THE ACR STANDARD

REQUIREMENTS AND SPECIFICATIONS FOR THE QUANTIFICATION, MONITORING, REPORTING, VERIFICATION, AND REGISTRATION OF PROJECT-BASED GHG EMISSIONS REDUCTIONS AND REMOVALS

VERSION 8.0

July 2023

ACR
AT WINROCK INTERNATIONAL

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ACR[SM]

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ABOUT ACR[SM]

ACR is a leading global carbon crediting program operating in regulated and voluntary carbon markets. Founded in 1996 as the first private voluntary greenhouse gas (GHG) registry in the world, ACR creates confidence in the integrity of carbon markets to catalyze transformational climate results. ACR ensures carbon credit quality through the development of environmentally rigorous, science-based standards and methodologies as well as oversight of carbon offset project verification, registration, and credit issuance and retirement reporting through its transparent registry system. ACR is governed by Environmental Resources Trust LLC, a wholly-owned nonprofit subsidiary of Winrock International.

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Acronyms

AC-F	Avoided conversion of forest
AEZ	Agroecological zone
AFOLU	Agriculture, Forestry, and Other Land Use
AR	Afforestation/reforestation
AR5	Fifth Assessment Report
CFC	Chlorofluorocarbon
CH_4	Methane
CO_2	Carbon dioxide
CO_2e	Carbon dioxide-equivalent
CORSIA	Carbon Offset Reduction Scheme for International Aviation
DNA	Designated National Authority
ERR	Emission reduction/removal
ERT	Emission Reduction Ton
GHG	Greenhouse gas
GIS	Geographic Information System
GWP	Global warming potential
HCFC	Hydrochlorofluorocarbon
HFC	Hydrofluorocarbon
IAF	International Accreditation Forum
ICAO	International Civil Aviation Organization
IFM	Improved forest management

IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
ITMO	Internationally transferred mitigation outcome
MIGA	Multilateral Investment Guarantee Agency
MoU	Memorandum of understanding
N_2O	Nitrous oxide
NF_3	Nitrogen trifluoride
NDC	Nationally determined contributions
ODS	Ozone-depleting substance
OECD	Organization for Economic Co-Operation
OIMP	Other international mitigation purposes
OPR	Offset Project Registry
PDA	Programmatic Development Approach
PFC	Perfluorocarbon
QA/QC	Quality assurance/quality control
REDD	Reducing Emissions from Deforestation and Degradation
RMSE	Root mean squared error
SDG	Sustainable Development Goal
SF_6	Sulfur hexafluoride
SOC	Soil organic carbon
ToU	Terms of Use
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

VVB	Validation/Verification Body
WMO	World Meteorological Organization

Introduction

ACR[SM] is a leading greenhouse gas (GHG) emission reduction and removal crediting program with over two and a half decades of unparalleled carbon market experience in the development of rigorous, science-based carbon credit standards and methodologies as well as operational experience in the oversight of GHG project registration and verification and the issuance, tracking and reporting of serialized carbon credits for verified GHG emission reductions and removals on ACR's transparent registry system. ACR is a nonprofit enterprise of Winrock International. Winrock works with people in the United States and around the world to empower the disadvantaged, increase economic opportunity, and sustain natural resources. Key to this mission is building capacity for climate change mitigation and adaptation and leveraging the power of environmental markets.

ACR was founded in 1996 as the GHG Registry by the Environmental Resources Trust (ERT) and joined Winrock in 2007. As the first private GHG registry in the world, ACR has set the bar for carbon credit quality that is the market standard today and continues to lead carbon market innovation.

In 2012, ACR was approved by the California Air Resources Board to serve as an Offset Project Registry (OPR) for the California cap-and-trade program.[1] In 2020, ACR was approved by the International Civil Aviation Organization (ICAO) to supply units to the Carbon Offsetting Scheme for International Aviation (CORSIA).[2] In 2022, ACR was approved to issue GHG emission reduction credits from recovered methane projects[3] for use for compliance with the State of Colorado's Recovered Methane Rule. In 2023, ACR was approved by Washington State's Department of Ecology to Serve as an OPR for the Washington's cap-and-invest program.[4] The ACR Standard governs only the registration of GHG projects under ACR-approved methodologies.

ACR Governance

The ACR program is built on principles of accountability, transparency, responsiveness, and participatory processes. ACR is governed by Environmental Resources Trust (ERT), a wholly-owned nonprofit subsidiary of Winrock International. The ERT Board of Managers assumes fiduciary

[1] https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program.

[2] ICAO Eligible Emissions Units: https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx.

https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/CORSIA%20Eligible%20Emissions%20Units_March2023.pdf.

[3] https://cdphe.colorado.gov/air-pollution/recovered-methane.

[4] https://ecology.wa.gov/Air-Climate/Climate-Commitment-Act/Cap-and-invest/Offsets.

responsibility for the organization and ensures activities contribute to its mission of harnessing the power of markets to improve the environment.

The ACR Standard

The ACR Standard details ACR's requirements and specifications for the quantification, monitoring, and reporting of project-based GHG emission reductions and removals, independent third-party verification by accredited entities, GHG project registration, and issuance of serialized carbon credits on a transparent registry platform. The Standard establishes the quality level that every GHG project must meet in order for ACR to register its GHG emission reductions and removals as tradable environmental assets.

ACR aims to maximize flexibility and usability for Project Proponents while maintaining the environmental integrity and scientific rigor necessary to ensure that GHG projects developed against its standards and methodologies are recognized as being of the highest quality, whether used for voluntary or compliance purposes.

Adherence to the ACR Standard and associated methodologies will ensure that project-based carbon credits represent GHG emission reductions and removals that are real, measurable, permanent, in excess of regulatory requirements and common practice, additional to business-as-usual, net of leakage, verified by a competent independent third party, and used only once.

Applicability

Project Proponents wishing to develop a GHG project for registration on ACR shall follow this Standard and must apply an ACR-approved methodology (as defined below).

The ACR Standard v8.0 supersedes the ACR Standard v7.0 (December 2020). Any GHG project listed subsequent to July 1, 2023, must follow all requirements of and be validated against the ACR Standard v8.0. GHG projects listed prior to July 1, 2023, may be validated according to a previous version of the ACR Standard, as applicable at the time of listing.

GHG project eligibility is subject to the criteria of the ACR Standard version under which the project was listed and confirmed upon validation (e.g., those listed in Tables 2 and 4, or the equivalent as presented in earlier versions of the ACR Standard).[5] A GHG project's eligibility criteria, as established by the ACR Standard version under which it is validated[6] along with the relevant methodology-specific

[5] Should the Standard be updated to a newer version between GHG Project listing and validation, it is encouraged that the GHG Project be validated under the updated version of the ACR Standard.

[6] Tables 2 and 4 of this document.

eligibility criteria, are considered static until the GHG Project undergoes a subsequent validation as applicable.

All GHG projects, where applicable, are required to adhere to updates to ACR administrative policies as prescribed in the most recently published version of the Standard. Examples of such administrative policies include, but are not limited to, reporting requirements, use of ACR templates, use of ACR Tools, verification procedures, use of the Buffer Pool Terms and Conditions.

Project Proponents and other interested parties should refer to www.acrcarbon.org for the latest version of the ACR Standard, methodologies, tools, document templates, and other guidance.

Chapter Guide

Chapter 1 Basics on ACR

Chapter 2 ACR's general accounting and data quality principles for GHG projects

Chapter 3 ACR GHG project eligibility requirements

Chapter 4 ACR tests to ensure that GHG projects are additional to business-as-usual

Chapter 5 ACR's approach to ensuring permanence of GHG emission reductions and removals

Chapter 6 Process for Project Proponents to develop and register a GHG Project

Chapter 7 Processes for ACR approval of new methodologies and methodology modifications

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Appendix A ACR Requirements for Agriculture, Forestry, and Other Land Use (AFOLU) projects

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Appendix D References on which the ACR Standard is based

The ACR Standard does not detail legal responsibilities of ACR and ACR Registry Account Holders with regard to the use of the ACR Registry, which are provided for in the legally binding ACR Terms of Use Agreement and referenced operative documents such as the ACR Operating Procedures.

Citation

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Chapter 1: ACR Basics

1.A Description of the ACR

ACR, a nonprofit enterprise of Winrock International, is a leading GHG emission reduction and removal crediting program that operates in both voluntary and compliance carbon markets. Founded in 1996 as the first private voluntary GHG registry in the world, ACR has over two decades of unparalleled carbon market experience in the development of rigorous, science-based carbon credit standards and methodologies as well as operational experience in the oversight of GHG project registration and verification and the issuance, tracking and reporting of serialized carbon credits for verified emission reductions and removals on ACR's transparent registry system.

ACR operates a transparent online registry system, the ACR Registry, for Account Holders to register GHG projects and record the issuance, transfer, and retirement of serialized, project-based, and independently verified carbon credits. The ACR Registry records transactions directly negotiated between buyers and sellers over the counter, through ACR Linked Platforms. Transactions of ACR-issued credits are tracked on the ACR Registry.

1.B Objectives

ACR's objectives are to:

- Support the development and implementation of well-designed domestic and international, voluntary and compliance carbon markets to enhance ambition to reach Paris Agreement targets;
- Enhance public confidence in market-based action for GHG emission reductions and removals;
- Encourage action to reduce and mitigate GHG emissions;
- Provide science-based standards and transparent infrastructure to foster high-quality GHG emission reduction and removal carbon credits;
- Support best practices in GHG accounting;
- Commercialize innovative new methodologies; and
- Encourage broad adoption of practices that mitigate climate change with significant community, economic, and environmental benefits.

1.C Geographic Scope

ACR accepts GHG projects from worldwide locations, provided they conform to an ACR-approved methodology. Certain sectors and methodologies prescribe a narrower geographic scope.

1.D Scope: Greenhouse Gases and Particulate Matter

ACR registers GHG emission reductions and removals of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). ACR's scope also includes destruction of Ozone-Depleting Substances (ODS) listed in Annexes A, B, C, and E of the Montreal Protocol.[7]

1.E Scope: GHG Project Types

ACR accepts all GHG 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 stakeholder 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.

1.E.1 SCOPE EXCLUSIONS

The following scope exclusions apply under the ACR program:

- Projects that convert and/or clear native ecosystems;
- Projects quantifying GHG emission reductions from electricity generation connected to a national or regional power distribution grid;
- Projects quantifying GHG emission reductions from the usage displacement of one type of fossil fuel to another type of fossil fuel;

[7] See https://ozone.unep.org/treaties/montreal-protocol.

- Projects that lock-in long-term GHG emissions;
- GHG emission reductions or removals that take place at a regulated source or have been used to meet a regulatory compliance obligation under a binding limit;
- GHG emission reductions or removals that are used in other environmental markets (such as a Low Carbon Fuel Standard);
- International project-level REDD (Reducing Emissions from Deforestation and Degradation) and forestry projects from REDD+ countries. The growing international implementation of land-based sectoral GHG accounting and crediting and/or results-based REDD finance greatly increases the risk of double claiming project-based carbon credits within a sectoral crediting scheme unless properly nested or otherwise accounted for; and
- Projects quantifying energy or life-cycle GHG accounting-based indirect GHG emission reductions and/or removals.

ACR retains the right, at its sole discretion, to reject any project type whether included in this list or not.

1.F Language

English is the operating language of ACR. All methodologies, tools, GHG Project Plans, Monitoring Reports, validation and verification reports and opinions, and other documents required by ACR shall be in English.

1.G Unit of Measure

Project Proponents shall calculate, quantify, and report all GHG emission reductions and removals in metric tons, converting each metric ton to its CO_2 equivalent (CO_2e). The principle of conservativeness embedded into all ACR methodologies, in conjunction with the application of the materiality threshold, ensures that no more than one GHG emission reduction or removal carbon credit is issued per tonne of CO_2-equivalent. GHG emission reductions and removals with a vintage year of 2021 or later shall use conversion calculations based on the 100-year Global Warming Potential factors listed in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5), Working Group 1, Chapter 8, Table 8.7 for CH_4 and N_2O[8] and Table 8.SM.16 for HFCs, PFCs, SF_6, NF_3, and all ODS.[9] ACR-issued carbon credits with a vintage year of 2020 or earlier will maintain the original

[8] See https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf.

[9] See https://www.ipcc.ch/site/assets/uploads/2018/07/WGI_AR5.Chap_.8_SM.pdf.

application of global warming potential (GWP) factors from an earlier IPCC Assessment Report referenced in previous, relevant versions of the ACR Standard.

1.H Unit of Exchange

The ACR unit of exchange is a verified GHG emission reduction or removal carbon credit, serialized and registered as an Emission Reduction Ton (ERT), denominated in metric tons of CO_2e. ERTs, also referred to as offsets, offset credits, carbon offsets, carbon credits, and carbon offset credits, include GHG emission reductions and removals (i.e., enhanced sequestration).

1.I No Ex-Ante Crediting

A project-based carbon credit is the result of a defined and eligible GHG Project action that yields quantifiable and verifiable GHG emission reductions and/or removals. ACR will not issue ERTs for GHG emission reductions or removals when an emission mitigation activity has not yet occurred or is not yet verified. ACR will not credit a projected stream of ERTs on an ex-ante basis.

1.J Adoption of and Revisions to ACR Standards

The ACR Standard will be posted for public comment for at least sixty (60) days prior to adoption. ACR will prepare responses to all submitted comments and post the comments and responses along with the new version of the standard.

ACR will review and revise the ACR Standard, as necessary, at a minimum of every three (3) years.

Such updates may occur when significant changes to GHG accounting best practices or the legislative and/or regulatory context justify an update; when new provisions or requirements originating in methodologies make ACR aware of higher-level requirements or clarifications that should be made at the ACR Standard; upon an update to ACR's internal policy and/or process requirements; or for other reasons.

1.K Conflict of Interest Policy

As a nonprofit organization that values its reputation for integrity, Winrock requires that all management and staff, including of ACR, adhere to its Code of Professional Conduct,[10] which includes a strict and comprehensive policy against engaging in activities that present a conflict of interest. Accordingly, each director, officer, and staff member are required to regularly affirm that they are in compliance with this policy, that they avoid all conflicts of interest and take reasonable action to avoid circumstances that create the appearance of a conflict of interest. ACR staff are required to notify management immediately if any conflict of interest situations arise or come to their attention so the conflict can be appropriately mitigated.

In addition to its internal conflict of interest policy, ACR requires that its third-party registry service provider maintain and adhere to a strict conflict of interest policy and that all ACR-approved Validation and Verification Bodies (VVBs) execute an Attestation of Validation/Verification Body, which defines the VVB role and responsibilities and ensures technical capabilities of all staff and no conflicts of interest. ACR-approved VVBs must also execute and have approved by ACR a project-specific conflict of interest form for each GHG project validation and/or Reporting Period verification for which they have been selected.

[10] See https://code.winrock.org/.

Chapter 2: Accounting and Data Quality Principles

The accounting and data quality principles summarized here are designed to ensure that the assumptions, values, and procedures used by Project Proponents and VVBs result in a fair and true accounting of GHG emission reductions and removals.

2.A Guiding Principles for GHG Accounting

ACR affirms a set of guiding principles, based on the International Organization for Standardization (ISO) 14064 Part 2 (2019) specifications from which all other ACR principles and eligibility criteria follow, as summarized in Table 1.

Table 1: Core GHG Accounting Principles

RELEVANCE	Select the GHG sources, GHG sinks, GHG reservoirs, data, and methodologies appropriate to the needs of the intended user.
COMPLETENESS	Include all relevant GHG emissions and removals. Include all relevant information to support criteria and procedures.
CONSISTENCY	Enable meaningful comparisons in GHG-related information. Use consistent methodologies for meaningful comparisons of emissions over time. Transparently document any changes to the data, boundary, methods, or any other relevant factors.
ACCURACY	Reduce bias and uncertainties as far as is practical.
TRANSPARENCY	Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
CONSERVATIVENESS	Use conservative assumptions, values, and procedures to ensure that GHG emission reductions or removals are not overestimated.

2.B Methodological Specifications for Adherence to Guiding Principles

2.B.1 BOUNDARY SELECTION

GHG project boundaries include a project's physical boundary or implementation area, the GHG sources, sinks, and reservoirs (or pools) considered, and the project duration.

Approved methodologies establish criteria for the selection of relevant GHG sources, sinks, and reservoirs for regular monitoring or estimation. The Project Proponent shall justify in the GHG Project Plan the exclusion from regular monitoring of any relevant GHG source, sink, or reservoir.

In accordance with ISO 14064-2:2019, approved methodologies establish criteria and procedures for quantifying GHG emissions and/or removals for selected GHG sources, sinks, and/or reservoirs. The Project Proponent shall quantify GHG emissions and/or removals separately for each relevant GHG for each GHG source, sink, and/or reservoir identified in the methodology as being relevant for the baseline and for the with-project scenario.

The Project Proponent shall provide a detailed description of the geographic boundary of project activities. A project may contain more than one facility or discrete area of land, but each facility or land area must have a unique geographical identification, and each land area must meet the sector-specific land eligibility requirements, if applicable. For AFOLU projects, the Project Proponent shall provide maps, Geographic Information System (GIS) shapefiles, and other relevant information to delineate the project boundary.

Sector-specific requirements found in Appendix A specify the required Minimum Project Term for particular project types.

2.B.2 RELEVANCE AND COMPLETENESS

Consistent with ISO 14064-2:2019, Project Proponents shall consider all relevant information that may affect the accounting and quantification of GHG emission reductions and removals, including estimating and accounting for any decreases in carbon pools and/or increases in GHG emission sources.

2.B.3 UNCERTAINTY, ACCURACY, AND PRECISION

The Project Proponent shall reduce, as far as is practical, uncertainties related to the quantification of GHG emission reductions and removals.

Methodologies submitted for ACR approval shall include methods for estimating uncertainty relevant to the baseline and with-project scenario. For methodologies based on statistical sampling (e.g., methodologies in the AFOLU sector), ACR requires that the sampling error associated with the mean of the estimated GHG emission reduction/removal not exceed ±10% of the mean at the 90% confidence interval to report the mean of the estimated GHG 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 Total GHG Emission Reductions/Removals, 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 ±10% of the mean at 90% confidence. If the sampling error is equal to or greater than 20%, the uncertainty deduction for the Reporting Period must be 100%. ACR-approved methodologies provide more specific guidance on how to calculate the associated uncertainty deduction.

The use of biogeochemical or process models, when employed as the sole estimator of emissions and/or removals, must also include estimates of input uncertainty and structural uncertainty related to the inadequacy of the model, model bias, and model discrepancy. Structural uncertainty should be quantified using the best available science, and can include Monte Carlo analyses, uncertainty estimates from peer reviewed literature, and/or consulting model experts who have either developed or worked directly with the model in an academic setting. See section A.6 for further details.

2.B.4 CONSERVATIVENESS

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.

The following rules shall be applied when reporting emissions data to ACR for credit issuance:

- Claimed GHG emission reductions and removals shall be rounded down to the nearest whole number; and
- Calculated Buffer Pool contributions shall be rounded up to the nearest whole number.

2.B.5 EMISSIONS FACTORS

Where needed to estimate GHG emission reductions or removals in the baseline or with-project scenario, the methodology shall specify GHG emission or removal factors that:

- Derive from a scientific peer-reviewed origin;
- Are appropriate for the GHG source or sink concerned; and

- Take account of the quantification uncertainty.

2.B.6 MANAGING DATA QUALITY

The Project Proponent shall establish and apply quality assurance and quality control (QA/QC) procedures to manage data and information, including activities designed to assess, address, and minimize overall uncertainty. QA/QC procedures shall be outlined in the GHG Project Plan.

2.B.7 PARTICIPATION IN OTHER ASSET PROGRAMS

In general, ACR allows GHG projects with multiple environmental and/or social attributes to participate in and benefit from programs that quantify achieved benefits beyond those of GHGs. However, participation in such programs may not always be consistent with the ACR Standard and carbon market best practices. Projects intended for simultaneous reporting of non-carbon attributes will be subject to evaluation upon the ACR project listing review and during validation of the GHG Project Plan. The following requirements must be met for consideration:

- Any project that seeks to register non-carbon environmental attributes alongside carbon credits must disclose to ACR the intent and details of the program prior to validation, if known;
- The attributes quantified for the non-carbon benefits must be distinct from the GHG benefits such that they have separately defined accounting units (e.g., pounds of nutrients in the case of water quality credits versus metric tons of CO_2e);
- The attributes quantified for the non-carbon benefits must represent a well-defined and distinct ecosystem service that can be "stacked" with carbon credits, such that they could be financially incentivized separately from the carbon benefit;[11]
- The project action must not be required by regulation to achieve the quantified non-carbon benefit; and
- The project action must not compensate for an activity outside the project's geographic boundary that results in release of GHGs or loss of a carbon sink (e.g., wetlands mitigation banking).

[11] Any project using an ACR-approved GHG quantification methodology for issuance of credits may choose to quantify alternate environmental and/or social benefits. However, these benefits may not always be creditable in a non-carbon environmental market at the same time as the GHG emission reduction and/or removal benefits represented by credits.

Chapter 3: Project Eligibility Requirements

Table 2 details ACR eligibility criteria for all GHG projects, defines each criterion, and articulates ACR requirements. Additional eligibility requirements for specific project types are summarized in the relevant ACR methodology. Project Proponents shall address, in their GHG Project Plan, each of the criteria below along with the project type-specific requirements.

Table 2: Eligibility Requirements for GHG Projects

CRITERION	DEFINITION	ACR REQUIREMENT
Start Date[12]	ACR defines the Start Date for all non-AFOLU projects as the date on which the GHG Project began to reduce GHG emissions against its baseline. ACR defines the eligible Start Date(s) for AFOLU project types in Appendix A, "ACR Requirements for AFOLU Projects". All Start Date definitions also apply to Site-specific Implementation Dates within Programmatic Development Approach (PDA) projects.	Non-AFOLU projects must be validated within two (2) years of the project Start Date, unless otherwise specified in the methodology. AFOLU projects must be validated within three (3) years of the project Start Date, unless otherwise specified in the methodology. One exception applies to these timeframes: Proof of Concept Projects that engaged with ACR to directly contribute to the development of a newly approved methodology[13] or a newly approved modification that expands the eligibility of a previously published methodology[14] may be submitted for listing to ACR within five (5) years of the project Start Date. However, the date of listing submittal must be within six (6) months of the methodology (or version) publication date, and

[12] The Start Date requirements do not apply to existing ACR projects that renew a Crediting Period. In these instances, the initial project Start Date, as previously validated, shall apply and shall be accepted in the Crediting Period renewal validation process on a de facto basis.

[13] A methodology is considered "newly approved" if ACR has published it no more than six (6) months prior to the Project's listing or registration with ACR. See Chapter 6 for guidance on ACR listing and registration requirements.

[14] The GHG Project must demonstrate that it was not eligible under the previously published version of the relevant methodology, without the newly approved modification.

CRITERION	DEFINITION	ACR REQUIREMENT
		the GHG Project must then be validated within two (2) years of the listing.
Minimum Project Term	The minimum length of time for which a Project Proponent commits to project continuance, monitoring, reporting, and verification.	The duration of the Minimum Project Term for specific project types is defined in the relevant ACR sector requirements and/or methodology. Project types with no risk of reversal after crediting have no required Minimum Project Term. Project Proponents of AFOLU projects with a risk of reversal shall commit to a Minimum Project Term of forty (40) years. The Minimum Term begins on the Start Date, not the first or last year of crediting. The Minimum Project Term is a requirement of the Project Proponent, not necessarily of the landowner (unless the landowner is the Project Proponent). ACR enters into legal agreements only with the Project Proponent. Project Proponents and landowners may continue AFOLU carbon activities beyond the Minimum Project Term, but ACR does not require continued monitoring, reporting, or verification unless the Crediting Period is renewed.
Crediting Period	Crediting Period is the finite length of time for which a GHG Project Plan is valid, and during which a GHG project can generate carbon credits against its baseline scenario. Crediting Periods are limited in temporal duration to require Project Proponents to reconfirm at intervals	The Crediting Period for non-AFOLU projects shall be ten (10) years, unless otherwise specified in the methodology. AFOLU projects may have different Crediting Periods, as specified in the relevant ACR sector requirements or methodology. The Start Date and the start of the first Crediting Period are generally the same, unless otherwise allowable in the relevant methodology. A Project Proponent may apply to renew the Crediting Period by complying with all then-current ACR requirements (including the latest

CRITERION	DEFINITION	ACR REQUIREMENT
	appropriate to the project type that the baseline scenario remains realistic and credible, the project activity remains additional, and GHG accounting best practice is being used.	version of the ACR Standard and applicable methodology), re-evaluating and remodeling (as appropriate) the baseline scenario, reconfirming additionality, and using emission factors, tools, and methodologies in effect at the time of renewal. Except where specified in a methodology, ACR does not limit the number of renewals. GHG 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 begun.[15] 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 GHG Project will no longer be eligible for crediting from the date the regulation takes effect, unless otherwise specified in the applicable methodology.
Real	A real credit is the result of a project action that yields quantifiable and verifiable GHG emission reductions and/or removals.	ERTs shall only be issued for a GHG emission reduction or removal that has been verified against an approved ACR Methodology to have already occurred. ACR will not credit a projected stream of credits on an ex-ante basis.
Title	Title is a legal term representing rights and interests in a carbon credit, a future stream of	The Project Proponent shall provide documentation and attestation of undisputed title to all carbon credits prior to registration. Title to credits shall be clear, unique, and uncontested.

