



**AMERICAN CARBON REGISTRY**  
**SUMMARY AND RESPONSE TO PEER REVIEW**



For all new standards and methodologies, ACR coordinates a sequential process of public consultation and scientific peer review prior to publication. The ACR *Forest Carbon Project Standard v2.0 (FCPS)* was first posted for public comment and feedback incorporated. The public comments and ACR’s response to them are summarized in a separate document.

The *FCPS* was then reviewed by four independent, external peer reviewers with expertise in U.S. and international forest carbon. Further changes were made to the *FCPS* based on this review. The peer review comments are provided below, grouped by topical area, with ACR’s response to each.

To safeguard the impartiality and rigor of the process and prevent any attempts by financially interested parties to influence peer reviewers, ACR conducts the peer review process anonymously.

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**A. General Comments**

	<b>Comment</b>	<b>Response</b>
1	We suggest adding to the introduction a brief overview of the offset creation process. This overview could be a bulleted list of steps, and probably should reference the ACR Standard.	The offset project development, certification, verification and registration process is summarized in chapter 6 of the <i>ACR Standard</i> , which is now referenced in the <i>FCPS</i> .
2	As written, Version 2.0 is a mixture of general guidance and standards requirements. This may present problems in both project approval and verification. Terms such as “may,” “must,” “should,” “are advised,” or “could,” provide insight into what the ACR desires to see in a project, but offer little guidance for a verifier, who must ascertain if the project meets the standard.	We have clarified language throughout so that the use of “shall,” “should,” and “may” more clearly indicates which portions of the <i>FCPS</i> represent requirements vs. optional guidance. We also removed negative language.

	Comment	Response
	<p>Where possible, through terms such as “shall” or “shall not,” and through the use of boxes or other editorial devices, it would be useful to more clearly separate the guidance language from the standards language.</p> <p>There are also many examples of negative language (“ACR does not accept”, or “ACR does not state”). These should be replaced with what ACR does want or accept.</p>	
3	<p>The primary scientific basis for project design is contained in the ACR-approved methodologies, which do not appear in the Standard 2.0 document. This leaves few technical details in Version 2.0, and does not provide guidance for potential forestry project proponents in a single source document. ACR may wish to consider attaching one or more basic ACR-approved methodologies as an annex to the Standard. The principles in the standard are good, but quantification details are in methodologies, and particularly for baselines and leakage the devil is definitely in the details.</p>	<p>This is correct. ACR has made the policy decision to provide general and sector-specific requirements in standards, and separately publish and/or approve methodologies via the public consultation and peer review process. This provides flexibility to Project Proponents to use an ACR-published methodology, use an ACR-approved methodology from another GHG program, or submit a new or modified methodology to ACR for approval. Since methodologies are numerous and vary in their applicability conditions and appropriateness to different project activities, we have not attempted to create a single-source document.</p>
4	<p>There seems to also be the risk of confusion when approved methodologies do not exactly match the ACR Standard. It must be made clear which prevails in that situation. One would assume that the Standard would prevail, but that could become a source of confusion if not clearly presented.</p>	<p>A clarifying note has been added that in the case of any conflict between an approved methodology and the <i>FCPS</i>, the <i>FCPS</i> shall govern.</p>
5	<p>The difference between the two <i>de minimis</i> thresholds (1% and 3%) and the materiality threshold for verification (5%) is confusing. Suggest using the same number. See specific comments for those segments.</p>	<p>The materiality threshold for verification is a distinct concept from the <i>de minimis</i> threshold used in the selection of which sources and carbon pools to include or exclude in <i>ex ante</i> or <i>ex post</i> accounting.</p> <p>However, following the reviewers’ suggestion the separate <i>de minimis</i> threshold of 1% for individual pools has been eliminated in favor of a single <i>de minimis</i> threshold of 3% for all combined pools excluded from project accounting. See response to comment C.4.</p>

## B. Chapter 1: Scope

	Comment	Response
1	<p>Afforestation/Reforestation. The merged consideration of Afforestation and Reforestation as a single type of project is acceptable. It blurs the distinction between projects that change established land uses and those that do not, but that may not be a distinction that is important to ACR.</p>	<p>This is correct. In general, the term afforestation is applied to activities to establish forest on lands that have been in another land use for some relatively long period, while reforestation is applied to activities to reestablish forest on lands that were in forest cover relatively recently. Some definitions use a specific number of years out of forest cover to distinguish between the two. ACR does not make a specific distinction between afforestation and reforestation, since both are eligible.</p>
2	<p>Although this is the definition for AR, it seems to allow revegetation without establishing a forest as defined by countries. Why not name it ARR?</p>	<p>We have clarified that AR activities must target the eventual establishment of “forest” per the applicable definition.</p>
3	<p>A related remark is that the standard apparently does not cover avoided devegetation. This category is unfortunately not covered by VCS AFOLU and here the opportunity seems to be missed as well.</p>	<p>We have clarified that avoided degradation of forests remaining as forests is an eligible activity under Reducing Emissions from Deforestation and Degradation (REDD).</p>
4	<p>Improved Forest Management. Footnote 1 (p. 10) and definition (p. 64). Avoided degradation can be considered a type of IFM. Please note that the VCS IFM category is defined differently, under the guidance of one of the same authors:</p> <p>"Only areas that have been designated, sanctioned or approved for such activities (e.g., as logging concessions or plantations) by the national or local regulatory bodies are eligible for crediting under the VCS Improved Forest Management (IFM) category. Activities to reduce emissions from unsanctioned forest degradation (e.g., illegal logging) is not eligible for crediting under the IFM category, but may be creditable as a Reduced Emissions from Deforestation and Degradation activity (REDD)."</p> <p>Practitioners will be confused about this. Suggest that either the definitions are synchronized or some justification for the difference is provided.</p>	<p>The question of where avoided degradation appropriately resides (IFM or REDD) was also raised in public comments and so we have clarified.</p> <p>In the international context REDD is understood to include reducing emissions from deforestation, improved forest management, and avoiding degradation through illegal or unsanctioned activities. Here for clarity we include under IFM only sanctioned activities carried out on lands designated for forest management. We include under REDD: all deforestation (conversion from forest to non-forest), whether planned/sanctioned or not; and all unplanned, unsanctioned or illegal activities, whether they cause deforestation (conversion to non-forest) or degradation (forest degrades</p>

