

Application of the Oeko-Institut/WWF-US/ EDF methodology for assessing the quality of carbon credits

This document presents results from the application of a methodology, developed by Oeko-Institut, World Wildlife Fund (WWF) and Environmental Defense Fund (EDF), for assessing the quality of carbon credits. The methodology is applied by Oeko-Institut with support by Carbon Limits, Greenhouse Gas Management Institute (GHGMI), INFRAS, Stockholm Environment Institute, and individual carbon market experts. This document evaluates one specific criterion or sub-criterion with respect to a specific carbon crediting program, project type, quantification methodology and/or host country, as specified in the below table. Please note that the CCQI website [Site terms and Privacy Policy](#) apply with respect to any use of the information provided in this document. Further information on the project and the methodology can be found here: www.carboncreditquality.org

Sub-criterion:	1.3.1: Robustness of the general program principles and provisions for determining emission reductions and removals
Carbon crediting program:	ACR
Assessment based on carbon crediting program documents valid as of:	15 May 2022
Date of final assessment:	08 November 2022
Score:	3.13

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Assessment

Indicator 1.3.1.1

Relevant scoring methodology provisions

“The program has quantification methodologies in place and available for use, as well as a process for developing new or updating existing quantification methodologies.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- 2 Program website (<https://americancarbonregistry.org/carbon-accounting/standards-methodologies>), last accessed 5 June 2022.

Relevant carbon crediting program provisions

- Provision 1 Source 1, section 1.E.1, page 13: “ACR accepts all projects validated and verified against an ACR-approved methodology, provided they comply with the current version of the ACR Standard. ACR-approved methodologies include:
- Methodologies developed by ACR and approved through the public consultation and scientific peer review process;
 - Modifications of existing ACR methodologies, provided such modifications have been approved by ACR per requirements found in Chapter 7; and
 - New methodologies developed by external authors and approved by ACR through ACR’s methodology development process described in Chapter 7.”
- Provision 2 Source 1, section 7.A.1, page 45: “Methodology modifications may be submitted for review by ACR, at fees per the currently published ACR fee schedule. ACR will review the extent of the modification and determine whether the internal review, public consultation, and peer review process, as described in Section B of this chapter, must be implemented. In general, if the extent of the proposed modification(s) necessitates the process described in Section B, a new version number for the methodology will be issued (e.g., Version 3.0 to Version 4.0). Modifications to eligibility, applicability, Project Activities, and/or baseline assumptions are likely to trigger the full process stipulated in Section B; minor modifications or clarifications may not require the full public consultation and peer review processes.”
- Provision 3 Source 1, section 7.A.2, page 45: “New methodologies proposed to ACR for approval always require internal screening, public consultation, and blind scientific peer review as described in section B.”
- Provision 4 Source 1, section 7.C, page 47: “ACR may periodically update (or decide to retire) its approved methodologies and tools. Such updates occur when significant changes to

GHG accounting best practice or the legislative and/or regulatory context justify an update; when sufficient new data is available to revise eligibility and/or additionality requirements; when ACR becomes aware of clarifications that should be made; or for other reasons.”

Assessment outcome

Yes (2 Points).

Justification of assessment

As specified by provisions 1 to 4, and identified by the existence of all approved methodologies on the ACR webpage (Source 2), the indicator is fulfilled.

Indicator 1.3.1.2

Relevant scoring methodology provisions

“Approved methodologies (or general program provisions) address the following essential components:

- Applicability or eligibility criteria
- Determination of the project boundary
- Determination of additionality
- Establishing the baseline scenario
- Quantification of emission reductions
- Monitoring practices”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- 2 Template for New Methodologies, Version 1.0, 2018. Available: <https://americancarbonregistry.org/carbon-accounting/guidance-tools-templates/acr-methodology-template-2018july.docx>

Relevant carbon crediting program provisions

Provision 1 Source 1, section 7.B, page 46: “The methodology developer(s) submits to ACR for review the following information: 1) Brief description of the proposed project type (including but not limited to: activity, geography, quantification approach, additionality approach, leakage description); 2) Market analysis demonstrating technical potential for emissions reductions of the proposed activity and ability and timing to scale impact given geographic, regulatory or other market considerations; 3) Sample project using

the proposed methodology including an economic analysis demonstrating that the proposed activity is viable under current market conditions; and 4) Indication of intent for near-term project development. Based on review of this information, ACR will determine whether to move forward with the methodology review (Step 2).”

Provision 2 Source 1, 7.B, page 46: “Project Proponents must submit their proposed methodology using the available templates to reduce the time and cost of the approval process for both Project Proponent and ACR.”

