

**International Civil Aviation Organization (ICAO) Carbon Offsetting and Reduction
Scheme for International Aviation (CORSA)**

Application Form for Emissions Units Programs

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SECTION I: ABOUT THIS ASSESSMENT

Background

Following the agreement at the 39th Assembly of the International Civil Aviation Organization (ICAO), governments and the aviation industry are getting ready to implement the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Together with other mitigation measures, CORSIA will help achieve international aviation's aspirational goal of carbon neutral growth from year 2020.

Aeroplane Operators will meet their offsetting requirements under CORSIA by purchasing and cancelling CORSIA eligible emissions units, which will be determined by the ICAO Council upon recommendations by its Technical Advisory Body (TAB), according to paragraph 20 d) of ICAO Assembly Resolution A39-3.

As an initial step, in November 2017, the ICAO Council provisionally approved CORSIA Emissions Unit Eligibility Criteria (EUC). Application of the EUC will serve as the basis for the Council's decisions on CORSIA-eligible emissions units.

To make further progress on the application of the EUC, the ICAO Council requested its Committee on Aviation Environmental Protection (CAEP) to informally test emissions unit programs against the EUC. The results and recommendations of the informal testing were provided to the Council, including the recommendation for the EUC to be used by the TAB in this assessment process.

Subsequently, in March 2019, the ICAO Council unanimously approved the EUC for use by the TAB in undertaking its tasks. At the same time, the ICAO Council also approved the 19 members of the TAB and its Terms of Reference (TOR).

ICAO has invited emissions unit programs to apply for the assessment, which will involve collecting information from each program through this program application form.

Through this assessment, the TAB will develop recommendations on the list of eligible emissions unit programs (and potentially project types) for use under the CORSIA, which will then be considered by the ICAO Council to make its decision on CORSIA eligible emissions units.

This form is accompanied by Appendix A "*Supplementary Information for Assessment of Emissions Unit Programs*", containing the EUC and *Guidelines for Criteria Interpretation*. These EUC and Guidelines are provided to inform programs' completion of this application form, in which they are cross-referenced **by paragraph number**.

Program responses to this application form will serve as the primary basis for the assessment. Such assessment may involve e.g. clarification questions, an in-person interview, and a completeness check of the application, as further requested. Programs which are invited for an in-person interview will receive advance notice of the time and date of the interview.

The working language of the assessment process is English. If the program documents and information are not published in English, the program should fully describe in English (rather than summarize) this information in the fields provided in this form, and in response to any additional questions. Translation services are not available for this process. Those programs that need to translate documents prior to submission may contact the ICAO Secretariat regarding accommodation.

Disclaimer: The information contained in the application, and any supporting evidence or clarification provided by the applicant including information designated as “business confidential” by the applicant, will be provided to the members of the TAB to properly assess the Program and make recommendations to the ICAO Council. The application and such other evidence or clarification will be made publicly available on the ICAO CORSIA website for the public to provide comments, except for information which the applicant designates as “business confidential”. The applicant shall bear all expenses related to the collection of information for the preparation of the application, preparation and submission of the application to the ICAO Secretariat and provision of any subsequent clarification sought by the Secretariat and/or the members of the TAB. Under no circumstances shall ICAO be responsible for the reimbursement of such or any other expenses borne by the applicant in this regard, or any loss or damages that the applicant may incur in relation to the assessment and outcome of this process.

SECTION II: INSTRUCTIONS

Submission and contacts

A Program is invited to complete and submit the form, and any accompanying evidence, through the ICAO CORSIA website no later than close of business on **12 July 2019**. Within seven business days of receiving this form, the Secretariat will notify the Program that its form was received.

If the Program has questions regarding the completion of this form, please contact ICAO Secretariat via email: officeenv@icao.int. Programs will be informed, in a timely manner, of clarifications provided by ICAO to any other program.

Form basis and cross-references

Questions in this form are derived from the criteria and guidelines introduced in Section I (above). To help inform the Program's completion of this form, each question includes the paragraph number for its corresponding criterion or guideline that can be found in Appendix A "*Supplementary Information for Assessment of Emissions Unit Programs*".

Form completeness

The Program is strongly encouraged to respond to all questions in this application form. If any question(s) in this form does not apply to the Program, please briefly explain the exception.

Where "evidence" is requested, programs are encouraged to substantiate their responses in any one of these ways (in order of preference):

- web-links to supporting documentation included along with the written summary response; with instructions for finding the relevant information within the linked source, if necessary;
- copying/pasting information directly into this form (no character limits) along with the written summary response;
- attaching supporting documentation to this form at the time of submission, with instructions for finding the relevant information within the attached document(s);

Please note that written summary responses are encouraged—supporting documentation should not be considered as an alternative.

To help manage file size, the Programs should limit supporting documentation to that which directly substantiates the Program's statements in this form.

Form scope

The Program may elect to submit for analysis all or only a portion of the activities supported by the Program.

In the template provided by Appendix B "Program Scope Information Request", the Program should clearly identify and submit along with this form information on the following:

- a) activities that the Program submits for analysis by describing them in this form;
- b) activities that the Program does not wish to submit for analysis, and so are not described in this form;

c) identification details (e.g., methodology date, version) for activities described in this form.

Information provided under “c” should allow for the unambiguous identification of all methodologies/protocols that the Program has approved for use as of the date of submission of this form.

Program revision

Where the Program has any immediate plans to revise the Program (e.g., its policies, procedures, measures) to enhance consistency with a given criterion or guideline, provide the following information in response to the relevant form question(s):

- Proposed revision(s);
- Process and proposed timeline to develop and implement the proposed revision(s);
- Process and timeline for external communication and implementation of the revision(s).

“Linked” certification schemes

This application form should be completed and submitted exclusively on behalf of the Program that was invited to participate in the assessment.

Some programs may supplement their standards by collaborating with other schemes that certify, e.g., the social or ecological “co-benefits” of mitigation. The Program can reflect a linked scheme’s procedures in responses to this form, where this is seen as enhancing—i.e. going “above and beyond”—the Program’s own procedures.

For example, the Program may describe how a linked scheme audits sustainable development outcomes; but is not expected to report the linked scheme’s board members or staff persons.

Programs should clearly identify any information provided in this form that pertains to a linked certification scheme and/or only applies when a linked certification scheme is used.

Disclosure of program application forms

Applications and other information submitted by emissions unit programs will be publicly available on the ICAO CORSIA website, except for materials which the applicants designate as business confidential.

The public will be invited to submit comments on the programs applications including regarding their consistency with the emissions units criteria (EUC), through the ICAO CORSIA website, for consideration by the TAB following its initial assessment of program applications.

SECTION III: APPLICATION FORM

PART 1: General information

A. Program Information

Program name: American Carbon Registry (ACR), an enterprise of Winrock International
Official mailing address: 2121 Crystal Drive, Suite 500 : Arlington, VA 22202
Telephone #: +1 703-302-6500
Official web address: <https://americancarbonregistry.org>

B. Program Administrator Information

Full name and title: John Kadyszewski, Director, American Carbon Registry
Employer / Company (*if not Program*): Winrock International (ACR parent organization)
E-mail address: JKadyszewski@winrock.org
Telephone #: +1 703-302-6518

C. Program Representative Information (if different from Program Administrator)

Full name and title: Mary Grady, Deputy Director, American Carbon Registry
Employer / Company (*if not Program*): Winrock International (ACR parent organization)
E-mail address: MGrady@winrock.org Telephone #: +1 805-252-1658

D. Program Senior Staff / Leadership (e.g., President / CEO, board members)

List the names and titles of Program's senior staff / leadership, including board members:

Winrock / American Carbon Registry (ACR) Management:

Rodney Ferguson, President and CEO, Winrock International
Jyjit Deb Roy, Senior Vice President of Programs, Winrock International
Amit Bando, Senior Director, Clean Energy, Environment and Water, Winrock International
John Kadyszewski, Director, American Carbon Registry, Winrock International
Mary Grady, Deputy Director, American Carbon Registry, Winrock International

American Carbon Registry Staff (Bios | <https://americancarbonregistry.org/about-us/team>):

Jessica Orrego, Director of Forestry, American Carbon Registry
Lauren Nichols, Technical Manager, American Carbon Registry
Eric Ripley, Program Manager, American Carbon Registry
Margaret Williams, Program Officer, American Carbon Registry

Andrew Taylor, Forestry Program Officer, American Carbon Registry
Kurt Krapfl, Forestry Program Officer, American Carbon Registry
Quincey Oliver, Forestry Program Officer, American Carbon Registry
Stephen Lamm, Director of Climate Strategy, American Carbon Registry
Christina Magerkurth, Senior Program Officer, American Carbon Registry
Maria-Cristina Silva, Senior Program Associate, American Carbon Registry

Winrock International Board of Directors (Bios | <https://www.winrock.org/bios/>):

Rodney Ferguson, President and CEO, Winrock International
William Bumpers, Winrock Board Chair, (Retired) Baker Botts Law Firm
Suzanne Siskel, Winrock Board Vice Chair, EVP & COO of The Asia Foundation
David Braman, Founding Senior Partner (Retired), Pantheon Ventures Inc.
Earl E. Devaney, The Devaney Group
Jason Bordoff, Columbia University
Jerry Adams, President and CEO of ARA
John M. Nees, Getty Land Company
Jude Kearney, Greenberg Traurig Law Firm
Melissa S. Dann, Former Executive Director Wallace Global Fund
Peter M. O'Neill, Winrock Board Member
Richard Leach, World Food Program USA
Samar Ali, Director, Lodestone Advisory Group
Will Rockefeller, Vice President of Winrock Farms
F. Bronson Van Wyck, Bronson Van Wyck and Company, Inc.
Paloma Adams-Allen, President and CEO, Inter-American Foundation
Saud Siddique, Co-Founder and Executive Chairman, Odyssey Capital
Lawrence S. Coben, Founder and Executive Director, Sustainable Preservation Initiative

PART 2: Program summary

Provide a summary description of your program

Winrock International, named for philanthropist Winthrop Rockefeller, is a nonprofit organization that works with people in the United States and around the world to empower the disadvantaged, increase economic opportunity and sustain natural resources. Winrock believes that climate change will have a profound impact on the poorest populations around the world and that markets are the most effective path to mobilize actions to reduce and stabilize emissions and limit global warming to 1.5 degrees as needed to avoid catastrophic effects of climate change.

American Carbon Registry (ACR)

Bearing the Rockefeller imprimatur, Winrock's nonprofit American Carbon Registry (ACR) is a leading carbon offset program recognized for its strong standards for environmental integrity and its quest to innovate. Founded in 1996 as the first private voluntary offset program in the world, ACR has over two decades of unparalleled experience in the development of rigorous, science-based carbon offset standards and methodologies as well as operational experience in carbon offset project registration, verification oversight and offset issuance. In fulfillment of Winrock's mission, ACR enhances confidence in carbon markets and catalyzes transformational emissions reduction opportunities.