[15] Other than regulatory changes that effectively mandate project activity (for which additionality is re-evaluated during the Crediting Period), if the basis for additionality changes during the Crediting Period, the GHG Project may be ineligible for Crediting Period renewal.

CRITERION	DEFINITION	ACR REQUIREMENT
	credits, or a GHG project delivering credits.	ACR will issue ERTs into the associated Project Developer Account on ACR only if there is clear, unencumbered, and uncontested title.
Additional	GHG emission reductions and removals are additional if they exceed those that would have occurred in the absence of the project activity and under a business-as-usual scenario.	Every GHG project shall demonstrate they either: Meet an ACR-approved performance standard and pass a regulatory surplus test, as detailed in the applicable methodology, or pass a three-pronged test of additionality in which the GHG Project: **1.** Exceeds regulatory/legal requirements; **2.** Goes beyond common practice; and **3.** Overcomes at least one of three implementation barriers: institutional, financial, or technical.
Regulatory Compliance	Adherence to all national and local laws, regulations, rules, procedures, other legally binding mandates and, where relevant, international conventions and agreements directly related to project activities.	GHG projects must maintain regulatory compliance. To do this, a regulatory body/bodies must deem that a GHG project is not out of compliance at any point during a Reporting Period. GHG projects deemed to be out of regulatory compliance are only eligible to earn ERTs during the period of non-compliance in specific circumstances.[16]
Permanent	Permanence refers to the longevity of GHG emission reductions and removals,	For GHG projects with a risk of reversal of GHG emission reductions or removals, Project

[16] Regulatory compliance violations related to administrative processes (e.g., missed applications or reporting deadlines), issues that are unenforced or unrelated to the integrity of the GHG emission reductions/removals, or minor regulatory infractions (affecting <1% of credits issued for the Reporting Period) that are accounted for with indisputably conservative crediting adjustments may be considered on a case-by-case basis and may not necessarily disqualify a project from ERT issuance.

CRITERION	DEFINITION	ACR REQUIREMENT
	and the risk of reversal (i.e., the risk that atmospheric benefit will not be permanent). Reversals may be unintentional or intentional.	Proponents shall analyze and mitigate risk, and monitor, report, and compensate for reversals. AFOLU Project Proponents shall periodically analyze reversal risk using the most recently published version of ACR's Tool for Reversal Risk Analysis and Buffer Pool Contribution Determination[17] and shall enter into a legally binding Reversal Risk Mitigation Agreement with ACR that details the risk mitigation option selected and the requirements for reporting and compensating reversals. Project Proponents of terrestrial sequestration projects shall mitigate reversal risk by contributing eligible ERTs to the ACR Buffer Pool or using another ACR-approved insurance or risk mitigation mechanism. Project Proponents of geologic sequestration projects shall mitigate reversal risk during the project term by contributing eligible ERTs to the ACR Reserve Account, or by using another ACR-approved insurance or risk mitigation mechanism, and post-project term by filing a Risk Mitigation Covenant, which prohibits any intentional reversal unless there is advance compensation to ACR.
Net of Leakage	Leakage is an increase in GHG emissions or decrease in sequestration outside the project boundaries that occurs because of the project action.	ACR requires Project Proponents to address, account for and mitigate certain types of leakage, according to the relevant sector requirements and methodology conditions. Project Proponents must deduct for leakage that reduces the GHG emission reduction and/or removal benefit of a GHG project in excess of

[17] In the event that an update to ACR's Tool for Reversal Risk Analysis and Buffer Pool Contribution Determination is released during a verification, Project Proponents shall use the version available at the end of the Reporting Period being verified.

CRITERION	DEFINITION	ACR REQUIREMENT
		any applicable threshold specified in the methodology.
Independently Validated	Validation is the systematic, independent, and documented process for the evaluation of a GHG Project Plan against applicable requirements of the ACR Standard and approved methodology.	ACR requires third-party validation of the GHG Project Plan by an accredited, ACR-approved VVB once during each Crediting Period and prior to issuance of ERTs. Validation can be conducted at the same time and by the same VVB as a full verification; however, the deadline for validation is determined by the methodology being implemented and the project Start Date (see above). Governing documents for validation are the ACR Standard, including sector-specific requirements, the relevant methodology, and the ACR Validation and Verification Standard. The Project Proponent must comply with all reasonable requests for documentation and data to enable required validation activities.
Independently Verified	Verification is the systematic, independent, and documented assessment by a qualified and impartial third party of the GHG statement for a specific Reporting Period.	Verification must be conducted by an accredited, ACR-approved VVB prior to any issuance of ERTs for a given Reporting Period and must be conducted at minimum specified intervals. ACR requires verifiers to provide a reasonable, not limited, level of assurance that the GHG statement is without material discrepancy. ACR's materiality threshold is ±5%. The Project Proponent must comply with all reasonable requests for documentation and data to enable required verification activities.
Environmental and Social Impact Assessments	GHG projects have the potential to generate positive and negative environmental and social impacts. Appropriate	ACR requires that all GHG projects develop and disclose an impact assessment to ensure compliance with environmental and social safeguards best practices. GHG projects must

CRITERION	DEFINITION	ACR REQUIREMENT
	safeguard procedures can identify, evaluate, and manage potential negative impacts. Positive impacts can contribute to sustainable development objectives.	"do no harm" in terms of violating local, national, or international laws or regulations. Project Proponents must identify in the GHG Project Plan environmental and social impacts of their project(s). Project Proponents shall also disclose and describe positive contributions as aligned with applicable Sustainable Development Goals. Project Proponents must describe the safeguard measures in place to avoid, mitigate, or compensate for potential negative impacts, and how such measures will be monitored, managed, and enforced. Chapter 8 contains ACR's requirements regarding the assessment, monitoring, and reporting of environmental and social impacts.

Chapter 4: Additionality

ACR's additionality requirements are intended to ensure that GHG emission reductions and removals are in excess of what would have occurred under current laws and regulations, current industry practices, and without carbon market incentives. Project Proponents must demonstrate that the project-based GHG emission reductions and removals are above and beyond the "business as usual" scenario. To qualify as additional, ACR requires every GHG Project to either:

- Exceed an approved performance standard, as defined in the applicable methodology, and a regulatory additionality test; or
- Pass a three-pronged test of additionality.

4.A Three-Pronged Additionality Test

This approach combines three tests that help determine whether project-based GHG emission reductions and removals are above and beyond the "business as usual" scenario and whether carbon market incentives were a significant factor. The three-pronged test requires GHG projects to demonstrate that they exceed currently effective and enforced laws and regulations; exceed common practice in the relevant industry sector and geographic region; and face at least one of three implementation barriers (financial, technological, or institutional). The three-pronged test is described in Table 3. The GHG Project Plan must present a credible demonstration, acceptable to ACR and the VVB, that the GHG Project passes all of these tests.

Some ACR-approved methodologies require application of an additionality tool to assist Project Proponents in demonstrating additionality. ACR does not require all methodologies to mandate application of an additionality tool; however, if the relevant methodology requires one, its use is mandatory, unless otherwise indicated in the methodology.

4.A.1 REGULATORY SURPLUS TEST

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, or which require specific technical, performance, or management actions inclusive of the project action. 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 GHG 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 one (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.

Table 3: Three-Pronged Additionality Test

TEST	KEY QUESTIONS
REGULATORY SURPLUS	Is there an existing law, regulation, statute, legal ruling, or other regulatory framework in effect as of the project Start Date that mandates and enforces the project activity or effectively requires the GHG emission reductions and/or removals? **YES = FAIL NO = PASS**
COMMON PRACTICE	In the field or industry/sector, is there widespread deployment of this project type, technology, or practice within the relevant geographic area? **YES = FAIL NO = PASS**
IMPLEMENTATION BARRIERS	**CHOOSE AT LEAST ONE OF THE FOLLOWING THREE**
Financial	Does the GHG Project face capital constraints that carbon revenues could address; or is carbon funding reasonably expected to incentivize the Project's implementation; or are carbon revenues a key element to maintaining the project action's ongoing economic viability after its implementation? **YES = PASS NO = FAIL**
Technological	Does the GHG Project face significant technological barriers such as R&D deployment risk, uncorrected market failures, lack of trained personnel and supporting infrastructure for technology implementation, or lack of knowledge on practice/activity, and are carbon market incentives a key element in overcoming these barriers? **YES = PASS NO = FAIL**
Institutional	Does the GHG Project face significant organizational, cultural, or social barriers to implementation, and are carbon market incentives a key element in overcoming these barriers? **YES = PASS NO = FAIL**

If the GHG Project passes the Regulatory Surplus and Common Practice tests and at least one Implementation Barrier test, ACR considers the GHG Project additional.

4.A.2 COMMON PRACTICE TEST

The common practice test requires the Project Proponent to evaluate the predominant technologies or practices in use in a particular industry, sector, and/or geographic region, as determined by the degree to which those technologies or practices have penetrated the market, and demonstrate that the proposed project activity is not common practice and will reduce GHG emissions below levels produced by common technologies or practices within a comparable environment (e.g., geographic area, regulatory framework, investment climate, access to technology/financing).

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

GHG projects that are deemed to go beyond common practice are considered as such for the duration of their Crediting Period. If common practice adoption rates of a particular technology or practice change during the Crediting Period, this may make the GHG Project non-additional and thus ineligible for renewal; however, this does not affect its additionality during the current Crediting Period.

4.A.3 IMPLEMENTATION BARRIERS TEST

An implementation barrier represents any factor that would prevent the adoption of the project activity the Project Proponent proposes. Under the implementation barriers test, Project Proponents shall choose at least one of three barrier assessments (financial, technological, or institutional). Project Proponents may demonstrate that the project activity faces more than one implementation barrier but are not required to address more than one barrier.

- **FINANCIAL BARRIERS** include high costs, limited access to capital, or an internal rate of return in the absence of carbon revenues that is lower than the Project Proponent's established and documented minimum acceptable rate. Financial barriers can also include high risks such as unproven technologies or business models, poor credit rating of project partners, and project failure risk. If electing the financial implementation barriers test, Project Proponents shall include solid quantitative evidence such as net present value and internal rate of return calculations.
- **TECHNOLOGICAL BARRIERS** include research and development deployment risk, uncorrected market failures, lack of trained personnel and supporting infrastructure for technology

implementation, and lack of knowledge on practice/activity. If electing the technological barriers test, Project Proponents shall provide documentation regarding the development status of the technology being implemented by the project activity and evidence that carbon market incentives are a key element in overcoming these barriers.

- **INSTITUTIONAL BARRIERS** include institutional opposition to technology implementation, limited capacity for technology implementation, lack of management consensus, aversion to upfront costs, and lack of awareness of benefits. If electing the institutional implementation barriers test, Project Proponents shall provide documentation of the Project Proponent or project participant, management policies or guidelines that corroborate the claim of an organizational or institutional barrier and evidence that carbon market incentives are a key element in overcoming these barriers.

4.B Performance Standard Approaches

In lieu of the three-pronged test, ACR also recognizes the "performance standard" approach, in which additionality is demonstrated by showing that a proposed project activity is 1) surplus to regulations, and 2) exceeds a performance standard as defined in an approved methodology.

Project Proponents must first establish regulatory additionality per the requirements in section A.1 of this chapter.

Second, under the performance standard approach, Project Proponents must demonstrate that the GHG Project achieves a level of performance that, with respect to GHG emission reductions and/or removals, or technologies or practices, exceeds that of similar recently undertaken practices or activities in a relevant geographic area and sector.[18] This is done by comparing the project activity to a project type specific performance threshold. The performance threshold may be:

- **PRACTICE-BASED,** developed by evaluating the adoption rates or penetration levels of a particular practice in a relevant industry, sector, or sub-sector. If these levels are sufficiently low that it is determined the project activity is not common practice, then the activity is considered additional. Specific thresholds may vary by industry, sector, geography, and practice, and are specified in the relevant methodology.
- **TECHNOLOGY STANDARD,** where the installation of a particular GHG-reducing technology is determined to be sufficiently uncommon that simply installing the technology is considered additional.

[18] Adapted from the U.S. Environmental Protection Agency Climate Leaders offset methodologies at http://www.epa.gov/stateply/resources/optional-module.html.

- **EMISSIONS RATE OR BENCHMARK** (e.g., metric tons of CO_2e emission per unit of output), with examination of sufficient data to assign an emission rate that characterizes the industry, sector, subsector, or typical land management regime, the GHG emission reductions and/or removals associated with the project activity, in excess of this benchmark, may be considered additional and credited.

  Performance standard baselines specific to particular project types, activities, and regions are detailed in the relevant ACR-approved methodologies, which will include as part of the analysis any existing legal and regulatory requirements that lower GHG emissions, including through national, state or local laws and regulations (e.g., minimum product efficiency standards, technology phase-outs, air quality requirements) including taking into consideration the level of enforcement and timing for compliance.

Chapter 5: Permanence

In GHG accounting, permanence refers to the perpetual nature of GHG emission reductions and removals, and the risk that a GHG project's atmospheric benefit will not be permanent. GHG crediting from terrestrial and geologic sources, sinks, and reservoirs may not be permanent if a GHG project has exposure to risk factors such as intentional or unintentional events that result in emissions into the atmosphere of stored or sequestered CO_2e for which carbon credits were issued (termed a Reversal).

Impermanence is not relevant for some project types for which the GHG emission reductions or avoidance are not reversible once they occur. However, terrestrial and geologic sequestration projects have the potential for GHG emission reductions and removals to be reversed upon exposure to risk factors, including Unintentional Reversals (e.g., fire, flood, and insect infestation for terrestrial projects, and unanticipated releases of CO_2 for geologic projects) and Intentional Reversals (e.g., landowners or Project Proponents choosing to discontinue AFOLU project activities and/or participate in an activity that reverses the sequestration previously achieved by a carbon sink, and for geologic sequestration, the release of stored CO_2 that is intentional or that is a collateral effect of any planned activities affecting the storage volume).

ACR AFOLU projects must commit to maintain, monitor, and verify project activity for a Minimum Project Term of forty (40) years. The Minimum Project Term is not equated with the assurance of permanence, because no length of time, short of perpetual, is truly permanent, nor is there a sound scientific basis or accepted international standard around any number of years that equates to a GHG emission reduction or removal being permanent. This AFOLU Minimum Project Term is aligned with scientific reports[19] that have assessed the critical role of the AFOLU sector in all 1.5°C-consistent pathways to achieve Paris Agreement targets and reach net zero emissions by mid-century to avoid the catastrophic effects of climate change.

Only well-designed, legally-binding reversal risk mitigation mechanisms can make sequestration-based carbon credits effectively permanent and fungible with permanent GHG emission reduction

[19] Bronson W. Griscom et. al, Proceedings of the National Academy of Sciences Oct 2017, 114 (44) 11645-11650

IPCC, 2018: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)].

IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.- O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)].

and removal carbon credits. Analysis and mitigation of reversal risk ensures that any losses of sequestration (i.e., increases in atmospheric GHG concentrations), whether occurring from an unforeseen natural disturbance or from an intentional discontinuation of sequestration activities, are effectively compensated and the atmosphere "made whole."

ACR requires that GHG projects with a risk of reversals shall analyze and mitigate risk, and monitor, report, and compensate for reversals over the project term.

5.A Analysis of AFOLU Reversal Risk

Project Proponents of terrestrial sequestration projects with a permanence risk must conduct a Reversal Risk Analysis using an ACR-approved tool that addresses both general and Project-specific risk factors. General risk factors include financial failure, technical failure, rising land opportunity costs, regulatory and social instability, and natural disturbances. Project-specific risk factors vary by project type.

AFOLU Project Proponents shall conduct their risk analysis using the most recent version[20] of the ACR Tool for Reversal Risk Analysis and Buffer Pool Contribution Determination at time of verification. The output of the tool is the Buffer Pool Contribution Percentage, an overall risk rating for the GHG Project, which translates into the number of credits that must be deposited in the Buffer Pool at the time of each issuance to mitigate the risk of reversals.

The initial Reversal Risk Analysis and Buffer Pool Contribution Percentage shall be included in the GHG Project Plan. Any subsequent Reversal Risk Analysis, Buffer Pool Contribution Percentage, and calculated Buffer Pool Contribution amount shall be included in their respective Monitoring Reports. ACR evaluates the proposed overall risk rating and corresponding Buffer Pool Contribution, and the VVB evaluates whether the risk analysis has been conducted correctly. Concurrent with each issuance of carbon credits to the GHG Project, the Project shall contribute credits to the Buffer Pool equal to the sum of the Buffer Pool Contribution Percentage multiplied by each of the annual volumes of credits being issued.

If no reversals occur, the Project's Buffer Pool Contribution Percentage may remain unchanged for five (5) years. The Reversal Risk Analysis must be re-evaluated at least every five (5) years, or coincident with a full verification including a field visit to the project Site(s). An exception is in the event of a Reversal, in which case the Buffer Pool Contribution Percentage shall be re-evaluated and re-verified according to provisions laid out in the most recently published ACR Buffer Pool Terms and Conditions.

[20] In the event that an update to ACR's Tool for Reversal Risk Analysis and Buffer Pool Contribution Determination is released during a verification, Project Proponents shall use the version available at the end of the Reporting Period being verified.

5.B Reversal Mitigation, Reporting, and Compensation

ACR has established mitigation mechanisms to make sequestration-based carbon credits effectively permanent and fungible with permanent GHG emission reduction and removal carbon credits. Project Proponents of terrestrial and geologic sequestration GHG projects shall utilize these mechanisms and, in the event of a Reversal, report and compensate for Reversals as prescribed in the ACR Standard, applicable methodology, and legally binding agreements.

5.B.1 AFOLU RISK MITIGATION MECHANISMS

Project Proponents of AFOLU projects with risk of Reversal shall enter into a legally binding Reversal Risk Mitigation Agreement that details the requirements for reporting and compensating for Unintentional and Intentional Reversals. Should Reversals occur, the requirements and liabilities associated with replacing the Verified Lost Credit Amount rest with the Project Proponent, and not necessarily with the individual landowner(s) or Project Developer Account Holder per the Reversal Risk Mitigation Agreement. If the Project Proponent is not the same entity as the Project Developer Account Holder, the Project Developer Account Holder shall facilitate the replacement of the Verified Lost Credit Amount on the Registry and deliver credits on behalf of the Project Proponent to compensate for the Verified Lost Credit Amount.

Project Proponents that use the ACR Buffer Pool as the risk mitigation mechanism agree through execution of the Reversal Risk Mitigation Agreement to adhere to the most recently published ACR Buffer Pool Terms and Conditions. The number of credits as determined by the Project-specific Reversal Risk Analysis are contributed to the ACR Buffer Pool account to be pooled with contributions from other GHG projects and be available to replace unforeseen unintentional losses. ACR has sole management and operational control over the credits in the Buffer Pool.

5.B.2 GEOLOGIC SEQUESTRATION RISK MITIGATION MECHANISMS

For geologic sequestration projects, Project Proponents must contribute 10% of the Project's maximum Total GHG Emission Reductions and Removals in a single calendar year to a Reserve Account, managed by ACR, from which credits will be cancelled in the event of a Reversal during the project term. If the Project's annual Total GHG Emission Reductions and Removals increases, the Project Proponent must contribute additional credits to meet the 10% requirement. Project Proponents must file a legally binding Risk Mitigation Covenant, in the real property records of each

county, parish, and other governmental subdivision that maintains real property records, which prohibits any post-project term Reversal unless there is advance compensation to ACR.

5.B.3 ALTERNATE RISK MITIGATION MECHANISMS

In lieu of making a Buffer Pool Contribution or Reserve Account Contribution, Project Proponents may propose an established insurance product for ACR approval as a risk mitigation mechanism. Insurance may be a financial product based on an actuarial analysis of Project risk that considers circumstances such as the region, threats, and mitigating factors. This is similar to the assessment done for property insurance.

The Project Proponent may provide insurance, bonds, letters of credit, or other financial assurances to ACR in amounts, and in form and substance, satisfactory to ACR in its sole and absolute discretion. Such financial products must assure, in the event that the GHG Project suffers a Reversal, provision to ACR either a sufficient volume of ERTs or adequate funds, as determined by ACR, to offset the Reversal via ERT cancellation. There may be no hidden costs, exclusions, or unanticipated liabilities. Should ACR elect to evaluate the proposed alternative product for approval, the due diligence will be at the Project Proponent's or insurance provider's expense. ACR approval must proceed use of any alternative mechanism.

5.C Monitoring for Reversals

All AFOLU Project Proponents must adhere to ongoing monitoring requirements as detailed in relevant methodologies, including ongoing verification during the Minimum Project Term.

For geologic sequestration, Project Proponents are required to demonstrate that the CO_2 captured and stored is permanently sequestered underground through detailed post-injection monitoring, required until it can be demonstrated that the CO_2 plume has stabilized and the modeled failure scenarios indicate that the CO_2 will remain contained within the storage volume. Ongoing reversal monitoring requirements are detailed in the relevant methodology(ies).

5.D Reversal Reporting and Compensation

AFOLU reversals must be reported and compensated following requirements detailed in the ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement and the most recently published Buffer Pool Terms and Conditions.

Per the Reversal Risk Mitigation Agreement and as detailed in the ACR Buffer Pool Terms and Conditions, Unintentional Reversals are compensated by cancelling a volume of credits equal to the Verified Lost Credit Amount from the Buffer Pool. Intentional reversals are compensated by the Project Proponent depositing into the Buffer Pool and ACR cancelling a volume of credits equivalent to the total volume of credits that have been issued to the Project to date.

At the end of the Minimum Project Term for AFOLU projects, if the Project Proponent does not renew for another Crediting Period, ACR conservatively assumes that the activities have ceased and will cancel the remaining Project-related Buffer Pool contributions. If the GHG Project renews for another Crediting Period, ACR will continue to hold the Project's Buffer Pool Contributions in the Buffer Pool.

Geologic sequestration reversals must be reported and compensated following requirements as detailed in applicable methodology. In the event of reversals during the project term, the quantity of CO_2 shall be modelled and reported, verified, and compensated by cancelling credits from the Reserve Account. Reversals post-project term are compensated as outlined in the Risk Mitigation Covenant, which prohibits any Reversal unless there is advance compensation to ACR, or as detailed in relevant regulations.

Chapter 6: Project Development Trajectory

Every GHG Project submitted for listing must use an active, ACR-approved methodology and achieve GHG emission reductions and/or removals from a single country.[21] This chapter focuses on the project development steps that occur after the methodology has been approved: GHG project listing, validation and verification, and issuance of ERTs.

6.A Project Development Process

A Project Proponent using an ACR-approved methodology shall proceed per the following sequence of steps:

1. Project Proponent submits a GHG Project Listing Form using the most recently published template on the ACR website, which includes a non-technical summary of the GHG Project and other relevant information for ACR to make a listing determination.
2. ACR reviews the GHG Project Listing Form for completeness and alignment with the ACR Standard, at fees per the currently published ACR fee schedule.[22] This screening results in (a) GHG Project Listing with approval to proceed to Validation/Verification Body (VVB) selection, (b) requests for clarifications or corrections, or (c) rejection because the Project is ineligible or does not meet requirements of the ACR Standard. If the ACR screening includes requests for clarifications or corrections, the Project Proponent may re-submit the GHG Project Listing Form for further review. ACR reserves the right, in its sole discretion, to accept or reject a GHG Project Listing at any time and for any reason during the review. A GHG project is considered to be listed once the GHG Project Listing Form is approved.
3. Having received listing approval to proceed to VVB selection, the Project Proponent selects an ACR-approved independent third-party VVB to validate the GHG Project Plan and verify the Project's GHG statements for the first Reporting Period as presented in the monitoring report. The VVB shall submit to ACR a Conflict of Interest self-evaluation form for review. ACR must approve the VVB selection prior to the start of validation and verification services based on proper accreditation, conflict of interest review, and VVB rotation requirements.[23] Fees for

[21] Projects Proponents implementing project activities that result in GHG emission reductions or removals being generated within the geographic boundary of more than one country must independently quantify GHG emission reductions and/or removals achieved within each country and register them as separate projects.