Provision 3 Source 2, page 4: “Section titles and sub-titles that appear in this document must be maintained. In sections where no sub-titles are present, authors can create their own as suits their document.”

Provision 4 Source 2, section 2-3, page 8-9: “2 ELIGIBILITY CONDITIONS

In addition to satisfying the latest ACR program requirements, project activities must satisfy the following conditions for this methodology to apply:

[Provide a full, numbered list of testable requirements for use of the methodology. The list shall include:]

1. Conditions that are required and that if absent would negate the ability of projects to use the methodology;
2. Conditions that if in existence immediately exclude projects from use of the proposed methodology; and
3. Conditions related to geographic location, if any restrictions exist.
4. Any eligibility criteria that is specific to aggregated or programmatic development approach projects.

3 PROJECT BOUNDARIES

3.1 SPATIAL BOUNDARY

Outline the how the physical project area is defined. Note that if the project activity contains more than one discrete area of land each area must have a unique geographical identification, and that each site, facility, or parcel must meet the eligibility requirements of the ACR Standard. Include what types of information must be made available, such as maps and GIS shapefiles, to delineate the spatial boundary.

3.2 TEMPORAL BOUNDARY

Describe the temporal boundary of planned project activities. Include requirements for project start date, crediting periods, baseline renewal and project life, consistent with the ACR Standard.

3.2.1 START DATE

3.2.2 CREDITING PERIOD

3.2.3 PROJECT TERM

3.3 GHG ASSESSMENT BOUNDARY

Indicate and justify greenhouse gas emission sources included and excluded. If needed, specify if there are differences in the baseline and with-project case.”

Provision 5 Source 2, section 5.1-5.2.3, page 11: “Baseline determination

Delineate how the baseline scenario can be determined. This should include requiring why, among potential baseline candidates, this baseline scenario was chosen. The methodology should also specify whether it is allowable for different areas within the project boundary to contain different baseline scenarios (if necessary).

5.2 ADDITIONALITY ASSESSMENT

Describe whether the methodology requires projects to use ACR’s three-pronged additionality test: beyond regulatory requirements, beyond common practice, and facing at least one of three implementation barriers (financial, technological, or institutional) OR if it requires projects to demonstrate that the activity is beyond regulatory requirements and exceeds an approved performance standard.

5.2.1 REGULATORY SURPLUS TEST

Example text: To pass the regulatory surplus test, a project must not be mandated by existing laws, regulations, statutes, legal rulings, or any other regulatory frameworks that directly or indirectly affect the GHG emissions associated with a project. The project proponent must demonstrate that there is no existing law, regulation, statute, legal ruling, or other regulatory framework that mandates the project or effectively requires the GHG emission reductions associated with the project activity.

5.2.2 PERFORMANCE STANDARD (if applicable)

Provide a description of the performance standard, how it was derived (an in depth version can be provided in an appendix), and what requirements must be met in order to be eligible to use the performance standard, in addition to demonstrating that there is no existing law, regulation, statute, legal ruling, or other regulatory framework that mandates the project or effectively requires the GHG emission reductions associated with the project activity.

5.2.3 THREE-PRONGED ADDITIONALITY TEST (if applicable)

Provide a description of how to apply the Three-Prong Additionality Test, any specific requirements that pertain to this methodology, and any additional tools that may be required or suggested.”

Provision 6 Source 2, section 8-8.4, page 14: “QUANTIFICATION OF GHG EMISSIONS REDUCTIONS

Describe the quantification method in the sections below for estimating baseline and project emissions. Include all applicable equations, citations, or references. Add or subtract additional baseline and project emission categories as necessary.

8.1 BASELINE NET GHG EMISSIONS (add additional SSR sub-sections as necessary)

8.1.1 ACCOUNTING BASELINE EMISSIONS FROM [ADD RELEVANT SSR NAME]

8.2 PROJECT SCENARIO NET GHG EMISSIONS (add additional SSR sub-sections as necessary)

8.2.1 ACCOUNTING PROJECT EMISSIONS FROM [ADD RELEVANT SSR NAME]

8.3 LEAKAGE

Establish whether leakage must be considered for the proposed project type including why or why not. Describe the methods used to monitor leakage over time.

8.3.1 DESCRIPTION OF LEAKAGE

8.3.2 QUANTIFICATION OF LEAKAGE DEDUCTION

Provide a quantification method to account for leakage, if necessary.

8.4 NET GHG EMISSIONS

Provide a quantification method to account for the difference in GHG emissions between the baseline and with-project scenarios, including leakage.”

Provision 7 Source 2, section 9, page 16: “Provide an overview of the data or other parameters that will need to be monitored during the lifetime of the project either for the purposes of calculation or demonstrating additionality. In Section 11.1, outline each parameter needed to meet the requirements of the methodology, the units (if applicable), a description of the parameter, what section or equation it is relevant to, the source of the data, and the frequency of the measurement.”