ACR is also an approved Offset Project Registry (OPR) for the California Cap-and-Trade program. In this role, ACR has worked for the past six and a half years with the Air Resources Board (ARB) to oversee the registration and issuance of California-eligible Registry Offset Credits (ROCs) developed using ARB-approved offset protocols. ARB's approval of ACR as a California OPR signals that ACR has met stringent regulatory requirements including technical expertise in carbon offset methodologies; extensive experience in the oversight of offset project listing, registration, independent verification and issuance; and a solid understanding of the regulation underpinning the compliance offset program.

Architecture for REDD+ Transactions (ART)

In addition to its role overseeing ACR, Winrock would like to take this opportunity to update ICAO and the TAB on The Architecture for REDD+ Transactions (ART), for which it serves as the Secretariat. ART is a global voluntary initiative to promote the environmental and social integrity and ambition of carbon emission reductions from the forest sector to catalyze new, large-scale finance for REDD+.

ART includes a rigorous Standard to quantify emissions reductions from REDD+ activities at a jurisdictional and national scale, and a comprehensive process to transparently register, verify and issue high quality, serialized credits that are fungible with those from other sectors. ART will serve as a global quality benchmark for forest emission reductions, providing confidence to market participants and stakeholders in the integrity of results.

ART's standard, *The REDD+ Environmental Excellency Standard (TREES)*, will be consistent with UNFCCC decisions including the Paris Agreement, the Warsaw Framework and the Cancún Safeguards, with precise and comprehensive requirements for accounting and crediting; monitoring,

reporting and independent verification; mitigation of leakage and reversal risks; avoidance of double counting; robust environmental and social safeguards; and transparent issuance of serialized units on a public registry.

Under ART, countries will generate verified emissions reduction credits by reducing their deforestation and degradation emissions below a crediting level and meeting other requirements specified in TREES. Once issued, these serialized credits can be sold into voluntary or compliance markets, can be transferred under the Paris Agreement towards meeting NDCs and increasing ambition, or can be used as a donor pay-for-performance mechanism.

The Steering Committee that has served as an interim governance body and guided the establishment of ART includes individuals, serving in their personal capacity, from the Climate and Land Use Alliance (CLUA), Environmental Defense Fund (EDF), Norway’s International Climate and Forest Initiative (NICFI) and the Rockefeller Foundation. ART will be governed and managed by globally recognized, independent, objective experts including a Board of Directors and a Secretariat, who are supported by expert technical committees. The ART Secretariat and TREES technical committees have been in place since mid-2018, and the ART Board has been appointed and will officially convene in the summer of 2019.

In July 2019, Winrock will publish a version of TREES for public stakeholder consultation throughout August and September. The ART Board will review and consider stakeholder comments, and TREES will be approved by the ART Board and published for use in December 2019. After publication, TREES will be open for forest countries wishing to submit a national or jurisdictional REDD+ program for registration and issuance of emission reductions.

In the next CORSIA program application request (March 2020), after TREES has been published, Winrock intends to submit an ART application to ICAO for evaluation for approval to supply emissions units to the CORSIA.

PART 3: Emissions Unit Program Design Elements

Note—where “evidence” is requested in *Part 3* and *Part 4*, the Program should provide web links to documentation. If that is not possible, then the program may provide responses in the text boxes provided and/or attached supporting documentation, as recommended in “SECTION II: INSTRUCTIONS—*Form Completeness*”.

Note—“*Paragraph X.X*” in this form refers to corresponding paragraph(s) in Appendix A “*Supplementary Information for Assessment of Emissions Unit Programs*”.

Note—Where the Program has any immediate plans to revise the Program (e.g., its policies, procedures, measures) to enhance consistency with a given criterion or guideline, provide the following information in response to the relevant form question(s):

- Proposed revision(s);
- Process and proposed timeline to develop and implement the proposed revision(s);
- Process and timeline for external communication and implementation of the revision(s).

3.1. Clear methodologies and protocols, and their development process

Summarize the Program's processes for developing and approving methodologies, including the timing and process for revision of existing methodologies:

The following development and approval process is applied to new methodologies and certain methodology revisions and modifications (per Chapter 7, Section A.2 of [ACR Standard: https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard/acr-standard-v6_final_july-01-2019.pdf](https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard/acr-standard-v6_final_july-01-2019.pdf), whether authored and proposed by external sources, or by Winrock/ACR staff. The process relies on thorough engagement by ACR staff, public consultation, and scientific peer review, and is designed to reflect ACR's priorities: reliance on sound science; providing opportunities for stakeholder consultation to ensure that methodologies are commercially adoptable and reflect the concerns of those who will use them, while still making sure the process cannot be influenced by politics or special interests; and ensuring that the process is efficient.

ACR coordinates a process of internal review, public stake-holder consultation, and a blind scientific peer review as follows:

1. Feasibility review. The methodology developer(s) submits to ACR material demonstrating feasibility of and intent for subsequent project development using the proposed methodology. Based on review and analysis of this information, ACR determines whether to move forward with the full methodology review process.
2. Full Submittal. The methodology author submits the proposed new or modified methodology to ACR.
3. Internal Review. The first step in the ACR methodology approval process is a review of the draft methodology by members of Winrock and ACR staff who are recognized experts in carbon science and carbon offset methodology development. Winrock and ACR staff review the methodology for consistency with ACR requirements and scientific rigor, provide formal written comments outlining required corrections/clarifications to the methodology author(s), and inform the methodology author(s) of their judgment whether the methodology can be considered for public consultation and peer review. The methodology author(s) then addresses corrections and clarifications identified in the Winrock/ACR review and resubmits the methodology for a second review. ACR's decision to proceed with the formal methodology approval process, however, does not guarantee that the methodology will be approved.
4. Public Stakeholder Consultation. Once all required revisions identified in the Winrock/ACR review are made, the methodology is posted publicly on the ACR website for a minimum of 30 days, and ACR sends out a public notice to its stakeholder email list-serve soliciting comments. During this period, the methodology authors may elect to conduct a webinar with ACR to present the draft methodology and solicit additional comments and feedback. At the conclusion of the public comment period, ACR compiles all comments and shares them with the methodology author, who then incorporates revisions and/or documents responses to each comment, which are posted on ACR's website.

5. **Scientific Peer Review.** After having incorporated any changes from the public stakeholder consultation process, and to ensure methodologies are based on sound science, a team of independent subject matter experts conduct a blind scientific peer review. ACR may consult the relevant ACR Technical Committee in the selection of peer reviewers. Peer reviewer comments and recommendations are compiled and shared with the methodology author(s). The author must respond by incorporating revisions and/or documenting justifications for the proposed approach. Generally, several rounds of peer review are necessary to reach consensus on all issues.
6. **Approval.** Once all required corrections have been made to the satisfaction of the scientific peer review team and Winrock/ACR staff, the methodology is approved and published on the ACR website. An approved methodology may be used by any Project Proponent, including the methodology author, in preparing GHG Project Plans and registering projects on ACR.
7. **Transparency.** Transparency of the process is paramount. ACR posts to its website all process documentation including all public comments and documented responses, and all scientific peer review comments and documented responses along with the public comment version of the methodology, and the final approved methodology.

ACR may periodically update its approved methodologies and tools. Such updates occur when significant changes to GHG accounting best practice or the legislative and/or regulatory context justify an update; when sufficient new data is available to revise eligibility and/or additionality requirements; when ACR becomes aware of clarifications that should be made; or for other reasons.

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

Provide evidence¹ of the public availability of a) the Program’s current processes for developing methodologies and protocols and b) the methodologies / protocols themselves: (Paragraph 2.1)

1. The current processes for methodology approval are outlined in Chapter 7, Section B of the ACR Standard, which is publicly available here: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>.
2. All methodologies that are ACR approved, or in the various stages of development and approval, are publicly available on the ACR website: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies>

3.2. Scope considerations

SECTION II: Application Form Scope includes questions related to this criterion. No additional information is requested here.

¹ For this and subsequent “evidence” requests, evidence should be provided in the text box (e.g., web links to documentation), and/or in attachments, as recommended in “SECTION II: INSTRUCTIONS—Form Completeness”.

3.3. Offset credit issuance and retirement procedures

Are procedures in place... (Paragraph 2.3)

- a) for unit issuance and retirement / cancellation? YES
- b) related to the duration and renewal of crediting periods? YES
- c) for unit discounting (if any)? YES

Provide evidence of the relevant policies and procedures related to a) through c) (if any, in the case of “c”), including their availability to the public:

- a) ACR’s policies and procedures for offset credit issuance, retirement and cancellation are detailed in the [ACR Terms of Use Agreement \(https://americancarbonregistry.org/how-it-works/membership/acr-terms-of-use/acr-terms-of-use-june-2015.pdf\)](https://americancarbonregistry.org/how-it-works/membership/acr-terms-of-use/acr-terms-of-use-june-2015.pdf) and the [ACR Operating Guidelines \(https://americancarbonregistry.org/how-it-works/membership/acr-operating-procedures/acr-operating-procedures_april-2015.pdf\)](https://americancarbonregistry.org/how-it-works/membership/acr-operating-procedures/acr-operating-procedures_april-2015.pdf), and summarized below.

“Issue” or “Issuance” is defined by ACR as the creation of serialized offsets as verified emissions reductions or registry offset credits equivalent to the number of verified GHG reductions or GHG removal enhancements for an offset project over a specified period. Offset credits are issued directly into the offset project account for transfer, retirement or cancellation.

Offset credits are issued to a specific project upon completion of a successful third-party verification and ACR review, approval and acceptance of the verification report and statement (see the ACR Standard Chapter 6, section 6.A). Upon issuance by ACR, each offset is automatically assigned a unique serial number, is issued into the Registry account of the emissions reduction project, and appears in the public issuance report: <https://acr2.apx.com/myModule/rpt/myrpt.asp?r=112>. All offset credit issuances are conducted by ACR Staff in the ACR registry system upon approval of the project for issuance and cross-checking final offset credits data for accuracy. Once offset credits are issued, they can be transferred to another ACR account holder, retired or canceled.

“Retire” or “retirement” is the permanent removal of an offset credit from circulation as a transactable unit so that it represents a permanent reduction or removal of CO₂e from the atmosphere. A retired credit may be applied toward the emissions reduction target of the ACR account holder that retired the credit, or on behalf of a third party.

“Cancel” or “Cancellation” is the permanent removal of an offset credit from the Registry so that it cannot be transferred, transacted, retired or applied towards any emissions reduction targets as an ACR offset credit unit. The exception to this is for airplane operators who cancel units to surrender them towards their CORSIA compliance obligations. If the offset credit has been canceled so that the equivalent can be reissued under another offset program, ACR no longer tracks the credit ownership.