[22] The ACR fee schedule is posted at https://www.acrcarbon.org/.

[23] If the VVB changes during a validation and/or verification, the VVB selection and approval process must be repeated with the new VVB.

validation and verification services are as agreed between the Project Proponent and VVB. Prior to validation commencement, Project Proponent uploads a GHG Project Plan to the ACR Registry.

4. ACR will make public on the ACR Registry the Listing Form and will publish on its website the Project name, ACR ID, project type, and location for a thirty (30) day public comment period for local and global stakeholders impacted by the project. Comments on GHG projects can be submitted via email to ACR@winrock.org with an email subject line: "Comments on ACR [PROJECT NAME and/or ACR PROJECT ID#]". Comments will be forwarded to the Project Proponent and VVB and reviewed by ACR.
5. Validation and the initial verification may occur simultaneously and must occur prior to issuance of ERTs. This results in submission to ACR of a validated GHG Project Plan, verified Monitoring Report, Validation Report, Validation Opinion, Verification Report, and Verification Opinion.[24]
6. ACR reviews the project, validation, and verification documents as well as comments received from stakeholders. This results in (a) acceptance, (b) acceptance contingent on requested corrections or clarifications, or (c) rejection. See the ACR Validation and Verification Standard for further details.
7. Upon acceptance of the submitted documents, ACR registers the GHG Project and makes the final validated GHG Project Plan, verified Monitoring Report, Validation Report and Validation Opinion, and Verification Report, Verification Opinion, and Supplemental Project Description (optional) public on its registry. These documents contain the content necessary to enable third parties to assess the social and environmental impacts, replicate the GHG emission reductions and removal calculations (including baseline quantification), and assess additionality and are made publicly available except for content deemed by ACR to be Commercially Sensitive Information (i.e., subject to confidentiality, proprietary, privacy and data protection restrictions).
8. ACR serializes and issues to the Project Developer Account Holder's account ERTs for the relevant Reporting Period, in the amount listed in the Verification Opinion. The vintage year of the ERTs correspond to the year the GHG emission reductions/ removals occurred. In the case of a terrestrial or geologic sequestration project, the appropriate number of ERTs are deposited into the ACR Buffer Pool or Reserve Account, if this is the approved risk management option the Project Proponent has chosen.
9. Next steps are at the Project Proponent's discretion—credit transfer, retirement, etc. —with credit activation, transaction, cancellation, and retirement fees per the currently published ACR fee schedule.

[24] ACR requires the use of its most recently published templates for the GHG Project Plan, Monitoring Report, Validation Opinion, Verification Opinion, and optional Supplemental Project Description, each made available on the ACR website.

10. Subsequent reporting periods qualifying within the originally validated Crediting Period can be verified per ACR's Validation and Verification Standard.

6.B Information in a GHG Project Plan

A GHG Project Plan is a document that describes the project activity; addresses ACR eligibility requirements; identifies sources and sinks of GHG emissions; establishes project boundaries; describes the baseline scenario; defines how GHG quantification will be done and what methodologies, assumptions, and data will be used; and provides details on a project's monitoring, reporting, and verification procedures. Project Proponents shall use the most recently published ACR GHG Project Plan template and include the following information:

- Project title, purpose(s), objective(s) and non-technical executive summary with key information;
- Type of project;
- The applicable ACR methodology and a description how the methodology has been applied for the purpose of demonstrating additionality and determining the baseline;
- Project location, including geographic and physical information allowing for the unique identification and delineation of the specific extent of the Project. AFOLU projects must provide, at minimum, a map delineating the project area boundary within a regional context (i.e., governing jurisdictions, towns, roads, major rivers and bodies of water, and other notable features). Project Proponents implementing a Programmatic Design Approach shall include location information for all Sites known at the time of the GHG Project Plan validation;
- Physical conditions prior to Project initiation;
- For AFOLU projects, description of the inventory methodology and subsequent calculation steps used to measure and estimate carbon stocks for all relevant GHG sources, sinks, and pools;
- Description of how the Project will achieve GHG emission reductions and/or removal enhancements;
- Project technologies, products, services, and expected level of activity;
- Ex-ante calculations projecting estimated future GHG emission reductions and removals, stated in metric tons of CO_2e (Total GHG Emission Reductions and Removals and Net GHG Emission Reductions and Removals, if applicable);
- Outline of QA/QC procedures to manage data and information;
- Identification of risks that may substantially affect the Project's GHG emission reductions and removals, inclusive of a description of how the risk of reversal was assessed and the results of the analysis;
- Roles and responsibilities, including contact information of the Project Proponent, other project participants, relevant regulator(s) and/or administrators of any GHG program(s) in which the GHG Project is already enrolled, and the entities holding title and land title;

- Information relevant to the eligibility of the GHG Project and quantification of GHG emission reductions and removals, including legislative, technical, economic, sectoral, socio-cultural, environmental, geographic, site-specific, and temporal information;
- Relevant outcomes from any stakeholder consultations and mechanisms for ongoing communication, as applicable;
- Chronological plan for initiating project activities, project term, frequency of monitoring, reporting, and verification, including relevant project activities in each step of the project cycle;
- Identification of relevant local and national laws, regulations, rules, procedures and, where relevant, international conventions and agreements related to the GHG Project and a demonstration of compliance;
- Statement whether the Project has applied for and been listed, registered, and/or been issued GHG emission reduction or removal carbon credits through any other GHG emissions program, including detailed information on any credit issuance (volume, vintage, status), and information on any rejections of the project application, as applicable (see Section 6.C below);
- An environmental and social impact assessment, following ACR requirements as detailed in Chapter 8, to ensure compliance with best practices and that safeguard measures are in place to avoid, mitigate, or compensate potential negative impacts, and how such measures will be monitored, managed, and enforced;
- Identification and description of the Sustainable Development Goals (SDGs) to which the Project impacts are aligned and positively contribute as detailed in Chapter 8; and
- Attestation by the Project Proponent and Project Developer Account Holder, if not the same entity, regarding the content of the GHG Project Plan and all appendices.

6.C Previous Rejection by a GHG System

ACR may consider a project rejected by other independent or compliance GHG programs, due to procedural or eligibility requirements, if the GHG Project complies with all aspects of the ACR Standard and any relevant methodology. The Project Proponent for such a Project shall:

1. Include a statement in the GHG Project Listing Form and GHG Project Plan that lists all other programs to which the Project Proponent has applied for registration, was rejected, and the reason(s) for the rejection. Such information shall not be considered Commercially Sensitive Information.
2. Provide the actual rejection document(s), including any additional explanation, to ACR and its verifier.

6.D Project Deviations

ACR may permit Project-specific deviations to an existing approved methodology where they do not negatively affect the conservativeness of an approved methodology's approach to the quantification of GHG emission reductions and removals. For instance, where alternate monitoring or measurement regimes are proposed, ACR may permit these changes provided they are conservative. ACR will not permit, on a Project-specific basis, changes to requirements related to additionality assessment or baseline establishment.

Project Proponents shall submit any proposed Project-specific methodology deviation to ACR for review and approval. Deviations apply for that specific Project but are not published as modifications to the methodology. Project Proponents must provide evidence that the proposed deviation, such as a substitute calculation method for missing data, is conservative (i.e., likely to underestimate GHG emission reductions/removals).

Project Proponents shall request a Project-specific deviation by using the most recently published template for ACR Project Deviation Request available on the ACR website.

6.E Project Monitoring Reports

Project Monitoring Reports shall be completed for each verified Reporting Period using the most recently published template for ACR Monitoring Report.[25] The Monitoring Report shall be submitted to the approved VVB during verification and submitted to ACR upon completion of the verification, including any corrections/revisions identified by the VVB. The report shall describe the current status of project operation, and detail the data monitored, the monitoring plan and the calculation of GHG emission reductions and removals for the Reporting Period. Additionally, Project Monitoring Reports shall describe any Project-specific deviations that may have occurred during the Reporting Period, as described below, and include attestations by the Project Proponent or, if not the same entity as the Project Developer Account Holder, attestations by either the Project Proponent or Project Developer Account Holder regarding the continuance, regulatory compliance, ownership, avoidance of double counting, any changes to the environmental and social impact assessment of the GHG Project, ongoing monitoring of negative impacts and mitigations. The regulatory compliance attestation must disclose all violations or other instances of non-compliance with laws, regulations, or other legally binding mandates directly related to project activities.

Changes to validated GHG Project Plans are not permitted. Instead, Project-specific deviations from methodology requirements or other changes from the validated GHG Project Plan (e.g., new GHG

[25] In the event that an update to Monitoring Report template is released between the end of the Reporting Period and submission, Project Proponents shall use the version available at the end of the Reporting Period being verified.

sources, sinks, or reservoirs) must be described in a Project Monitoring Report—as well as all subsequent Project Monitoring Reports—and submitted during the GHG Project's subsequent verification. As described in Section 6.D above, ACR must pre-approve any Project-specific deviation from methodology requirements. Where changes to GHG Project Plans require revisions to baseline or additionality assessments, these changes must be validated at the time of the subsequent verification.

6.F Aggregation and Programmatic Development Approach

ACR has established procedures for GHG projects to include multiple facilities, fields, or parcels (hereafter referred to collectively as "Sites") as an Aggregated project or as a Programmatic Development Approach (PDA) so that they may achieve efficiencies of-scale and other potential project administrative benefits while preserving the accounting principles of the ACR Standard and its approved methodologies, and the integrity of the monitoring, reporting, and verification processes. Streamlined processes associated with documentation, registration, and verification of multiple project Sites may be available to projects applying these approaches.

6.F.1 AGGREGATION

A Project Proponent proposing an Aggregated project shall submit a GHG Project Plan encompassing all project Sites, and applying project boundaries, baseline definition, additionality demonstration, and all other requirements at the level of the Aggregate. No new Sites can be added after the validation.

6.F.1.1 General Aggregation Requirements:

An Aggregated project must:

- Be under the management of a single Project Proponent and listed under a single ACR account. If the Aggregated Project includes multiple landowners/facility owners, the Project Proponent is also the ACR Project Developer Account Holder and shall enter into a legally binding Reversal Risk Mitigation Agreement with ACR, if applicable.
- Implement a single ACR-approved methodology (or pair of ACR-approved methodologies when relevant).[26]

[26] Some ACR-approved methodologies may be paired to be used simultaneously on the same project area. This allowance will be specified in the methodologies themselves.

- Adhere to a single overarching project Start Date, which corresponds to the earliest Implementation Date among the Sites.
- Where relevant, meet the required inventory statistical precision (±10% of the mean at a 90% confidence level) at the Aggregated Project level for the purposes of monitoring and verification.
- Analyze general and Project-specific risk factors for an Aggregated project as for any other GHG project. The Buffer Pool Contribution Percentage is applied at the overall Aggregate.
- Adhere to the Crediting Period requirements of the chosen methodology with each Site able to report and verify GHG emission reductions and removals for the duration of its individual Crediting Period. However; upon any request for a renewed Crediting Period all Sites must be included in an updated GHG Project Plan and be re-validated at the same time.

Adherence to the aforementioned requirements shall be described in a Multi-Site Design Document, which shall be considered an appendix to the GHG Project Plan and must be presented and approved at validation.

6.F.1.2 Site-Level Requirements for Aggregation:

Each Site participating in an Aggregated project must:

- Meet all eligibility criteria as determined by the relevant ACR Standard and methodology.
- Be enrolled by the Project Proponent at the project Start Date.
- Be available for a site visit during validation and any subsequent verifications (unless otherwise specified in the relevant methodology).
  - A VVB may use equal probabilities among Sites to select a sub-sample for validation and verification site visits, or a risk- or sensitivity-based analysis to identify those Sites with the strongest influence over GHG emission reduction/removal estimates.
  - Not all Sites must undergo a site visit at each required interval, and VVBs may use their own discretion to determine if sub-sampling is appropriate. At minimum, all Sites are subject to desk-based review at validation and verification.
- Be validated within two (2) years (for non-AFOLU) or three (3) years (for AFOLU) of the project Start Date (unless otherwise specified in the relevant methodology).
  - Sites may begin generating GHG emission reductions and removals at their Implementation Date but are not eligible for ERT issuance until they are successfully validated.
- Be presented in a Site Information Table within the Multi-Site Design Document, which shall be considered an appendix to the GHG Project Plan. The table shall list the attributes of each Site enrolled at project listing and include the following:
  - A unique identification number for each Site;
  - For AFOLU projects, the geographic size of each Site;

- For AFOLU projects, a clearly defined geographic boundary uniquely identifying each Site, including any maps and spatial files required by the chosen methodology;
- Short narrative description of project activities carried out at each Site, including confirmation of eligibility and additionality;
- Name and contact details of the landowner and/or associated operator of each Site;
- The Site-specific Implementation Date; and
- Description of the evidence confirming each Site's relevant Implementation Date, as applicable.

- Provide the information required in the Monitoring Report during each verification. This information shall be consolidated into a single summary report to facilitate review across all participating Sites.

If the Project Proponent anticipates adding more project Sites after validation, they should instead register using the Programmatic Development Approach (PDA), described below.

6.F.2 PROGRAMMATIC DEVELOPMENT APPROACH

The PDA provides for organization of project participants around basic similarity criteria and a common project Start Date but with flexibility for Sites to enter the Project over time. The PDA is intended for projects where the participation of all project participants or Sites is impractical at the time of initial validation. Although this approach allows for new project participants and Sites to enter over time, it requires more complex project management and verification considerations than an Aggregated project, in which all project participants and Sites are included in the Project's initial validation.

6.F.2.1 General PDA Requirements:

A PDA project must:

- Be under the management of a single Project Proponent and listed under a single ACR account. If the PDA Project includes multiple landowners/facility owners, the Project Proponent is also the ACR Project Developer Account Holder and, for AFOLU projects, shall enter into a legally binding Reversal Risk Mitigation Agreement with ACR.
- Implement a single ACR-approved methodology (or pair of ACR-approved methodologies, when relevant).[27]
- Analyze general and Project-specific risk factors. The Buffer Pool Contribution Percentage is applied at the overall PDA level.

[27] Some ACR-approved methodologies may be paired to be used simultaneously on the same project area. This allowance will be specified in the methodologies themselves.

- Adhere to a single overarching project Start Date, corresponding to the earliest Implementation Date among the Sites included in the first validation.
  - All Sites participating in the PDA Project must have a Site-specific Implementation Date that is the same or after the established project Start Date.
  - A Site or group of Sites will be considered "participating" in the PDA Project upon its successful validation by an ACR-approved VVB.
- A group of Sites undergoing validation and entering the GHG Project at the same time is considered a "Cohort." Multiple Cohorts may enter the GHG Project during the same validation, and may be organized along various Site characteristics (e.g., location, quantification approach) to facilitate verification efficiencies.
  - Sites within a Cohort must share the same validation and verification schedule.
- Apply Crediting Period requirements of the applicable methodology at the PDA level, where each Cohort may report and verify GHG emission reductions and removals for the duration of the existing Crediting Period.
  - Upon request for a renewed Crediting Period at any Site, an updated GHG Project Plan must be submitted and the Project re-validated for all Sites enrolling in a subsequent Crediting Period. All Sites renewing a subsequent Crediting Period shall be consolidated into a single Cohort.
- Use only one version of a given methodology.
  - GHG projects validated against a previous version of a given methodology may 1) enroll new Cohorts using the version of the methodology for which they were initially validated (for up to five (5) years from project Start Date, unless otherwise specified in the relevant methodology) or 2) update to the newly approved version of the methodology.
    - If the Project uses option 2, an updated GHG Project Plan must be submitted and all Cohorts re-validated prior to any new Sites enrolling.
    - If the chosen methodology is no longer approved for use by ACR, new Sites cannot be added to the PDA Project. Existing Sites can continue to report and verify for the duration of their previously validated Crediting Periods.
- Specify the anticipated project boundaries (geographic, temporal, and GHG assessment boundary), the baseline scenario, and anticipated monitoring, reporting, and verification procedures and schedule.
- If defined by the chosen methodology, meet the required inventory statistical precision (±10% at 90% confidence interval) for the CO_2e estimate reported in the Monitoring Report.
- Describe a management system that includes the following:
  - The reason why all expected project participants and Sites cannot be included upon initial validation;
  - A clear definition of the roles and responsibilities of personnel involved in monitoring, reporting, verification, and recruitment of new Sites;
  - A description of eligibility criteria for recruiting new Sites to the PDA;

- Procedures to avoid double counting, that no Site or group of Sites has been or will be registered on ACR as part of another GHG project; and
- A Site-level QA/QC process for record and documentation control made available to the VVB at the time of validation.

- An individual Site may begin credit generation at its Site-specific Implementation Date. However, a Site must undergo validation by an ACR-approved VVB before ERTs can be issued against its associated project activities. This may be conducted at the same time as a full verification for the PDA or as a separate validation event. In addition to desk-based review of Sites within newly enrolling Cohorts, a validation must include site visits to at least a selection of the new Sites (as required by the chosen methodology) as determined by the VVB's sampling plan.

Adherence to the aforementioned requirements shall be described in a Multi-Site Design Document, which shall be considered an appendix to the GHG Project Plan and presented at first validation and updated coincident with subsequent Cohort validations.

6.F.2.2 Site-Level Requirements for PDA:

Each Site participating in a PDA project must:

- Meet all project eligibility criteria as determined by the ACR Standard and chosen methodology.
- Be enrolled by the Project Proponent with an Implementation Date no later than five (5) years after the project Start Date, unless otherwise specified in the relevant methodology.
- Be available for a site visit during the validation and any subsequent verification where site visits are required.
  - VVBs may use equal probabilities among Sites to select a sub-sample for validation and verification site visits, or a risk- or sensitivity-based analysis to identify those Sites with the strongest influence over a Project's overall GHG emission reduction/removal estimates.
  - Not all Sites must undergo a site visit at each required interval, and VVBs may use their own discretion to determine if sub-sampling is appropriate. At minimum, all Sites are subject to desk-based review at validation and verification.
- Be presented in a Site Information Table within the Multi-Site Design Document, which shall be considered an appendix to the GHG Project Plan. The Site Information Table shall outline the unique attributes of the Site(s) enrolled at project listing, and be updated as new Sites are added, to include the following:
  - A unique identification number for each Site;
  - For AFOLU projects, the geographic size of each Site;
  - For AFOLU projects, a clearly defined geographic boundary to uniquely identify the Site and associated Cohort, including any maps and spatial files required by the chosen methodology;

- Description of the project activities carried out on the Site and how each Site demonstrates additionality;
- Name and contact details of the landowner and/or associated operator of each Site;
- The Site-specific Implementation Date, confirming that the Implementation Date of any Site is not prior to the project's Start Date;
- Information on how each Site fulfills the eligibility criteria of the ACR Standard and chosen methodology, is within the project boundaries, and demonstration of additionality as specified in the GHG Project Plan; and
- Description of the evidence confirming each Site's relevant Implementation Date.

- Provide the information required in the Monitoring Report during each verification. This information shall be consolidated into a single summary report to facilitate review across all participating Sites.

6.F.3 DESIGN CONSIDERATIONS FOR AGGREGATES AND PDA COHORTS

Project Proponents may increase efficiencies in reporting and verification by strategically considering Site characteristics in the design of an Aggregated or PDA project. To maximize potential efficiencies, it may be advantageous to group Sites or Cohorts so their defining characteristics are as homogeneous as possible. VVBs may use equal probabilities to select which Sites or Cohorts will receive verification site visits where applicable, or a risk- or sensitivity-based analysis to identify Sites or Cohorts with the strongest influence over the Project's overall GHG emission reduction/removal estimates. VVBs must use their own discretion to determine if a Cohort or Aggregate lends itself to sub-sampling. All project Sites are subject to desk-based review at minimum. Below are examples of how variance in Site characteristics may be minimized in an Aggregate or Cohort.

- Grouping based on homogenous project practices or technologies, to the extent there are multiple options within the chosen methodology.
- Using a single quantification approach for the baseline and project conditions (models, equations, measurements, default factors) as outlined in the methodology. These methods shall be documented in the GHG Project Plan. Any subsequent changes to these methods following the initial validation of the GHG Project Plan must be applied across all Sites in the Cohort, tracked, and made available for review at subsequent third-party verification events to ensure the quality and conservativeness of carbon accounting principles originally validated for the GHG Project are maintained.
- Grouping Sites encompassing relatively similar Site characteristics. In the case of forestry projects this may include productivity, carbon stocking, or soil types.

- Grouping Sites within a pre-defined geographic region (e.g., all fall within a maximum of three adjacent ecosystem provinces).[28]
- Grouping Sites that share a similar baseline scenario in which there are similar legal and management constraints (i.e., the without-project scenario is comparable).

6.G Commercially Sensitive Information

Project Proponents may designate certain parts of the GHG Project Plan or other project documentation as Commercially Sensitive Information (subject to confidentiality, proprietary, privacy and data protection restrictions). This information must be available for review by ACR and the VVB (with non-disclosure agreements, as necessary), but will be excised from the project documentation posted publicly on the ACR registry.

For the sake of transparency, ACR shall presume project information to be available for public scrutiny, and demonstration to the contrary shall be incumbent on the Project Proponent. The VVB shall check that any information requested as "commercially sensitive" meets the ACR definition of Commercially Sensitive Information. Synthesized project data may also be aggregated for public posting on ACR to fulfill program reporting requirements.

6.H Additional Project Documentation for Registration

ACR may require the following documentation as part of the GHG Project review prior to registration:

- Title documents or sample landowner agreements;
- Chain of custody documentation, if applicable;
- GIS shapefile or other spatial datafile delineating the project area boundary, to be submitted and approved (yet privately maintained) on the registry, if applicable;
- ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement, if applicable; and
- Project Proponent agreement to ACR Terms of Use, if Project Proponent is not the same entity as the Project Developer Account Holder.

[28] https://www.fs.usda.gov/land/ecosysmgmt/colorimagemap/ecoreg1_provinces.html.

To support the GHG Project Plan's declaration of title, ACR may require one or more of the following: a legislative right; a right under local common law; ownership of the plant, land, equipment and/or process generating the GHG emission reductions/removals; or a contractual arrangement with the owner of the plant, land, equipment, or process that grants title to the Project Proponent.

6.1 Crediting Period Renewal

All GHG Projects have a limited Crediting Period (i.e., the finite length of time for which a GHG Project Plan is valid, and during which a Project can generate carbon credits against its baseline scenario).

Renewal of a Crediting Period includes reassessment of the baseline scenario, including whether the conditions and barriers at the start of the mitigation activity still prevail, and an update of relevant parameters used to calculate emission reductions and removals, as applicable.

In general, the Crediting Period for non-AFOLU projects is ten (10) years, unless otherwise specified in the relevant ACR sector requirements or approved methodology. Crediting periods for AFOLU projects vary and are specified in the relevant sector requirements and/or methodology.

A Project Proponent may apply to renew the Crediting Period by:

- Uploading to the Registry a Renewed Crediting Period Listing Form using the most recently published template on the ACR website.
- Submitting a new GHG Project Plan in compliance with then-current ACR Standard and criteria;
- Re-evaluating the GHG 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 (1) year from the end of the previous Crediting Period.[29]

ACR does not limit the allowed number of renewals, since at each Crediting Period renewal the Project Proponent must demonstrate that the GHG Project is additional and meets all ACR requirements. An approved Validation Report is necessary for ACR to renew the Crediting Period and continue issuing

[29] ACR suggests that the Project Proponent conduct the validation of the re-submitted GHG Project Plan for the new Crediting Period concurrently with the last verification of the previous, expiring Crediting Period. ACR may, on a case-by-case basis, consider applications for Crediting Period renewal submitted beyond the one (1) year deadline for validation of the new GHG Project Plan.

credits generated by the GHG Project. Upon acceptance by ACR of the validation and verification documents, ACR will issue new ERTs at specified intervals for the duration of the new Crediting Period, provided the Project Proponent continues to meet the current ACR reporting and verification requirements.