Assessment outcome

Yes (1 Point).

Justification of assessment

The ACR Program Standard identifies that some of the indicator’s required elements must be provided for a methodology to be approved (Provision 1) and identifies that the use of a methodology template is required (Provision 2). The ACR Methodology Template identifies that all methodological sections must be completed for methodologies submitted for approval (Provision 3). All methodological elements identified by this indicator are covered in the ACR Methodology Template (Provisions 4 to 7). The indicator is therefore fulfilled.

Indicator 1.3.1.3

Relevant scoring methodology provisions

“The program requires that, as part of the approval process, new quantification methodologies undergo expert review by an independent technical panel or working group.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

- Provision 1 Source 1, section 7.B, page 45-46: “7.B ACR’S INTERNAL REVIEW, PUBLIC CONSULTATION, AND SCIENTIFIC PEER REVIEW PROCESS

The following process is applied to new methodologies developed internally by Winrock/ACR, methodologies drafted by external authors, and certain methodology modifications, per Section A.2 of this chapter. In such cases, ACR coordinates a process of internal review, public stakeholder consultation, and a blind scientific peer review. ACR administers this process, with fees charged to the methodology author.”

- Provision 2 Source 1, section 7.B, page 46-47: “The revised methodology is provided to a team of independent subject matter experts for a blind scientific peer review process. ACR may consult the relevant ACR Technical Committee in the selection of reviewers. The lead reviewer compiles comments and recommendations from the peer review team and prepares a summary report. ACR delivers to the methodology author a peer review report, organized by section of the methodology, to which the author must respond by incorporating revisions and/or documenting justifications for the proposed approach. Generally, several rounds of peer review are necessary. Timing and cost of peer review depends on the complexity, scope, and quality of the methodology and the availability of peer reviewers. The cost of peer review is borne by the methodology author.”

- Provision 3 Source 1, section 7.B, page 47: “Scientific peer review teams are selected from a pool of potential reviewers with applicable subject matter expertise. ACR actively identifies and qualifies candidates for inclusion in this pool, and publicly solicits applications from interested parties. Applications are reviewed for sector expertise, GHG quantification experience, and impartiality. Throughout and after the peer review process, the experts selected for each review team remain unknown to the methodology author and the public.”

Assessment outcome

Yes (2 Points).

Justification of assessment

The above documentation specifies that the indicator is fulfilled. Scientific peer review is conducted by a team of qualified experts (Provision 3). The blind scientific peer review process meets the requirement for independent review by a technical panel or working group (Provision 2).

Indicator 1.3.1.4

Relevant scoring methodology provisions

“The program requires that the approval of new quantification methodologies must include a public stakeholder consultation.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

Provision 1 Source 1, section 7.A.2, page 45-46: “New methodologies proposed to ACR for approval always require internal screening, public consultation, and blind scientific peer review as described in section B.”

Provision 2 Source 1, section 7.B, page 45-46: “7.B ACR’S INTERNAL REVIEW, PUBLIC CONSULTATION, AND SCIENTIFIC PEER REVIEW PROCESS

The following process is applied to new methodologies developed internally by Winrock/ACR, methodologies drafted by external authors, and certain methodology modifications, per Section A.2 of this chapter. In such cases, ACR coordinates a process of internal review, public stakeholder consultation, and a blind scientific peer review. ACR administers this process, with fees charged to the methodology author.”

Provision 3 Source 1, section 7.B, page 46: “ACR coordinates a public consultation process. The methodology is posted publicly on the ACR website for a minimum of 30 days, and ACR sends out a public notice inviting comments. During this period, the methodology authors may also elect to conduct a webinar with ACR to present the draft methodology and solicit additional comments. At the conclusion of the public comment period, ACR compiles all comments by methodology section and forwards a compiled report to the methodology author, who then incorporates revisions and/or documents responses to each comment, which are posted on ACR’s website.”

Assessment outcome

Yes (2 Points).

Justification of assessment

The above documentation specifies that public consultation is required. The indicator is therefore fulfilled.

Indicator 1.3.1.5

Relevant scoring methodology provisions

“The program requires that all quantification methodologies be reviewed and updated at least every five years to verify that they continue ensuring environmental integrity. The program may provide for exceptions from this rule (e.g., in case of rarely used quantification methodologies or if the review is pending due to forthcoming decisions by other bodies such as governments or guidance setting institutions).”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

Provision 1 Source 1, section 7.C, page 47: “ACR may periodically update (or decide to retire) its approved methodologies and tools. Such updates occur when significant changes to GHG accounting best practice or the legislative and/or regulatory context justify an update; when sufficient new data is available to revise eligibility and/or additionality requirements; when ACR becomes aware of clarifications that should be made; or for other reasons.