Offset credit retirements are completed by account holders when logged into the ACR registry. ACR processes all offset credit cancellations. All retirement and cancellation transactions are made publicly available on the ACR Registry. The following web link provides links to the

public registry reports from ACR's website: <https://americancarbonregistry.org/how-it-works/registry-reports>.

These [ACR offset project public reports](#) page on the ACR website provides downloadable, sortable reports of offset issuance by project, offset cancellation by project, offset retirement by project, as well as a buffer summary report, and an offset search by serial number. Individual links to each of these is also provided below.

- i. Public issued credits report: <https://acr2.apx.com/myModule/rpt/myrpt.asp?r=112>
- ii. Public project report: <https://acr2.apx.com/myModule/rpt/myrpt.asp?r=111>
- iii. Public retired credits report: <https://acr2.apx.com/myModule/rpt/myrpt.asp?r=206>
- iv. Public canceled credits report: <https://acr2.apx.com/myModule/rpt/myrpt.asp?r=208>

b) In the ACR program, as specified in the ACR Standard Chapter 3, Table 2, all non-AFOLU project types have a crediting period of 10 years. Project types with a crediting period of 10 years include:

- Recycling of Transformer Oil
- Truckstop Electrification
- Destruction of Ozone Depleting Substances and High-GWP Foam
- Replacement of SF6 with Alternate Cover Gas in the Magnesium Industry
- Use of Certified Reclaimed HFC Refrigerants and Advanced Refrigeration Systems
- Landfill Gas Destruction and Beneficial Use Projects
- Methane Recovery in Animal Manure Management Systems
- Transition to Advanced Formulation Blowing Agents in Foam Manufacturing and Use
- Carbon Capture and Storage
- N₂O Abatement from Nitric Acid Production
- Re-Refining Used Lubricating Oils
- Mine Methane Capture and Destruction

The length of the crediting period for AFOLU project types varies and is described in The ACR Standard, Appendix A, Section A.3.3, Table 4., row heading "Crediting Period", and also in the table below. Project types that restore or revegetate degraded land or ecosystems require longer crediting periods to allow ample time for stored carbon to accumulate. Improved Forest Management project type includes a baseline that is subject to economic and policy changes so must have a shorter crediting period. Project types that avoid emissions range in crediting period depending on the period that emissions are assumed to be avoided. Several project types have the crediting period specified in the specific methodology. See methodologies here: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies>

Project type	Crediting Period
Afforestation/Reforestation (A/R)	40 years
Improved Forest Management (IFM)	20 years
Wetland Restoration/Revegetation	40 years
Avoided emissions from agriculture, or soil sequestration in agricultural/rangeland	Specified in each methodology (this applies to 2 methodologies)

To date there have been no projects to apply for a crediting period renewal in the ACR program. If this occurs in the future this will appear on the project's registry page and will also appear in all required project reporting and verification documentation. The process for crediting period renewal is detailed in the ACR Standard, Chapter 6, section 6.I, and includes the following steps:

- i. Re-submitting the GHG Project Plan in compliance with then-current ACR standards and criteria;
 - ii. Re-evaluating the project baseline, as required by the methodology;
 - iii. 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;
 - iv. Using ACR-approved baseline methods, emission factors, tools, and methodologies in effect at the time of Crediting Period renewal; and,
 - v. Completing validation of the new GHG Project Plan within one year from the end of the previous crediting period.
- c) Each offset credit issued on ACR is considered equally fungible and to represent an equal benefit to the atmosphere, no matter the project type, location or vintage. ACR does not implement any flat "unit discounting" procedures. Rather, each methodology outlines relevant sources of uncertainty and leakage activities that must be assessed for each project of that type. Any associated deductions are accounted for in the methodology-specific quantification approach and are unique to that project type. ACR's policies for leakage accounting is discussed in detail in section 3.6 of this form below. Per the ACR Standard (under Definitions on page 73), the definition of Net Emissions Reductions is *GHG emission reductions or removals created by a Project Activity, minus the baseline scenario and any deductions for uncertainty and leakage*. This is the amount that is serialized.

Section 2.B.3 of the Standard states that "the Project Proponent shall reduce, as far as is practical, uncertainties related to the quantification of GHG emission reductions or removal enhancements. For methodologies based on statistical sampling (e.g., methodologies in the forestry or working land use sectors), ACR requires that the sampling error associated with the mean of the estimated emission reduction/removal not exceed $\pm 10\%$ of the mean at the 90% confidence interval to report the mean of the estimated emission reduction/removal. If the Project Proponent cannot meet this target, then the reportable amount shall be the mean minus the lower bound of the 90% confidence interval, applied to the final calculation of emission reductions/removal enhancements. If the sampling error is equal to or greater than 20%, the confidence deduction for the monitoring period must be 100%. Project-specific methodologies provide guidance how to calculate this uncertainty deduction. Methodologies approved by ACR shall include methods for estimating uncertainty relevant to the project and baseline scenario (as applicable).

If sampling is required and the statistical precision requirements are not met, project proponents must take an uncertainty deduction from their total reported offset credits for that period. The Project Proponent can elect to implement more intensive sampling

to achieve the precision of $\pm 10\%$ of the mean at 90% confidence to avoid an uncertainty deduction and retain more net emission reductions/removals for crediting.

The use of biogeochemical or process models must also include an estimate of structural uncertainty related to the inadequacy of the model, model bias, and/or model discrepancy. This 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.”

3.4 Identification and Tracking

Does the Program utilize an electronic registry or registries? (Paragraph 2.4.2) YES

Provide web link(s) to the Program registry(ies) and indicate whether the registry is administered by the Program or outsourced to a third party (Paragraph 2.4 (e)):

The ACR registry is an online, secure, logic-based platform developed and administered by APX (www.apx.com), per a private, bilateral legal Master Services Agreement between APX and Winrock/ACR, and customized for ACR's project workflow and approvals process. The registry is web-based and links are available on the ACR website: <https://acr2.apx.com/>.

ACR manages and oversees all registry functions including account application reviews through a Know Your Customer (KYC) process, a day-to-day processing of project and document reviews and project phase changes, project approval and offset credit issuance and cancellation (as applicable, for example, under the California cap-and-trade program).

Do / does the Program registry / registries....:

a) have the capability to designate the ICAO eligibility status of particular units? YES
(Paragraph 2.4.3)

b) identify and facilitate tracking and transfer of unit ownership/holding from issuance to cancellation/retirement? (Paragraphs 2.4 (d) and 2.4.4) YES

c) identify unit status, including retirement / cancellation, and issuance status? YES
(Paragraph 2.4.4)

d) assign unique serial numbers to issued units? (Paragraphs 2.4 (b) and 2.4.5) YES

e) identify in serialization, or designate on a public platform, each unique unit's country and sector of origin, and vintage year? (Paragraph 2.4.5) YES

Summarize and provide evidence of the relevant policies and procedures related to a) through e), including their availability to the public:

a) ACR's registry platform currently includes an "ARB Eligible" designation for each of the issued serialized credit batches to indicate which ones are eligible for conversion to ARBOCs under the California State Cap-and-Trade program, and conversely which ones are strictly voluntary program credits. ACR's public report of Credits Issued (<https://acr2.apx.com/myModule/rpt/myrpt.asp?r=112>) shows the current "ARB Eligible" distinction. Similarly, this kind of distinction could be easily created to display CORSIA eligibility status for credits issued on ACR. Per the *Guidelines for Avoiding Double Counting*

for the CORSIA (available at <https://www.adc-wg.org/guidelines-version-1-0> and incorporated by reference to ACR Standard v6.0), units can be designated as “CORSIA Qualified” if they have been approved for use for CORSIA by ICAO (approved program, project type, vintage etc.) and have obtained a letter of Assurance and Authorization (for use of the units for CORSIA or other “export” purpose) from the Host Country.

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- b) Offset ownership and all transactions—including issuance, transfers, retirements, and cancellations—are tracked within ACR’s registry system. Offset ownership and transactions are tracked in individual accounts, and the ACR administrator can view and search the *ERT Holdings* report for the current and historical ownership of any serialized offset as well as track all individual transactions and retirements of offsets system-wide (by project, account, date, serial number etc.) in the *Credit Transfer History* report.
- c) The ACR registry system is a permanent record and repository for all ownership of each offset from issuance through retirement or cancellation. The ACR registry administrator has 24-hour access to system-wide reports such as the *ERT Holdings* report, which tracks the current and historical ownership of any serialized offset, as well as the *Credit Transfer History* report, which is a time and date stamped record of all individual transactions, retirements and cancellations of offsets system-wide (by project, account, date, serial number etc.). Additionally, [public reports](#) are available for offset credit issuance, retirement and cancellation (<https://acr2.apx.com/mymodule/mypage.asp>).
- d) The ACR system registry assigns unique serial numbers to each offset credit upon issuance. Serialized credits are automatically issued into the project account once the Emission Reductions and Issuance record is approved by the ACR administrator. The format for ACR serial numbers includes identification references to key project information including program (ACR), country, project ID, credit vintage, batch number, unit serial number block start and unit serial number block end values that represent the volume of credits issued in the batch. For example, serial number ACR-US-192-2010-203-1-5000 indicates that the credits were issued by American Carbon Registry (ACR), from a project in the United States, with Project ID 192, with credit vintage 2010, from credit batch 203, for which the serial block begins with 1 and the serial block ends with 5000 (representing a volume issued in the batch of 5,000 credits).
- e) Each unique unit’s country and vintage year are identified as part of the credit’s serial number. In addition, the [public registry reports](#) (projects, issued credits, retired credits, canceled credits), which are downloadable, sortable and searchable, include detailed information on all registry projects and credits including project name and ACR identification number, project type

(sector), location (including country), vintage year of credits (the year in which the emissions reduction occurred), project developer, project verifier, ARB eligibility (yes or no), quantity and date of credits issued, retired or canceled, serial numbers, and links to project documentation such as registration documentation and verification statements.

List any/all international data exchange standards to which the Program's registry(ies) conform: (Paragraph 2.4 (f))

ACR's registry platform provider, APX, implements industry standard tools and technologies such as ETL tools and Extensible Markup Language (XML) to ensure process integrity. XML technology allows the registry to organize and annotate data while it is transmitted. Transmitting data as XML allows verification that a complete set of data is transferred, i.e. that no data is lost while being transmitted. ETL tools, such as Wherescape and SQL Server Integration Services (SSIS), allow the registry platform to define workflows for processing of data. A typical workflow validates that a complete set of data has been provided, processes and stores the data into a data repository, as well as identifies and logs any errors encountered during processing of the data. Additionally, via a scheduler, the workflows are configured to kick off at predefined points in time or upon occurrence of certain events with notifications sent out upon completion of a workflow, including information about errors that have been encountered. This is a critical component of the overall goal of having processing integrity as it ensures that critical issues are identified, escalated, and remediated quickly.