On a project level, when a Project Proponent seeks renewal of a Crediting Period (i.e., the previous Crediting Period was validated under a prior version of the ACR Standard or a different GHG crediting program and the Project's Crediting Period has expired), the GHG Project is required to meet the requirements of the most recent version of the ACR Standard and applicable, active methodology.

Chapter 7: Methodologies and Tools

If ACR has not yet published a methodology for a particular project type, the Project Proponent may submit a new or modified methodology to ACR for approval.

7.A GHG Measurement Tools and Methodologies

7.A.1 ACR-PUBLISHED METHODOLOGIES

Current versions of methodologies published by ACR via the public consultation and peer review process are approved without qualification.

7.A.2 MODIFICATIONS TO EXISTING APPROVED METHODOLOGIES

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 7.B of this chapter, must be implemented. In general, if the extent of the proposed modification(s) necessitates the process described in Section 7.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 7.B; minor modifications or clarifications may not require the full public consultation and peer review processes.

7.A.3 NEW METHODOLOGIES

New methodologies proposed to ACR for approval always require internal screening, public consultation, and blind scientific peer review as described in section 7.B.

7.B ACR's Internal Review, Public Consultation, and Scientific Peer Review Process

The following process is applied to new methodologies developed internally by ACR, methodologies drafted by external authors, and certain methodology modifications, per Section 7.A.2 of this chapter. In such cases, ACR coordinates a process of internal expert review, public stakeholder consultation, and a blind scientific peer review. ACR administers this process, with fees charged to the methodology author.

1. The Project Proponent submits for ACR consideration a New Methodology Intake Form using the template provided by ACR. ACR conducts this internal review at no cost. Based on review of this information, ACR will determine whether to move forward with the Concept Note submission and review (Step 2).
2. Upon ACR's invitation, the methodology developer(s) submits to ACR for review a Concept Note. The Concept Note shall be drafted using a template provided by ACR. ACR conducts this internal review at currently published fees. Based on review of this information, ACR will determine whether to move forward with the methodology review (Step 3).
3. The Project Proponent submits the proposed new or modified methodology to ACR using the most recently published template on the ACR website. 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. At published fees, ACR reviews and evaluates the methodology against its requirements, communicates any corrections or clarifications that are immediately needed, and informs the methodology author of its judgment as to whether the methodology is ready for public consultation and peer review.[30] If the methodology author elects to proceed, they must address any corrections and clarifications identified in the ACR review and resubmit the methodology. Based on review of draft methodology document, ACR will determine whether to move forward with the public consultation and peer review processes (Steps 4 and 5). The cost of the methodology approval process is borne by the methodology author. ACR's agreement to proceed with subsequent steps in the methodology approval process does not guarantee that the methodology will be approved for publication and use.
4. ACR coordinates a public consultation process. The methodology is posted publicly on the ACR website for a minimum of thirty (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

[30] The ACR Methodology screening fee includes two rounds of ACR review. The fee will be charged again for any necessary additional reviews prior to the initiation of the public consultation process.

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(s), who then incorporate revisions and/or document responses to each comment, which are posted on ACR's website.

5. The revised methodology is provided to a team of independent subject matter experts for a blind scientific peer review process. The peer review coordinator compiles comments and recommendations from the peer review team and prepares a peer review report. The peer review coordinator then delivers to the methodology author the 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 depend on the complexity and scope of the methodology and the availability and responsiveness of peer reviewers.
6. Once all required corrections have been made to the satisfaction of the peer reviewers and ACR, ACR approves the new methodology and publishes it on its website. An approved methodology may be used by any Project Proponent, including the methodology author, in preparing GHG Project Plans and registering GHG projects on ACR.
7. ACR posts process documentation—including all public comments and documented responses, and all peer review comments and documented responses—along with the public comment version of the methodology, and the final approved methodology.

Scientific peer review teams are selected from a pool of potential expert reviewers with applicable subject matter expertise, including technical and/or policy knowledge and GHG quantification experience. ACR actively identifies and qualifies candidates for inclusion in this pool. Throughout and after the peer review process, the experts selected for each review team remain unknown to the methodology author(s) and the public.

7.C Review of ACR-Approved Methodologies and Tools

ACR may periodically suspend the use of approved methodologies and tools for review, resulting in a methodology update, making the methodology inactive, or retiring the methodology. Such suspensions occur when significant changes to GHG accounting best practices or the legislative and/or regulatory context justify a review; 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 five (5) years, at minimum. The period for forestry projects is every ten (10) years, at minimum.

Chapter 8: Environmental and Social Impacts

ACR supports a diverse set of GHG project activities, each with its own potential to generate both positive and negative environmental and social impacts. Positive impacts can contribute to sustainable development objectives; negative risks and impacts can be identified, evaluated, and managed through appropriate safeguard procedures.

ACR's environmental and social impact requirements reflect the acknowledgment in the eleventh preambular paragraph of the Paris Agreement that climate change is a common concern of humankind and therefore actions to address climate change should address these impacts including on human rights, the rights of indigenous peoples, local communities, children, people in vulnerable situations, as well as gender equality, empowerment of women and intergenerational equity.

ACR requires that GHG projects adhere to environmental and social safeguards best practices to:

- Ensure that GHG projects "do no harm" by maintaining compliance with all relevant local, national, and international laws, regulations, conventions and agreements;
- Identify environmental and social risks and impacts and contributions to sustainable development;
- Detail how negative environmental and social impacts will be avoided, reduced, mitigated, or compensated, and how mechanisms will be monitored, managed, and enforced;
- Ensure that the rights of affected communities and other stakeholders are recognized, and that they have been fully and effectively engaged and consulted; and
- Ensure that effective ongoing communications and grievance redress mechanisms are in place, and that affected communities will share in the Project benefits.

8.A Environmental and Social Impact Assessment Requirements

ACR requires all Project Proponents to prepare and disclose an environmental and social impact assessment, mitigation of any negative impacts, and monitoring of any negative impacts and risks. ACR requires the use of the most recently published ACR Environmental and Social Impact Assessment Report template on the ACR website, provided within or as an appendix to the GHG Project Plan, for the assessment of environmental and social impacts of the Project, taking into account the scope and scale of the project activity and the mitigation measures.

The assessment must include the following:

1. An overview of the project activity, geographic location and relevant stakeholders.[31]
2. An assessment of the GHG Project's environmental and social risks and impacts for the project duration based on defined and defensible assumptions and taking into account the scope and scale of the project activity. The assessment shall include a review of risks and impact, as applicable, on terrestrial and marine biodiversity habitat and ecosystems; resource efficiency and pollution prevention including to air, water, soil and the ozone layer; the protection, conservation, or restoration of natural habitats such as forests, grasslands, and wetlands; labor rights and working conditions; gender equality; land acquisition and involuntary physical or economic displacement; and human rights and stakeholder engagement.

   For community-based[32] projects, the assessment shall include a description of the environmental and social impact of the Project on communities in the immediate project area, including specific impacts to Indigenous Peoples, local communities, and cultural heritage. The impact assessment must describe the process to identify community(ies) affected by the GHG Project and provide detailed information regarding the community stakeholder consultation process undertaken as part of the Project design and implementation. This includes demonstrating that the consultations with Indigenous Peoples and local communities, as applicable, were conducted in a manner that is inclusive, culturally appropriate, and respectful of local knowledge. The assessment must document meetings held, attendees and meeting minutes, as well as stakeholder comments and concerns and how those were addressed. When relevant to circumstances, the assessment must include evidence of Free, Prior and Informed Consent. Project Proponents shall confirm that project activities do not involve relocation or resettlement (voluntary or involuntary). The assessment shall also include a discussion of robust benefit sharing arrangements.
3. The assessment shall: 1) identify each risk/impact/claim; 2) categorize the risk/impact/claim as positive, negative, or neutral and substantiate the impact category; 3) describe how any negative impacts will be avoided, reduced, mitigated or compensated, commensurate with the risk; and 4) detail how risks and negative impacts will be monitored, how often, and by whom. All negative risks and impacts must be included in ongoing Monitoring Reports.

[31] Stakeholders are defined as individuals or groups that can potentially affect or be affected by the project activities and who may live within or outside the Project area.

[32] A community includes groups of people who live within or adjacent to the project area, including indigenous peoples and other local communities, as well as any groups that derive income, livelihood, or cultural values from the area.

8.B Positive Contributions to Sustainable Development

ACR requires reporting on the project activity's positive contributions to the U.N. Sustainable Development Goals (SDGs) using the most recently published ACR SDG Contributions Report template, provided within or as an appendix to the GHG Project Plan. This includes providing information on how the project activity is consistent with the SDG objectives[33] of the host country, where the SDG objectives are relevant, and such is feasible. The SDG Contributions Report includes a qualitative assessment of the positive impacts the GHG Project is delivering to SDGs in addition to SDG 13 (Climate Action), based on standardized ACR tools and methods or other method(s) or tool(s) approved by ACR.

8.C Ongoing Disclosure and Enforcement

Project Proponents shall disclose in their Monitoring Reports any negative environmental or social impacts or claims of negative environmental or social impacts and the appropriate mitigation measure applied. They shall also attest to no undisclosed or unmitigated adverse environmental or social impacts as a result of the GHG Project and provide confirmations and/or updates to the original assessment.

ACR reserves the right to refuse to list or issue credits to a GHG project based on environmental or social impacts that have not or cannot be mitigated, or that present a significant risk of future negative environmental or community impacts.

[33] https://sdgs.un.org/goals.

Chapter 9: Validation and Verification

This chapter provides a general overview of ACR requirements for validation of GHG Project Plans, and ex-post verification of GHG statements, by an accredited, competent and independent third-party VVB approved by ACR. Each GHG Project shall be validated and verified through the end of their Crediting Period to the relevant eligibility criteria specified in the version of the ACR Standard against which it was validated. Each GHG Project shall be subsequently verified to the administrative policies specified in the version of the ACR Standard in effect at the end of the Reporting Period being verified. Further detail on ACR verification requirements is included in the ACR Validation and Verification Standard, available at http://acrcarbon.org/.

9.A Definitions

ACR conducts a preliminary listing review of every GHG Project. ACR may request clarifications and corrections regarding a proposed project's listing documentation before allowing a project to commence validation. A listing review by ACR that results in an approved project listing shall not inform the process or determination of the subsequent validation by the selected VVB.

Validation is the systematic, independent, and documented process for the evaluation of a GHG Project Plan against applicable requirements of the ACR Standard, the applicable ACR-approved methodology, and any other applicable audit criteria (e.g., relevant errata and clarifications).

Verification is the systematic, independent, and documented assessment by a qualified and impartial third party of the GHG statement for a specific Reporting Period. The verification process is intended to assess the degree to which a GHG Project complies with the applicable ACR-approved methodology, tools, eligibility criteria, requirements and specifications, and has correctly quantified Total and Net GHG Emission Reductions and Removals.

Validation and verification must be conducted by an ACR-approved independent third-party VVB. Validation and verification may be conducted by the same entity and may occur simultaneously.

9.B Materiality Threshold

A material misstatement is an inaccurate statement of a Project's GHG emission reductions or removals or other information which may reasonably be expected to influence decisions or actions taken by the users of the GHG Project information. To accept a Verification Opinion, ACR requires that

discrepancies between the GHG emission reductions and removals claimed by the Project Proponent and estimated by the VVB for a given Reporting Period be immaterial (i.e., less than ACR's materiality threshold of ±5%). For terrestrial or geologic sequestration projects utilizing the Buffer Pool or Reserve Account to mitigate for reversals, this assessment (Equation 1) must be performed on the Total GHG Emission Reductions and Removals prior to deduction of the Buffer Pool or Reserve Account contribution. Individual or aggregation of errors or omissions greater than the ACR materiality threshold require restating before a Verification Opinion will be accepted.

ACR's materiality threshold also applies in the event that an overstated GHG statement is discovered after credits have been issued. If the misstatement exceeds the materiality threshold, ACR will determine the volume of over-issued credits and the appropriate corrective action including 1) the cancellation of over-issued credits still held in the Project account, 2) the deduction of the over-issued volume amount from the verified Total GHG Emission Reductions and Removals to be issued after the next completed verification, 3) the cancellation of the over-issued volume of comparable replacement credits supplied by the Project Proponent, or 4) other remedies as defined in the ACR Terms of Use Agreement. The following equation is to be used to calculate the percent error in a GHG statement:

Equation 1

$$\%\ \textbf{Error} = \frac{\textbf{Project Emission Reduction/Removal Statement} - \textbf{VVB Emission Reduction/Removal Calculation}}{\textbf{VVB Emission Reduction/Removal Calculation}} \times 100$$

9.C Validation and Verification Interval

Validation of the GHG Project Plan occurs once per Crediting Period. Renewal of the Crediting Period requires a new validation within one (1) year from the end of the previous, expiring Crediting Period. Per Section 6.E, if Project-specific changes that require revision to baseline or additionality assessments occur after the validation, these changes must be disclosed in the Project Monitoring Report and validated in conjunction with the Project's next subsequent verification.

ACR requires verification of GHG statements at specified intervals in order to issue new ERTs.[34] GHG emission reductions and removals may be verified and issued as ERTs annually, or at the Project Proponent's request, more or less frequently out to a maximum five (5) year Reporting Period duration. At each request for issuance of ERTs, the Project Proponent must submit a Verification Opinion from an approved verifier. No less than once every five (5) years of reporting (with the exception of some AFOLU project types referenced in Section A.7.3), and upon the first verification conducted by a new VVB (per ACR's VVB rotation requirements in Section 9.G), Project Proponents

[34] Verification activities may begin only after the completion of the GHG Project's Reporting Period being verified.

must submit a Verification Opinion based on a full verification including a field visit to the project Site.[35]

The initial Reporting Period full verification interval begins on the project Start Date and is a maximum of five (5) years in duration. The maximum interval between subsequent full verifications is five (5) years, calculated from the start date of the last Reporting Period receiving full verification to the end date of any subsequent Reporting Period receiving desk-based verification.[36]

In the case of sequestration projects, the scope of a full verification should include an updated analysis of risk of reversal and an updated buffer determination, as applicable.

ACR requires Verification Opinions to be submitted no later than two (2) years from the end of the Reporting Period being verified for non-AFOLU projects and no later than three (3) years from the end of the Reporting Period for AFOLU projects.

9.D Validation and Verification Body Requirements

Validation and verification are risk-based processes carried out in conformance with ISO 14064-3 and ISO 14065,[37] as considered current and as represented on the ACR website. VVBs shall be accredited for project-level validation and verification in the sector of the applicable methodology and shall meet the competence requirements as set out in ISO 14065 as considered current.

All VVBs must be approved by ACR and be accredited under ISO 14065 by an accreditation body that is a member of the International Accreditation Forum (IAF) and with which ACR has a Memorandum of Understanding (MoU) in place, as detailed in the ACR Validation and Verification Standard.

A list of currently approved VVBs and the sectors for which they are approved to conduct validation and/or verification is provided at http://acrcarbon.org/acr-program/validation-and-verification/.

Prior to commencing validation or verification work on ACR, all VVBs must be in good standing; have completed the application process described at http://acrcarbon.org/acr-program/validation-and-verification/, including submitting an application form and Attestation of Validation/Verification Body,

[35] Unless otherwise specified in the relevant methodology, a site visit is required for validation and the first verification for the GHG Project. PDA Projects are subject to risk-based sampling by the VVB to determine the number of sites to be visited during a full verification. More information can be found in Chapter 10 of the ACR Validation and Verification Standard.

[36] For example, if a project conducts a full verification for a Reporting Period starting September 1, 2020, is eligible for subsequent desk-based verifications through August 31, 2025. In this example, the next Reporting Period to receive a full verification must start no later than September 1, 2025.

[37] ISO 14065 references to “GHG programme” shall mean the ACR.

which details requirements for conflicts of interest and makeup of the verification teams; document technical capabilities for each of the sectoral scopes in which the verifier seeks to conduct validation or verification; established their VVB account on ACR; and have submitted a Project-specific Conflict of Interest Form for ACR's approval.

The VVB shall keep all documents and records pertaining to the validation and verification in a secure and retrievable manner for at least two (2) years after the end of the Crediting Period of the relevant GHG Project, even if it does not carry out verification throughout the Project's Crediting Period.

9.E Validation Report and Opinion

On completion of validation, a Validation Report and Validation Opinion shall be submitted to ACR. Validation documents shall be in English, and describe the validation process, any issues raised during the validation and their resolutions, and the conclusions reached by the VVB. The Validation Opinion must be submitted using the most recently published template available on the ACR website.

When the validation of a GHG project is conducted separately from the verification of the first Reporting Period, the VVB is to provide an opinion on the assumptions supporting the projected ex-ante GHG emission reductions and removals as quantified by the Project Proponent.[38]

Details on the contents of the Validation Report and Validation Opinion are provided in the current ACR Validation and Verification Standard and relevant methodology.

9.F Verification Report and Opinion

On completion of verification, the Project Proponent shall submit a Verification Report and Verification Opinion to ACR. Verification documents shall be in English, and describe the verification process, any issues raised during the verification and their resolutions, and the conclusions reached by the VVB. The Verification Opinion must be submitted, using the most recently published template available on the ACR website.

Details on the contents of the Verification Report and Verification Opinion are provided in the current ACR Validation and Verification Standard and relevant methodology.

[38] In cases where the validation and verification are conducted at the same time, the project level data provided by the Project Proponent will be used in determining the Validation Opinion and Verification Opinion.

9.G Validation and Verification Acceptance

ACR will review the project documents and validation and/or verification documents and accept them, request corrections and/or clarifications, or reject them. If ACR requests corrections or clarifications, the Project Proponent and VVB shall make all necessary corrections and clarifications and resubmit updated documents for subsequent review.

If ACR accepts the validation and verification documents, and the GHG Project has already completed all other required steps, then ACR will post the Validation Report, Validation Opinion, Verification Report, Verification Opinion, and other public documentation to the ACR Registry, and issue ERTs to the Project Developer Account Holder's account.

GHG projects must be validated and verified without reservation, with Project Proponents having addressed all clarifications and corrections required by the VVB. ACR reserves the right to accept or reject a validation or verification from an approved VVB.

9.H Rotation of Verification Bodies

ACR requires that Project Proponents utilize a different VVB at a minimum of every five (5) years[39] of reporting or five verifications (including both full and desk-based reviews), whichever comes first. The first verification conducted by a new VVB must be a full verification. For project types with only one Reporting Period and therefore only one verification per project, VVBs may conduct no more than five out of nine sequential verifications of projects developed at the same facility.

9.I Validation and Verification Body Oversight

In addition to the accreditation processes to which all ACR-approved VVB's must adhere, ACR reserves the right to conduct oversight activities during validation and/or verification performance by the VVBs operating under the ACR program, and to suspend or revoke its approval of a previously approved VVB with cause. Oversight activities are conducted to ensure an adequate level of quality control and are intended to supplement accreditation body oversight and audit processes. Oversight activities conducted by ACR representatives include the following:

[39] In this context, a year is defined as a twelve (12) month period.

- Review of information and supplementary documentation submitted by VVBs regarding Project-specific conflict of interest determinations;
- Review of VVB documentation, such as data checks and verification and sampling plans;
- Review of Project Proponent documentation, such as data sources, quantification methodologies, and calculation spreadsheets or databases;
- Review of Validation Reports, Validation Opinions, Verification Reports and Verification Opinions; and
- Project-level audits.

ACR may elect to audit any validation and/or verification process conducted by an ACR-approved VVB, including attending the validation and/or verification meetings and site visits. Validation and verification of GHG projects that: use a new methodology (or an updated version of a methodology) that has not previously been implemented by a successfully validated/verified GHG project; are conducted by a newly approved VVB; and/or are conducted by a VVB that has been newly approved for the Project's sectoral scope may be considered priorities for project-level audits. ACR will notify the VVB and the Project Proponent of selection for a project-level audit upon the Project-specific approval of the VVB. Should ACR select a GHG Project for a project-level audit, the VVB must include ACR on communications with the Project Proponent and in substantive meetings with the Project Proponent and make project-level data and information subject to validation and/or verification available to ACR for review. During a project-level audit, ACR may choose to send, at its own expense, a representative to the validation and/or verification site visit to observe on-site verification activities. At the conclusion of a project-level audit, ACR will communicate directly to the VVB, as applicable, any items of concern noted during validation and/or verification performance, including areas for improvement and non-conformities with ACR validation and verification procedures. ACR will report significant, non-remediated and/or recurring VVB performance concerns to the relevant accreditation body.

Chapter 10: Avoiding Double Counting with Other GHG Crediting Programs, Mandatory domestic mitigation schemes,[40] environmental markets and national or sectoral GHG Emission reduction targets

In the context of climate change mitigation, the term double counting refers to situations where a single GHG emission reduction, removal, avoidance, or other mitigation outcome is used towards more than one mitigation target, pledges, obligation or other mitigation commitment or effort. Double counting must be avoided when GHG emission reductions/removals are used to meet mitigation obligations, targets, pledges, commitments, or efforts. Double counting can occur in different ways, including double issuance, double use, and double claiming. ACR has program rules and operational processes, transparent registry infrastructure and oversight to mitigate these double counting risks.

Appendix B, *ACR Requirements for Avoiding Double Counting in the International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*, details specific requirements for the use of units to meet CORSIA obligations. ACR will incorporate by reference relevant decisions and guidance to prevent double counting, including accounting and reporting in the UNFCCC for the Paris Agreement and relevant ICAO decisions.

[40] Mandatory domestic mitigation schemes include emissions trading systems (cap-and-trade, cap-and-invest), carbon tax systems and carbon intensity schemes such as Low Carbon Fuel Standards.

10.A Policies to Prevent Double Issuance and Double Use of Carbon Credits

Double issuance occurs when more than one unique unit is issued for the same GHG emission reduction or removal, within the same program/registry or involving concurrent issuance under more than one carbon program(s)/registry(ies). This includes any mandatory GHG mitigation schemes, independent carbon credit crediting programs, as well as other compliance or voluntary environmental markets or regulatory programs.

ACR has rules and procedures in place to mitigate the risk of double issuance, including checks of duplicate registration (project activity, location/boundary, vintage) on ACR or under other programs and requirements for disclosure of any other registrations, as well as for cancellation of the units on one registry prior to re-issuance on another.

Double use refers to either 1) an instance in which a single GHG emission reduction or removal is sold to more than one entity at a given time (also referred to as double selling) due to double issuance or fraudulent sales practices, which may or may not be detectable, or 2) an instance in which an issued unit is used by the same buyer toward more than one target (e.g., under systems that are not linked, do not coordinate, or may have inconsistent rules for reporting and/or retirement).

To prevent double use, ACR requires execution of ACR's legal Terms of Use (ToU) Agreement by authorized account representatives, clear proof of ownership upon registration, tracking of ownership of credits within the registry by serial number and account, and an attestation prior to each issuance of unique, uncontested ownership and legal rights to the GHG emission reductions as well as that no GHG emission reductions/removals issued by and registered on ACR for a specific activity in a specific location/project boundary have been concurrently issued, or registered on ACR or by another carbon crediting program or regulatory body, including for other environmental markets (e.g., Renewable Energy Certificates) or programs based on carbon intensity of fuels (e.g., Low Carbon Fuel Standards), nor have they been transferred, retired, cancelled or otherwise used or disposed of other than as duly recorded on the ACR registry. Project Proponents are required to attest upon project listing and at each verification that ERTs will not both be sold as carbon credits and used to make claims towards their own corporate GHG emission reduction targets.

10.A.1 PROJECTS REGISTERED ON ACR AND OTHER GHG CREDITING PROGRAMS

ACR allows for project registration simultaneously on ACR and other GHG crediting programs in only two circumstances: 1) the simultaneous registration is disclosed and approved by both programs, including explicitly through regulation and 2) credits issued for the same unique GHG emission reductions/removals (project activity, boundary and vintage) do not reside concurrently on more than one program registry.

To prevent double issuance and double use of carbon credits for projects registered simultaneously on ACR and another GHG crediting program, 1) credits representing the same GHG emission reduction/removal must be publicly cancelled from one program registry before they can be converted and re-issued on another program registry or 2) credits can be issued to a project by both programs as long as the registration of the project under more than one program is disclosed in writing to the GHG program and the verifier, and the credits represents a unique vintage of emission reductions and removals for the project boundary. ACR AFOLU projects that have a risk of reversal are not eligible for simultaneous registration on ACR and another GHG crediting program.