	Comment	Response
		<p>but remains as forest per applicable definition).</p> <p>The categories are important since different activities have different Crediting Periods, and activities where the change in baseline conditions is relatively quicker are given a shorter Crediting Period.</p>
5	<p>It is not readily apparent to the peer reviewers why the following statement is included in the IFM description: “Thinning of native tree species (e.g. of suppressed understory trees in older stands) to promote growth does not make an IFM project activity ineligible, but must be included in project accounting.” Why would thinning make an IFM project ineligible? It is included in the project definition as an accepted practice. Of course, it must be included in project accounting. Isn’t there a more positive way to say this? Something like: “Full project accounting must include all growth, removals, and mortality in both the project baseline and the calculation of Net Emission Reductions.” Or does it need to be said at all?</p>	<p>ACR agrees this sentence, added at the suggestion of one of the public commenters, was extraneous since nothing in the <i>FCPS</i> suggested thinning of trees would make an IFM project ineligible; this may in fact be part of the project plan. The sentence has been removed.</p>
6	<p>The connection between AR or IFM and fuel switching has implications for additionality. Additionality should be assessed at the level of the entire program (including AFOLU and fuel switching) because carbon finance can remove barriers. While PPs may submit separate PDs for AFOLU and for fuel switching, a validator may not accept the connection between the two activities if not specifically instructed by the ACR.</p>	<p>The intent of the comment is unclear. Forest carbon projects may have a biomass energy component, with changes in GHG reductions and removals in forest carbon pools accounted under the <i>FCPS</i> and approved methodologies, and any displacement of fossil fuel GHG emissions (if eligible) accounted using appropriate energy sector methodologies and tools. However only under specific conditions, detailed in the <i>ACR Standard</i>, are avoided direct emissions eligible for crediting.</p>
7	<p>The second paragraph and its associated footnote in Section 1.E. seems out of place in a forestry project standard, since it applies specifically to renewable energy projects. Could a footnote on the last sentence of the first paragraph cite the appropriate reference to the ACR Standard?</p>	<p>This paragraph described the specific criteria, all of which must be met, in order for a forestry project generating biomass for energy to receive credit for avoided direct emissions from displaced fossil fuels. These requirements are intended to ensure that offset title is clear and uncontested</p>

	Comment	Response
		and double-counting is eliminated.  However the paragraph duplicated text in the <i>ACR Standard</i> so we have removed it and referenced the applicable section there.
8	Reducing Emissions from Deforestation and Degradation. The definition of REDD does not cover the second 'D'. It is only about deforestation. Avoided degradation seems to be under IFM. If this is intentional the title should be renamed into RED.	We have clarified that REDD does include avoided degradation. The definition now reads:  Reducing Emissions from Deforestation and Degradation (REDD), defined as the reduction in GHG emissions from the avoided conversion of forest to non-forest use (e.g. to cropland, grassland, settlement, or development) or avoided degradation of forests remaining as forests. Recognized REDD project activities include avoiding planned deforestation, avoiding unplanned/illegal deforestation, avoiding conversion from forest to non-forest use, preventing unsanctioned forest degradation through fuelwood collection or other practices, and preventing illegal timber harvest.

### C. Chapter 2: Accounting and Data Quality Principles

	Comment	Response
1	Boundary Selection. The text after the first line in paragraph 2 is an example of guidance language that could (and perhaps should) be removed from the text of a standard.	ACR has clarified language throughout so that the use of "shall," "should," and "may" more clearly indicates which portions of the <i>FCPS</i> represent requirements vs. optional guidance. However we have not removed all guidance. The <i>FCPS</i> provides both mandatory requirements and optional guidance.
2	Project Baseline. While it is widely accepted, the construction of a counterfactual BAU baseline is particularly problematic for IFM project designers. The specific timing of many forest management activities, particularly timber harvest, is dictated more by market and weather conditions than by management plans. This is particularly true when accounting is done on an	This problem is inherent in project-level IFM methodologies, which do require projecting a counterfactual IFM baseline at least for the duration of the Crediting Period.  ACR is currently developing an IFM

	Comment	Response
	annual basis, but can even be true over a 5-year span.	performance standard methodology that will not require projecting business-as-usual management into the future.
3	Measurement Accuracy and Precision. Technically, the title should be “Sampling Precision.”	The section title has been clarified to indicate that all types of uncertainties are considered. The section sets a precision target for the final calculation of GHG emission reductions/removal enhancements.
4	Relevance and Completeness. The <i>de minimis</i> definition of 1% for individual pools and 3% for aggregated pools could be more clearly written. Until the last clause in the paragraph, it is not clear that the percentage applies to the final calculation of emission reductions for the project. Even at 3%, the costs of measuring, monitoring, and verifying carbon pools will be very expensive for achieving a marginal improvement in accuracy. We believe ACR should consider moving to a 5% <i>de minimis</i> definition. ACR should also consider simplifying this requirement by making the individual pool and the aggregate pool <i>de minimis</i> limit the same. That would mean that if only one pool (e.g. forest soil) was omitted from the accounting, the project accounting would still be as complete as if 3 pools were omitted at the aggregate <i>de minimis</i> limit.	<p>ACR has simplified these requirements. The 1% <i>de minimis</i> threshold for individual sources and pools has been eliminated, but 3% threshold on combined sources and pools excluded from accounting has been retained (not raised to 5%). The relevant text now reads:</p> <p>Practical and cost concerns dictate that some GHG emission sources/sinks falling below an appropriate <i>de minimis</i> threshold may be excluded from ongoing measurement and monitoring. Project Proponents may omit any pool or emission source whose exclusion is conservative, i.e. the exclusion of which will tend to underestimate emission reductions/ removal enhancements. If exclusion of a pool or source is not conservative, the pool or source may be excluded only if all combined pools and sources thus excluded represent less than 3% of the <i>ex ante</i> calculation of emission reductions/removal enhancements.</p>
5	On <i>de minimis</i> : why does the standard not refer to the EB tool for AR projects? In addition, why are certain emissions sources not deemed insignificant <i>a priori</i> ? When allowing use of the EB tool and deeming certain emissions source insignificant, the Standard should provide guidance on whether such <i>a priori</i> insignificant sources must be included when using the tool. Otherwise significant sources may be treated as insignificant. The reviewers believe that the Standard should develop a list of emission sources that can be	<p>We have added guidance that the following pools and sources are considered insignificant <i>a priori</i> for forest carbon projects.</p> <p>Emissions sources:</p> <ul style="list-style-type: none"> <li>• Fertilizer application</li> <li>• Removal of herbaceous vegetation</li> <li>• Transportation emissions from</li> </ul>