Additionally, as a result of APX's recent SOC 2 audit (referenced in more detail below) it has been ascertained that APX has proper "processing integrity" in place, i.e., that its "data processing is reliable, verifiable as well as being monitored and actioned."

Are policies in place to prevent the Program registry administrators from having financial, commercial or fiduciary conflicts of interest in the governance or provision of registry services? (Paragraph 2.4.6) YES

To address and isolate such conflicts, should they arise? (Paragraph 2.4.6) YES

Summarize and provide evidence of the relevant policies and procedures, including their availability to the public:

All ACR staff who conduct activities on the Registry adhere to the Winrock COI policy as stated below. Per the ACR Standard, Section 1.k Conflict of Interest Policy, ACR requires that its third-party registry service provider maintain and adhere to Winrock's Conflict of Interest Policy. The COI provisions are also detailed in the Master Services Agreement (MSA) between Winrock and APX as executed in 2011 and amended from time to time (which is a private legal agreement between Winrock and APX and not posted publicly).

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[END BUSINESS CONFIDENTIAL].

Are provisions in place...

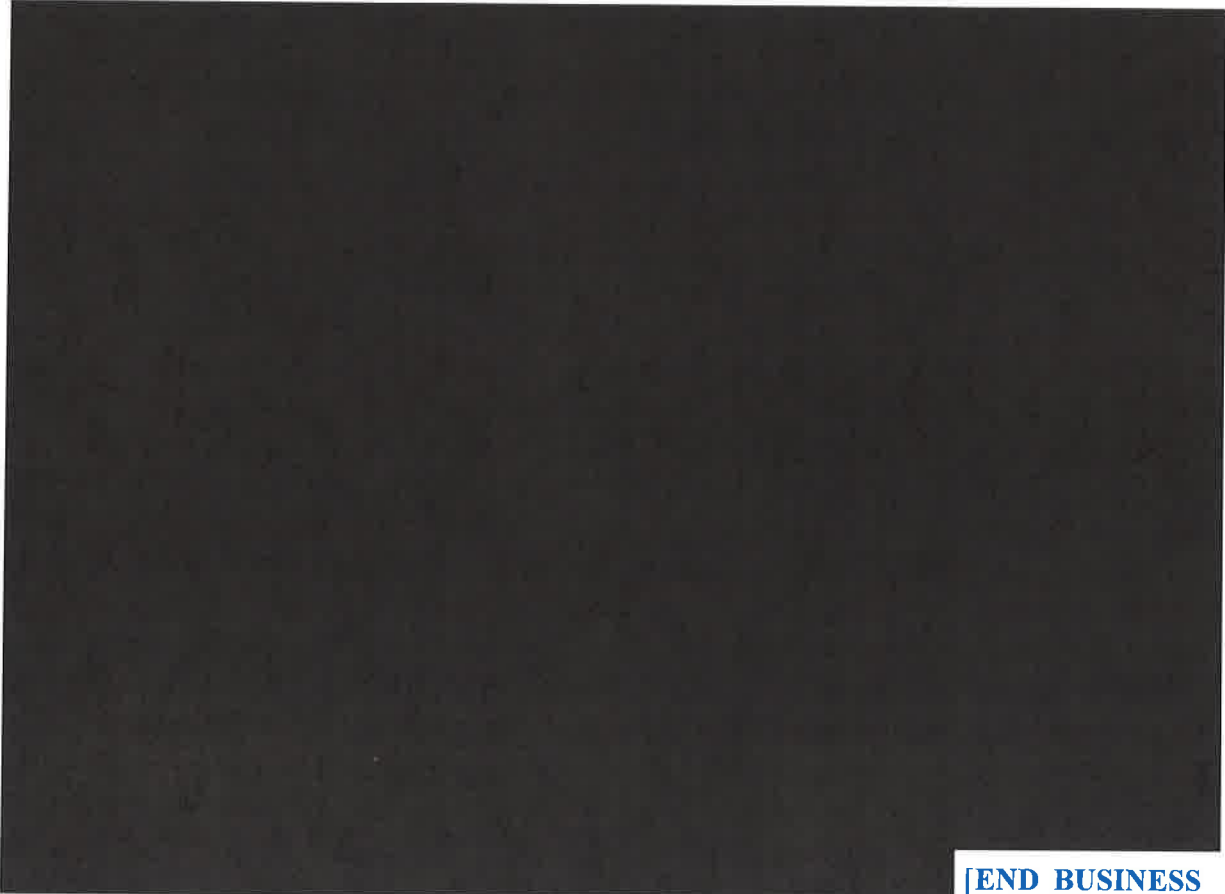
- a) ensuring the screening of requests for registry accounts? (*Paragraph 2.4.7*) YES
- b) restricting the Program registry (or registries) accounts to registered businesses and individuals? (*Paragraph 2.4.7*) YES
- c) ensuring the periodic audit or evaluation of registry compliance with security provisions? (*Paragraph 2.4.8*) YES

Summarize registry security provisions, including related to a) through c); and provide evidence of the relevant policies and procedures, including their availability to the public:

- a) ACR receives new registry account applications via the registry platform. Account application reviews and approvals (or denials) are conducted by Winrock and ACR management through a Know Your Customer (KYC) due diligence process. Accounts are only approved for registered businesses / legal entities that meet ACR's KYC requirements. Individuals are not permitted to open ACR accounts.

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- b) ACR does not approve accounts for individuals – only duly incorporated organizations that meet the KYC screening criteria. Account access via unique login ID and password is only provided to the individual approved and listed as the Account Manager. The Account Manager can choose to provide access to other individual users. Per the ACR ToU the Account Manager shall ensure that any of its owners, trustees, members, officers, directors, employees, agents appointed as Account Holder’s agent (“Agents”) and/or any other agents to whom it has provided access to the Registry (collectively, the “Representatives” or “Users”) agree to comply with the Operative Documents and the Terms of Use.
- c) The MSA executed between Winrock and APX, and updated from time to time, includes a description of the APX Platform Security provisions with which they agree to comply including provisions for periodic audits of registry compliance with security protocols.

In the MSA, APX represents that it will follow best industry practice to secure, back up and recover all information stored by or on behalf of APX as part of the Registry Service and will maintain the systems and processes described in the detailed **APX Registry Platform Security Overview**. APX further commits to conducting Service Organization Controls (SOC) 2 Type II audits on a biennial basis, as defined by the American Institute of Certified Public Accountants (AICPA) and shall provide a copy of such audit report(s) to Winrock for review.

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[END BUSINESS CONFIDENTIAL].

In February 2018, APX successfully completed a Service Organization Controls (SOC) 2 Type II examination related to security, availability and processing integrity principles defined by the American Institute of Certified Public Accountants (AICPA). APX worked with MossAdams LLP, an independent certified public accounting firm, to perform an in-depth audit of the control objects and activities for APX. Service Organization Control (SOC) reports are internal control reports on the services provided by a service organization designed to provide valuable information to help users assess and address the risks associated with an outsourced service. APX also has obtained a follow-on SOC 3 report based on the same security and availability principles covered in the SOC 2 audit. (Announcement link: <https://apx.com/corporate-news/1379/>).

3.5 Legal nature and transfer of units

Does the Program define and ensure the underlying attributes and property aspects of a unit? (Paragraph 2.5) YES

Summarize and provide evidence of the relevant policies and procedures, including their availability to the public:

The publicly available ACR Standard in Section 1.H defines the ACR unit of exchange as “*a verified emissions reduction, serialized and registered as an Emission Reduction Ton (ERT), denominated in metric tons of CO₂e. ERTs, also referred to as offsets, carbon offsets, and carbon offset credits, include emission reductions and removal enhancements (i.e., enhanced sequestration).*”

Table 2 in Chapter 3 of the ACR Standard (<https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>) presents the following relevant ACR eligibility criteria against which all projects are validated and verified (so that the criteria are ensured):

- **Emissions or Removal Origin:** “For projects reducing or removing direct emissions, the following requirement applies: The Project Proponent shall **own, have control over, or document effective control over the GHG sources/sinks from which the emissions reductions or removals originate.** If the Project Proponent does not own or control the GHG

sources or sinks, it shall document that effective control exists over the GHG sources and/or sinks from which the reductions/removals originate.

For projects that reduce or remove energy-related indirect emissions, eligible projects must be located outside the United States and in a country without a regulatory incentive mechanism for GHG mitigation.

For projects reducing or removing non-energy indirect emissions, the following requirement applies: **The Project Proponent shall document that no other entity may claim GHG emission reductions or removals from the Project Activity (i.e., that no other entity may make an ownership claim to the emission reductions or removals for which credits are sought).**”

- **Offset Title:** “The Project Proponent shall provide documentation and attestation of undisputed title to all offsets prior to registration. **Title to offsets shall be clear, unique, and uncontested.** ACR will issue offsets into the account of a Project Proponent only if there is clear, unencumbered, and uncontested offset title.”

All ACR registry account holders must execute the legally-binding ACR Terms of Use (ToU) agreement prior to account approval (this agreement is publicly available here:

<https://americancarbonregistry.org/how-it-works/membership/acr-terms-of-use/acr-terms-of-use-june-2015.pdf>).

Section 6 of the ToU agreement outlines the ownership requirements (property aspects) for offset credits, summarized as follows.

Ownership of offset credits: A General Prohibition exists on Third Party Ownership of offset credits requiring Account Holder to hold or retire in its Accounts offset credits for which it is the sole holder of legal title. There are exceptions for retail aggregators, which may retire offset credits on behalf of third-parties under specific conditions, and for Account Holders that are Regulated Person(s) and have approval of third-party owners of offset credits to hold offset credits on their behalf. In the cases of the exceptions, Account Holder must comply with applicable laws, regulations and other legally enforceable requirements and agrees to maintain a customer identification program that contains reasonable procedures to verify the identity of any individual or organization on whose behalf Account Holder is holding offset credits.

3.6 Validation and verification procedures

Are standards and procedures in place for... (Paragraph 2.6)

- | | |
|---|---|
| a) validation and verification processes? | <input checked="" type="checkbox"/> YES |
| b) validator and verifier accreditation? | <input checked="" type="checkbox"/> YES |

Provide evidence of the relevant policies and procedures related to a) and b), including their availability to the public:

a) Validation and verification processes and requirements are outlined in two key documents; the ACR Standard, Chapter 9 and the ACR Validation and Verification Standard. Both are publicly available and web links are provided below.