10.A.2 TRANSFERRED PROJECTS PREVIOUSLY REGISTERED ON ACR AND OTHER GHG CREDITING PROGRAMS

For projects transferring from another GHG crediting program to ACR, the Project must be validated and verified by an ACR-approved VVB to comply with the ACR Standard and relevant methodology. To avoid double issuance and double use of the same GHG emission reduction or removal, any credits that had been issued that were not transferred, sold, or retired must be cancelled from the other program's registry before conversion and re-issuance by ACR.

For projects transferring from ACR to another GHG crediting program, Project Developer Account Holders must cancel from ACR all credits that have not been transferred, sold, or retired to allow for conversion and re-issuance of credits by the other GHG program on its registry.

10.B Policies to Prevent Double Claiming of GHG Emission Reductions or Removals

In the global carbon market context in which all signatories to the Paris Agreement ("Parties") have GHG emission reduction target(s)/pledge(s)/contributions/commitments (collectively "targets") as formulated in the nationally determined contributions (NDCs), and aeroplane operators ("non-Parties") have an offsetting obligation under the International Civil Aviation Organization (ICAO) Carbon Reduction Offsetting Scheme for International Aviation (CORSIA), double claiming occurs when two or more Parties or non-Parties claim the same GHG emission reduction/removal (ERR) to comply with their mitigation targets/pledges/commitments /obligations.[41] Transparent reporting and accounting procedures at both the national and international level will be developed to track GHG emission reductions/removals transferred to/from other Parties or non-Parties to meet NDC targets per Paris Agreement 6.2 and 6.4 and to meet CORSIA obligations. In these instances, the host country of the ERR activity shall authorize the transfer through a Host Country Letter of Authorization and agree to report the authorization in an initial report to the UNFCCC and to make associated corresponding adjustments in biennial transparency report to the UNFCCC. At present, voluntary market transactions do not require authorization or corresponding adjustments, although host countries, at their discretion, may decide to authorize units for this purpose, and the ACR Registry infrastructure is in place to label authorized units regardless of use.

Where accounting for international transfers is required under Article 6 or otherwise agreed, ACR requires notification by the owner of the ERR of the intent to transfer the credits for these purposes and to obtain a Host Country Letter of Authorization from the national UNFCCC focal point for the use of the ERR by another Party or non-Party. ACR will request that Host Country(ies) include in their Letter(s) of Authorization how they define "first transfer" in terms of when they will apply a Corresponding Adjustment for other international mitigation purposes upon 1) authorization, 2) issuance or 3) the use or cancellation of the mitigation outcome, as specified by the participating Party. This information will facilitate ACR's ability to obtain evidence that a Corresponding Adjustment has been made and reported to the UNFCCC.

The ACR Registry facilitates the transparency of the process for all transactions by providing the registry infrastructure to publish Host Country Letters of Authorization, to label ERRs that are associated with a Letter of Authorization, as well as to label ERRs for which a corresponding adjustment has been applied. ACR will make public on the registry all retirements/cancellation of

[41] Requirements in Section 10.B do not currently apply to carbon credits used to meet voluntary targets, pledges, contributions or commitments, although host countries—at their discretion—may decide to authorize units for this purpose and they will be labeled as such on the ACR Registry.

units toward a Paris Agreement target, a CORSIA offsetting obligation or for Other International Mitigation Purposes. In addition, ACR will report such information to Parties, to ICAO and to Host Countries.

ACR requirements for avoiding double counting with the CORSIA are detailed in Appendix B.

Chapter 11: Complaints Procedure

ACR's Complaints Procedure details the steps for effective and timely resolutions to complaints about activities or decisions related to the application of the ACR Standard and other program rules and requirements, including the performance of an ACR-approved VVB. Any stakeholder may submit a complaint to ACR following this procedure. By submitting a complaint, the complainant agrees to the provisions of the procedure.

ACR's Complaints Procedure is not intended to substitute, circumvent, or override the legal rights of any party to use judicial mechanisms.

11.A Principles and Processes

1. ACR is committed to open, transparent and fair resolution of all complaints received. The following principles guide ACR's dealing with complaints:
    a. Legitimate: ACR is committed to enabling trust from the stakeholder groups for whose use they are intended and being accountable for the fair conduct of grievance processes.
    b. Accessible: ACR is fully accessible to all stakeholders and provides adequate assistance for those who may face particular barriers to access.
    c. Predictable: ACR provides a clear and known procedure with an indicative timeframe for each stage and provides clarity on the types of process and outcome available and means of monitoring implementation.
    d. Transparent: ACR keeps parties to a grievance informed about its progress and provides sufficient information about the mechanism's performance to build confidence in its effectiveness and meet any public interest at stake.
    e. Continuous learning: ACR draws on relevant findings and information provided to identify lessons for improving the mechanism and preventing future grievances and harm.
    f. Engagement and dialogue: ACR may consult relevant stakeholder groups as one of the means to address and resolve grievances.
2. In addition to the above principles, the complaint process requires that:
    a. Any individuals involved in the investigation and/or decision-making process surrounding a complaint declare any conflict of interest they may have in the proceedings and disqualify themselves accordingly. For the avoidance of doubt, being a member of management or the Board of ACR / ERT is not in itself a conflict of interest if the individual was not involved in the matter that is the subject of the complaint.

b. Decisions must take into account relevant considerations and mitigating circumstances and ignore irrelevant considerations.

c. Any retributions or reprisals against complainants are prohibited and will not be tolerated.

11.B Scope

1. The scope of the ACR Complaints Procedure is to provide a formal process for addressing grievances related to ACR policies and procedures, substantive complaints regarding the rules, requirements and content of the standard and operative documents including approved methodologies.
2. Complaints and appeals relating to VVBs may be submitted to ACR, however, these complaints are reviewed and resolved through distinct processes depending on their nature.
   a. Complaints related to the performance of VVBs, including issues such as conflicts of interest, fraud, inability to access a VVB's grievance mechanism, and inconsistent application of the ACR Standard and methodologies will be assessed and resolved in line with the process outlined in the ACR Validation and Verification Standard.
   b. Complaints and appeals relating to decisions of the VVBs, including the following topics will be evaluated by ACR to determine if the evidence presented indicates the need for further review:
      i. Non-compliance with requirements of the relevant Standard and/or methodology as applicable to a project;
      ii. Validation and verification decisions, including but not limited to project design, GHGs emission reduction/removal monitoring, calculation approaches, conformance with safeguards; and
      iii. VVB audit process.

   If the complaint requires further action ACR will either 1) forward to complaint to the VVB selected for the next verification to be evaluated again as part of the new audit process or 2) forward the complaint to the accreditation body overseeing the VVB for investigation.
3. It is not within the scope of the ACR Complaints procedure to consider:
   a. Complaints related to the laws, policies, and regulations of the host country, unless this directly relates to the entity's obligation to comply with ACR's standards and procedures;
   b. A complaint submitted by the same complainant(s) on matters previously submitted through the mechanism or addressed as part of a public comment submission unless new, compelling evidence is provided; or
   c. A complaint related to a matter or allegation that is more than one (1) year old or has been investigated and resolved within the last two (2) years, even if it has been submitted by a

different complainant, unless new evidence is provided, or new allegations have been made.

11.C Process

1. Stakeholders must submit a complaint in writing, which must include:
   a. Name, organization, and primary contact details for official communications regarding the complaint (email, telephone/Skype/WhatsApp).
   b. Description of the complaint, including:
      i. Nature of complaint, relevant timeframe and perceived impact;
      ii. Specific reference with citations to applicable ACR principle, program requirement(s) or procedure(s) that is the subject of the complaint;
      iii. Supporting evidence and documentation to be considered in the complaint resolution process. Examples of supporting evidence may include correspondence, such as emails or letters, research studies, or letters of support from other stakeholders. Typically, no additional information will be accepted after the initial submission of the complaint, although ACR reserves the right to accept additional information (in its complete discretion) upon a showing of good cause;
      iv. Declaration of any potential or perceived conflict of interest or statement that there is no conflict; and
      v. Declaration that information being provided is true, accurate and made in good faith.
   c. **CONFIDENTIALITY.** Complainants may request confidentiality, but any request for confidentiality must detail the scope of the request. For example, a request shall state what needs to be kept confidential (e.g., complainant's name, topic of complaint itself). Requests for confidentiality also must state a compelling reason for same. ACR will apply its best efforts to honor requests for confidentiality.
2. Complaints shall be sent in writing to ACR@winrock.org with the subject line "Complaint submission to ACR."
   a. **ACKNOWLEDGMENT.** ACR will respond in writing to acknowledge receipt of the complaint within fifteen (15) days of receipt of the complaint. If the complaint is found ineligible per Section 11.B, ACR will provide an explanation for this finding. For any complaints requesting confidentiality, ACR also will inform the complainant if the request will be honored. Complainants may withdraw the complaint at any time.
   b. **INVESTIGATION.** Following the receipt of an eligible complaint, ACR will conduct an assessment of the extent of the complaint about activities or decisions related to the application of the ACR Standard or applicable program rules and requirements. ACR will appoint an independent representative to investigate the complaint who shall not have been involved with the issue that is the subject of the complaint. If the complexity of the

complaint requires it, ACR, at its discretion may appoint or engage an external party to conduct the investigation and/or manage the complaint.

ACR shall conduct and conclude the investigation within ninety (90) days after the acknowledgement of the complaint. ACR reserves the right, however, to extend the investigation timeline, as required. The complainant will be informed about the revised timeline and expected dates.

i. At any time during this process, ACR may request additional information from complainant. If complainant is non-responsive for more than fifteen (15) days, ACR reserves the right to close the complaint process. Moreover, extended periods of slow responsiveness will affect the overall timelines for the investigation.

ii. At any time during this process, and typically prior to the launch of the investigation, ACR may reach out to the complainant and/or parties involved to attempt to resolve the issue in an informal manner, unless such an attempt is reasonably considered an unnecessary exercise.

c. **DECISION.** ACR shall communicate by email the decision regarding the resolution, including the reasons for the decision and, if applicable, any follow up actions and/or corrective measures to complainant and parties involved in the grievance. Any decision reached by the investigator shall be final.

Along with ACR's written resolution to the complaint, ACR will publish on its website any associated supporting evidence or documentation, including any additional records that become associated with the complaint during the investigation, in summary or in full at ACR's discretion.

11.D Appeals

1. The complainant may appeal the outcome of an investigation by notifying ACR at ACR@winrock.org with the subject line "Appeal submission to ACR" within thirty (30) days of ACR publishing the complaint decision on its website. Appeals are limited to the issues raised in the complaint, and no new issues will be considered on appeal. No additional evidence will be accepted during an appeal. The request for appeal must include a statement of the specific finding(s) that is being appealed and an explanation of why it was in error.
2. **ACKNOWLEDGEMENT.** ACR will respond in writing within thirty (30) days to acknowledge receipt of the appeal. If the appeal is found ineligible, ACR will provide an explanation for this finding.
3. For eligible appeals, ACR will form an independent committee that will include a member of the ERT or Winrock Board of Directors, a member of the ERT or Winrock Senior Management team, and a member of ERT staff who was not involved with the issue that is the subject of the appeal, and all of whom will have equal votes. The committee may also include non-voting technical and/or subject matter expert or experts as necessary. If the complexity of the appeal

requires it, ACR, at its discretion, may appoint or engage an external party to conduct the investigation.

The independent committee shall conduct a review and issue a report within ninety (90) days. ACR reserves the right to extend the review timeline, as required. The appellant will be informed about the revised timeline and expected dates.

4. **DECISION.** The decision reached by the committee shall be communicated via written response to the appellant and posted on the ACR website. All decisions shall be final and binding.

11.E Miscellaneous

Translation of investigation plan and resolutions can be requested. ACR, at its discretion, may publish these documents in a language other than English, if required.

Definitions

Account Holder	A duly organized entity that has an ACR Registry account. There are different Registry account types, including Project Developer, Transaction, Corporate, and Custodial accounts. The Project Developer Account Holder and Project Proponent may be different entities.
ACR℠	A leading GHG emission reduction and removal crediting program founded in 1996 as the first private voluntary GHG registry in the world, ACR operates in the voluntary and compliance carbon markets. ACR has over two decades of experience in the development of environmentally rigorous, science-based methodologies, as well as operational experience in the oversight of GHG project registration and verification and the issuance, tracking and reporting of serialized carbon credits for verified GHG emission reductions and removals through its transparent registry system.
ACR-Approved Methodology	GHG quantification, monitoring, reporting, and verification methodology published by ACR after public consultation and scientific peer review.
Additionality	ACR's additionality requirements are intended to ensure that carbon credits are in addition to GHG emission reductions and removals that would have occurred in the absence of the project activity and without carbon market incentives. A Project Proponent must demonstrate that the GHG emission reductions and removals associated with a project are above and beyond the "business as usual" scenario. ACR requires that every GHG Project either adhere to an approved performance standard and a regulatory additionality test or pass a three-pronged test to demonstrate that the project activity is beyond regulatory requirements, beyond common practice, and faces at least one of three implementation barriers (institutional, financial, or technical).
Afforestation/ Reforestation	Activities to increase carbon stocks by establishing, increasing, and restoring vegetative cover through the planting, sowing, or human-assisted natural regeneration of woody vegetation. These activities must target the eventual establishment of "forest" per the applicable definition. 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, and "reforestation" is applied to activities to reestablish forest on lands that were relatively recently in forest cover. ACR does not make a specific distinction between afforestation and

	reforestation, because both are eligible. Project Proponents shall document that afforestation/reforestation project lands were not cleared of trees during the ten (10) years preceding the project Start Date in order to implement an afforestation/reforestation project. This exclusion does not apply to natural disturbances or to removal of non-tree vegetation (e.g., heavy brush) to prepare the site for planting. Project lands that already meet the applicable "forest" definition due to the percentage tree cover or other factors, and on which a Project Proponent wishes to implement activities to increase carbon stocks by increasing and restoring vegetative cover through the planting, sowing, or human-assisted natural regeneration of woody vegetation, qualify under the Improved Forest Management (IFM) category.
Aggregate/ Aggregated Project	The grouping of multiple project instances, fields, producers, or facilities into a single GHG Project registered on ACR. An Aggregate project must be coordinated by a single Project Proponent (public or private entity). The GHG Project Plan will define the overall project boundary and baseline conditions encompassing all project instances, fields, producers, or facilities. An Aggregate project will have a single Start Date and Crediting Period.
Agriculture, Forestry, and Other Land Use (AFOLU)	A broad category of ACR-eligible project activities that reduce GHG emissions and/or enhance GHG removals through changes in agriculture, forestry, and land-use practices.
Agricultural Land	Any ecosystem modified or created specifically to grow or raise biological products for human consumption or use. This includes cropland, pasture, rangeland, orchards, groves, vineyards, nurseries, ornamental horticultural areas, and confined feeding areas. It is generally synonymous with farmland.
Avoided Conversion of Forest	Activities that prevent the conversion of forests to development, agriculture, or other land uses.
Avoided Conversion of Non-Forest	Activities that prevent the conversion of non-forest native lands to anthropogenically productive uses (e.g., cropland, settlement, or development). Eligible project activities include avoided conversion of grasslands and shrublands to crop production.
Baseline Scenario	A counterfactual scenario that forecasts the likely stream of emissions and removals to occur if the Project Proponent does not implement the GHG Project

	(i.e., the "business as usual" case). It also reflects the sum of the changes in carbon stocks (and, where applicable and significant, nitrous oxide and methane emissions) in the carbon pools within the project boundary that would occur in the absence of the project activity.
Buffer Pool	An account managed by ACR as a reversal risk mitigation mechanism for AFOLU projects into which each AFOLU Project deposits a determined quantity of ERTs to be available to replace unforeseen losses in carbon stocks.
Buffer Pool Contribution	The number of credits contributed to the Buffer Pool for AFOLU projects with a risk of reversal. The Buffer Pool Contribution is a portion of the AFOLU Project's verified issuance volume, determined by multiplying the Buffer Pool Contribution Percentage by the Total GHG Emission Reductions and Removals. The contribution may be made in ERTs of any type and vintage meeting the requirements laid out in the most recently published ACR Buffer Pool Terms and Conditions.
Buffer Pool Contribution Percentage	An overall reversal risk rating for an AFOLU project based on the ACR Tool for Reversal Risk Analysis and Buffer Pool Contribution Determination, which translates into the number of credits that will be deposited in the ACR Buffer Pool at the time of each issuance to mitigate the risk of reversals.
Cancel or Cancellation	The permanent removal of a carbon credit from the Registry so that it cannot be transferred, transacted, retired or applied towards any GHG emission reduction targets as an ACR carbon credit unit. The exception to this is for aeroplane operators who cancel eligible units to surrender them towards their CORSIA compliance obligations. If the carbon credit has been cancelled so that the equivalent can be reissued on another carbon crediting program, ACR no longer tracks the credit ownership and permanence (if applicable).
Carbon Dioxide-Equivalent (CO_2e)	A metric to compare GHGs based on their global warming potential (GWP) relative to CO_2 over the same timeframe. The Intergovernmental Panel on Climate Change publishes GWP values for converting all GHGs to a CO_2e basis.
Carbon Credit	A quantified reduction, removal, or avoidance of GHG emissions that is used to compensate for GHG emissions that occur elsewhere. In a compliance market, carbon credits are GHG emission reductions or removals from projects undertaken outside the coverage of a mandatory GHG emission reduction system for which the ownership of verifiable GHG emission reductions/removals can be transferred and used by a regulated entity to meet its GHG emission

	reduction obligations.[42] ACR issues carbon credits that can be used by regulated entities in certain compliance markets as well as by other entities toward voluntary emission reduction targets. Also sometimes referred to as offsets, offset credits, carbon offsets, and carbon offset credits.
Carbon Pool	A reservoir of carbon that has the potential to accumulate or lose carbon over time. Common forest carbon pools are aboveground biomass, belowground biomass, litter, dead wood, soil organic carbon (SOC), and wood products.
Carbon Stocks	The measured, estimated or modeled quantity of carbon held in a particular carbon pool. Quantifying GHG emission reductions and removals for terrestrial projects involves estimating and measuring, for the baseline vs. with-project scenario, changes over time in carbon stocks in relevant pools.
Cohort	A group of Sites sharing the same validation and verification schedule within a Programmatic Development Approach (PDA) project.
Commercially Sensitive Information	Trade secrets, financial, commercial, scientific, technical, or other information subject to confidentiality agreement whose disclosure could result in a material financial loss or gain, prejudice the outcome of contractual or other negotiations, or otherwise damage or enrich the person or entity to which the information relates.
Community	Groups of people who live within or adjacent to a project area, including indigenous peoples and other local communities, as well as groups that derive income, livelihood, or cultural values from the area.
Complaint	Synonymous with the terms “grievance,” “dispute,” “challenge,” or “conflict,” a term that expresses dissatisfaction with ACR’s processes or decisions, or the performance of ACR-approved VVBs.
Crediting Period	The finite length of time for which a GHG Project Plan is valid, and during which a GHG project can generate carbon credits against its baseline scenario. The baseline must be re-evaluated to renew a Crediting Period. ACR methodologies specify the Crediting Period for particular project types.
Cropping Cycle	The period between the first day after harvest of the last crop in a field and the last day of harvest of the current crop. A single cropping cycle does not have to

[42] Adapted from Pew Center on Global Climate Change. Climate Change 101: Cap and Trade. https://www.pewtrusts.org/en/research-and-analysis/reports/2008/02/25/climate-change-101-cap-and-trade.

	be twelve (12) months, and multiple cropping cycles may occur within a cultivation year.
Cultivation Year	The annual cycle of activities related to the growth and harvest of crops within an approximate twelve (12) month period. A single cultivation year may contain a single cropping cycle or several cropping cycles.
De Minimis	So minor as to merit disregard. ACR sets a de minimis threshold of 3% of the ex-ante calculation of Total GHG Emission Reductions and Removals for the entire Crediting Period. For the purpose of completeness, any decreases in carbon pools and/or increases in GHG emission sources that exceed the de minimis threshold must be included. Any exclusions using the de minimis principle shall be justified using fully documented ex-ante calculations, and within the specifications of the chosen methodology.
Do no harm	GHG projects must be in compliance with applicable local, national, and international laws and regulations.
Double Counting	In the context of climate change mitigation, situations where a single GHG emission reduction, removal, avoidance, or other mitigation outcome is used more than once to demonstrate achievement of mitigation targets or pledges. Double counting can occur in different ways, including double issuance, double use, and double claiming.
Double Claiming	Whereby two or more parties claim the same GHG emission reduction, removal, or other mitigation outcome toward their national or sector-wide emission reduction cap or target (e.g., mitigation targets/pledges under the Paris Agreement as formulated in the NDCs and/or air carriers offsetting obligation under the CORSIA). Transparent accounting and reporting procedures at both the national and International level must be in place to track GHG emission reductions and removals transferred to other Parties toward meeting their targets. In these instances, a corresponding adjustment should be made by the host country, adding the emissions back to its national GHG inventory (or NDC), as well as by the receiving party.
Double Issuance	Whereby more than one unique unit is issued for the same GHG emission reduction or removal, within the same program/registry or involving concurrent issuance under more than one program(s)/registry(ies). This can lead to double use/selling and double claiming, in that more tons are being created and supplied than were actually mitigated. The risk of double issuance can be

	avoided by having preventative program rules and oversight processes in place, such as cancellation of units by one program prior to re-issuance by another.
Double Use	When a GHG emission reduction or removal is sold to more than one entity at a given time, or when an issued unit is used by the same buyer toward more than one target (e.g., under systems that do not "talk" to each other or may have inconsistent rules for reporting and/or retirement). Double use can be avoided by having operational processes, program rules, tracking systems, and oversight processes in place. Also referred to as double selling due to, for example, double issuance (registry/program/verification issue) or fraudulent sales practices, which may or may not be detectable by registry/program/ verifier.
Early Project Termination	When an AFOLU project terminates prior to the end of the Minimum Project Term. Early Project Termination occurs if, prior to the end of the Minimum Project Term, the Project Proponent opts to leave the program and/or discontinue project monitoring, reporting, and verification activities or if an Intentional or Unintentional Reversal causes project carbon stocks to decrease below baseline levels. Early Project Termination is assumed to affect all project carbon stocks, the loss of which is mitigated and compensated for per the most recently published Buffer Pool Terms and Conditions.
Emission Reduction Ton (ERT)	The ACR unit of exchange for tradable, project-based carbon credits. ERTs represent both GHG emission reductions and removals (enhancements in sequestration). ACR issues one ERT for each metric ton of CO_2e emission reduction or removal verified against an ACR Standard and methodology.
Emission Factor	A coefficient that relates an activity datum to the quantity of GHG emissions released to the atmosphere. Emission factors are often based on a sample of measured emissions data that are averaged to develop a representative rate of GHG emissions for a given activity level under a given set of operating conditions.
Environmental and Social Impacts	The effects, positive and negative, that a project activity may have on the environmental quality or socioeconomic well-being of affected communities in the project area. ACR requires that the Project Proponents assess environmental and social impacts and that negative impacts be mitigated or compensated and monitored throughout the project term.

Farm	The entire operations, which may include multiple fields or parcels of land, and is under the management of a single owner or entity.
Field	A contiguous tract of land with a homogenous management strategy and a common owner separated by permanent boundaries such as fences, waterways, woodlands, or other similar features.
Forest	Forest projects shall use a nationally approved "forest" definition for the country where the activity occurs. For projects in the United States, Project Proponents shall use the U.S. definition in Appendix A, which is based on the U.S. Forest Service Forest Inventory & Analysis Program definition. For projects outside of the United States, Project Proponents may use the Kyoto Protocol definition in Appendix A, with the relevant Designated National Authority (DNA) selections for minimum land area, crown cover, and tree height. If the GHG Project is in a country that no longer has a designated DNA or whose DNA has not made these selections, the Project Proponent may propose another nationally approved forest definition. The definition of forest shall apply in each eligible forest project category. For example, afforestation/ reforestation activities must target the eventual establishment of a forest; IFM activities must be implemented in a forest remaining as forest; and Avoided Conversion activities must be implemented in a forest and prevent its conversion to non-forest or its degradation remaining forest.
Geologic Sequestration	The process of capturing carbon dioxide from a stationary source and injecting it deep underground through a well, with or without enhanced oil recovery. Also called carbon capture and storage.
Greenhouse Gas (GHG)	Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds, causing the greenhouse effect. The primary GHGs regulated under the Kyoto Protocol are carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The IPCC lists and periodically updates GHGs in its assessment reports.