	Comment	Response
	considered <i>de minimis</i> by project proponents.	<p>vehicles used in project visits, monitoring, verification etc. This does not include emissions of harvest, processing, transport equipment. These emissions may be insignificant but are not insignificant <i>a priori</i>; the Proponent shall justify exclusion of such emissions.</p> <ul style="list-style-type: none"> <li>• Collection of wood from non-renewable sources to be used for fencing of the project area</li> <li>• Nitrous oxide (N<sub>2</sub>O) emissions from decomposition of litter and fine roots from nitrogen-fixing trees</li> </ul> <p>Carbon pools:</p> <ul style="list-style-type: none"> <li>• Litter</li> </ul> <p>We have also noted that Project Proponents may apply a significance tool, such as the CDM Tool for Testing Significance of GHG Emissions in A/R CDM Project Activities, to determine whether pools and sources not in the <i>a priori</i> list may be considered insignificant.</p>

#### D. Chapter 3: Eligibility Requirements

	Comment	Response
1	Forest Definition. The language indicates in the U.S., Proponents “may” use the FIA definition. Does that indicate they can use anything else they find? That should be changed to “shall” to maintain uniformity in project approach.	<p>We have clarified that Project Proponents shall use a nationally approved “forest” definition for the country where the activity occurs. For projects in the United States, Proponents shall use the U.S. definition in Annex 1, which is based on the U.S. Forest Service Forest Inventory &amp; Analysis Program definition (but does not exclude urban forests or riparian forests narrower than 120 feet).</p> <p>For projects in Kyoto Protocol CDM countries, Proponents shall use the Kyoto Protocol definition in Annex 1,</p>

	Comment	Response
		<p>with the relevant Designated National Authority (DNA) selections for minimum land area, crown cover and tree height. If the project is in a country that has not yet designated a DNA, or whose DNA has not yet made these selections, the Proponent may propose another nationally approved forest definition.</p> <p>We also clarified that the definition of forest shall apply in each eligible project category: i.e., AR activities must target the eventual establishment of a forest; IFM activities must be implemented in a forest remaining as forest; REDD activities must be implemented in a forest and prevent its conversion to non-forest or its degradation.</p>
2	<p>Minimum Project Term and Crediting Period. The Standard requires a minimum project term of 40 years and defines crediting periods to be either 10 or 20 years, with no limit on the number of renewal crediting periods. A renewed crediting period, however, must qualify under then-current regulations, common practice and implementation barriers, ACR Standards, etc. In other words, there is little or no substantive difference between a new project start and a renewed crediting period. A Project Proponent will thus find it difficult, if not impossible, to assure the project's viability for a 40-year term. It might be advisable to make project term and crediting period the same length.</p> <p>What is potentially problematic with the Standard is that a project can continue to be renewed after each 20 year crediting period by setting a new baseline and passing the then-current test for additionality. It is probable that projects will not be renewed for a second 20 year period if access to forest carbon markets becomes pervasive, as they will fail either a common practice or a performance test. The Standard needs to make a statement regarding the requirements for monitoring, reporting and verification for a project that is not renewed for another 20 year crediting period, but that must still meet the minimum 40 year project term. This will be an important part of establishing full-term</p>	<p>The Minimum Project Term and Crediting Period are distinct concepts. ACR is not willing to make the Crediting Period 40 years for any forest carbon project activity, since the Crediting Period is by definition the length of baseline validity and it is important to require Project Proponents to document more frequently that the project baseline remains valid and project activity remains additional per ACR requirements. Thus we do not provide Crediting Periods longer than 10 years for REDD and IFM stop-logging, or longer than 20 years for AR and other types of IFM.</p> <p>However, the peer reviewers have identified an important oversight in the case of a project that is not able to renew for another Crediting Period, e.g. because it no longer passes ACR additionality tests, but has not yet reached the Minimum Project Term. It is not ACR's intent to force Project Proponents to exercise the "buy-out" option in such a scenario. We have</p>