- ACR Standard: <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>
- ACR Validation and Verification Standard: https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1/acr-vv-standard_v1-1_may-31-2018.pdf

Chapter 9 of the ACR Standard outlines key processes and high-level requirements. The general requirements for verification and validation are described in the table below:

Item	Definition, Process or requirement
Validation	A systematic, independent, and documented process for the evaluation of a GHG Project Plan against applicable requirements of the ACR Standard and approved methodology
Verification	A systematic, independent, and documented assessment by a qualified and impartial third party of the GHG assertion for a specific reporting period
Materiality Threshold	Set at $\pm 5\%$; ACR requires that discrepancies between the emission reductions/removal enhancements claimed by the Project Proponent and estimated by the Validation and Verification Body (VVB) be immaterial
Validation and Verification frequency	Validation occurs once per crediting period. Validation for non-AFOLU projects must occur within 2 years of the project start date or within 3 years of the project start date for AFOLU projects. Verification must occur no less than every 5 years.
VVB requirements	All VVBs must apply and be approved by ACR to meet requirements including scope accreditation and technical capabilities of the VVB and individuals, disclosure and mitigation of conflicts of interest, insurance and others as detailed in the Attestation of Validation / Verification Body. 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 MoU in place. Project-specific conflicts of interest must be disclosed and mitigated.

The ACR Validation and Verification Standard is a more detailed document which outlines the scope, describes in detail the process and ACR Standard requirements, and provides specific

guidance on how to verify ACR projects. This document also describes the accreditation requirements. The below table outlines the topics covered in each section of the ACR Validation and Verification Standard:

Chapter 1	Objectives and scoping elements for validation
Chapter 2	How to validate project boundaries
Chapter 3	How to validate project baselines
Chapter 4	How to validate additionality
Chapter 5	How to validate quantification methods
Chapter 6	How to validate other eligibility criteria, such as start dates and Crediting Periods
Chapter 7	Requirements for developing and submitting a validation report
Chapter 8	Objectives and scoping elements for verification
Chapter 9	Activities to be performed while conducting a verification
Chapter 10	Verification of aggregated or programmatic develop approach projects
Chapter 11	Requirements for quality assurance and quality control
Chapter 12	Requirements for developing and submitting Verification Statements and reports.
Chapter 13	Requirements for VVBs operating on behalf of ACR
Appendix A	A list of normative references on which the ACR Validation and Verification Standard is based

- b) Chapter 13 of the ACR Validation and Verification Standard describes the accreditation requirements for VVBs. ACR requires all VVBs to be accredited for project validation and verification in the scope of a given project's applicable methodology. VVB teams shall meet the competence requirements set out in ISO 14065:2013 and must be accredited, by an accreditation body that is a member of the International Accreditation Forum (IAF) and with which ACR has a MoU in place, to ISO 14065:2013 (or the latest version of the standard) in the applicable sectoral scope to conduct validation(s) and/or verification(s).

ACR requires that all VVBs submit an application for ACR review and approval and a legal verifier attestation (<https://americancarbonregistry.org/carbon-accounting/verification/attestation-of-verification-body-2017.pdf>), which defines the VVB role and responsibilities, ensuring technical capabilities and no conflicts of interest. Validation and verification activities may not be conducted until the VVB has received approval from ACR. Once approved, it is the VVB's responsibility to update ACR immediately about any changes in accreditation status or scope, enforcement activities, investigations, revocations or suspensions of the body itself, or any verifiers working on the VVB's behalf.

VVBs must also complete a project-specific conflict of interest form prior to initiating any validation or verification work. VVBs must complete the conflict of interest form for each reporting period, regardless of prior approval. Documentation for the VVB application and approval, including a link to the project-specific conflict of interest form, is publicly available here: <https://americancarbonregistry.org/carbon-accounting/verification/verification>.

3.7 Program governance

Does the Program publicly disclose who is responsible for the administration of the Program, and how decisions are made? (Paragraph 2.7) YES

Provide evidence that this information is available to the public:

ACR Program governance and administration is defined in the Introduction section of the ACR Standard: *“The ACR program is built on principles of accountability, transparency, responsiveness, and participatory processes. As an enterprise of Winrock, ACR benefits from the support and guidance of an established, reputable, global nonprofit organization. Winrock’s management, executive team, and board of directors provide direct oversight of all ACR operations.”*

ACR is governed by its parent organization, Winrock International, including Winrock’s Board of Directors (<https://www.winrock.org/about/> - see “board of directors” tab) and Winrock’s Senior Management members:

- Joyjit DebRoy and Amit Bando for program-related management support (https://www.winrock.org/bios/#more_bios_dept_programs)
- Mike Myers, Shawn Cathey, Travis Greenwell and Braulio Olivera for finance and information technology support (https://www.winrock.org/bios/#more_bios_dept_finance)
- Malika Magagula and [Charlotte Young](#) and their teams for operational and legal support (https://www.winrock.org/bios/#more_bios_dept_operations)

Winrock’s senior management listed above provide strategic and program-related oversight, approve operational processes and legal agreements (such as ACR’s Terms of Use, the Master Services Agreement with APX, Verifier Attestations, Project Attestations and Reversal Risk Mitigation Agreements), ensure appropriate registry security processes of APX, and provide financial management oversight of ACR’s business within Winrock.

ACR management and staff, listed publicly on the ACR website (<https://americancarbonregistry.org/about-us/team>) manage the day-to-day operations of the program. With collectively over 200 years of experience in carbon accounting, verification, climate science and policy, carbon project development, registry operations and environmental markets, all ACR team members are committed to uphold the mission of environmental integrity and transparency.

As described in the publicly available ACR Standard under Section 2.A, ACR's overarching offset policy and accounting decisions are driven by ACR's affirmation of a set of guiding principles, which are based on the International Organization for Standardization (ISO) 14064 Part 2 (2006) specifications and from which all other ACR principles and eligibility criteria follow.

As described in Section 9.D of the ACR Standard, ACR depends upon accreditation programs that are a member of the International Accreditation Forum (IAF) and with which ACR has an MoU to determine eligibility of Validation and Verification Bodies for consideration of approval on ACR. ACR staff confirms the VVB applicant's accreditation as part of the broader ACR approval application review.

As described above in section 3.1 of this form and in the ACR Standard under Section 7.B, the ACR methodology approval process utilizes a blind expert peer review process in addition to internal review and public comment to determine eligibility for publication.

Designated ACR staff members oversee the review of new account applications and approval of registry accounts according to its established KYC process as referenced in response to 3.4 above.

Individual project and verification reviews are conducted by ACR technical experts.

Further, the ACR Standard Chapter 11 addresses procedures for complaints and appeals to decisions taken by ACR as described below.

Complaints: When a Project Proponent or ACR stakeholder objects to a decision made by ACR representatives or the application of the ACR program requirements, the following confidential complaint procedure shall be followed:

1. Project Proponent or ACR stakeholder sends a written complaint via email to ACR@winrock.org. The complaint must detail the following:
 - i. Description of the complaint with specific reference to ACR Standard and/or ACR Methodology requirements, as applicable;
 - ii. Supporting documentation provided for consideration by ACR in the complaint resolution process; and
 - iii. Complainant name, contact details, and organization.
2. ACR Senior Management shall assign an ACR representative to research and further investigate the complaint. The representative assigned to handle the complaint shall not have been involved with the issue that is the subject of the formal complaint.
3. ACR Senior Management will provide a written response, via email, to the complainant detailing ACR's decision on the matter.

Appeals: In the event that a complaint remains unresolved after the conclusion of the complaints procedure, an ACR Project Proponent or stakeholder may appeal any such decision or outcome reached. The following confidential appeals procedure shall be followed:

1. Project Proponent or ACR stakeholder sends a written appeal via email to ACR@winrock.org. The appeal must detail the following:
 - Description of the appeal, with specific reference to ACR Standard and/or ACR Methodology requirements, as applicable;
 - Supporting documentation provided for consideration in the appeal process, including previous communication on the complaint and all relevant details of the previously implemented complaint procedure; and
 - Appellant name, contact details, and organization.
2. ACR Senior Management shall forward the appeal to the appropriate Winrock Senior Director, who will convene a committee of representatives to review and discuss the matter. The committee will include a member of the Winrock Board of Directors, a member of the Winrock Senior Management team, and an ACR staff member unrelated to the complaint, all of whom will have equal votes. The committee may also include a technical and/or subject matter expert or experts as necessary, who will not be able to vote. The committee members selected will depend on the subject matter and nature of the appeal.
3. The decision reached by the committee shall be communicated, via written response, to the ACR Project Proponent or stakeholder. Any decision reached by the committee shall be final.

Can the Program demonstrate that it has... (*Paragraph 2.7.2*)

- a) been continuously governed and operational for at least the last two years? YES
- b) a plan for the long-term administration of multi-decadal program elements which includes possible responses to the dissolution of the Program in its current form? YES

Provide evidence of the relevant policies and procedures related to a) and b):

- a) The non-profit American Carbon Registry® (ACR) was founded by the Environmental Resources Trust as the Greenhouse Gas (GHG) Registry in 1996. In 2008, ERT and the GHG Registry joined Winrock International, and Winrock re-branded the registry as American Carbon Registry (ACR). ACR develops carbon offsets standards and methodologies (protocols), oversees independent third-party verification of projects, oversees the registration of carbon offset projects and the issuance of serialized offset credits. In addition, ACR was approved in December 2012 by the California Air Resources Board (ARB) to operate as an Offset Project Registry for the California cap-and-trade program. ACR administers a robust, secure and transparent registry platform, powered by APX that serves as a database of all project documentation as well as to track ownership and status of all credits.

In Section 3.3 above we provide links to ACR's public reports of offset issuance, offset retirement and offset cancellation which detail ACR offset issuances totaling over 148 million tons, retirements of over 7.5 million tons, and cancellations of over 94 million tons (cancellation is primarily for conversion of credits for use in the California carbon market) to demonstrate ACR's continuous operation of a carbon offset registry for a minimum of two years.

- b) ACR is a business unit of Winrock International, and Winrock stands behind ACR's long term commitments. In the unlikely event that the ACR program is discontinued in its current form, Winrock is legally responsible for the administration of any ongoing program elements or the appointment of a comparable qualified organization to do so. Such elements include the management of the Buffer Pool, as mutually agreed in section 13(h) of the legal Reversal Risk Mitigation Agreement executed between Winrock and AFOLU project proponents.

Winrock International was created in 1985 from the merger of three predecessor Winthrop Rockefeller organizations: the Agricultural Development Council established in 1953, the Winrock International Livestock Research and Training Center established in 1974 and the International Agricultural Development Service established in 1975. Winrock operates in over 50 countries with a global staff of over 1,150 employees including experts in forestry, agriculture, renewable energy and energy efficiency, and water and manages an annual budget of over \$100 million. Winrock is governed by a Board of Directors with fiduciary responsibility to assure it fulfills its commitments. The Board is also responsible for management of Winrock's modest \$50 million endowment.