For methodologies that employ a performance standard for additionality assessment, ACR shall review the validity and underlying assumptions of the performance standard for all non-forestry projects every 5 years, at minimum. The period for forestry projects is every 10 years, at minimum.”

Assessment outcome

No (0 Points).

Justification of assessment

The ACR has provisions in place to periodically update or retire approved methodologies or tools. However, a frequency for doing so is only foreseen for methodologies that employ a performance standard for determining additionality. In this case, the scope of the update may also be limited to additionality considerations (Provision 1). The indicator is therefore not fulfilled.

Indicator 1.3.1.6

Relevant scoring methodology provisions

“The program has procedures in place to suspend the use of quantification methodologies in cases where new information, such as new scientific studies, indicate that emission reductions or removals are being over-estimated or that additionality may not be ensured.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

- Provision 1 Source 1, section 7.C, page 47: “ACR may periodically update (or decide to retire) its approved methodologies and tools. Such updates occur when significant changes to GHG accounting best practice or the legislative and/or regulatory context justify an update; when sufficient new data is available to revise eligibility and/or additionality requirements; when ACR becomes aware of clarifications that should be made; or for other reasons.”

Assessment outcome

Yes (1 Point).

Justification of assessment

Provision 1 states that methodologies and tools may be periodically updated or retired when new data impacting eligibility or additionality is discovered. Further, the reference to “other reasons” in Provision 1 suggests that an update or retirement may be undertaken if it becomes apparent that emission reductions or removals are overestimated. The indicator is therefore fulfilled.

Indicator 1.3.1.7

Relevant scoring methodology provisions

“The program clearly defines that a carbon credit unit represents one metric ton of CO₂ equivalent of GHG emission reductions or removals and identifies the underlying GWP values used to calculate the CO₂ equivalence (e.g., the source of the GWP value and the time horizon used).”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

- Provision 1 Source 1, section: Definitions, page 66: “Emission Reduction Ton (ERT)
- The ACR unit of exchange for tradable, project-based carbon offsets. ERTs refer to both emission reductions and enhancements in sequestration. ACR issues one ERT for each metric ton of CO₂e emission reductions or removals verified against an ACR Standard and methodology.”

Provision 2 Source 1, section: Definitions, page 63: “Carbon Dioxide Equivalent (CO₂e)

A metric to compare GHGs based on their global warming potential (GWP) relative to CO₂ over the same timeframe. The Intergovernmental Panel on Climate Change publishes GWP values for converting all GHGs to a CO₂e basis.”

Provision 3 Source 1, section: Definitions, page 67: “Global Warming Potential (GWP)

A relative scale translating the global warming impact of any GHG into its CO₂e over the same timeframe. The IPCC periodically updates the list of GHGs and their GWP factors, based on the most recent science. ACR requires Project Proponents to calculate GHG reductions and removals based on the 100-year GWPs in the IPCC Fifth Assessment Report (AR5), Working Group 1, Chapter 8, Table 8.7 for CH₄ and N₂O and Table 8.SM.16 for HFCs, PFCs, SF₆, NF₃, and all ODS.”

Assessment outcome

Yes (1 Point).

Justification of assessment

The above documentation specifies that the indicator is fulfilled.

Indicator 1.3.1.8

Relevant scoring methodology provisions

“The program requires in its general program provisions (rather than only in its specific quantification methodologies) that emission reductions or removals be determined in a conservative manner (rather than using the most accurate estimate) to ensure that emission reductions or removals are not overestimated (this prioritization of conservativeness over accuracy acknowledges that uncertainty exists with even the most accurate estimates).

OR

The program requires in its general program provisions (rather than only in its specific quantification methodologies) that emission reductions or removals be determined in a conservative manner (rather than using the most accurate estimate) to ensure that emission reductions or removals are not overestimated, unless emission reductions or removals can be determined with high accuracy, in which case no conservativeness needs to be included in the quantification.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- 2 ACR Validation and Verification Standard, Version 1.1, May 2018. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1>