	Comment	Response
	<p>project costs for calculations of IRR and NPV in the project plan.</p> <p>There needs to be assurance that the baseline/additionality calculations at the beginning of the project remain the same for the minimum project term. If they are really subject to change at the end of a shorter crediting period, there is no way that a proponent can guarantee the minimum project term.</p>	<p>added the following clarification:</p> <p>If, before the conclusion of the Minimum Project Term, ACR cannot renew a project’s Crediting Period – e.g. because the project activity no longer passes additionality tests or a baseline cannot be demonstrated – this is not treated as an intentional reversal requiring the Proponent to replace issued ERTs. The project simply concludes without penalty, but since monitoring and verification are no longer required, the project’s remaining buffer contributions are treated per Chapter 5 Sections F and G.</p>
3	<p>Since the 40-year project length is clearly not related to permanence, and any number is inherently arbitrary, make sure that there are no other references to permanence as a working concept within the Standard. We think the 40 years strikes a good balance, but it will be open to criticism in comparison with some of the other standards that have been proposed.</p>	<p>Peer review comment is correct. ACR does not propose that the 40-year Minimum Project Term in itself provides or equates to permanence, and we agree that there is no <i>scientific</i> basis for 40, 100, 200 or any other arbitrary number of years. Rather, Minimum Project Term is a <i>policy</i> decision that attempts to strike a balance and incentivize broad participation. We have chosen the 40-year Minimum Project Term as this 1) corresponds to the time period over which reductions will be achieved in major emitting sectors, and 2) we believe strikes the appropriate balance between market credibility and broad landowner participation. Meanwhile, it is the accurate assessment and effective mitigation of reversals that makes forest offsets effectively permanent and fungible with other offsets (i.e. those without a permanence risk), on-system emission reductions, and allowances.</p>
4	<p>Direct Emissions. It is not clear how a Project Proponent that is not the landowner can document that it owns or has control over the GHG sources and/or sinks from which the reduction or removals originate. An aggregator may have a contract with the landowner</p>	<p>We have clarified that the Project Proponent (which is usually a different entity from the landowner) shall document that effective control exists over the GHG sources and/or sinks</p>

	Comment	Response
	giving them the right to report the net emission reductions that accrue from the landowner’s management and specifying certain management practices, but that does not give them control over the forests or all of the activities carried out by the forest managers. Neither party can control environmental change and the impact it has on sources/sinks, so it is not clear how this requirement can be achieved in the practical world.	from which the reductions/removals originate. The Project Proponent need not own the forest lands or GHG sinks thereon, provided the Project Proponent can document that control over GHG sources and sinks, land title, and offset title is clear, unique, and uncontested.
5	Land Eligibility. Does ACR need a definition of “native trees?” That can be controversial, and also have unintended consequences if climate change affects species range to any degree in the future.	ACR has chosen not to prescribe a definition of native trees. A project proposing to introduce exotic non-native species would likely fail to satisfy the required community and environmental impacts assessment.
6	Is it clear enough that the 10 years is meant to assure that people don’t harvest to establish conditions for an AR project? It is possible for people to be confused about the time lag between a natural disturbance and an eligible project start?	<p>This has been clarified in the <i>FCPS</i>:</p> <p>For AR projects, Project Proponents shall provide documented evidence in the GHG Project Plan that no project areas have been cleared of trees within the ten (10) years prior to the project Start Date in order to establish an AR project; or if project lands have experienced loss of forest cover within the last ten years, this loss was caused by fire or natural disturbance. Loss of forest cover due to fire or natural disturbance does not disqualify an AR project.</p> <p>Some reforestation projects require removal of non-tree vegetation in order to prepare the site and establish trees. An example is the removal of heavy brush from areas where brush has invaded after fire and prevented or significantly slowed the return of trees due to competition, water limitations, lack of a nearby seed source or other factors. Brush removal for site preparation does not disqualify a reforestation project. Emissions from brush removal must be accounted for in the GHG Project Plan if they exceed the <i>de minimis</i> threshold.</p>

	Comment	Response
7	Permanence. "Project Proponents must assess reversal risk using an ACR-approved risk assessment tool." This is a good example of where a technical review is not possible without including the tool as part of the peer review.	ACR has provisionally approved use of the most updated version of the VCS Tool for AFOLU Non-Permanence Risk Analysis and Buffer Determination, until publication of the ACR Tool. The ACR Tool will be subject to a separate public consultation and peer review.
8	Community and Environmental Impacts. The lack of a formal assessment looks weak and inconsistent. Perhaps this works for US projects, but it is likely to introduce a very weak spot for projects in developing countries. Addressing issues in a project plan should be based on a formal assessment that can create transparency and fend off easy criticism. It is usually not a big deal for project developers to perform a good assessment or have it done by experts. Motto: if there are no issues it should not be an issue to do a thorough analysis.	<p>The <i>ACR Standard</i> and <i>FCPS</i> require Project Proponents to in the GHG Project Plan a mitigation plan for any foreseen negative community or environmental impacts, and disclose in their Annual Attestations any negative environmental or community impacts or claims of negative environmental and community impacts.</p> <p>ACR requires community and environmental impact assessment, and provides tools that may be used to assist in that assessment, but does not mandate a particular process, tool, or environmental impact assessment be used. We believe prescriptive requirements in this area would slow project development considerably and could create avenues for disaffected community members or external parties to delay projects indefinitely. Community and environmental impacts requirements are nonetheless mandatory to address in all GHG Project Plans and Annual Attestations.</p>

#### E. Chapter 4: Additionality

	Comment	Response
1	Start Date. Good to get rid of the "explicit documentation of GHG mitigation as an original project objective" idea.	ACR agrees that except in the case of projects with a Start Date before November 1, 1997, it is not necessary to require the Project Proponent to document that GHG mitigation was an objective from project inception, only to document that the activity passes ACR's additionality tests. Meeting these tests (either the regulatory surplus plus

	Comment	Response
		<p>performance standard approach, or the three-prong test) is sufficient to demonstrate that the project activity is additional. The <i>FCPS</i> has been modified accordingly.</p> <p>Projects with a Start Date earlier than November 1, 1997 must still document GHG mitigation as an original objective.</p>
2	<p>The Three-Pronged Additionality Test. The “common practice” additionality test, while mandatory, seems open to imprecise and variable definitions. It depends heavily on the nature of the definition of terms such as “widespread deployment,” “project,” “technology,” and “practice.” If “widespread deployment” means the large owners with big budgets do it but the little owners can’t afford it, is it “widespread” or not? If a “technology” is improved seedling genetics, it is hard to say that this is not widely practiced, as nursery stock everywhere seeks constant improvement. If a “practice” is defined as thinning or competition control, these are common practices almost everywhere. If there is a modification to one of these practices to test a new idea, is that above common practice? This seems to call for professional judgments on the part of ACR project plan reviewers and verifiers that could result in widely different interpretations and decisions.</p>	<p>We have clarified that:</p> <ul style="list-style-type: none"> <li>• The common practice component of the three-prong test is distinct from a performance standard reflecting average stocking levels or average emissions per unit of output.</li> <li>• Proponents choosing the project-level approach to additionality and therefore the three-prong test shall provide evidence to document what is common practice forest management for similar landowners of similar forests in that region, e.g., through management plans of other landowners or alternatively the opinions of established forestry consultants.</li> <li>• The Project Proponent shall demonstrate that the proposed project activity exceeds the common practice of similar landowners managing similar forests in the region. Common practice for large industrial and small non-industrial private landowners may be different. The Proponent shall demonstrate and document what is common practice for similar landowners.</li> </ul>
3	<p>Of the implementation barriers that can be chosen, it seems unlikely that technological or institutional barriers could be documented in the developed countries. Financial barriers will always exist, particularly where project implementation and transaction costs are</p>	<p>ACR agrees that the financial implementation barriers test is the most frequently chosen, and requires Project Proponents to provide solid quantitative evidence such as net</p>