The ACR Standard Appendix B: Buffer Pool Terms and Conditions, B.3 Buffer Pool Account: "In the event of that ACR is no longer operational or able to manage the Buffer Pool Account, the account will be managed by ACR's parent organization, Winrock International ("Winrock") or a comparable, qualified organization of Winrock's election."

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[END BUSINESS CONFIDENTIAL].

Are policies in place to prevent the Program staff, board members, and management from having financial, commercial or fiduciary conflicts of interest in the governance or provision of program services? (Paragraph 2.7.3)

YES

To address and isolate such conflicts, should they arise? (Paragraph 2.7.3)

YES

Summarize and provide evidence of the relevant policies and procedures:

Winrock International's [Code of Conduct](#) is mandatory and applies to all members of Winrock's Board of Directors and Officers, each employee, and every volunteer, intern, and partner who works on behalf of Winrock. The Code specifies Winrock's [Conflict of Interest Policy](#) (page 41), key elements of which are included below. It provides clear criteria for what constitutes a conflict of interest and a comprehensive policy on addressing and reporting any and all conflicts. There is no materiality threshold. Winrock requires annual formal acceptance of the Code of Conduct including its Conflict of Interest Policy by all employees.

From Winrock International's Conflict of Interest Policy:

What is a Conflict of Interest?

A conflict of interest exists when an individual who is responsible for acting in the best interests of Winrock has another interest or loyalty that could influence or impair, or may appear to influence or impair, the individual's ability to act in Winrock's best interests. Conflicts exist, for example, when a Winrock employee can either influence or make a decision on contractual, procurement, recruitment and employment, or other business transactions, and that employee has a relationship with the business or persons being hired. Conflicts of interest may be actual, potential, or even just a matter of perception. Conflicts must be approved per this policy before proceeding.

Who is Covered?

Conflicts can be caused by relationships with or among these covered persons:

- Employees*
- Families of employees*
- Close personal friends*
- Board members*
- Families of board members*
- Entities owned or controlled by employees, board members, or their families*

Families means (and as defined by the U.S. Internal Revenue Service) spouse, ancestors, brothers and sisters (whether whole or half-blood), children (whether natural or adopted), grandchildren, great-grandchildren, and spouses of brothers, sisters, children, grandchildren, and great-grandchildren; and any person with whom the covered person shares living quarters under circumstances that closely resemble a marital relationship or who is financially dependent upon the covered person. Families may also extend to members of the same clan, tribe, or communities and vary depending on the location and culture.

Conflict Review, Mitigation, and Approval

If an actual, perceived, or potential conflict is present, an employee must first try to avoid the activity--not do it. If avoidance is not in the best interest of Winrock, approval must be obtained before proceeding. Employees must disclose the conflict to the Chief Risk and Compliance Officer, with a proposed means to mitigate – or minimize – the conflict. The Chief Risk and Compliance Officer will decide whether the mitigation acceptably minimizes risk to Winrock. Approval is required under this policy prior to proceeding with the action. The Chief Risk and Compliance Officer will make the necessary disclosures to funders and regulators. Specific examples of conflicts and the approval requirements are set forth below. Approval requirements vary depending on the level of risk incurred.

Disclosure and Management of a Conflict of Interest

Employees (report and obtain approval for conflicts): All employees shall identify conflicts of interest before taking any conflicted action, and address the conflict as noted above (obtain approval from the Chief Risk and Compliance Officer before proceeding). Senior Directors,

Directors, and Chiefs of Party or Project Directors (report and obtain approval for conflicts and acknowledge annually the Policy): In addition to the above, Senior Directors, Directors, and Chiefs of Party or Project Directors have an enhanced obligation to report and address conflicts because of their position within Winrock. The Chief Risk and Compliance Officer shall circulate annually a Conflicts Acknowledgement Form that requires acknowledgement that each understand and adhere to Winrock's Conflict of Interest Policy. The form must be acknowledged immediately upon receipt. Executive Team and Board of Directors (report and obtain approval for conflicts, annually acknowledge the policy, and annually disclose all affiliations): Winrock's Executive Team and members of the Winrock Board of Directors also have enhanced obligations to report conflicts, as conflicts relating to this group may require reporting of conflicts to regulators. In addition to addressing conflicts as they arise per this policy, both acknowledgement and affiliation disclosure is required. The Chief Risk and Compliance Officer shall circulate annually an Acknowledgement and Affiliation Disclosure Form for the ET and Board to:

- *Acknowledge understanding of and adherence to Winrock's Conflict of Interest Policy, and*
- *List entities in which they, or a member of their families, have a material interest or occupy a position that might create a conflict of interest under this policy.*

Principles for Evaluating Conflicts

In evaluating conflicted situations to determine an appropriate course of action, the Chief Risk and Compliance Officer shall be guided by the following:

- *Are there alternative approaches that would avoid the conflict?*
- *Is there an actual or perceived private benefit or private inurement that must be avoided?*
 - *Is the transaction being conducted transparently, with full disclosure of the conflict?*
- *Does the transaction support Winrock's mission?*
- *Is there a consequence to Winrock for not proceeding that might outweigh the reputational or other impact of the conflict?*
- *What is the nature and the risk to Winrock's reputation if the action proceeds?*
- *What is the mitigation proposed and does it minimize risk to Winrock?*

Restrictions and Conflicts of Interest in Connection with Government Employment

Winrock employees who are or have been employed by any government, including federal, state, and non-U.S. governments including universities, may face restrictions on the activities to which they may devote their time and attention in service to Winrock. The obligations of these individuals to their government employers may impair their ability to serve Winrock and should be considered by management. Similarly, employees of Winrock who have left previous government employment may be barred by government ethics regulations from working on certain Winrock matters which were within the purview of their official duties during their government employment, or in some cases, from accepting employment with Winrock. Winrock employees must disclose to their manager any such current or previous government employment to avoid conflicts of interest in connection with their government service.

[BUSINESS CONFIDENTIAL]: 



[END BUSINESS CONFIDENTIAL].

Winrock does not develop carbon offset projects nor take ownership of offset credits. Other non-ACR Winrock business units provide GHG accounting consulting services on a contract basis. Conflict of interest risk between Winrock technical staff and ACR operations is managed in three primary ways:

1. All conflicts of interest must be disclosed. Winrock staff with potential conflicts are recused from any involvement in ACR activities or decisions where a conflict might arise.
2. Methodology development and approvals all follow a process that includes not only ACR staff review but public comment and blind scientific peer review by a panel of independent subject matter experts. Public and peer review comments and responses from methodology developers are all published on the ACR website.
3. Issuance of credits against approved standards and methodologies requires independent third-party verification by accredited entities.

If applicable, can the Program demonstrate up-to-date professional liability insurance policy of at least USD\$5M? (Paragraph 2.7.4) YES

Provide evidence of such coverage:



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3.8 Transparency and public participation provisions

Does the Program publicly disclose... (Paragraph 2.6)

a) what information is captured and made available to different stakeholders? YES

b) its local stakeholder consultation requirements (if applicable)? YES

c) its public comments provisions and requirements, and how they are considered (if applicable)? YES

Provide evidence of the public availability of items a) through c):

- a) ACR's publicly available Terms of Use (ToU) Agreement (<https://americancarbonregistry.org/how-it-works/membership/acr-terms-of-use/acr-terms-of-use-june-2015.pdf>) describes what information is collected by ACR and APX from the Account Holder account. Provision 5 specifically addresses ACR's policies on the ownership and use of data.
- b) Requirements for stakeholder consultation are project type-specific and are outlined in the relevant methodology. The ACR Standard indicates in Section 6.B that relevant outcomes from any required stakeholder consultations and mechanisms for ongoing communication must be presented in the GHG Project Plan. ACR's Environmental and Community Safeguards assessment procedures (Chapter 8) require a description of the process to identify community(ies) and other stakeholders affected by the project and, as applicable, the community consultation and communications plan, and that the Project Proponent provide detailed information regarding the community stakeholder consultation process (e.g., meeting minutes, attendees), including documentation of stakeholder comments and concerns and how those are addressed.
- c) As a key part of the process to solicit stakeholder feedback on updates / changes to the ACR Program including the approval of new methodologies and methodology revisions, ACR publicly posts the draft document on the ACR website (for the ACR Program, such as the ACR Standard, proposed changes are posted for a minimum of 60 days and for methodologies a minimum of 30 days), and ACR sends out a public notice to its email list-serve soliciting comments. During this period, methodology authors may elect to conduct a webinar with ACR to present the draft methodology. All public comments are responded to and published on the ACR website. The public comment period for ACR Standards is stated in Section 1.J of the currently approved version of the ACR Standard. The public comment period for methodologies is stated in the ACR Standard Chapter 7. The public webpages for ACR's methodologies include documentation of public comments and responses. Two examples are included below:
- 1) Destruction of ODS and High GWP Foam (<https://americancarbonregistry.org/carbon-accounting/standards-methodologies/destruction-of-ozone-depleting-substances-and-high-gwp-foam>)
 - [Methodology Public Comments and Responses](#) including comment letters from [3M](#), [Hudson Technologies](#) and [Iron Mountain](#)
 - 2) Landfill Gas Destruction and Beneficial Use (<https://americancarbonregistry.org/carbon-accounting/standards-methodologies/landfill-gas-destruction-and-beneficial-use-projects>)
 - [Methodology Public Comments and Responses](#)

Does the Program conduct public comment periods?

YES

Provide evidence of the relevant policies and procedures:

The public comment period for ACR Standards of 60 days is stated in Section 1.J of the currently approved version of the ACR Standard. The public comment period for methodologies of 30 days is stated in the ACR Standard Chapter 7.

Below are links to examples of previous public comment announcements, all available on the ACR website:

- <https://americancarbonregistry.org/news-events/program-announcements/cr-announces-open-public-comment-period-for-updates-to-the-acr-standard>
- <https://americancarbonregistry.org/news-events/program-announcements/acr-announces-open-public-comment-period-for-two-methodologies>
- <https://americancarbonregistry.org/news-events/program-announcements/acr-announces-public-comment-for-advanced-refrigeration-systems-methodology-1>
- <https://americancarbonregistry.org/news-events/program-announcements/acr-announces-open-public-comment-period-for-updates-to-the-acr-standard-and-publication-of-tribal-lands-guidance>

3.9 Safeguards system

Are safeguards in place to address environmental and social risks? (*Paragraph 2.9*) YES

Summarize and provide evidence of the relevant policies and procedures, including their availability to the public:

ACR's environmental and community safeguard requirements are described in Chapter 8 of the ACR Standard (<https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>). ACR supports a diverse set of offset 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 requires that projects adhere to environmental and community safeguards best practices to:

- Ensure that projects “do no harm” by maintaining compliance with local, national, and international laws and regulations;
- Identify environmental and community risks and impacts;
- Detail how negative environmental and community 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 ongoing communications and grievance redress mechanisms are in place, and that affected communities will share in the project benefits.