Relevant carbon crediting program provisions

- Provision 1 Source 1, section 2.B.3, page 17-18: “Methodologies submitted for ACR approval shall include methods for estimating uncertainty relevant to the project and baseline scenario. For methodologies based on statistical sampling (e.g., methodologies in the forestry or working land use sectors), ACR requires that the sampling error associated with the mean of the estimated emission reduction/removal not exceed $\pm 10\%$ of the mean at the 90% confidence interval to report the mean of the estimated emission reduction/removal. If the Project Proponent cannot meet this target, then the reportable amount shall be the mean minus the lower bound of the 90% confidence interval, applied to the final calculation of emission reductions/removal enhancements, or must be calculated as specified in the applied methodology. Project Proponents are responsible for deciding if potential additional revenues from reporting the mean without an uncertainty deduction justify the additional costs of more intensive sampling to achieve precision of $\pm 10\%$ of the mean at 90% confidence. If the sampling error is equal to or greater than 20%, the confidence deduction for the monitoring period must be 100%. Project-specific methodologies provide guidance on how to calculate this uncertainty deduction.”
- Provision 2 Source 1, section 2.B.4, page 18: “The methodology shall define assumptions and specify quantification methods and monitoring requirements to ensure that GHG emission reductions and removals are not overestimated, particularly in cases where estimation methods, not direct measurement, are used to populate parameters.”
- Provision 3 Source 2, 8.G, page 30: “The precision of GHG estimates is distinct from the concept of materiality. Materiality dictates that the individual or aggregation of errors and omissions exceeding the $\pm 5\%$ materiality threshold requires restatement (i.e., correcting of material errors) prior to ERT issuance.

For precision, ACR prescribes a target for the final calculation of GHG emission reductions/removal enhancements, and requires an uncertainty deduction if this target is not achieved. This is to provide flexibility to the Project Proponent, in the case that the costs of additional sampling to achieve the precision target outweigh the benefits of not having to take a deduction. The relevant text [from the ACR Standard] is:

ACR sets a precision target of $\pm 10\%$ of the mean at 90% confidence, applied to the final calculation of emission reductions/sequestration. If the Project Proponent cannot achieve precision of $\pm 10\%$ of the mean at 90% confidence, then the reportable amount shall be the mean minus the lower bound of the 90% confidence interval, applied to the final calculation of emission reductions/removal enhancements.”

Assessment outcome

The second of the two options is fulfilled (1 point).

Justification of assessment

Provision 1 identifies that for projects that apply “methodologies based upon statistical sampling”, if a low level of uncertainty ($> \pm 10\%$) is achieved for the project, an uncertainty deduction is not

required. In principle, this may satisfy the second of the two options of the indicator; however, the provision is only applicable to methodologies based on upon statistical sampling, and not to all methodologies. Provision 2 identifies that methodologies must not overestimate emission reductions; however, this does not necessarily imply that conservativeness adjustments are required. Provision 3 identifies the precision required to avoid a conservativeness adjustment. ACR thus follows an approach where accurate estimates are acceptable within a certain uncertainty range and conservativeness deductions apply in cases of large uncertainty. This corresponds to the second statement of the indicator, which is assigned 1 point.

Indicator 1.3.1.9

Relevant scoring methodology provisions

“The program requires in its general program provisions that, before approving a methodology, the level of uncertainty of emission reductions and removals is identified, or that a provision is included in the methodology requiring that each project applying the methodology must determine the level of uncertainty in quantifying the emission reductions or removals.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

Provision 1 Source 1, section 2.B.3, page 17: “Methodologies submitted for ACR approval shall include methods for estimating uncertainty relevant to the project and baseline scenario.”

Assessment outcome

Yes (1 Point).

Justification of assessment

The above documentation specifies that the indicator is fulfilled.

Indicator 1.3.1.10

Relevant scoring methodology provisions

“The program requires in its general program provisions (rather than only in its specific quantification methodologies) that the degree of conservativeness in quantifying emission reductions or removals be based on the magnitude of uncertainty in the estimation of emission reductions and removals (i.e., applying a larger degree of conservativeness in case of higher uncertainties).”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- 2 ACR Validation and Verification Standard, Version 1.1, May 2018. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1>

Relevant carbon crediting program provisions

- Provision 1 Source 1, section 2.B.3, page 17-18: “Methodologies submitted for ACR approval shall include methods for estimating uncertainty relevant to the project and baseline scenario. For methodologies based on statistical sampling (e.g., methodologies in the forestry or working land use sectors), ACR requires that the sampling error associated with the mean of the estimated emission reduction/removal not exceed $\pm 10\%$ of the mean at the 90% confidence interval to report the mean of the estimated emission reduction/removal. If the Project Proponent cannot meet this target, then the reportable amount shall be the mean minus the lower bound of the 90% confidence interval, applied to the final calculation of emission reductions/removal enhancements, or must be calculated as specified in the applied methodology. Project Proponents are responsible for deciding if potential additional revenues from reporting the mean without an uncertainty deduction justify the additional costs of more intensive sampling to achieve precision of $\pm 10\%$ of the mean at 90% confidence. If the sampling error is equal to or greater than 20%, the confidence deduction for the monitoring period must be 100%. Project-specific methodologies provide guidance on how to calculate this uncertainty deduction.”
- Provision 2 Source 2, Section 8.G, page 30: “The conservativeness principle dictates that if projects cannot achieve the precision target, then:
- For activities reducing emissions, proponents should report the lower bound of the confidence interval on baseline emissions and the upper bound of the confidence interval on project emissions.
 - For activities enhancing terrestrial sequestration, proponents should report the upper bound of the confidence interval on baseline sequestration and the lower bound of confidence interval on project sequestration.”