	Comment	Response
	<p>significantly higher than non-project costs which do not include project measurement, monitoring and verification. Project costs also involve the cost of buffer inputs and/or financing other risk mitigation methods. Projects are expensive, and the very act of signing a project agreement creates a significant (and often hard to accurately enumerate) long-term financial risk for a Project Proponent.</p>	<p>present value (NPV) and internal rate of return (IRR) calculations, documentation such as appraisal documents, etc.</p> <p>The <i>FCPS</i> now strongly recommends application of an additionality tool to assist in making the three-prong additionality demonstration. Project Proponents may use ACR's <i>Tool for the Demonstration and Assessment of Additionality in Forest Carbon Project Activities</i>, or a similar CDM tool.</p> <p>The mere signing of a project agreement is generally not sufficient to demonstrate additionality.</p>
4	<p>The Standard makes inappropriate judgments regarding other IFM performance based approaches to additionality. Consider deleting the following language section from the Standard.</p> <p>“To date performance standard approaches for forestry (e.g. Improved Forest Management) have been flawed. Performance standards based purely on forest carbon stocks, assigning credits to projects whose carbon stocks happen to exceed a regionally defined average carbon stock, have significant danger of crediting non-additional activities, and may or may not require Proponents to institute a change in practice from business-as-usual. The crediting profile of such projects will tend to be a large “bump” of up-front credits that represent no real or additional reduction in atmospheric CO<sub>2</sub> concentrations. These approaches also tend not to have an appropriate balance of over and under-crediting, since projects with carbon stocks exceeding the benchmark will register for credit, while any that do not will not enroll. Other approaches, assigning credit to all growth compared to a base-year stock, likewise pose significant danger of crediting non-additional activities.”</p>	<p>The text has been deleted.</p>
5	<p>Performance Standard Approaches. Regarding a performance standard and the additionality test, the Standard makes a statement of what the ACR <i>will not</i> approve. It would be more appropriate to rephrase this statement to what the ACR <i>will</i> approve, or delete this</p>	<p>This text was included at the behest of public commenters (Project Proponents) who asked for additional guidance regarding the types of IFM performance standards ACR would and</p>

	Comment	Response
	<p>section from the Standard. It would be adequate to say that “when performance standards have been developed and officially approved, it is the intention of the ACR to incorporate them in this Standard.”</p> <p>One reviewer offers the following:</p> <p>“Performance standards for emissions that are essentially intensity thresholds are in terms of flow of emissions relative to flow of goods. Carbon sequestration is change in stock, not change in flow. We need to be very careful when considering mixing stocks and flows. Parallel logic for sequestration (stock) might credit in units of stock for a gain in stock relative to a stock performance threshold, with change in flow of products dealt with as leakage. If you are trying to construct a performance standard for forest carbon sequestration, perhaps what is credited is stock above the average, but credit is given only if production is at least equal to the average. The problem with this is that production varies from decade to decade due to large economic cycles and possibly even as a result of regional changes in age class distributions. The baseline can’t be recent harvest volume on the project lands because of multi-decadal variability in harvest volumes at the ownership scale. If a project is given GHG offsets on the basis of having lower emissions per unit of harvest (lower flow intensity), it seems to me that there should be no leakage deductions. Be aware that much of the GHG benefit will be indirect, because projects would get credits by harvesting mature stands—which reduces their stock—and displacing wood product market share and harvest from stands at economic CMAI. The resulting sequestration will be occurring on those other lands, from which harvest is displaced. In the past we have called this positive leakage and not credited it.”</p>	<p>would not accept. To provide that guidance, the <i>FCPS</i> states explicitly that performance standards based purely on average carbon stocks are not likely to be approved, due to the significant potential for crediting business-as-usual practices without atmospheric benefit. Likewise, ACR will not approve performance standard approaches that do not provide an appropriate balance of over- and under-crediting; performance standards that assign credit without requiring a change in practice from the business-as-usual; or approaches that provide credits vs. a base year, rather than a project-level baseline or appropriate industry-level performance standard.</p> <p>We have also included guidance on the types of performance standards ACR will approve: in particular, methodologies based on rates of net sequestration and emissions, or on emissions intensity, per unit output (e.g. per unit harvested wood products), similar to performance standards in other sectors. Winrock has developed and ACR will shortly post for public comment an IFM performance standard of this type.</p>
6	<p>It is also unclear how a performance standard such as tCO<sub>2</sub> per unit of harvested wood production will create atmospheric benefits if leakage simply moves the harvest production elsewhere. Reducing emissions from slash can be readily done by whole-tree harvesting for bioenergy production, but it can also be overdone and cause reduced carbon inputs into forest soils. There are significant technical questions to be solved in establishing and using performance standards in forest situations that may be more difficult than in other sectors.</p>	<p>These issues, including required deductions for market effects leakage if IFM activities significantly reduce timber output, and prohibition of activity-shifting leakage as an applicability condition, are addressed in the forthcoming IFM performance standard methodology.</p> <p>Regarding the comment on slash management, State forest practice rules will presumably mandate</p>

	Comment	Response
		appropriate slash management and a minimum level of slash retention for wildlife/soils; this does not need to be done in the <i>FCPS</i> or the methodology.