Project documents submitted to ACR must include an assessment of environmental and social risks demonstrating that the impact is net positive. VVBs confirm this assertion at Validation and at each Verification for the duration of the project crediting period.

Additionally, the annual ACR attestation required by ACR to be executed for all projects (found on the ACR website: (<https://americancarbonregistry.org/how-it-works/membership>)) includes the following attestations to environmental and community impacts of the project:

- (6) At no time during or since the development of the Project have there been any undisclosed or unmitigated adverse environmental or community impacts as a result of the development, construction, operation and/or maintenance of the Project;
- (7) Any comments that were received from stakeholders regarding environmental or community impacts during the development, construction, operation and/or maintenance of the Project have been addressed, and when necessary response actions have been implemented by the Member or Proponent and a true and accurate summary of any and all such communications/actions is attached hereto (as available).

3.10 Sustainable development criteria

Does the Program publicly disclose sustainable development criteria used (*if any*), and provisions for monitoring, reporting and verification in accordance with these criteria?
(Paragraph 2.10)

YES

Provide evidence of the public availability of any relevant policies and procedures:

All projects must include in their GHG Project Plan the identification and description of the Sustainable Development Goals to which the project impacts are aligned and positively contribute, as stated in Section 6.B of the ACR Standard.

ACR is primarily an offset standard for the issuance of high-quality emissions reduction / removals in the form of carbon offset credits. However, per the ACR Standard, project developers can also certify sustainability benefits under co-benefit standards such as the Climate Community and Biodiversity Alliance (CCBA) Standard, the Social Carbon Standard or SD Vista for the assessment, monitoring and reporting of environmental and community impacts of GHG mitigation projects.

Per the ACR Standard all IFM projects must demonstrate sustainable forest management, and certification by the Forest Stewardship Council (FSC), American Tree Farm (ATF) or Sustainable Forestry Initiative (SFI). In addition, projects may disclose positive contributions as aligned with applicable Sustainable Development Goals such as air quality improvements (reductions in SO_x and NO_x due to decreased truck idling, non-methane volatile organic compounds from control of landfill gas emissions), acres of land under sustainable management (reforestation and IFM projects), and acres of biodiversity/habitat conservation (A/R, wetlands restoration, avoided conversion of grasslands).

The Web based Registry also provides a field to indicate any other certifications a project may have obtained.

3.11 Avoidance of double counting, issuance and claiming

SECTION III, Part 4.7—Are only counted once towards a mitigation obligation includes questions related to this criterion. No additional information is requested here.

PART 4: Carbon Offset Credit Integrity Assessment Criteria

Note—Where the Program has any immediate plans to revise the Program (e.g., its policies, procedures, measures) to enhance consistency with a given criterion or guideline, provide the following information in response to the relevant form question(s):

- Proposed revision(s);
- Process and proposed timeline to develop and implement the proposed revision(s);
- Process and timeline for external communication and implementation of the revision(s).

4.1 Are additional

What is the threshold for over-issuance risk beyond which the Program provisions or measures require a response? (*Quantify if possible*)

The threshold for over-issuance risk beyond which ACR requires a response is defined as the materiality threshold of $\pm 5\%$. The ACR Standard, Chapter 9.B states:

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

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

Is additionality and baseline-setting assessed by an accredited and independent third-party verification entity, and reviewed by the Program? (*Paragraph 3.1*) YES

Summarize and provide evidence of the relevant policies and procedures, including their availability to the public:

The ACR Standard only issues offset credits to projects that demonstrate additionality. If a project is determined to be non-additional it is considered ineligible for any ACR offset credit issuance. If it is determined that a project is non-additional after offset credits are issued the project would be required to compensate for any over-issuance.

Additionality and project baselines are evaluated in all third-party validations. Validations and verifications are conducted by approved and accredited VVBs, as described in Section 3.6 of this document.

Both project additionality and the project baseline remain fixed for the duration of the crediting period. Therefore, these two key eligibility requirements feature more prominently in the scope of the validation, which occurs only once, at the beginning of each crediting period. VVBs are required to analyze baseline assumptions, models, and quantification to ensure that it is credible. This can include interviews with project proponents, review of legal and financial constraints, data checks, and analysis of common practice. VVBs also must evaluate each project's additionality assessment to ensure that all claimed emission reductions are surplus to "business as usual" (i.e., the baseline scenario). Details on validating a baseline is further provided in Section 3.B (page 14) and in Chapter 4 (page 15 -18) of the ACR Validation and Verification Standard (publicly available here: https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1/acr-vv-standard_v1-1_may-31-2018.pdf)

ACR staff also assess both the baseline and additionality during the project review prior to credit issuance. This two-fold review process ensures that the project meets the ACR additionality and baseline requirements.

Does the Program utilize one or more of the methods cited in Paragraph 3.1.2, which can be applied at the project- and/or program-level? (Paragraphs 3.1.2 - 3.1.3) YES

Summarize and provide evidence of the relevant policies and procedures, including listing and describing any/all analysis / test types that the Program permits for use:

The table below shows which of the methods from paragraph 3.1.2 (in Supplementary Information) for demonstrating additionality are applied in ACR Methodologies.

Method from Paragraph 3.1.2	ACR application
Barrier analysis	Yes, as part of the ACR Three-pronged additionality test
Common Practice	Yes, as part of the ACR Three-pronged additionality test
Performance Standards	Yes, if specified in the applicable methodology
Legal/regulatory additionality	All ACR projects must pass the Regulatory additionality test (see Chapter 4, Section A.1 of ACR Standard)

ACR requires that all GHG emission reductions and removals are surplus to the "business as usual" scenario. This is described in detail in Chapter 4 of the ACR Standard. To qualify as additional, ACR requires every project to either 1) exceed an approved performance standard, as defined in the applicable methodology, and a regulatory additionality test, or, 2) pass a three-pronged additionality test. The method for determining additionality is specified in each methodology.

The three-pronged additionality test combines three tests to determine whether projects are additional. Projects must pass all three tests to be deemed additional, and are considered additional

for the duration of the project's crediting period. The three-prong test consists of the following three tests:

1. Regulatory Surplus Test: Project activities that reduce or remove emissions may not be mandated by any existing law, regulation, statute, legal ruling, or other regulatory framework in effect as of the project Start Date.
2. Common Practice Test: Project activities must be distinct from activities, practices or technologies that are determined to be common practice in the sector and/or region. Project activities must also reduce or remove more GHGs than common practice activities, practices or technologies.
3. Implementation Barriers Test: Project activities must face at least one implementation barrier, such that it could prevent the adoption of the project activity. Projects must demonstrate that they face one of the following three barriers:
 - Financial barriers; includes high costs, limited access to capital, low rate of return in the absence of carbon revenue, financial risks associated with new technologies, and poor credit rating.
 - Technology barriers; includes R&D deployment risk, uncorrected market failures, lack of trained personnel and supporting infrastructure for technology implementation, and lack of knowledge on the project activity.
 - Institutional barriers; includes institutional opposition to technology implementation, limited capacity for technology implementation, lack of management consensus, aversion to upfront costs, and lack of awareness of benefits.

The performance standard approach consists of 1) demonstrating regulatory surplus (also required in the three-prong test) and 2) demonstrating that the project scenario exceeds a performance standard (as defined in the applicable methodology). Performance standards must be reviewed at least every five (5) years by ACR to ensure continued validity. The performance standard 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**: Installation of a particular GHG-reducing technology may be determined to be sufficiently uncommon that simply installing the technology is considered additional.
- **Emissions Rate or Benchmark**: per unit of output (e.g., tons of CO₂e emissions) with examination of sufficient data to assign an emission rate that characterizes the industry, sector, subsector; or typical land management regime, the net GHG emissions/removals associated with the Project Activity, more than this benchmark, may be considered additional and credited.

A table is provided below showing which method of additionality each ACR-approved methodology employs:

Methodology	Additionality Approach
Recycling of Transformer Oil	Three-pronged Test
Truck Stop Electrification ²	Performance Standard
Re-Refining Used Lubricating Oils	Performance Standard
Transition to Advanced Formulation Blowing Agents in Foam Manufacturing and Use	Performance Standard
Destruction of Ozone Depleting Substances and High-GWP Foam	Performance Standard
N ₂ O Abatement from Nitric Acid Production	Performance Standard
Capturing and Destroying Methane from U.S. Coal and Trona Mines	Performance Standard
Replacement of SF ₆ with Alternate Cover Gas in the Magnesium Industry	Three-pronged Test
Use of Certified Reclaimed HFC Refrigerants and Advanced Refrigeration Systems	Performance Standard
Landfill Gas Destruction and Beneficial Use Projects	Performance Standard
Methane Recovery in Animal Manure Management Systems	Three-pronged Test
Afforestation and Reforestation of Degraded Lands	Three-pronged Test
Improved Forest Management (IFM) for Non-Federal U.S. Forestlands	Three-pronged Test
Avoided Conversion of Grasslands and Shrublands to Crop Production	Three-pronged Test
Compost Additions to Grazed Grasslands	Three-pronged Test
Restoration of California Deltaic and Coastal Wetlands	Performance Standard
Restoration of Degraded Wetlands of the Mississippi Delta ³	Performance Standard
Restoration of Pocosin Wetlands	Three-pronged Test
Carbon Capture and Storage Projects	Performance Standard

If the Program designates certain activities as automatically additional (e.g., through a “positive list” of eligible project types), does the Program provide clear evidence on how the activity was determined to be additional? (Paragraph 3.1) YES

Summarize and provide evidence of the availability to the public of relevant policies and procedures, including the criteria used to determine additionality:

ACR has not approved any positive lists for additionality.

ACR allows methodologies to develop performance standards that are based on technology usage or practices. If a technology or practice is sufficiently uncommon or new, a project may be deemed additional by using a novel and less commonly used, ‘better performing’ practice or technology. All projects are still be required to pass the regulatory surplus test. All performance standards (and positive lists, of which there are none currently) are subject to ACR review at least every 5 years.

² No new projects will be registered with this methodology until the project-specific performance standard is updated.

³ No new projects will be registered with this methodology until the project-specific performance standard is updated.

Examples of performance standards

For ACR's Methodology for the Quantification, Monitoring, Reporting, and Verification of Greenhouse Gas Emissions Reductions and Removals from the Transition to Advanced Formulation Blowing Agents in Foam Manufacturing and Use, a performance standard was developed to document project additionality. The development of this performance standard is discussed in full in Appendix A of the methodology.

Information about foam blowing agent usage in the foam industry was gathered and reviewed. This included several studies, reports, and conversations with industry experts, regulatory personnel, and foam manufacturers. Additionally, a market research report was commissioned on the "Global Foam Blowing Agents Market Size, Share, Development, Growth, and Demand Forecast." In the ACR scientific peer review process, this information was disclosed and reviewed carefully. The market penetration rate of eligible blowing agents (i.e. those that, if used in a project activity, could lead to credited emission reductions) was determined via the use of the above-mentioned data and reporting and agreed during the ACR peer review process. This process ensured a very low penetration rate for eligible low-GWP foam blowing agents that lead to significant emission reductions when used instead of hydrofluorocarbon blowing agents.