Assessment outcome

Yes (1 Point).

Justification of assessment

The approach to determining a conservative adjustment due to project uncertainty identified in Provision 1 meets the requirement for a relationship between the level of uncertainty and the amount of conservativeness applied to quantify GHG emissions for “methodologies based upon statistical sampling”. Provision 2 identifies that if any project does not meet the precision target, emission reduction quantification must rely upon the lower and upper bound of confidence intervals for project

and baseline emissions, determined through uncertainty analysis, to conservatively avoid overestimation. This approach also ensures that the higher the uncertainty (and therefore lower value lower band and higher value upper band) the lower the quantified emission reductions. This is effectively a mechanism that enacts a conservative deduction through quantification based upon the magnitude of uncertainty. The indicator is therefore fulfilled.

Indicator 1.3.1.11

Relevant scoring methodology provisions

“The program explicitly requires in its general program provisions (rather than only in its specific quantification methodologies) that *existing* government policies and legal requirements which lower GHG emissions (e.g., feed-in tariffs for renewable energy, minimum product efficiency standards, air quality requirements, or carbon taxes) must be included when determining the baseline emissions.”

Note: This indicator does not apply to announcements that have not yet been operationalized within the country, such as mitigation targets communicated in Nationally Determined Contributions (NDCs) or Low Emission Development Strategies (LEDS), or other similarly broad national goal-setting policies. However, the implementing policies developed to accomplish objectives within NDCs or LEDS would need to be considered (if relevant to the project in question).

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- 2 ACR Validation and Verification Standard, Version 1.1, May 2018. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1>
- 3 ACR Methodology Template, July 2018. Available: <https://americancarbonregistry.org/carbon-accounting/guidance-tools-templates/acr-methodology-template-2018july.docx>

Relevant carbon crediting program provisions

Provision 1 Source 1, Section 4.A.1, page 27-28: “The regulatory surplus test requires the Project Proponent to evaluate existing laws, regulations, statutes, legal rulings, or other regulatory frameworks that directly mandate the project action, and which require specific technical, performance, or management actions. These legal requirements may require the use of a specific technology, meeting a certain standard of performance (e.g., new source performance standards), or managing operations according to a certain set of criteria or practices (e.g., forest practice rules). In determining whether an action is surplus to regulations, the Project Proponent does not need to consider voluntary agreements without an enforcement mechanism, proposed laws or regulations, optional guidelines, or general government policies.

If a regulatory requirement (or similar requirement such as a permit condition) comes into force during the crediting period and effectively mandates the project activity, the

project will no longer be eligible for crediting from the date the regulatory requirement takes effect, unless otherwise specified in the applicable methodology.

AFOLU projects with easements need to consider the legally binding requirements of the easement if the recordation date is prior to 1 year before the project Start Date. (The constraints outlined in the easement would also need to be included in the baseline scenario within this time frame.)”

Provision 2 Source 1, Chapter 3, page 21-22: “Projects that are deemed to meet all ACR additionality criteria upon validation are considered additional for the duration of their Crediting Period with the exception of regulatory changes that effectively mandate the project activity after a Crediting Period has begun¹². If a regulatory requirement (or similar requirement such as a permit condition) comes into force during the crediting period and such requirement effectively mandates the project activity, the project will no longer be eligible for crediting from the date the regulation takes effect, unless otherwise specified in the applicable methodology.

Footnote 12: If the basis for additionality changes during the Crediting Period (other than regulations that require project implementation), the project may be ineligible for Crediting Period renewal.”

Provision 3 Source 2, Section 4.A, page 15: “The regulatory surplus test involves existing laws, regulations, statutes, legal rulings, or any other regulatory frameworks that directly or indirectly affect GHG emissions associated with a project action or its baseline candidates, and that require technical, performance, or management actions.”

Provision 4 Source 3, Section 5.2.1-2, page 11: “Example text: To pass the regulatory surplus test, a project must not be mandated by existing laws, regulations, statutes, legal rulings, or any other regulatory frameworks that directly or indirectly affect the GHG emissions associated with a project. The project proponent must demonstrate that there is no existing law, regulation, statute, legal ruling, or other regulatory framework that mandates the project or effectively requires the GHG emission reductions associated with the project activity.