GHG Emission Reductions and Removals (ERRs)	A GHG emission reduction is the measured decrease of GHG emissions over a specified period relative to an approved baseline. A GHG removal is the mass of CO_2 removed from the atmosphere over a specified period relative to an approved baseline. Removals can be nature-based or technology-based.
GHG Emission System/Trading Program	A voluntary or compliance program that allows for trading in project-based GHG emission reductions and/or removals, government-issued credits, and/or allowances.
GHG Project Plan	A document that describes the project activity, satisfies eligibility requirements, identifies sources and sinks of GHG emissions, establishes project boundaries, describes the baseline scenario, defines how GHG quantification will be done and what methodologies, assumptions, and data will be used, and provides details on the Project's monitoring, reporting, and verification procedures. ACR requires Project Proponents to submit a GHG Project Plan using an ACR-approved methodology for every GHG Project. Project Proponent and Project Developer Account Holder, if not the same entity, must also submit an attestation regarding the content contained therein.
Global Warming Potential (GWP)	A relative scale translating the global warming impact of any GHG into its CO_2e 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 emission reductions based on the 100-year GWPs in the IPCC Fifth Assessment Report (AR5), Working Group 1, Chapter 8, Table 8.7 for CH_4 and N_2O and Table 8. SM.16 for HFCs, PFCs, SF_6, NF_3, and all ODS.
Grassland and Shrubland	A land-use category on which the plant cover is composed principally of grasses, grass-like plants (e.g., sedges and rushes), forbs, or shrubs suitable for grazing and browsing, and includes both pastures and native rangelands. This includes areas where practices such as clearing, burning, chaining, and/or chemicals are applied to maintain the grass vegetation. Land is also categorized as Grassland if there have been three (3) or fewer years of continuous hay production. Savannas, deserts, and tundra are considered grassland. Drained wetlands are considered Grassland if the dominant vegetation meets the plant cover criteria for Grassland. Woody plant communities of low forbs and shrubs and woodlands, such as sagebrush, mesquite, chaparral, mountain shrubland, and pinyon-juniper are also classified as Grassland if they do not meet the criteria for Forest Land. Grassland includes land managed with agroforestry practices such as silvopasture and windbreaks, if the land is principally grass, grass-like plants,

	forbs, and shrubs suitable for grazing and browsing, and assuming the stand or woodlot does not meet the criteria for Forest Land.[43]
Implementation Date	The Site-specific date corresponding to the start of project activities (as they are defined by the relevant methodology) on a single Site within a GHG project implementing an Aggregate or Programmatic Design Approach.
Improved Forest Management (IFM)	Activities to reduce GHG emissions and/or enhance GHG removals, implemented on lands designated, sanctioned, or approved for forest management (e.g., production of sawtimber, pulpwood, and fuelwood). Eligible IFM project activities include conversion from conventional logging to reduced-impact logging; conversion of managed forests to protected forests ("stop logging"); extending rotation lengths in managed forest; conversion of low-productive forests to high-productive forests; increasing forest productivity by thinning diseased or suppressed trees; managing competing brush and short-lived forest species; increasing the stocking of trees on understocked areas (including lands not historically managed as forest but meeting the applicable "forest" definition due to percent tree cover or other factors); increasing carbon stocks in harvested wood products; improving harvest or production efficiency; and shifting from shorter- to longer-term wood products.
Indirect GHG Emissions	GHG emissions caused by a Project Proponent's activities but that are not directly released into the atmosphere from sources owned or controlled by the Project Proponent. Indirect emissions can occur upstream or downstream from activities directly controlled by the Project Proponent.
Intentional Reversal	In the context of terrestrial sequestration, the decrease of carbon stocks within a project area below levels associated with previously issued ERTs as a result of intentional, willful activity (e.g., harvesting, forest conversion, willful withdrawal of a parcel/parcels) on the part of the Project Proponent or project owner(s). When carbon stocks decline in this way (i.e., negative stocks, relative to previous reporting), it is assumed that the carbon is released back into the atmosphere and must be compensated per the provisions in the Project Proponent's Reversal Risk Mitigation Agreement with ACR.

[43] https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Chapter-6-Land-Use-Land-Use-Change-and-Forestry.pdf.

	In the context of geologic sequestration, atmospheric leakage of injected CO_2 from the storage volume that is not remediated and is the collateral effect of any planned activity affecting the storage volume.
Intergovernmental Panel on Climate Change (IPCC)	The "international body for assessing the science related to climate change. The IPCC was set up in 1988 by the World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP) to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation."[44]
Invasive Species	Non-native species that cause or may cause economic or environmental harm, harm to human health, or harm to natural resources or their use.
Issue/Issuance	To assign a unique serial number to a verified GHG emission reduction or removal for tracking the carbon credit on ACR's transparent, public registry platform.
Leakage	A decrease in sequestration or increase in GHG emissions outside project boundaries resulting from project implementation. Leakage may be caused by shifting of the activities of people present in the project area or by market effects whereby GHG emission reductions or removals are countered by emissions created by shifts in supply of and demand for the products and services affected by the GHG Project.
Listing	The process by which a Project Proponent submits a GHG Project Listing Form to ACR for review, the successful outcome of which results in the GHG Project being approved for listing on the ACR Registry. ACR's review and subsequent approval of a project listing is not a project registration, nor does it take the place of a successful validation and verification.
Methodology	A systematic approach that establishes requirements for a Project Proponent to develop a project's baseline scenario(s) and to quantify, monitor, report, and verify GHG emission reductions and/or removals by following scientific good practice. Good practice entails that a methodology be conservative, transparent, and scientifically-based.
Methodology Deviation	A Project-specific change to the requirements of an existing approved methodology due to a change in the conditions, circumstances, or nature of a

[44] https://www.ipcc.ch/site/assets/uploads/2021/07/AR6_FS_What_is_IPCC.pdf.

	GHG project. A deviation may be accepted for a specific Project but does not result in an approved modification to the methodology.
Methodology Revisions	A methodology revision is a fundamental change in an existing approved methodology due to a change in conditions, circumstances, or general developments in knowledge. Approval of revisions may require public consultation and peer review.
Methodological Tools	An approved component of a methodology (e.g., a stand-alone methodological module to perform a specific task) or a calculation tool (e.g., spreadsheets or software that perform calculation tasks) that a Project Proponent uses to quantify Total GHG Emission Reductions and Removals or meet other ACR requirements.
Minimum Project Term	The minimum time period for which an AFOLU Project Proponent commits to project continuance, monitoring, reporting, and verification.
Monitoring	Continuous or periodic direct measurements and/or indirect assessment of GHG emissions, emission reductions, removals, and other GHG data that is typically specified in the ACR-approved methodology, and other project information as specified in the ACR Standard.
Monitoring Report	The report detailing a Project's activity, GHG calculations, and monitored eligibility criteria and parameters for each Reporting Period. A Project Proponent is required to submit a new Monitoring Report to the VVB during each verification, and a finalized version to ACR upon completion of each verification. Project Proponent or Project Developer Account Holder, if not the same entity, must also submit attestations regarding the continuance, regulatory compliance, ownership, and community and environmental/social impacts of a GHG project in each Monitoring Report.
Native vs. Non-native Species	Native species are species naturally present within an area not as a result of human movement or activity. Species which have expanded from their historic range without human intervention are considered native. Non-native species are species introduced into an area, intentionally or unintentionally, as a result of human movement or activity.
Naturalized Species	Non-native species that reproduce and survive in an area where they are not native, without any benefit of human activity. Even though their offspring

	reproduce and spread naturally (i.e., without human help), naturalized plants do not become native species.
Net GHG Emission Reductions and Removals	Total GHG Emission Reductions and Removals minus any deductions for reversal risk mitigation. For AFOLU projects that use the Buffer Pool as their risk mitigation mechanism, this deduction is the Buffer Pool Contribution. For geologic sequestration projects that use the Reserve Account as their risk mitigation mechanism, this deduction is the contribution to the Reserve Account.
Ozone-Depleting Substances (ODS)	Controlled substances under Annexes A, B, C, and E of the Montreal Protocol,[45] many of which are also potent GHGs. The Montreal Protocol controls the consumption, production, and international trade of ODS, but not emissions; therefore, the destruction of ODS in existing facilities and equipment worldwide has the potential to prevent significant GHG emissions.
Pasture	Grassland that has been seeded, usually to introduced species, and intensively managed for livestock using agronomy practices and control of livestock.
Permanence	In GHG accounting, a reference to the perpetual nature of GHG emission reductions and removals, and the risk that a project's atmospheric benefit will not be permanent. GHG emission reductions and removals may not be permanent if a project has exposure to risk factors such as intentional or unintentional events (e.g., fire, flood, insect infestation) that results in the emissions into the atmosphere of stored or sequestered CO_2e for which carbon credits were issued (i.e., a reversal).
Programmatic Development Approach (PDA)	A GHG Project in which successive cohorts of Sites are added incrementally to a Project over time. A PDA project must be coordinated by a single Project Proponent (public or private entity) that must use an approved baseline and monitoring methodology that defines the appropriate boundary, avoids double counting, accounts for leakage, and ensures that the GHG emission reductions and removals are real, measurable, verifiable, and additional to any that would occur in the absence of the Project.

[45] See https://ozone.unep.org/sites/default/files/Handbooks/MP_Handbook_2019.pdf.

Project Boundaries	A GHG Project's physical boundary or implementation area, the GHG sources, sinks and reservoirs (or pools) considered, and the project duration.
Project Proponent	An entity that undertakes, develops, and/or owns or controls the lands/facilities on which project activities are conducted. This may include the project investor and/or designer. The Project Proponent and landowner/facility owner may be different entities. For Aggregated and PDA projects that include multiple landowners/facility owners, the Project Proponent is the ACR Project Developer Account Holder and shall enter into a legally binding Reversal Risk Mitigation Agreement with ACR, if applicable.
Rangeland	A land use category generally synonymous with grazed grassland. Rangelands support native vegetation and include areas that have been seeded to introduced species but are managed as native range.
Registration	GHG Projects are considered registered and eligible for ERT issuance into a Project Proponent's account upon acceptance of the Validation Report, Validation Opinion, Verification Report and a positive Verification Opinion.
Reporting Period	The period of time covering a GHG statement that is submitted for a single verification and subsequent request for ERT issuance. Unless otherwise noted in a methodology, there is no minimum length and the maximum length is five (5) years.
Retire or Retirement	The permanent removal of a carbon credit from circulation as a transactable unit so that it represents a permanent reduction or removal of CO_2e from the atmosphere. A retired credit may be applied toward the GHG emission reduction target of the ACR account holder that retired the credit, or on behalf of a third party.
Reserve Account	An ACR-approved risk mitigation mechanism for geologic sequestration projects. Project Proponents who choose this mechanism shall mitigate reversal risk by contributing ERTs in the amount determined by the methodology from the Project itself or from another GHG project to the Reserve Account.
Reversal	An intentional or unintentional event that results in the emissions into the atmosphere of stored or sequestered CO_2e for which carbon credits (ERTs) were issued to AFOLU or geologic sequestration projects.

Reversal Risk Analysis	To account for and mitigate against the risk to permanence in AFOLU Projects, ACR requires Project Proponents to conduct a project-specific risk analysis to determine the number of credits that must be deposited in the ACR Buffer Pool. The risk analysis evaluates several types of risk—project, economic, regulatory, and social and environmental/natural disturbance—and must be conducted using the ACR-approved tool.
Site	A physical location at which GHG emissions are generated and/or GHG emission reductions and/or removals are achieved. Project Sites may consist of forest, fields, parcels of land, or industrial facilities located within the project boundary.
Standard	A standard is an established norm or requirement in a formal document that establishes uniform engineering or technical criteria, methods, processes, and practices. Standards may provide general guidance across all project types, such as this document, or be sector-specific. ACR registers only GHG projects that meet the ACR Standard.
Start Date	For non-AFOLU projects, the date on which the Project began to reduce GHG emissions against its baseline. For AFOLU projects, the date on which the Project Proponent began the activity on project lands, with more specific guidance in the relevant ACR sector-specific requirements.
Sustainable Biomass	Biomass which meets one of the following conditions: a. The biomass is a biomass residue directly sourced from the land areas on which it originates and the use of that biomass residue in a project activity does not involve a decrease of long-lived carbon pools, in particular dead wood, litter or soil organic carbon, on the land areas from which the biomass residues originate; b. The biomass is the non-fossil fraction of industrial or municipal waste, which can include agricultural residues, animal wastes, forestry residues, wood wastes, industrial wastes such as black liquor and food processing.
Terrestrial Sequestration	The process of maintaining and increasing the carbon stock of terrestrial carbon pools by changing the management of forests, rangelands, agricultural lands, and wetlands, resulting in avoided emissions of CO_2 to or increased removals of CO_2 from the atmosphere and sequestration of carbon through biological processes.

Title	A legal term representing rights and interests in a carbon credit, a future stream of credits, or a GHG project delivering credits.
Total GHG Emission Reductions and Removals	GHG Emission Reductions and Removals achieved by a project, minus any deductions for uncertainty and leakage, as prescribed by the applicable ACR-approved methodology.
Unintentional Reversal	In the context of terrestrial sequestration, the decrease of carbon stocks within a project area below levels associated with previously issued ERTs as a result of natural disturbances. Examples include fire, disease, and insect infestations. In the context of geologic sequestration, the unplanned release of CO_2 from the storage volume.
Validation	The systematic, independent, and documented process for the evaluation of a GHG Project Plan against applicable requirements of the ACR Standard, the applicable ACR-approved methodology, and any other applicable audit criteria (e.g., relevant errata and clarifications). Validation must be conducted by an ACR-approved independent third-party Validation and Verification Body (VVB).
Validation Opinion	A document issued by a VVB that provides assurance, through examination of objective evidence by a competent and independent third party, of the reasonableness of the assumptions, methods, and limitations used to develop the GHG Project Plan.
Validation/ Verification Body (VVB)	A competent and independent person, persons, or firm responsible for performing the validation and/or verification process. A VVB must be ACR-approved to conduct validation and/or verification.
Verification	The systematic, independent, and documented assessment by a qualified and impartial third party of the GHG statement for a specific Reporting Period. The verification process is intended to assess the degree to which a GHG project complies with the applicable ACR-approved methodology, tools, eligibility criteria, requirements, and specifications, and has correctly quantified Total and Net GHG Emission Reductions and Removals. Verification must be conducted by an ACR-approved, accredited third-party Validation and Verification Body (VVB).

Verification Opinion	A document issued by a VVB that provides assurance, through examination of objective evidence by a competent and independent third party, that a GHG statement is in conformity with applicable requirements.
Vintage	The calendar year in which a GHG emission reduction or removal is verified to have occurred.
Wetlands	Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and that under normal circumstances do support) a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Appendix A: ACR Requirements for Agriculture, Forestry, and other Land Use Projects

Purpose

This annex details ACR's overarching requirements for the quantification, monitoring, and reporting, verification, registration, and issuance of GHG emission reductions and removals from AFOLU project activities. All AFOLU projects must also meet all relevant requirements of the main body of this ACR Standard.

The ACR Requirements for AFOLU Projects supersedes the ACR Forest Carbon Project Standard version 2.1 and includes updates, clarifications for consistency, and removal of redundancies with the ACR Standard and approved methodologies. Details around non-forest project types have also been added to include agriculture and other land use-specific requirements. All essential requirements remain unchanged.

Applicability

The ACR Requirements for AFOLU Projects cover the project types specified in Section A.1 below. Other eligible AFOLU carbon project types may be added in the future.

A.1 Eligible Project Types

A.1.1 ELIGIBLE PROJECT TYPES

The following broad categories of AFOLU project types are eligible for registration on ACR. Within each category, the GHG Project Plan will outline specific activities undertaken to reduce GHG emissions and/or enhance removals.

- **IMPROVED FOREST MANAGEMENT (IFM)** Activities to reduce GHG emissions and/or enhance GHG removals, implemented on lands designated, sanctioned, or approved for forest management

(e.g., production of sawtimber, pulpwood, and fuelwood). Eligible IFM project activities include conversion from conventional logging to reduced impact logging; conversion of managed forests to protected forests ("stop logging"); extending rotation lengths in managed forest; conversion of low-productive forests to high-productive forests; increasing forest productivity by thinning diseased or suppressed trees; managing competing brush and short-lived forest species; increasing the stocking of trees on understocked areas (including lands not historically managed as forest but meeting the applicable "forest" definition due to percent tree cover or other factors); increasing carbon stocks in harvested wood products; improving harvest or production efficiency; and shifting from shorter- to longer-term wood products and activities to avoid emissions from wildfire by improving fuels and fire management.

- **AFFORESTATION/REFORESTATION (AR)** Activities to increase carbon stocks by establishing, increasing, and restoring vegetative cover through the planting, sowing, or human-assisted natural regeneration of woody vegetation. AR activities must target the eventual establishment of "forest" per the applicable definition. 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, and "reforestation" is applied to activities to reestablish forest on lands that were in forest cover relatively recently. ACR does not make a specific distinction between afforestation and reforestation, because both are eligible.

  Project Proponents shall document that afforestation/reforestation project lands were not cleared of trees during the ten (10) years preceding the project Start Date in order to implement an afforestation/reforestation project. This exclusion does not apply to natural disturbances or to removal of non-tree vegetation (e.g., heavy brush) to prepare the site for planting. Project lands that already meet the applicable "forest" definition due to the percentage tree cover or other factors, and on which a Project Proponent wishes to implement activities to increase carbon stocks by increasing and restoring vegetative cover through the planting, sowing, or human-assisted natural regeneration of woody vegetation, qualify under the Improved Forest Management (IFM) category.

- **AVOIDED CONVERSION OF FOREST (AC-F)** Activities that reduce GHG emissions and/or enhance removals from the avoided conversion of forest to non-forest use (e.g., to cropland, grassland, settlement, mining, or development).

- **AGRICULTURE-AVOIDED EMISSIONS** Activities that reduce emissions of GHGs by improving efficiency of inputs or the application of a lower GHG practice practice/technology. Eligible project activities include changes to fertilizer rate and application, and changes in rice management systems.

- **WETLAND RESTORATION OR REVEGETATION** Activities that increase carbon sequestration and/or prevent soil oxidation on degraded wetlands. Eligible project activities include tidal wetland creation, deltaic wetland creation, and rewetting previously drained wetlands, including pocosins. Quantification frameworks and baseline definitions need to be developed for each location where this project type is applied due to unique, location-specific wetland dynamics, pressures, and restoration techniques.

- **AVOIDED CONVERSION OF NON-FOREST** The reduction in GHG emissions from the avoided conversion of lands with non-forest, native vegetation to anthropogenically productive uses (e.g., to cropland, settlement, or development). Eligible project activities include avoided conversion of grasslands and shrublands to crop production.

Project Proponents uncertain about eligibility of a planned activity may consult with ACR.

A.1.2 AFOLU PROJECTS WITH A BIOMASS ENERGY COMPONENT

AFOLU carbon activities may include a biomass energy component if they provide biomass fuel for Scope One, direct electricity generation, heating, or transportation fuels. Such projects occupy a unique GHG accounting niche with potential impacts on GHG emissions and removals in terrestrial ecosystems, as well as the ability to displace GHG emissions from fossil fuels. Projects that combine an eligible forest carbon project activity with biomass production shall account for changes in GHG emission reductions and removals in forest carbon pools using the requirements outlined in this document and appropriate AFOLU methodologies. Displacement of direct fossil fuel GHG emissions, if eligible, shall be accounted for by using appropriate energy sector methodologies and tools.

A.2 Accounting Principles

A.2.1 EXCLUSION OF POOLS IN ACCOUNTING

Project Proponents should refer to Chapter 2 of the ACR Standard for general accounting and data quality principles. Additional guidance is provided here for forest AFOLU projects. In general, the basis for ACR's accounting principles is ISO 14064-2:2019, Specification with guidance at the project level for quantification, monitoring, and reporting of GHG emission reductions or removal enhancements.

Project Proponents shall apply the guidance in ISO 14064-2:2019 and consider all relevant information that may affect the accounting and quantification of GHG emission reductions and removals, including estimating and accounting for any decreases in carbon pools, avoided emissions, and/or increases in GHG emission sources.

ACR methodologies dictate which GHG sources, sinks, and pools must be accounted for in the GHG boundary for each Project. However, the Project Proponent may elect to exclude from accounting a GHG source, sink, or pool if any of the following is demonstrated:

- The source, sink, or pool is a priori optional per the guidance below or has been explicitly excluded from the project boundary in the applied methodology.

- The source, sink, or pool is demonstrated to be de minimis per the ACR definition. A pool or source not initially considered de minimis in ex-ante calculations, but found to be de minimis in monitoring, may be omitted from subsequent monitoring and verification if the Project Proponent presents evidence that the pool or source is likely to remain indefinitely below the de minimis threshold (i.e., that the monitoring activities in which an individual pool or source was de minimis was not merely a temporary condition).
- All combined sources, sinks, and pools thus excluded must represent less than 3% of the ex-ante calculation of Total GHG Emission Reductions and Removals for the entire Crediting Period.

Sources, sinks, and pools that could be excluded may still be accounted; but any source, sink, or pool selected for accounting in the baseline scenario must also be accounted in the with-project scenario.

The following pools and sources are considered insignificant a priori for AFOLU projects.

Emissions sources:

- Fertilizer application in forest projects.
- Removal of herbaceous vegetation in forest projects.
- Transportation emissions from vehicles used in project visits, monitoring, verification, etc. This does not include emissions of harvest, processing, or transport equipment, which may be insignificant but are not insignificant a priori; the Project Proponent shall justify exclusion of such emissions.
- Collection of wood from non-renewable sources to be used for fencing of the project area.
- Nitrous oxide (N_2O) emissions from decomposition of litter and fine roots from nitrogen-fixing trees.

Carbon pools:

- Litter

A.3 Eligibility Requirements

A.3.1 AFOLU LAND CLASSIFICATION

1. Forest projects shall use a nationally approved “forest” definition for the country where the activity occurs. For projects in the United States, Project Proponents shall use the U.S. definition below, which is based on the U.S. Forest Service Forest Inventory & Analysis Program definition. For projects outside of the United States, Project Proponents may use the Kyoto Protocol definition below, 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 no longer has a designated DNA or whose DNA has not made these selections, the Project Proponent may propose another nationally approved forest definition.

FOREST (for projects in U.S.; based on U.S. Forest Service Forest Inventory & Analysis Program definition)[46]

Land with at least 10% cover (or equivalent stocking) by live trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated. To qualify, the area must be at least one (1) acre in size. Forest land includes transition zones, such as areas between forest and non-forest lands that have at least 10% cover (or equivalent stocking) with live trees and forest areas adjacent to urban and built-up lands. Projects in eligible countries outside of the US must apply the national definition of forest, consistent with what is used to report under its NDC and in UN reporting.

The definition of forest shall apply in each eligible forest project category. For example, Afforestation/ Reforestation activities must target the eventual establishment of a forest; IFM activities must be implemented in a forest remaining as forest; and Avoided Conversion activities must be implemented in a forest and prevent its conversion to non-forest or its degradation.

2. Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and that under normal circumstances do support) a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Methodologies specific to different types of wetlands must define the specific regional geographic applicability.
3. Agricultural Land is defined as any ecosystem modified or created specifically to grow or raise biological products for human consumption or use. This includes cropland, pasture, rangeland, orchards, groves, vineyards, nurseries, ornamental horticultural areas, and confined feeding areas. It is generally synonymous with farmland.
4. Grassland and shrubland is a land-use category on which the plant cover is composed principally of grasses, grass-like plants (e.g., sedges and rushes), forbs, or shrubs suitable for grazing and browsing, and includes both pastures and native rangelands. This includes areas where practices such as clearing, burning, chaining, and/or chemicals are applied to maintain the grass vegetation. Land is also categorized as Grassland if there have been three (3) or fewer years of continuous hay production. Savannas, deserts, and tundra are considered grassland. Drained wetlands are considered Grassland if the dominant vegetation meets the plant cover criteria for Grassland. Woody plant communities of low forbs, shrubs and woodlands, such as sagebrush, mesquite, chaparral, mountain shrubland,

[46] See https://www.fia.fs.usda.gov/library/database-documentation/current/ver90/FIADB%20User%20Guide%20P2_9-0-1_final.pdf at page 90. ACR does not exclude urban forestry activities, or forested areas less than 120 feet wide, from potentially meeting the definition of forest.

and pinyon-juniper are also classified as Grassland if they do not meet the criteria for Forest Land. Grassland includes land managed with agroforestry practices such as silvopasture and windbreaks, if the land is principally grass, grass-like plants, forbs, and shrubs suitable for grazing and browsing, and assuming the stand or woodlot does not meet the criteria for Forest Land.[47]

A.3.2 ELIGIBLE LAND OWNERSHIP TYPES

ACR accepts projects on all land ownership types—private, public (municipal, county, state, federal, or other), and tribal—provided the Project Proponent demonstrates that the land is eligible, documents clear land title and carbon credit title, the carbon credit contract is enforceable, and the project activity is additional and meets all other requirements of the ACR Standard. Projects on public lands, like any other project, shall demonstrate that the activity is not required by regulations and meets other additionality criteria. Agriculture and land use projects that generate ERTs with no risk of reversal need not demonstrate land title.

A.3.3 ELIGIBILITY CRITERIA

Table 4 details unique eligibility criteria for AFOLU projects, provides a definition of each criterion, and articulates ACR requirements specific to AFOLU project types. Project Proponents must also refer to Chapter 3 of the ACR Standard for additional requirements that apply to all project types. GHG Project Plans shall address each of these criteria.[48]

Table 4: Eligibility Criteria for AFOLU-Based GHG Projects

CRITERION	DEFINITION	REQUIREMENT
Start Date	For AR or Wetland restoration/revegetation projects, the Start Date is when the Project Proponent began planting or site preparation. For IFM, the Start Date may be denoted by one of the following:	AFOLU projects must be validated within three (3) years of the project Start Date. One exception applies to this timeframe: Proof of Concept Projects that engage with ACR to directly contribute to the development of a newly approved methodology or a newly approved modification that

[47] https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Chapter-6-Land-Use-Land-Use-Change-and-Forestry.pdf.

[48] A template for GHG Project Plans is available at https://acrcarbon.org/acr-program/.

CRITERION	DEFINITION	REQUIREMENT
	1. Land acquisition or easement enrollment date. 2. The date that the Project Proponent or project participant began to apply the land management regime to increase carbon stocks and/or reduce emissions relative to the baseline. 3. The date that the Project Proponent or project participant first demonstrated good faith effort to implement a GHG project. Such demonstration must include documented evidence of: a. The date the Project Proponent initiated a forest inventory for a GHG project. b. The date the Project Proponent entered into a contractual relationship or signed a corporate or board resolution to implement a GHG project. c. The date the Project was submitted to ACR for listing review, or for PDA projects, the date a Multi-Site Design Document describing a Site to be enrolled is formally submitted to ACR. 4. Other dates may be approved case-by-case on the basis of reasonable demonstration of intent to pursue GHG project origination. For Avoided Conversion of Forest and Avoided Conversion of Non-Forest,	expands the eligibility of a previously published methodology may be submitted for listing with ACR within five (5) years of the project Start Date. However, the date of listing submittal must be within six (6) months of the methodology publication date, and the GHG Project must then be validated within two (2) years of the listing.

CRITERION	DEFINITION	REQUIREMENT
	the Start Date is when the Project Proponent implemented the project action physically and/or legally, such as securing a concession, placing a land conservation agreement on the project land, or other relevant activities as defined by the methodology. All Start Date definitions also apply to Site-specific Implementation Dates within PDA projects.	
Minimum Project Term	The minimum period for which a Project Proponent commits to project monitoring, reporting and verification. This requirement applies only to AFOLU projects that have had ERTs issued that are associated with GHG removals (sequestration). AFOLU projects that have claimed only permanently avoided emissions (e.g., N_2O and CH_4) are not subject to this requirement.	Project Proponents of AFOLU projects with a risk of reversal shall commit to a Minimum Project Term of forty (40) years. The Minimum Project Term begins on the Start Date, not the first or last year of crediting. The Minimum Project Term is a requirement of the Project Proponent, not necessarily of the landowner (unless the landowner is the Project Proponent). ACR enters into legal agreements only with the Project Proponent. Project Proponents and landowners may continue AFOLU carbon activities beyond the Minimum Project Term, but ACR does not re-quire monitoring, reporting or verification unless the Crediting Period is renewed.
Crediting Period	Crediting Period is the finite length of time for which a GHG Project Plan is valid, and during which a project can	All AR projects shall have a Crediting Period of forty (40) years. All IFM projects shall have a Crediting Period of twenty (20) years.

CRITERION	DEFINITION	REQUIREMENT
	generate carbon credits against its baseline scenario. Crediting Periods are limited in order to require Project Proponents to reconfirm, at intervals appropriate to the project type, that the baseline scenario remains realistic and credible, the Project Activity remains additional, and GHG accounting best practice is being used.	Avoided Conversion projects on both forest and non-forest land with land conservation agreements in place[49] shall have a Crediting Period of forty (40) years, unless otherwise specified in chosen methodologies. Wetland Restoration/Revegetation projects shall have a Crediting Period of forty (40) years. The Crediting Periods for agriculture projects that avoid emissions by changing to lower GHG practices and those that include a soil sequestration component will be specified in the applicable methodology. 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. Projects that are deemed to meet all ACR additionality criteria upon validation are considered additional for the duration of their Crediting

[49] All land conservation agreements must be employed with a specified duration at least as long as the GHG Project's Minimum Project Term.

CRITERION	DEFINITION	REQUIREMENT
		Period with the exception of regulatory changes that effectively require project implementation after a Crediting Period has begun.[50] If a regulatory requirement (or similar requirement such as a permit condition) comes into force during the Crediting Period and such requirement effectively mandates project implementation, the project will no longer be eligible for crediting from the date the regulation takes effect, unless otherwise specified in the applicable methodology. If a Project Proponent chooses not to renew a Project's Crediting Period, it must continue monitoring, reporting, and verification activities for the duration of the Minimum Project Term. The Start Date and the start of the first Crediting Period are generally the same, unless otherwise allowable in the relevant methodology.
Land Eligibility	Land eligibility restrictions may apply to certain types of GHG projects.	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; or if project lands have experienced loss of forest cover within the last ten (10) years, this loss was caused by fire or natural

[50] Other than regulatory changes that effectively mandate project activity (for which additionality is re-evaluated during the Crediting Period), if the basis for additionality changes during the Crediting Period, the GHG Project may be ineligible for Crediting Period renewal.

CRITERION	DEFINITION	REQUIREMENT
		disturbance. Loss of forest cover due to fire or natural disturbance does not disqualify an AR project. Some reforestation projects require removal of non-tree vegetation to prepare the site and establish trees. An example is the removal of brush from areas where it has invaded after fire and prevented or significantly slowed the return of trees due to factors such as competition, water limitations, and lack of a nearby seed source. 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 de minimis threshold.
Land Title	Land title is a legal term representing rights and interests in project lands.	For U.S. projects with GHG emission reductions/removals resulting from terrestrial sequestration, Project Proponents (and/or associated landowners for an Aggregated or PDA project) shall provide documentation of clear, unique, and uncontested land title. For international projects, Project Proponents shall provide documentation and/or attestation of land title; ACR may require a legal review by an expert in local law. Land title may be held by a person or entity other than the Project Proponent, provided the Project Proponent can show clear, unique, and uncontested credit title. AFOLU projects that result only in the crediting of avoided emissions with

CRITERION	DEFINITION	REQUIREMENT
		no risk of reversal may not require demonstration of land title.
Natural Management Requirements	Natural management requirements ensure the growth of species that contribute to an ecosystem with broad environmental benefits and avoid potential negative impacts.	For AR and Wetland Restoration/Revegetation projects, Project Proponents must ensure that planting/regeneration of vegetation comprises at least 95% native species. Invasive species are not permitted whatsoever. Exceptions to the native species requirement may be granted on a case-by-case basis with ACR approval if at least one of the following can be demonstrated: • The non-native species can be considered naturalized; • The non-native species is not be considered invasive; • The non-native species are planted in accordance with a government-approved climate change adaptation plan, as supported by a written statement from a governmental agency involved in natural resource management in the project region attesting that the planting is an appropriate adaptation strategy; or • The non-native species are part of a small-scale (under 1,000 ha) agroforestry project with demonstrable livelihood benefits. For IFM and AC-F projects, forests that were converted from native species to non-native species within ten (10) years of the project Start Date are ineligible, and the planting of or

CRITERION	DEFINITION	REQUIREMENT
		management for non-native species is not permitted.
Permanent	Permanence refers to the longevity of GHG emission reductions and removals, and the risk of reversal (i.e., the risk that atmospheric benefit will not be permanent). Reversals may be unintentional or intentional. All AFOLU projects with GHG emission reductions and/or removals derived from terrestrial sequestration have a risk of reversal.	AFOLU Project Proponents shall periodically analyze reversal risk using the most recently published version of ACR's Tool for Reversal Risk Analysis and Buffer Pool Contribution Determination[51] and shall enter into a legally binding Reversal Risk Mitigation Agreement with ACR that details the risk mitigation option selected and the requirements for reporting and compensating reversals. Project Proponents of terrestrial sequestration projects shall mitigate reversal risk by contributing eligible ERTs to the ACR Buffer Pool or using another ACR-approved insurance or risk mitigation mechanism.

A.4 Baselines and Leakage

This chapter provides requirements on baselines and leakage for the broad categories of eligible AFOLU project activities. Exceptions to these requirements may occur in specific methodologies.

A.4.1 BASELINES: AFFORESTATION/REFORESTATION

The AR baseline scenario is the carbon stock present immediately prior to site preparation, or the most likely carbon stock in the absence of project implementation. If trees are present within the project boundary at the project start, Project Proponents may only account for sequestration in pre-existing trees as credits if growth of the trees is also projected in the baseline. If the Project Proponent

[51] In the event that an update to ACR's Tool for Reversal Risk Analysis and Buffer Pool Contribution Determination is released during a verification, Project Proponents shall use the version available at the end of the Reporting Period being verified.

does not intend to project growth of pre-existing trees in the baseline scenario, they should be excluded from the project boundary.

If natural forest regeneration is occurring or is likely to occur absent the project action, but the project action (planting, seeding, and/or the human-induced promotion of natural regeneration) accelerates the return to forest, then Project Proponents shall include the estimated natural regeneration in the without-project scenario in the baseline scenario.

Removals of any standing biomass as part of site preparation should be included in GHG project accounting if these exceed the de minimis threshold.

A.4.2 BASELINES: IMPROVED FOREST MANAGEMENT

The IFM baseline scenario shall quantify and justify harvest and forest growth in the absence of a GHG project. Wood products must be accounted for in an IFM baseline scenario. Each methodology shall specify the approach to calculating carbon in long-lived and landfilled wood products.

For Project-specific baselines, Project Proponents shall determine the baseline scenario by identifying credible alternative forest management scenarios to the proposed project activity, including historical and common practice forest management in the region, using the approach in an approved methodology. All forest management practices that are modeled in the baseline must be demonstrably legally and financially feasible. IFM baseline modeling must include all relevant legal constraints, including Safe Harbor Agreements, legally binding or State published Best Management Practices, restrictions related to endangered or threatened species, and any conservation easements (in place more than one (1) year prior to the Start Date).

Performance standard baseline approaches are allowed for IFM projects and shall be specified in the relevant methodology or approved on a case-by-case basis (where applicable).

A.4.3 BASELINES: AVOIDED CONVERSION OF FORESTS

The baseline for AC-F projects is the conversion of forest to non-forest over time. Baseline scenarios for planned deforestation and U.S. AC-F to non-forest can be directly calculated.

Avoiding deforestation displaces some use of the forest, often clearing of land for agriculture, or for developed uses such as buildings and roads. Therefore, activity-shifting leakage must always be considered for AC-F projects. Calculation of leakage must be specified in each methodology.

For unplanned deforestation, to determine the appropriate scale for setting a baseline, Project Proponents shall consider the cause of deforestation that the Project will address, then consider the

geographic range over which that activity is occurring. The goal is to determine potential leakage emissions from deforestation that have occurred across the entire area in which the Project might have an effect.

For planned deforestation and AC-F to non-forest, Project Proponents shall consider the probability of conversion as well as the carbon stock of the post-deforestation/conversion land use. The baseline agent of deforestation/conversion (or at a minimum a class of agent) must be identified, and the methodology must address activity-shifting leakage emissions.

A.4.4 BASELINES: AGRICULTURE-AVOIDED EMISSIONS

The baseline for Agriculture-Avoided Emissions projects is quantified by estimating the avoided emissions that result in a change from a high GHG practice to a low GHG practice. The baseline scenario shall represent the quantified emissions associated with higher GHG emitting practices. Baseline estimates shall be based on common practice, and emissions can be quantified using models, regional datasets, scientific literature, or other ACR-approved approaches. Each methodology will specify requirements for establishing baselines.

A.4.5 BASELINES: WETLAND RESTORATION AND REVEGETATION

The baseline for Wetland Restoration and Revegetation projects is quantified by estimating the emissions from a degrading or subsiding wetland or salinization. Baselines could also be agricultural practices, open water, or seasonal wetlands. In each methodology, baseline and project activities shall be specified per currently eligible geographies.

A.4.6 BASELINES: AVOIDED CONVERSION OF NON-FOREST

The full project area must currently be under a single land use classification and have qualified as that classification for at least ten (10) years prior to the Start Date (or Implementation Date in the case of Aggregated/PDA projects). It will remain as that classification throughout the project term and is legally able to be converted to alternate use in the absence of the project activity.

A.4.7 LEAKAGE

If an AFOLU project displaces activities, the Project Proponent shall account for the activity shifting, either by quantifying actual emissions that result for leakage or by applying a verifiable default. The geographic scope of activity-shifting leakage assessments should be constrained to the area in which the project activity can reasonably be expected to have resulted in activity shifting.

Similarly, if an AFOLU project causes market effects leakage, it must be accounted or mitigated. If AFOLU project activities cause a quantifiable, statistically significant decrease in supply of goods, then the methodology must provide an approach for addressing this (via deductions based on peer-reviewed literature, studies of market leakage rates, approved leakage mitigation techniques, approved leakage quantification approaches, or similar).

If AR project activities cause an increase in supply of emitting goods, ACR does not require Project Proponents to assess market leakage.

Projects that involve changes in hydrologic management practices (e.g., wetland restoration) must address the potential for ecological leakage (impacts outside the project boundary) caused by changes to the hydrologic regime as a result of project development.

More detailed leakage specifications in approved ACR methodologies must be followed.

A.5 Aggregated and Programmatic Development Approach Projects

A.5.1 RISK ANALYSIS

The Project Proponent shall analyze general and Project-specific risk factors for an Aggregated or PDA project as for any other project. The Buffer Pool Contribution Percentage is applied at the overall aggregate or PDA level. The risk of unintentional reversals may be lower for Aggregated or PDA projects, because risk may be diversified across a group of geographically dispersed project participants. The risk of intentional reversals could also be lower; in a large Aggregated Project, it is more likely that at least one project participant may choose to discontinue participation, but this risk is spread across multiple project participants and many acres so that the probability of intentional reversals significantly affecting the project stocks as a whole may be lower.

A.5.2 CARBON STOCK INVENTORY AND MONITORING OF SEQUESTRATION-BASED AFOLU PROJECTS

AFOLU projects with direct measurement of removals resulting from sequestration in an Aggregated or PDA project must meet the same accuracy and precision targets as non-grouped projects to avoid a confidence deduction.

As noted in Chapter 2, ACR requires a 90% statistical confidence interval of sampling of no more than ±10% of the mean. 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 GHG emission reductions/removals, or must be calculated as specified in the applied methodology.

For Aggregated or PDA projects, the ±10% at 90% confidence precision target is applied at the level of the Project overall. Project Proponents may use stratification to reduce inventory sampling intensity and cost to achieve this target. ACR advises Project Proponents to design projects within a single geographic region and relatively similar forest, land types, or crops, which combined with careful stratification as an initial inventory design step will help make the target achievable at reasonable costs spread across the overall Project.

ACR does not require any minimum number of inventory plots per participating landholding (unless otherwise specified in the methodology) as long as the target is achieved for the Project overall. ACR does not require individual landowner baseline inventories, as long as the Project Proponent has a stratified inventory meeting ACR requirements for the (Aggregated) Project overall. Arrangements with individual project participants regarding inventories, entry and exit, crediting, Buffer Pool Contributions, and other factors are left to the discretion of the Project Proponent.

As with initial carbon stock inventories and soil sampling, standards for monitoring and verification are applied at the level of the overall Project, whether it is a single large landholding or an Aggregated or PDA project.

A.6 Use of Models

Process-based biogeochemical models and empirical models may be approved for use under ACR-approved AFOLU methodologies to quantify emissions. The correct application of any such models shall be specified in the approved methodology. To be applicable, any model shall:

- Have the potential to model emissions from the relevant practice change(s) with consideration of relevant factors;

- Have been accepted in a peer reviewed scientific publication and/or been published by a government agency;[52] and
- Allow for the calculation of uncertainty in predicted emissions (as the root mean squared error (RMSE) for empirical models), meeting the relevant requirements for uncertainty assessments as stated in Section 2.B.3.

A.6.1 REQUIREMENTS FOR PROCESS-BASED BIOGEOCHEMICAL MODELS

Process-based biogeochemical models must consider the following factors, where relevant:

- Atmospheric factors (e.g., atmospheric background concentrations of ammonia and CO_2, and nitrogen concentration in rainfall);
- Daily meteorology;
- Edaphic factors (e.g., clay content; bulk density; soil pH; SOC at surface soil;[53] soil texture; slope; depth of water retention layer; field capacity; wilting point);
- Cropping factors (e.g., crop type; planting date; harvest date; carbon-to-nitrogen ratio of the grain, leaf + stem tissue and root tissue; fraction of leaves and stem left in field after harvest; maximum yield);
- Tillage factors (e.g., number of tillage events, date and depth of tillage events);
- Fertilizer application factors (e.g., number of fertilizer applications; date of each fertilizer application; application method; type of fertilizer; fertilizer application rate; number of organic applications per year; date, type, carbon-to-nitrogen ratio, and rate of organic amendment application); and
- Irrigation factors (e.g., number of irrigation events; date, type, and rate of irrigation event).

For application of the selected model to the project area, the following criteria must be met: There must be a study or studies (e.g., scientific journals, university theses, local research studies, or work carried out by the Project Proponent) that demonstrate that the use of the selected model is appropriate for the IPCC climatic regions of 2019 Refinement of the IPCC AFOLU Guidelines[54] or the agroecological zone (AEZ) in which the Project is situated using one of the following options:[55]

[52] ACR may also approve other models on a case-by-case basis via an ACR-lead peer review process.

[53] Depth as required by the process model.

[54] https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/4_Volume4/19R_V4_Ch03_Land%20Representation.pdf.

[55] IPCC. 2006, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4: Agriculture, Forestry, and Other Land Use. Prepared by the National Greenhouse Gas Inventories Programme, Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds). Published: IGES, Japan. http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html.

Option 1 The studies used in support of the Project should meet the guidance on model applicability as outlined in IPCC AFOLU guidelines in order to show that the model is applicable for the relevant IPCC climatic region. The guidance notes that an appropriate model should be capable of representing the relevant management practices and that the model inputs (i.e., driving variables) are validated from country- or region-specific locations that are representative of the variability of climate, soil, and management systems in the country.

Option 2 Where available, the use of national-, regional-, or global-level AEZ classification is appropriate to show that the model has been validated for similar AEZs. It is recognized that national-level AEZ classifications are not readily available; therefore, this methodology allows the use of the global and regional classification.

Where a project area consists of multiple Sites, it is recognized that studies demonstrating model validity using either Option 1 or Option 2 may not be available for each of the Sites in the project area. In such cases, the study used should be capable of demonstrating that the following two conditions are met:

1. The model is validated for at least 50% of the total project area relevant to the practice change where the project area covers up to 50,000 ha; or at least 75% of the total project area where the project area relevant to the practice change covers more than 50,000 ha; and
2. The area for which the model is validated generates at least two-thirds of the total GHG emission reductions and/or removals, as applicable.

A.7 Validation and Verification

A.7.1 VALIDATION AND VERIFICATION REQUIREMENTS

ACR definitions and requirements for independent validation and verification are provided in Chapter 9 and in the separate ACR Validation and Verification Standard.

A.7.2 DESK-BASED VERIFICATION ON REQUEST FOR NEW ISSUANCE

At each interval that the Project Proponent requests issuance of ERTs (usually annually, but may be more or less frequent), the Project Proponent shall submit a Monitoring Report and a verification document that are the product of a desk-based audit by an ACR-approved verifier. If applicable, this audit may use satellite or other aerial imagery, or other means acceptable to the verifier and ACR, to verify project continuance and boundaries.

A.7.3 FULL VERIFICATION EVERY 5 YEARS

ACR requires a full verification for all projects, including a site visit to the project site, no less frequently than every five (5) years (unless otherwise stated in the relevant ACR Methodology). In AR and wetlands restoration projects, several years may elapse between the project Start Date and significant carbon accrual in vegetation. These project types may defer their first verification up to twelve (12) years after project Start Date. The scope of full verifications should include such carbon stock measurements as the verifier requires to provide a reasonable level of assurance that the GHG statement is without material discrepancy (per ACR's materiality threshold of ±5%). It should also include an updated Reversal Risk Analysis and an updated Buffer Pool Contribution Percentage (if applicable).

Contingent upon successful submission of Monitoring Reports and required verification documents, projects continue to be credited for five (5) years following the start date of the latest Reporting Period upon which a full verification was performed. See Section 9.C for further details regarding the calculation of the five (5) year full verification interval.

The full verification with updated risk analysis also offers Project Proponents the opportunity to demonstrate that the risk of reversal has decreased, and thus decrease its contribution to the ACR Buffer Pool, as described in Chapter 5.

Appendix B: ACR Requirements for Avoiding Double Counting in the ICAO's CORSIA[56]

B.1 Purpose

According to *Guidelines on Avoiding Double Counting for the Carbon Reduction Offsetting Scheme for International Aviation (the Guidelines):*

"Greenhouse gas (GHG) emissions from international civil aviation are typically not included in countries' climate change mitigation targets under the United Nations Framework Convention on Climate Change (UNFCCC), its Kyoto Protocol and its Paris Agreement. Article 2.2 of the Kyoto Protocol mandated countries to work through the International Civil Aviation Organization (ICAO) to address these emissions.

In 2010, ICAO adopted an aspirational goal of carbon-neutral growth, meaning that global net carbon dioxide (CO_2) emissions from international aviation should be frozen at their 2020 levels. ICAO pursues a basket of measures to achieve this goal, including improved aircraft technologies, operational improvements, and sustainable aviation fuels. To address any remaining emissions above 2020 levels, in 2016 ICAO adopted an offsetting scheme—the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

CORSIA requires aeroplane operators to offset any increase of CO_2 emissions from international flights between participating countries above a 2020 baseline, through the purchase and cancellation of eligible emissions units. For emissions units to be eligible under CORSIA, they must comply with eligibility criteria, referred to as the CORSIA Emissions Unit Eligibility Criteria (EUC), and, accordingly, carbon offset-crediting programs that wish to provide carbon credits under CORSIA must demonstrate that the carbon credits meet the CORSIA Emissions Unit Eligibility Criteria. Carbon offset-crediting programs that are approved by ICAO as eligible under CORSIA will be included on a published list of CORSIA Eligible Emissions Unit Programs. Likewise, emissions units approved by ICAO as eligible under CORSIA will be included on a published list of CORSIA Eligible Emissions Units.[57]

[56] "*Guidelines on Avoiding Double Counting for the Carbon Reduction Offsetting Scheme for International Aviation*", ClimateWorks Foundation, Meridian Institute, Stockholm Environment Institute, version 1, July 2019.

[57] https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/CORSIA%20Eligible%20Emissions%20Units_March2023.pdf.

A key requirement under the CORSIA Emissions Unit Eligibility Criteria is that carbon crediting programs have in place rules and procedures to avoid the double counting of GHG emission reductions or removals. The Paris Agreement likewise requires countries to avoid double counting. Avoiding double counting is essential for environmental integrity, because if double counting occurs, actual global GHG emissions will be higher than the sum of what individual countries or entities report their emissions to be."