**F. Chapter 5: Permanence and Risk Mitigation**

	Comment	Response
1	<p>Permanence vs. Risk Mitigation and Fungibility. Within current and emerging voluntary and compliance market standards, permanence is a policy decision. The Standard does an excellent job of describing the difference between permanence, risk mitigation and fungibility. In reality, the permanence policy discussion has progressed far enough in voluntary and compliance markets that any arbitrary minimum term, 40 years in the case of this Standard, will be considered the period for permanence, unless there is a mitigation measure taken that requires monitoring and verification beyond the minimum term. Therefore, 40 years will by default be considered the permanence period.</p>	<p>See response to comment D.3. ACR agrees that Minimum Project Term is a policy rather than scientific decision. ACR does not propose that Minimum Project Term alone provides permanence; rather, strikes a balance between market credibility and landowner participation, and relies on effective risk assessment and mitigation to provide permanence and fungibility.</p>
2	<p>Assessment of Risk. The risk assessment tools available today provide insufficient guidance to PPs and validators without expertise in risk assessment. The tool was developed assuming that validators have this expertise in-house, knowing how to deal with weighing dependent and independent risk factors. It turns out that this expertise is lacking. Furthermore, ACR should make clear who is to apply the tool, the PP, the validator, or both. We would suggest that the project identifies and values the individual risk factors, and the validator checks the assumptions and calculation and does the weighing and calculation of total risk.</p>	<p>ACR agrees that currently available risk assessment tools generally provide insufficient guidance to Project Proponents for assigning an overall risk category and determining an appropriate buffer contribution. For this reason ACR is developing an <i>ACR Tool for Risk Assessment and Buffer Determination</i>. Prior to release of this tool, Project Proponents may use the VCS Tool, which with the recent (13 April 2010) update is likely to yield an overly conservative risk category and buffer contribution.</p> <p>We have clarified the roles of Project Proponent, ACR, and the verifier:</p> <p>The Project Proponent shall conduct the risk assessment and propose a corresponding buffer contribution (if applicable). The risk assessment, overall risk category, and proposed buffer contribution shall be included in the GHG Project Plan. ACR evaluates the</p>

	Comment	Response
		<p>proposed overall risk category and corresponding buffer contribution (if applicable). The verifier evaluates whether the risk assessment has been conducted correctly.</p> <p>ACR does not feel Project Proponents would find the suggestion here – that the Project Proponent identify and value risk factors but leave to the verifier to calculate overall risk and buffer percentage – commercially workable, since this would not allow Project Proponents to build an expected buffer percentage into their financial <i>pro formas</i>.</p>
3	<p>Mitigation of Risk. It is noted that timber harvest included in the plan is not considered an intentional reversal, and only project discontinuance is treated as an intentional reversal. Is there adequate guidance for a verifier to review an inventory estimate that is below the level of baseline + reported ERTs + leakage and decide that no reversal has occurred? Should there be a clause that provides projects a year or two to replace those inventory levels before they are again able to document and report additional ERTs?</p>	<p>No specific guidance added. This issue may be more specifically addressed in approved IFM methodologies.</p>
4	<p>First unintentional reversal. This section should be carefully edited if you intend that the key is the PPs <i>net</i> balance in the buffer—i.e. the past contributions minus any amounts that have been released from the buffer to the PP.</p>	<p>Comment is correct. The text throughout this section has been clarified to indicate that the requirements to use and/or replenish buffer contributions depend on whether the reversal exceeds buffer contributions to date, net of any refunds or earlier retirements.</p>

### G. Chapter 6: Baselines and Leakage

	Comment	Response
1	<p>Baselines: AR. Last paragraph, last sentence, replace “non-tree vegetation” with “live and dead biomass.”</p>	<p>Changed.</p>
2	<p>Baselines: IFM. It is not clear why a carbon stock baseline should need to include data on current and future prices and costs. These are beyond the control of project proponents, are highly uncertain, particularly in terms of short-term fluctuations, and have little or no</p>	<p>This text was appropriate to some forest carbon activities but we agree that it is not applicable to all activities eligible under this standard, so should not be included in the <i>FCPS</i>. The text</p>

	Comment	Response
	bearing on a carbon stock baseline. If prices and costs are somehow incorporated into the baseline, it will add significant and costly audit trails to verification without an apparent benefit in terms of the quality of either the baseline or the verification.	has been removed.
3	Baselines: REDD/Avoided Conversion. The text says that plans for deforestation can be taken as the baseline for avoided deforestation projects. Do we have any information that this is a reliable approach to setting the baseline? Does this open the standard up to “bluff” plans that seek to drive up land values, or other forms of gaming? Even where intentions are good, many plans are not implemented, or are partially implemented, and taking all planned deforestation at face value might substantially overstate the avoided emissions.	<p>“Bluff” plans for deforestation and gaming would presumably be screened out through application of the three-prong additionality test with its documentation requirements and recommended additionality tools.</p> <p>The requirement for periodic monitoring and verification of project activities should limit the potential for over-crediting due to partial project implementation. The limitation of REDD Crediting Period to 10 years before the baseline must be re-assessed should limit the potential for over-crediting due to changed baseline conditions.</p> <p>Forthcoming ACR REDD methodologies also address these concerns in more specific terms than is appropriate for the <i>FCPS</i>.</p>
4	The text says, "Typically, deforestation is not the result of removal of wood for wood products, but it is possible for timber harvest to facilitate deforestation or forest degradation." This statement is not always true, as shown by hot spots of deforestation in e.g. Indonesia and Brazil. One can limit this text to just: "If timber products would have been produced as a result of deforestation, market effects leakage must be considered."	Both statements are correct. The <i>FCPS</i> does not maintain that deforestation is never the result of, or facilitated by, timber harvest. And it is correct that if timber products would have been produced as a result of deforestation, the <i>FCPS</i> requires market effects leakage to be considered.
5	Leakage: AR. The text states that displaced people shall be surveyed or 100% displacement of activities is assumed. Does ACR have any estimate of the cost of surveying farm workers displaced by a tree planting project that occurs on agricultural lands in the U.S.? And can guidance be given in estimating how this displacement ripples through the job market? For example if a worker is displaced from one farm to another, do we have simple ratios for estimating what proportion of a worker goes out of agriculture, or becomes unemployed? And do we have tools for	No specific guidance added.