5.2.2 Performance Standard Threshold (if applicable)

Provide a description of the performance standard, how it was derived (an in depth version can be provided in an appendix), and what requirements must be met in order to be eligible to use the performance standard, in addition to demonstrating that there is no existing law, regulation, statute, legal ruling, or other regulatory framework that mandates the project or effectively requires the GHG emission reductions associated with the project activity.”

Assessment outcome

No (0 Points).

Justification of assessment

The above documentation does not explicitly require that regulations, policies, or legal mandates be incorporated into the determination of the baseline emissions (Provisions 1, 2, and 3). The provisions

of the carbon crediting program mainly comprise a regulatory surplus test which assess whether the project is required to be implemented. Provision 3 requires that the baseline scenario candidates are assessed taking legal or regulatory requirements into account, but no specific provisions speak to the need to incorporate policies that might affect baseline emissions. The indicator is therefore not fulfilled.

Indicator 1.3.1.12

Relevant scoring methodology provisions

“The program explicitly requires in its general program provisions (rather than only in its specific quantification methodologies) that new government policies and legal requirements which lower GHG emissions (e.g., feed-in tariffs for renewable energy, minimum product efficiency standards, air quality requirements, or carbon taxes) must be included when determining the baseline emissions, once they enter into force. This means that baseline emissions may need to be adjusted during the crediting period, and not only when a regular review of the baseline emissions is required (e.g., at the renewable of the crediting period).”

Note: This indicator does not apply to announcements that have not yet been operationalized within the country, such as mitigation targets communicated in Nationally Determined Contributions (NDCs) or Low Emission Development Strategies (LEDS), or other similarly broad national goal-setting policies. However, the implementing policies developed to accomplish objectives within NDCs or LEDS would need to be considered (if relevant to the project in question).

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- 2 ACR Validation and Verification Standard, Version 1.1, May 2018. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1>

Relevant carbon crediting program provisions

Provision 1 Source 1, Chapter 3, page 21-22: “Projects that are deemed to meet all ACR additionality criteria upon validation are considered additional for the duration of their Crediting Period with the exception of regulatory changes that effectively mandate the project activity after a Crediting Period has begun¹². If a regulatory requirement (or similar requirement such as a permit condition) comes into force during the crediting period and such requirement effectively mandates the project activity, the project will no longer be eligible for crediting from the date the regulation takes effect, unless otherwise specified in the applicable methodology.”

Provision 2 Source 2, Section 4.A, page 15: “The regulatory surplus test involves existing laws, regulations, statutes, legal rulings, or any other regulatory frameworks that directly or indirectly affect GHG emissions associated with a project action or its baseline candidates, and that require technical, performance, or management actions.”

Assessment outcome

No (0 Points).

Justification of assessment

Although the above provisions (1 and 2) identify that any new regulatory requirements that mandates the project activity would immediately disqualify the project activity from generating offset credits, no provisions speak to new regulations or policies that might alter the baseline emissions while not explicitly requiring the project activity to be implemented (e.g., a feed-in tariff or carbon tax policy). The indicator is therefore not fulfilled.

Indicator 1.3.1.13

Relevant scoring methodology provisions

“The program has established procedures to invalidate and/or replace carbon credits under circumstances in which the emission reductions or removals are demonstrated to have been overestimated.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- 2 ACR Validation and Verification Standard, Version 1.1, May 2018. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1>

Relevant carbon crediting program provisions

Provision 1 Source 1, section 9.B, page 52-53: “A material misstatement is an inaccurate assertion of an offset project’s GHG emission reductions/removals, which may reasonably be expected to influence decisions or actions taken by the users of the GHG project information. To accept a verification statement, ACR requires that discrepancies between the emission reductions/removal enhancements claimed by the Project Proponent and estimated by the VVB be immaterial (i.e. less than ACR’s materiality threshold of $\pm 5\%$). Individual or aggregation of errors or omissions greater than the ACR materiality threshold require re-stating before a verification statement will be accepted.

ACR’s materiality threshold also applies in the event that an overstated GHG emission reduction/removal assertion is discovered during a subsequent verification after it has been credited. If the misstatement exceeds the materiality threshold, the amount of over issuance shall be deducted from the net verified emissions reductions upon the next completed verification, cancelled from the project’s ACR account, or be deducted from the project’s contribution to the ACR Buffer Pool, to be replenished by the project account holder, as applicable.”

Assessment outcome

No (0 Points).