This Appendix B to the ACR Standard details requirements to avoid double counting in the CORSIA.

B.2 CORSIA Requirements for Avoiding Double Counting

The CORSIA Emissions Unit Eligibility Criteria, as adopted by the ICAO Council in March 2019, requires programs to put measures in place to avoid all three forms of double counting: double issuance, double use, and double claiming as defined by ICAO in the box below.[58]

Avoidance of Double Counting, Issuance and Claiming

Carbon offset credit integrity assessment criteria

Eligibility Criterion: Programs should deliver credits that represent emission reductions, avoidance, or sequestration that are only counted once towards a mitigation obligation. Measures must be in place to avoid:

a. Double issuance (which occurs if more than one unit is issued for the same emissions or emission reduction).

b. Double use (which occurs when the same issued unit is used twice, for example, if a unit is duplicated in registries).

c. Double claiming (which occurs if the same emission reduction is counted twice by both the buyer and the seller (i.e., counted towards the climate change mitigation effort of both an airline and the host country of the emission reduction activity). In order to prevent double claiming, eligible programs should require and demonstrate that host countries of emission reduction activities agree to account for any offset units issued as a result of those activities such that double claiming does not occur between the airline and the host country of the emission reduction activity.

[58] CORSIA Emissions Unit Eligibility Criteria, as adopted by the ICAO Council in March 2019, Carbon Offset Credit Integrity Assessment Criteria, item 7: Are only counted once towards a mitigation obligation

B.3 Functionality of the ACR Registry

A key element to avoid double counting in all of its forms is a robust and transparent registry platform, including a project database, that is publicly accessible, transparent and easily searchable, and provides relevant information needed to avoid double counting under CORSIA.

The robust registry and database platform must support project registration including providing a unique identifier for each project that can be cross-referenced with carbon credits issued in a program's carbon credit registry, so that project information can be identified for every carbon credit issued within the registry. ACR's registry platform is operational with all functionality and transparency needed to avoid double counting for CORSIA including items on the checklist in the Guidance[59] Section III.2 Table 3: *Checklist for the incorporation of the provisions set forth in these Guidelines into program documents and operations*, as detailed below:

1. Securely and transparently effectuating the issuance, transfer, retirement and cancellation of carbon credits;
2. Serialization and tagging of issuances so that each carbon credit is clearly associated with a specific Project, country, issuance block and vintage and so that information for avoiding double counting can be assigned to each carbon credit;
3. Public, downloadable, sortable reports on all carbon credits including Projects, issuances, retirements and cancellations with project information including:
    a. A description of the Project, including information on the mitigation technologies;
    b. The emission sources, sinks, and reservoirs and greenhouse gases included in the calculation of the Project's GHG emission reductions or removals;
    c. The Host Country and geographical location where the Project is implemented;
    d. The Project Proponent;
    e. The year(s) in which the GHG emission reduction/removal occurred (vintage);
    f. Any other information needed for the Project to be unambiguously identified, and distinguished from other projects that may occur in the same location;
    g. An indication whether the Project's mitigation activities and GHG emission reductions/removals are covered by the Host Country NDC targets (sector and target years) (for post 2020 credits);
    h. A Letter of Authorization from the Host Country, which will be posted on the registry once obtained (for post 2020 credits);
    i. Designation of the credits as Eligible for CORSIA once the Host Country Letter of Authorization has been obtained (for post 2020 credits); and
    j. Notice that the Host Country has applied an adjustment, once evidence obtained (for post 2020 credits).

[59] "*Guidelines on Avoiding Double Counting for the Carbon Reduction Offsetting Scheme for International Aviation*", ClimateWorks Foundation, Meridian Institute, Stockholm Environment Institute, version 1, July 2019

4. Retirement and cancellation procedures that ensure the removal of the unit is clearly indicated, irreversible, and unambiguously designated for an intended purpose. For cancellations of units for the CORSIA, the cancellation information will specify the aeroplane operator for which the carbon credits were cancelled and the calendar year for which an offsetting requirement is fulfilled through the cancellation."

B.4 ACR Requirements

ACR requirements for avoiding double counting in all of its forms are detailed in Chapter 10 of the ACR Standard. Procedures are in place and operable to avoid double issuance, double use and double claims of GHG emission reductions and removals including with the post-2020 Paris Agreement targets. Procedures currently in place to avoid double issuance and double use will remain the same for the CORSIA. ACR herein provides more precision and detail for its requirements to avoid double claiming in the CORSIA.

To avoid double claiming with progress towards mitigation targets pledged by countries in their Paris Agreement Nationally Determined Contributions (NDCs), countries must authorize the use of carbon credits by aeroplane operators under the CORSIA and provide assurance that they will report the use to the UNFCCC and make corresponding accounting adjustments. Countries then shall report to the UNFCCC and make adjustments as required by the UNFCCC, and ACR will seek evidence that pledged adjustments were made.

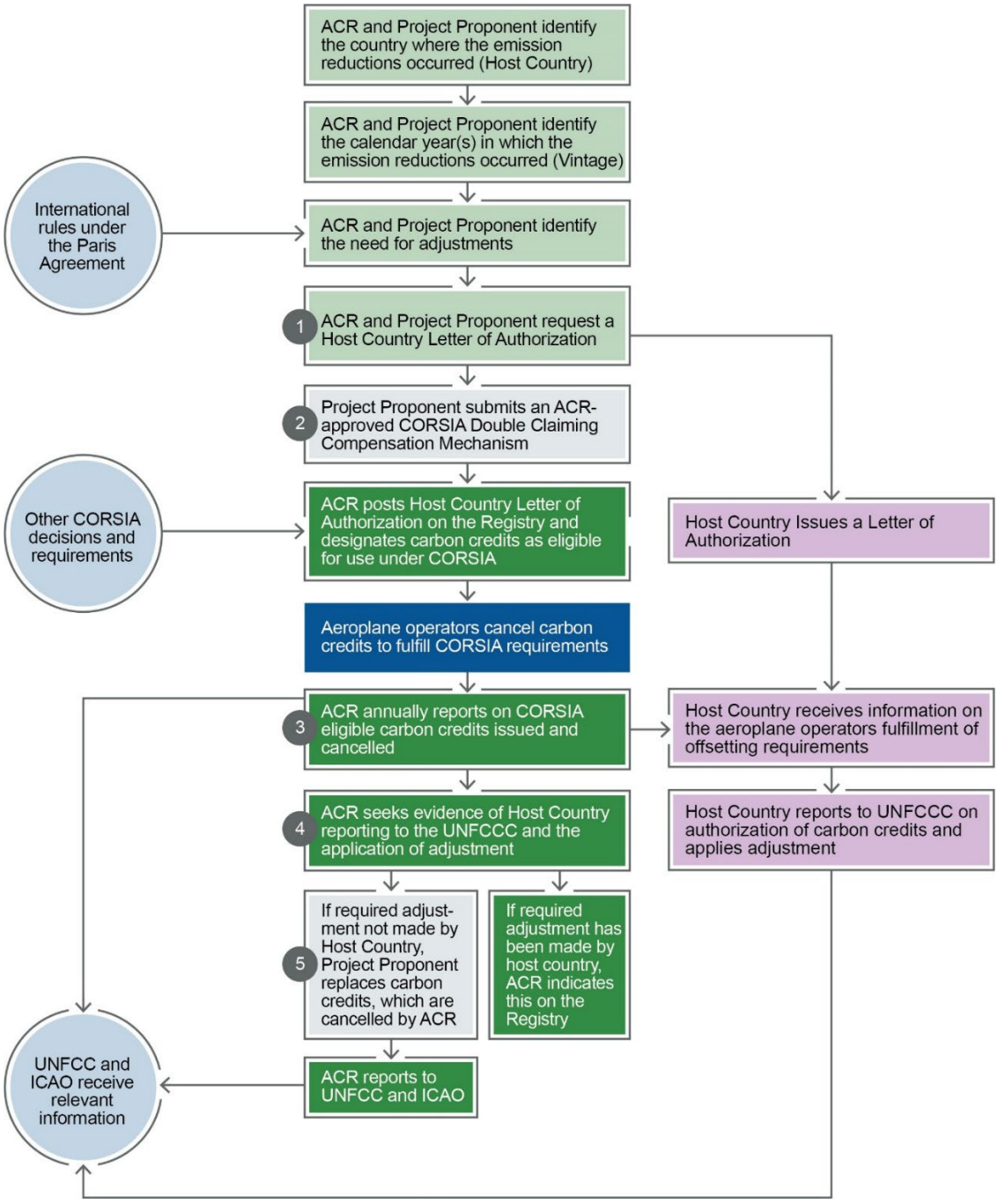
For ACR emissions units determined by ICAO to be CORSIA-eligible (project type, Start Date, vintage etc.), the steps detailed in workflow Figure 1 below, adopted from the Guidance, as adjusted for ACR-specific requirements including the compensation mechanism, will be necessary in order for the units to be eligible for use under CORSIA.

ACR plans to delegate some steps, as indicated, to Project Proponents, noting that ACR will review and approve all determinations and associated documentation. Below are details for the numbered steps in Figure 1.

1. The Host Country Letter of Authorization will be obtained from the country's UNFCCC Focal Point to designate post 2020 vintage units as eligible for CORSIA.

   ACR will make all Letters of Authorization publicly available by posting on the registry. For post 2020 units, ACR will only designate carbon credits as eligible for CORSIA once such a letter is received, only to any limit established in the letter and as long as all other ACR and CORSIA requirements are met including contributing to the ACR CORSIA Buffer Pool and executing the CORSIA Double Claiming Risk Mitigation Agreement as further described below.

Figure 1: Steps for Units to be Designated by ACR as Eligible for Use in CORSIA[60]



[60] "*Guidelines on Avoiding Double Counting for the Carbon Reduction Offsetting Scheme for International Aviation*", ClimateWorks Foundation, Meridian Institute, Stockholm Environment Institute, version 1, July 2019, Figure 1.

2. The Host Country Letter of Authorization will be obtained from the country's UNFCCC Focal Point to designate post 2020 vintage units as eligible for CORSIA.

   ACR will make all Letters of Authorization publicly available by posting on the registry. For post 2020 units, ACR will only designate carbon credits as eligible for CORSIA once such a letter is received, only to any limit established in the letter and as long as all other ACR and CORSIA requirements are met including contributing to the ACR CORSIA Buffer Pool and executing the CORSIA Double Claiming Risk Mitigation Agreement as further described below.

According to the *Guidelines* the letter should explicitly:

a. "Identify the specific Project and activity or group of project activities and acknowledge that the Project may reduce emissions and/or enhance removals in the country;
b. Acknowledge that ACR has issued, or intends to issue, carbon credits for [a stated volume in CO_2e] emission reductions and/or removals that occur within the country;[61]
c. Authorize the use of the Project's GHG emission reductions and/or removals, issued as carbon credits, by aeroplane operators in order to meet offsetting requirements under CORSIA;
d. Declare that the country will not use the Project's associated GHG emission reductions and/or removals to track progress towards, or for demonstrating achievement of, its NDC and will account for their use by aeroplane operators under CORSIA by applying relevant adjustments" in the structured summary of the country's biennial transparency reports, as referred to in paragraph 77, sub-paragraph (d), of the Annex to decision 18/CMA.1, and consistent with decisions in 2/CMA.3 and relevant future decisions by the CMA;
e. Define "first transfer" in terms of when a Corresponding Adjustment will be applied for other international mitigation purposes upon [SPECIFY either upon: 1) authorization, 2) issuance, or 3) the use or cancellation of the mitigation outcome, as specified by the participating Party]; and
f. "Declare that the country will report on the authorization and use of the Project's GHG emission reductions and/or removals for the CORSIA [or by other countries] in a transparent manner in the country's biennial transparency report submitted under Article 13 of the Paris Agreement."

[61] To ensure consistency in UNFCCC reporting and assurance of adjustments for CORSIA units issued, if the GWP value used by a country in its NDC reporting (in particular in its first NDC report) is different than the value used by ACR to calculate the volume of carbon credits issued, ACR will convert the carbon credit volume to the volume that should be adjusted using the same GWP values the country uses in its NDC reporting and provide that number to the country.

According to the *Guidelines* the letter may also:

a. "Authorize the use of the Project's GHG emission reductions and/or removals, issued as carbon credits, by other countries towards achieving their NDCs and/or by voluntary market buyers towards climate targets;
b. Include a request to ACR to provide information to the country on the use of the carbon credits.
c. Provide a limit for the maximum number of the Project's GHG emission reductions and/or removals, issued as carbon credits, that the country authorizes for use, including any limits on the time period over which the country provides such authorization" and/or other limitations on use (e.g., only for CORSIA); and
d. Include a request to ACR to provide information to the country on the use of the carbon credits.

A sample Letter of Authorization, adopted from the Guidance[62] and adjusted for ACR-specific requirements, is included as Exhibit 1 to this Appendix B.

3. ACR requires Project Proponent to compensate for, replace or otherwise reconcile instances of units used under the CORSIA and also claimed by the Host Country towards meetings its NDC ("compensation mechanism"). Project Proponents must present, in a form acceptable to ACR, a mechanism to compensate for double claims of GHG emission reduction and removal units between aeroplane operators for the CORSIA and host countries towards NDC achievement. Compensation is required in the event that the adjustment has not been made or credible evidence cannot be obtained by ACR within a year after the adjustment was due to be reported to the UNFCCC by the Host Country.

Options include:

a. Evidence of the application of the adjustment, as detailed in the Host Country Letter of Authorization, in country reports to the UNFCCC, in the Article 6 database or by other means (e.g. an irrevocable electronic certificate) from the Host Country indicating that the required adjustments have been applied within the relevant accounting system and an attestation that such adjustments will be reported to the UNFCCC in the next reporting period, before the unit could be cancelled for use by an aeroplane operator for CORSIA.[63]

[62] *Guidelines on Avoiding Double Counting for the Carbon Reduction Offsetting Scheme for International Aviation*", ClimateWorks Foundation, Meridian Institute, Stockholm Environment Institute, version 1, July 2019, Box 5 Example of a letter of assurance and authorization with further optional elements.

[63] The option of allowing an irrevocable electronic certificate will apply only in cases in between UNFCCC reporting periods and only when a Host Country has a robust GHG accounting system with functionality, such as a distributed ledger registry technology, to enable reporting of this type of real-time, transparent, immutable, irrevocable transaction information. When adjustments are demonstrated by an entry in the Article 6 database or via an irrevocable electronic certificate, ACR requires that the information on the adjustment also be recorded in country reports to the UNFCCC in the next reporting period.

b. A guarantee, in a form acceptable to ACR,[64] that any double-claimed units (those for which an adjustment has not been made) will be replaced with a volume of ICAO-eligible credits corresponding to the number of units that were double claimed by the Host Country ("Replacement Contribution"). These units must be ACR units, or comparable CORSIA-eligible units as approved by ACR, that have not been sold or otherwise committed. ACR will cancel the associated Replacement Contribution to mitigate the Host Country's double claim of GHG emission reductions and/or removals. This guarantee could be from a reputable third-party, an entity such as the Multilateral Investment Guarantee Agency (MIGA) or an ACR-approved insurance mechanism.

c. A guarantee,[65] in a form acceptable to ACR, that the guarantor will fully financially compensate ACR for the procurement of a Replacement Contribution for the double-claimed units. The Replacement units must be ACR units, or comparable CORSIA-eligible units as approved by ACR, that have not been sold or otherwise committed. ACR will cancel the associated Replacement Contribution to mitigate the Host Country's double claim of GHG emission reductions and/or removals. This guarantee could be from a reputable third-party, an entity such as the Multilateral Investment Guarantee Agency (MIGA) or an ACR-approved insurance mechanism.

d. Contribution to the ACR CORSIA Double Claiming Buffer Pool and execution of the CORSIA Double Claiming Risk Mitigation Agreement which details the requirement of the Project Proponent to replace the double-claimed credits with a volume of replacement CORSIA-eligible credits corresponding to the number of units that were double claimed by the Host Country. These units must be ACR units that have not been sold or otherwise committed or other CORSIA-eligible credits as approved by ACR. ACR will cancel the associated Replacement Contribution to mitigate the Host Country's double claim of GHG emission reductions and/or removals.

   The CORSIA Double Claiming Buffer Pool ("CORSIA Buffer Pool") contribution volume will be a percentage of the Project's credits as determined by the published Organization for Economic Co-Operation (OECD) Prevailing Country Risk Classification of the Host Country at the time of requesting CORSIA-eligible designation for the units, whereby a rating of 0-2 = 5% contribution, 3-4 = 20% contribution, 5-6 = 30% contribution and 7 = 40% contribution. Buffer pool contributions will be refunded once the corresponding adjustment has been applied.

4. ACR Annual Reporting on the eligibility designation and use of Units for CORSIA. ACR will publish annual reports that provide aggregated information related to the issuance, CORSIA-eligible designation, and cancellation of carbon credits. ACR will publish these reports within six (6) months after the end of a calendar year and will transmit the reports to ICAO and to all countries

[64] Any guarantee must be legally secure and binding, offered by a highly reputable third-party (i.e., a sovereign or corporate with a high grade or prime rating by Moody's, S&P and/or Fitch) and include sufficient remedies to cover ACR's costs for replacement units in the event of a default.

[65] Ibid.

in which the GHG emission reductions and/or removals associated with issued and CORSIA-eligible carbon credits occurred. Reported information will include:

a. Quantity of CORSIA-eligible carbon credits issued by country, calendar year, cancelled for CORSIA and cancelled for other purposes.
b. Quantity of CORSIA-eligible carbon credits cancelled by aeroplane operator for each CORSIA compliance period.
c. The maximum number of GHG emission reductions and/or removals from ACR projects authorized by countries for use by other countries or entities, by country and calendar year.

5. Obtaining evidence of the application of adjustments. ACR will take action to obtain evidence of the appropriate application of adjustments from the Host Country of GHG emission reductions and/or removals in the country's biennial transparency reports to the UNFCCC. The reports should clearly reference the carbon credits (e.g., using unique identifiers or serial numbers or a specific reference to the authorization letter) for which the country has applied the adjustments. Once evidence has been obtained, ACR will post such evidence on the registry and indicate that the adjustment has been made.

6. Remedy for CORSIA Double Claim. In the event that the adjustment has not been made or credible evidence cannot be obtained within a year after the adjustment was due to be reported to the UNFCCC by the Host Country, Project Proponent shall compensate for the double claimed volume following its selected compensation mechanism.

   ACR will inform the UNFCCC and ICAO accordingly and will evaluate possible revisions to the country's risk classification or whether to cease designating as eligible carbon credits from the respective country for CORSIA.

Exhibit 1 to Appendix B: Example Host Country Letter of Authorization

DATE:

TO: ACR, an enterprise of Winrock International

FROM: UNFCCC Focal Point, Government of Country X

RE: Letter of authorization related to GHG project Y

With regard to project Y, as described in the project documentation attached to this letter, we hereby acknowledge that the project may reduce greenhouse gas emissions in country X by [*describe activity*] and that ACR has issued, or intends to issue, carbon credits for these GHG emission reductions/removals.

We hereby authorize that the project's GHG emission reductions/removals, issued as carbon credits by ACR, may be used by aeroplane operators to meet offsetting requirements under CORSIA [optional: *or by other countries towards achieving their NDC and/or by voluntary market buyers towards climate targets,*] subject to the following restrictions:

- We authorize only the use of the project's GHG emission reductions/removals, for which ACR has issued or will issue carbon credits, that occur in the period from [DATE] to [DATE];
- We authorize only the use of a maximum of [#] tCO_2e of the project's GHG emission reductions/removals, issued as carbon credits by ACR, for each calendar year;
- We authorize the use of the GHG emission reductions and/or removals only for [NAME RESTRICTIONS ON USE]; and
- We acknowledge our definition of "first transfer" in terms of when we will apply a Corresponding Adjustment for other international mitigation purposes upon [SPECIFY ONE OF THE FOLLOWING: 1) authorization, 2) issuance or 3) the use or cancellation of the mitigation outcome, as specified by the participating Party].

We hereby request ACR to submit annual reports to us, no later than by 31 March of each year, on the actual issuance of carbon credits, as well as the use of the carbon credit's associated GHG emission reductions/removals by other countries or entities, including volumes cancelled for use by each country and entity.

We hereby declare that country X will not use the project's GHG emission reductions/removals to track progress towards, or for demonstrating achievement of, its NDC and that country X will account for the use of the project's GHG emission reductions/removals by aeroplane operators under CORSIA or by other countries through adjustments in the structured summary of country X's biennial transparency reports, as referred to in paragraph 77, sub-paragraph (d), of the Annex to decision 18/CMA.1, and consistent with relevant future decisions by the CMA.

We hereby also declare that country X will report on the authorization and use of the project's GHG emission reductions/removals by other countries or entities in a transparent manner in the country's biennial transparency report submitted under Article 13 of the Paris Agreement.

Appendix C: Normative References

The ACR Standard is based on the foundation laid by the normative reference standards and documents listed in Table 5 below. These documents assisted ACR to articulate its own requirements and specifications for the quantification, monitoring, and reporting of GHG project-based emission reductions and removals, verification, project registration, and issuance of project-based carbon credits.

In particular, the ACR Standard builds on the ISO technical specifications for GHG accounting, GHG statements and verification, and verifier accreditation as set forth in the ISO 14064-1:2018, ISO 14064 Parts 2-3:2019, and ISO 14065:2020. To the ISO specifications, ACR adds its own mandatory requirements as detailed in the ACR eligibility criteria, additionality determination process, and approved methodologies and tools. In the event of conflicts between the ACR Standard and the ISO technical specifications or other normative references, the ACR Standard shall take precedence.

Table 5: Normative References for the ACR Standard

AUTHORING BODY	DOCUMENT OR STANDARD	RELATIONSHIP TO ACR
International Standardization Organization (ISO)	• ISO 14064 Parts 1-3: A set of international standards that address the quantification, monitoring, reporting, and verification of GHG emissions reductions or removals • ISO 14065: Principles and requirements for validation and verification bodies	ISO 14064 provides a foundation for the ACR Standard with technical specifications for GHG project accounting, reporting and verification. ISO 14065 specifies requirements for verifier accreditation and validation/verification process requirements.
Intergovernmental Panel on Climate Change (IPCC)	• Guidelines for National GHG Inventories • Good Practice Guidance • Fifth Assessment Report	Identification of best practices and options for GHG emission inventory development; methodological guidance and primary seed document for

AUTHORING BODY	DOCUMENT OR STANDARD	RELATIONSHIP TO ACR
		more specific guidance materials and standards
International Civil Aviation Organization (ICAO)	• CORSIA Emissions Unit Eligibility Criteria	ACR is approved by the ICAO Council to supply CORISA Eligible Emissions Units for the 2021-2023 and 2024-2026 compliance periods.

Appendix D: References

Good Practice Guidance for Land Use, Land-Use Change, and Forestry (especially Chapter 4.3 on LULUCF projects). IPCC. https://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.html.

International Civil Aviation Organization (ICAO). CORSIA Emissions Unit Eligibility Criteria (2019). https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx.

International Organization for Standardization (ISO) 14064-1:2018(E) – Greenhouse gases. Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. https://www.iso.org/standard/66453.html.

International Organization for Standardization (ISO) 14064-2:2019(E) – Greenhouse gases. Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements. https://www.iso.org/standard/66454.html.

International Organization for Standardization (ISO) 14064-3:2019(E) – Greenhouse gases. Part 3: Specification with guidance for the validation and verification of greenhouse gas statements. https://www.iso.org/standard/66455.html.

International Organization for Standardization (ISO) 14065:2020(E) – General principles and requirements for bodies validating and verifying environmental information. https://www.iso.org/standard/74257.html.

Intergovernmental Panel on Climate Change (IPCC), 2019. 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 4 Agriculture, Forestry and Other Land Use. https://www.ipcc-nggip.iges.or.jp/public/2019rf/vol4.html.

Intergovernmental Panel on Climate Change (IPCC) 2014. Fifth Assessment Report. https://www.ipcc.ch/report/ar5/syr/.

United States Environmental Protection Agency (USEPA) Climate Leaders Program, GHG Inventory Protocol (May 2005). https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1004NBM.txt.

World Resources Institute and World Business Council for Sustainable Development. The Land Use, Land-Use Change, and Forestry (LULUCF) Guidance for GHG Project Accounting (LULUCF Guidance). https://www.wri.org/research/land-use-land-use-change-and-forestry-guidance-greenhouse-gas-project-accounting