	Comment	Response
	estimating the GHG effect of displacing a worker to a different agricultural job? This looks pretty un-doable.	
6	<p>The text says "If the project displaces people and the Project Proponent does not complete a survey, ACR assumes that displaced people are continuing their pre-project activities on other locations." This would be more accurately tied to leakage if the word "forested" were inserted between "other" and "locations."</p> <p>The final paragraph in this section is confusing, and could be dropped with no apparent loss to the Standard.</p>	Both suggested changes have been made.
7	<p>There have been various rulings and clarifications by the CDM EB regarding baseline setting and accounting in AR. VCSA is also increasingly busy clarifying issues that were left untouched in the AFOLU standard or need additional guidance. The baseline section in this ACR standard covers many issues, but is likely to be incomplete as well. Do issues addressed in approved CDM AR and VCS ARR methodologies set a precedent and will ACR automatically follow these approaches? How does the ACR envision dealing with requests for clarification? Perhaps a brief explanatory appendix on this topic would be useful.</p>	<p>ACR expects these issues to be clarified in approved methodologies and tools, not in the <i>FCPS</i>.</p> <p>ACR does not expect to automatically follow approaches chosen by CDM EB or the VCSA, but will certainly consider these approaches.</p> <p>Methodological innovations for baseline setting, accounting and other issues, as well as requests for clarification, will be dealt with through reliance on Winrock's internal forest carbon expertise where applicable – Winrock carbon scientists have developed most of the forest carbon guidance for VCS, and some for CDM – and through reliance on external experts and scientific peer reviewers where needed.</p>

## H. Chapter 7: Guidelines for Aggregated Projects

	Comment	Response
1	<p>Minimum Term and Risk Mitigation. If an individual landowner drops out of an aggregated project, the most likely opportunity for the aggregator to prevent a reversal at the project ERT level is to replace the lost land with a new landowner contract. This possibility is covered as a "programmatic" project approach in a subsequent section, but could be introduced or referenced under this section. If this is not allowed, aggregators will need to have significant resources to commit to replacing lost offsets. To get those resources,</p>	<p>Project Proponents will likely try to replace departing landowners. However allowing Proponents to do this as a mechanism for mitigation of intentional reversals, in lieu of replacing issued ERTs, implies a complicated accounting and tracking exercise to ensure that the sequestration to date from the new landowner somehow equates to the lost sequestration from</p>

	Comment	Response
	they will need to charge exorbitant aggregation fees, which could be a significant barrier to entry for small landowners.	the departing landowner. ACR does not find this feasible and has not relaxed the requirement to replace issued ERTs in the case of landowners discontinuing participation before the Minimum Project Term. ACR believes the flexibility mechanisms provided – the option to bank ERTs of any type and vintage, or to use approved futures, financial insurance or other mechanisms – will make managing this risk feasible for Project Proponents.
2	The definition of a “reasonable level of assurance” is understood by auditors, but often not by potential project proponents. It might be good to include a definition.	This has been added to the definitions and is described in the <i>ACR Verification Guideline</i> .
3	<p>The Standard requires the level of precision (90% CI) and the level of accuracy (10% sampling error) to be the same for the pool of aggregated projects as for large individual projects. To achieve this for pooled projects will allow the sampling error (and therefore the number of plots) for each landowner’s inventory to be lower.<sup>1</sup> This will require each landowner to establish a baseline and have an inventory that will be the basis for project level accounting throughout the crediting period.</p> <p>Individual baselines and inventories are necessary to mitigate risk associated with individual landowner reversals and forest management activities, as landowners enter and depart the pool. Landowners will have different risk factors that will require individual buffer contributions to establish and account for individual carbon stocks. Each landowner may want to hold an account with the aggregator to ensure that the landowner gets credits associated with its management practices, and does not take on the risk of reversals associated with another landowner in the pool. There are many complexities and uncertainties that make verifying a pool of landowners difficult for the landowners and verifier, over multiple management activities, where landowners do not have individual</p>	ACR does not require any minimum number of inventory plots per participating landholding as long as the target is achieved for the project overall. ACR does not require individual landowner baseline inventories, as long as the Proponent has a stratified inventory meeting ACR requirements for the (aggregated) project overall. Arrangements with individual landowners, regarding inventories, entry and exit, crediting, buffer contributions and other factors are left to the discretion of the Project Proponent.

<sup>1</sup> See Appendix A of the CAR Proposed Guidelines for Aggregation. [http://www.climateactionreserve.org/wp-content/uploads/2009/03/Reserve\\_Forest\\_Project\\_Aggregation\\_Proposal.pdf](http://www.climateactionreserve.org/wp-content/uploads/2009/03/Reserve_Forest_Project_Aggregation_Proposal.pdf)

	Comment	Response
	<p>baselines, inventories, and buffer pools.</p> <p>The Standard should require individual baselines, inventories, and buffer pools within aggregated pools. This will raise the costs and reduce the benefits of aggregation. One way to address this is to require a lower standard of accuracy and precision for individual landowners (e.g. +/-15% at 85% C.I.) as long as the total aggregated project always meets the higher level. This can take much of the complexity out of what ACR terms the “programmatic” approach.</p>	
4	<p>Additionally, the Standard should include minimum periods for re-inventory during the crediting period. The quality of inventory data, and thus the certainty of the registered and traded ERTs will degrade with time. A requirement to re-inventory the project half way through the crediting period (at year 10) seems like a reasonable requirement that will ensure confidence in the real verified reductions.</p>	<p>The <i>FCPS</i> clarifies that the required interval of monitoring is no less often than every five years, preceding the required full verification that occurs at five-year intervals.</p>
5	<p>Monitoring and Verification Cost Controls. The standard should require that the aggregator maintain an adequate internal data base and audit system, to ensure that both the aggregator and the individual land owners keep a high standard. This simplifies the work of the verifier and thus may reduce costs significantly.</p>	<p>No specific guidance added. Aggregators failing to maintain an adequate internal database and audit system will likely face challenges securing verification.</p>
6	<p>Last paragraph, 4<sup>th</sup> line, replace “will be” with “are.” Verification is retrospective, not prospective.</p>	<p>Change made.</p>