Justification of assessment

Provision 1 identifies that a procedure exists to invalidate and/or replacement carbon credits due to demonstrated overestimation of a project activity's emission reductions when identified by a verifier during a subsequent verification event. Three options are presented for cancelling or replacing invalidated credits that have already been retired. The carbon crediting program's provisions thus address the indicator in instances when the overestimation is identified through verification and when a project developer engages in a subsequent verification. Moreover, the procedure is effective when the project developer has sufficient carbon credits hold within its ACR account to replace invalidated credits, or when credits are available to replace a deduction from a project's buffer pool contribution. However, the provisions do not address the possibility that a third party could identify that overestimation has occurred. The provisions also do not provide recourse in the case where a project develop will no longer pursue verification or has no carbon credits remaining in its ACR accounts. Due to these possible scenarios, in which overestimation would not result in credits being invalidated or replaced, the indicator is not fulfilled.

Indicator 1.3.1.14

Relevant scoring methodology provisions

"The maximum length of the sum of crediting periods is:

- a. up to 40 years for afforestation/reforestation projects and up to 10 years for all other project types
OR
- b. up to 60 years for afforestation/reforestation projects and up to 15 years for all other project types
OR
- c. up to 80 years for afforestation/reforestation projects and up to 20 years for all other project types
OR
- d. more than 80 years for afforestation/reforestation projects and more than 20 years for all other project types.

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

Provision 1 Source 1, Section 6.I, page 44: “ACR does not limit the allowed number of renewals, since at each Crediting Period renewal the Project Proponent must demonstrate that the project is additional and meets all ACR requirements.”

Assessment outcome

No (0 Points).

Justification of assessment

Provision 1 specifies that ACR does not limit the maximum length of the sum of crediting periods. The indicator is therefore not fulfilled.

Indicator 1.3.1.15

Relevant scoring methodology provisions

“The program provides guidance on the renewal of the crediting period, which must include a re-assessment of the baseline scenario.”

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

Provision 1 Source 1, Section 6.I, page 44: “A Project Proponent may apply to renew the Crediting Period by:

- Re-submitting the GHG Project Plan in compliance with then-current ACR standards and criteria;
- Re-evaluating the project baseline, as required by the methodology;
- Demonstrating additionality against then-current regulations, common practice, and implementation barriers (or against an approved performance standard and then-current regulations), as required by the methodology;
- Using ACR-approved baseline methods, emission factors, tools, and methodologies in effect at the time of Crediting Period renewal; and,
- Completing validation of the new GHG Project Plan within one year from the end of the previous crediting period.”

Provision 2 Source 1, Definitions, page 65: “Crediting Period

The finite length of time for which a GHG Project Plan is valid, and during which a project can generate offsets against its baseline scenario. The baseline must be re-evaluated to renew the Crediting Period. ACR sector standards and methodologies specify the Crediting Period for particular project types.”

Provision 3 Source 1, Section A3.3, page 81: “Unless otherwise specified in the methodology, a Project Proponent may apply to renew the Crediting Period by complying with all then current ACR requirements (including the latest versions of the ACR Standard and applicable methodology), re-evaluating the baseline scenario, reconfirming additionality, and using emission factors, tools, and methodologies in effect at the time of Crediting Period renewal. ACR does not limit the allowed number of renewals.”

Assessment outcome

Yes (1 Point).

Justification of assessment

Provisions 1 to 3 specify that the baseline scenario must be re-evaluated prior to crediting period renewal. The indicator is therefore fulfilled.

Indicator 1.3.1.16

Relevant scoring methodology provisions

“In the case of project types where the baseline scenario is the continuation of the current situation (i.e. not undertaking any investment), the program requires the re-assessment of additionality at the renewal of the crediting period.” (See methodology for further explanation)

Information sources considered

- 1 The American Carbon Registry Standard, Version 7.0, December 2020. Available: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>

Relevant carbon crediting program provisions

- Provision 1 Source 1, Section 6.I, page 44: “A Project Proponent may apply to renew the Crediting Period by:
- Re-submitting the GHG Project Plan in compliance with then-current ACR standards and criteria;
 - Re-evaluating the project baseline, as required by the methodology;
 - Demonstrating additionality against then-current regulations, common practice, and implementation barriers (or against an approved performance standard and then-current regulations), as required by the methodology;

- Using ACR-approved baseline methods, emission factors, tools, and methodologies in effect at the time of Crediting Period renewal; and,
- Completing validation of the new GHG Project Plan within one year from the end of the previous crediting period.”

Assessment outcome

Yes (2 Points).

Justification of assessment

Provision 1 specifies that crediting period renewal always requires the re-evaluation of additionality. The indicator is therefore fulfilled.

Scoring results

According to the above assessment, the carbon crediting program achieves a total point score of 15 for the indicators. Applying the scoring approach in the methodology, this results in a score of 3.13 for the sub-criterion.