align: center;">Yes = Pass; No = Fail</p>
Institutional	<p>Does this project face significant organizational, cultural, or social barriers to GHG emissions reduction/sequestration that the accrual of benefits from a GHG emissions reduction/sequestration project action will help to overcome?</p> <p style="text-align: center;">Yes = Pass; No = Fail</p>
<p><i>If the project passes the Regulatory Surplus and Common Practices tests, and at least one Implementation Barrier test (i.e., financial, technological, or institutional), ACR considers the project additional.</i></p>	

Regulatory Surplus Test

The regulatory surplus test involves existing laws, regulations, statutes, legal rulings, or other regulatory frameworks that directly or indirectly affect GHG emissions associated with a project action or its baseline candidates, and which require technical, performance, or management actions. These legal requirements may involve the use of a specific technology, meeting a certain standard of performance, or managing operations according to a certain set of criteria or practices (e.g., forest management practices). The ACR does not consider mandatory those voluntary agreements without an enforcement mechanism, proposed laws or regulations, or general government policies.

Common Practices Test

Common practices represent the predominant technology(ies) implemented or industry practice(s) undertaken in a particular industry sector and/or geographic region, as determined by the degree to which those technologies/practices have penetrated the market (in a specific geographic area). The proposed offset project must reduce GHG emissions below levels produced by common practices technologies within a comparable environment (e.g., regulatory framework, investment climate, access to technology/financing, etc.).

The level of penetration that represents common practice may differ between sectors and geographic areas, depending on the diversity of baseline candidates. The common practice penetration rate or market share for a technology or practice may be quite low if there are many alternative technologies and practices. Conversely, the common practice penetration rate or market share may be quite high if there are few alternative technologies or practices. Projects that are “first-of-its-kind” are not common practice.

Implementation Barriers Test

An implementation barrier represents any factor or consideration that would prevent the adoption of such a practice/activity proposed by the project action. Baseline candidates each may face multiple barriers. Generally, there are no barriers to the continuation of current activities, with the exception of regulatory or market changes that force a shift in a project activity, or the end of equipment’s useful lifetime.



Under the implementation barriers test, project developers/proponents must choose at least one (1) among three (3) barrier assessments: i) financial, ii) technological, and iii) institutional. The ACR does not require passing all three (3) barriers. These are:

- *Financial* - Financial barriers can include high costs, limited access to capital, and high risks such as unproven technologies or business models, poor credit rating of project partners, and project failure risk.
- *Technological* - Technological barriers can include R&D deployment risk, uncorrected market failures, lack of trained personnel and supporting infrastructure for technology implementation, and lack of knowledge on practice/activity.
- *Institutional* - Institutional barriers can include institutional opposition to technology implementation, limited capacity for technology implementation, lack of management consensus, aversion to upfront costs, and lack of awareness of benefits.