## I. Chapter 8: Monitoring, Verification and Contractual Requirements

	Comment	Response
1	<p>While it is true that USDA provides high quality imagery, it is not updated annually, so is not always timely enough to support an annual desk audit. There could be other data sets that are available at different times and places. It is not clear that anything other than a current fly-over or field visit can be used to verify project continuance and boundaries. Consider accepting landowner attestation in the annual desk audits to maintain reasonable costs.</p>	<p>We have clarified that:</p> <p>The desk-based audit may use satellite or other aerial imagery, or other means acceptable to the verifier, to verify project continuance and boundaries. Verifiers are not required to use satellite or aerial imagery and may accept the landowner’s attestation of project continuance for the annual desk audits between field visits.</p>
2	<p>Full Verification Every Five Years. Middle paragraph, 6<sup>th</sup> line. Before the sentence beginning “For example,” insert a new sentence “Contingent upon annual</p>	<p>Change made.</p>

	Comment	Response
	attestations, offsets are valid until the end of the fifth calendar year following the year in which the field verification is performed.”	
3	<p>Application for Renewal of Crediting Period. The crediting period renewal process looks exactly like the project initiation process and, with a new baseline, additionality, and risk assessment, essentially creates a new project. While the crediting periods are set at 10 or 20 years, depending on project type and the number of renewals is unlimited, does that mean that, after the 40 years are up, new renewals would need a new contract for an additional 40 years? If a project does not apply for renewal, or does not qualify at the end of 20 years, what happens then with monitoring and verification? Is the project an early termination?</p>	<p>It is correct that the application for renewal of Crediting Period requires the Project Proponent to re-assess baseline, demonstrate additionality, and meet all current ACR requirements – similar to the requirements for creating a new project.</p> <p>After the 40-year Minimum Project Term, the Project Proponent may renew for another Crediting Period (10 or 20 years, as applicable) but is not required to commit to another 40-year Minimum Project Term.</p> <p>If the Project Proponent elects not to renew for another Crediting Period, ACR conservatively assumes project activities have ceased and retains and retires any remaining buffer contributions.</p> <p>If the project does not qualify for renewal of Crediting Period, e.g. because it no longer passes ACR additionality tests, but has not yet reached the Minimum Project Term, it is not ACR’s intent to force Project Proponents to exercise the “buy-out” option in such a scenario. Rather, the project simply concludes without penalty, but since monitoring and verification are no longer required, the project’s remaining buffer contributions are treated per Chapter 5 Sections F and G.</p>

## J. Chapter 9: Accepted Methodologies and Tools

	Comment	Response
1	GHG Measurement Tools and Methodologies. Because of differences in standards, projects approved under one standard always need modifications before they meet all criteria of another standard. It is not certain that one	The <i>ACR Standard</i> and <i>FCPS</i> make clear that although ACR approves certain methodologies and tools from other GHG programs, and allows Project

	<b>Comment</b>	<b>Response</b>
	<p>could verify a project using a non-ACR methodology and an ACR standard without adaptation of the non-ACR methodology, because the standards differ in what they require. ACR may wish to revise the language and talk about a streamlined approval process for modifications of methodologies from other systems, where the modifications address the differences between ACR’s standards and the other system’s standards, while leaving other aspects of the methodology unchanged.</p>	<p>Proponents to modify an existing methodology and submit it to ACR for approval by the public consultation and scientific peer review process, all projects must still comply with applicable ACR standards. There is no automatic crediting of projects using other methodologies without certification and verification to ACR standards.</p> <p>The <i>FCPS</i> states: Any Project Proponent proposing to use an ACR-approved methodology from another GHG emission system must comply with the ACR Standard and any relevant ACR sector standard. In the case of conflicts between the methodology and an ACR standard, the ACR standard shall govern.</p> <p>In the case of minor modifications (representing deviations rather than revisions), ACR has a streamlined approval process in which such minor modifications may be approved internally whereas significant methodology revisions and new methodologies require the public consultation and scientific peer review process. These distinctions are detailed in the <i>ACR Standard</i>.</p>

**K. Annex 1: Definitions**

	<b>Comment</b>	<b>Response</b>
1	<p>Additionality. Suggest dropping the phrase “and without carbon market incentives.” Not clear that the atmosphere is affected by that.</p>	<p>The definition has been revised to read: GHG emission reductions and removal enhancements are additional if they exceed those that would have occurred in the absence of the project activity and under a business-as-usual scenario. ACR requires that every project either use an approved performance standard and pass a regulatory surplus test, or pass a three-pronged test to</p>

	<b>Comment</b>	<b>Response</b>
		demonstrate that the project activity is beyond regulatory requirements, beyond common practice, and faces at least one of three implementation barriers.
2	Biological Sequestration. Suggest, in the last line, replace “sequestration of CO <sub>2</sub> ” with “removals of CO <sub>2</sub> from the atmosphere and sequestration of carbon”.	Change made.
3	Buffer Pool. Suggest replacing “unforeseen losses in” with “future losses of” or “future emission of”.	No change made.
4	Climate, Community & Biodiversity Alliance Standards. In the list of acronyms and definitions, but not in the text as far as we could tell.	Definition has been retained, since CCBA standards are an optional tool to conduct the mandatory community and environmental impacts assessment.
5	Methodology. Does the phrase “good practice” need definition and, perhaps, reference to the IPCC publication?	No change made.