A second example is found in the ACR Landfill Gas Destruction and Beneficial Use Projects methodology. The development of the performance standard is fully disclosed in Appendix A of the methodology. The focus of the performance standard in this methodology was to identify candidate landfills in both arid and non-arid regions of the United States based on the amount of waste that is placed in a landfill. The practice of methane mitigation is more common at large landfills, but is very uncommon, and therefore in need of environmental incentive mechanisms, at small landfills. This performance standard utilized a comprehensive landfill database maintained by the United States Environmental Protection Agency (U.S. EPA). Through quantitative and qualitative data analysis, the eligible size threshold for landfills located in non-arid and arid counties (as defined by the U.S. EPA precipitation zones) was determined. The results of the data analysis, including the U.S. EPA database, were reviewed and agreed upon during the ACR scientific peer review process.

Describe how the procedures described in this section provide a reasonable assurance that the mitigation would not have occurred in the absence of the offset program: (Paragraph 3.1)

The procedures and requirements that are in place provide reasonable assurance that projects are additional in the following ways:

1. The ACR Standard provides a robust set of additionality requirements that meet industry standards (Chapter 4).
2. The ACR scientific peer review process ensures that additionality criteria are scientifically based on robust datasets.
3. There is a strong tendency for carbon market participants to propose novel, additional project types and methodologies to avoid ineligibility.
4. Additionality assessments are reviewed by ACR and by independent accredited third-party verifiers.
5. Baselines and additionality must be re-evaluated at the end of each crediting period.

4.2 Are based on a realistic and credible baseline

Are procedures in place to issue emissions units against realistic, defensible, and conservative baseline estimations of emissions? (Paragraph 3.2) YES

Summarize and provide evidence of the relevant policies and procedures, including that baselines and underlying assumptions are publicly disclosed:

ACR affirms a set of guiding principles, based on the International Organization for Standardization (ISO) 14064 Part 2 (2006) specifications from which all other ACR principles and eligibility criteria follow. Three of these principles are relevance, accuracy, and conservativeness. All ACR methodologies and projects are required to use relevant, accurate, and conservative assumptions, values, and procedures to ensure that GHG emission reductions or removal enhancements are not overestimated. Section 2.B.4 of the ACR Standard states the following:

“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 ACR methodology development process, through initial ACR review, public consultation, and scientific peer review, ensures that a relevant, accurate, and conservative baseline scenario or baseline selection process is applied by each project.

Per Section 6 of the ACR Standard, all projects developed in the ACR program have the following documents made public upon acceptance of a completed validation and verification of the project: the GHG project plan, monitoring report, validation report, verification report, and verification statement. The GHG project plan, validation report and verification report all disclose a project’s baseline and any relevant assumptions related to the baseline and/or the application of the baseline in the project activity.

Are procedures in place to ensure that methods of developing baselines, including modelling, benchmarking or the use of historical data, use assumptions, methodologies, and values do not over-estimate mitigation from an activity? (Paragraph 3.2.2) YES

Summarize and provide evidence of the relevant policies and procedures:

In addition to the principles and processes stated in response to paragraph 3.2 (particularly as related to conservativeness), ACR has defined requirements for uncertainty, accuracy, and precision applied, as relevant, in each methodology, which are found in Section 2.B.3 of the ACR Standard.

For methodologies based on statistical sampling (e.g., methodologies in the forestry or working land use sectors), ACR requires that the sampling error associated with the mean of the estimated emission reduction/removal not exceed $\pm 10\%$ of the mean at the 90% confidence interval to report the mean of the estimated emission reduction/removal. If the Project Proponent cannot meet this target, then the reportable amount shall be the mean minus the lower bound of the 90% confidence interval, applied to the final calculation of emission reductions/removal enhancements. If the sampling error is equal to or greater than 20%, the confidence deduction for the monitoring period must be 100%.

Project-specific methodologies provide guidance how to calculate this uncertainty deduction. Methodologies submitted for ACR approval shall include methods for estimating uncertainty relevant to the project and baseline scenario.

If sampling is required and the statistical precision requirements are not met, project proponents must take an uncertainty deduction from their total reported offset credits for that period. The Project Proponent can elect to implement more intensive sampling to achieve the precision of $\pm 10\%$ of the mean at the 90% confidence interval to avoid an uncertainty deduction and retain more net emission reductions for crediting.

The use of biogeochemical or process models must also include an estimate of structural uncertainty related to the inadequacy of the model, model bias, and model discrepancy. This should be quantified using the best available science, and can include Monte Carlo analyses, uncertainty estimates from peer reviewed literature, and/or recommendations from model experts who have either developed or worked directly with the model.

Finally, for methodologies focused on non-CO₂ emission mitigation activities (for instance, those methodologies that quantify emission reductions of short-lived climate forcers such as methane or hydrofluorocarbons), ACR's program utilizes 100-year global warming potentials (GWPs). This is a very conservative requirement and, in practice, significantly under reports the actual impact of non-CO₂ emission mitigation activity. These projects should, arguably, be quantified using a GWP on time scales of less than 20 years which would greatly increase the credits earned by these projects. However, crediting on a 100-year GWP scale is an inherently very conservative requirement that ensures that there can be no overestimation of emission mitigation activity.

Are procedures in place for activities to respond, as appropriate, to changing baseline conditions that were not expected at the time of registration? (Paragraph 3.2.3) YES

Summarize and provide evidence of the relevant policies and procedures:

Yes, changing baseline conditions are assessed during project crediting period renewal. A project baseline is typically fixed for the duration of a crediting period and, at defined intervals, crediting periods are renewed. Per Chapter 3 of the ACR Standard, a project proponent may apply to renew the Crediting Period by complying with all then current ACR requirements, re-evaluating the baseline scenario, reassessing additionality, and using emission factors, tools, and methodologies in effect at the time of renewal. Crediting periods for non-AFOLU projects are 10 years in length and crediting periods for AFOLU project types vary in length but are typically longer than 10 years (please see section 3.3(b) above for a list of crediting period lengths) based on considerations such as industry dynamics that cause the need for more or less frequent assessment of baseline conditions.

4.3 Are quantified, monitored, reported, and verified

Are procedures in place to ensure that...

a) emissions units are based on accurate measurements and valid quantification methods/protocols? (Paragraph 3.3) YES

b) validation occurs prior to or in tandem with verification? (Paragraph 3.3.2) YES

c) results of validation and verification are made publicly available? (Paragraph 3.3.2) YES

d) monitoring, measuring, and reporting of both activities and the resulting mitigation is conducted at specified intervals throughout the duration of the crediting period? (Paragraph 3.3) YES

e) mitigation is measured and verified by an accredited and independent third-party verification entity? (Paragraph 3.3) YES

f) *ex-post* verification of mitigation is required in advance of issuance of emissions units? YES

Summarize and provide evidence of the relevant policies and procedures related to a) through f):

- a) Per ACR Standard Chapter 2 - Section 2.A, all ACR methodologies and projects are required to adhere to rigorous accounting and data quality principles that are set out in ISO 14064 Part 2. Specifically:
- i. Relevance: selection of the GHG sources, GHG sinks, GHG reservoirs, data, and methodologies appropriate to the needs of the intended user;
 - ii. Completeness: inclusion of all relevant GHG emissions and removals; inclusion of all relevant information to support criteria and procedures;
 - iii. Consistency: enabling meaningful comparisons in GHG-related information; use of consistent methodologies for meaningful comparisons of emissions over time; transparently document any changes to the data, boundary, methods, or any other relevant factors;
 - iv. Accuracy: reduce bias and uncertainties as far as is practical;
 - v. Transparency: disclosure of sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence; disclosure of any relevant assumptions and appropriate references to the accounting and calculation methodologies and data sources used; and,
 - vi. Conservativeness: use of conservative assumptions, values, and procedures to ensure that GHG emission reductions or removal enhancements are not overestimated.

Further, section 2.B.5 of the ACR Standard states that all emission factors employed in a methodology must:

- Derive from a scientific peer-reviewed origin;
- Be appropriate for the GHG source or sink concerned; and
- Take account of quantification uncertainty.

Lastly, the ACR methodology development process is designed to ensure that all projects apply accurate measurement and quantification methods/protocols. Per Chapter 7 of the ACR Standard, all methodologies undergo a rigorous review process to ensure that all ACR methods will result in accurate measurement and quantification techniques employed by each registered project.

- b) Validation may occur prior to or in tandem with a project's first verification.

Per ACR Standard Chapter 6: *"Validation and verification may occur simultaneously and must occur prior to issuance of ERTs."*

Per ACR Standard Chapter 9 – Section 9.A: *"Validation and verification may be conducted by the same entity, and may occur simultaneously."*

Per ACR Validation and Verification Standard Chapter 12: *"Note that validation and the first verification may be conducted simultaneously, and may be conducted by the same approved VVB."*

- c) Validation and verification reports are always publicly available at the "document" link for each project on the ACR Registry.

Per ACR Standard Chapter 6: *"Upon acceptance of the verification statement, ACR registers the project, posts public project documents, including the validation report, verification report and statement, and the validated GHG Project Plan,..."*

Per ACR Standard Chapter 6 – Section 6.A: *"Upon acceptance of the verification statement, ACR makes the validated GHG Project Plan, validation report, verification report, and statement public on its registry."*

Per ACR Validation and Verification Chapter 7: *"The product of validation is a Validation Report, which is posted publicly by ACR."*

Per ACR Validation and Verification Chapter 12: *"The end products of verification are a Verification Statement and Verification Report. ACR posts both publicly."*

- d) Defined intervals are required for reporting and subsequent verification of mitigation activities.

Per the ACR Standard Chapter 6 – Section 6.E: *"Project monitoring reports shall be completed for each verified reporting period. The report shall describe the current status of project operation, and include the data monitored and monitoring plan, and the calculated emission reductions for the reporting period."*

Per the ACR Standard Chapter 9 – Section 9.C: *"ACR requires verification of GHG assertions at specified intervals in order to issue new ERTs. ERTs may be created and issued annually, or at the Project Proponent's request, more or less frequently. At each request for issuance of new ERTs, the Project Proponent must submit a verification statement from an approved verifier. No less than once every 5 years, Project Proponents must submit a verification statement based on a full verification including a field visit to the project site. This 5-year verification requirement begins on the date that the project is listed in the ACR. In the case of sequestration projects, the scope of this verification should include an updated assessment of risk of reversal and an updated buffer determination, as applicable."*

Regarding verification intervals, per the ACR Validation and Verification Standard Chapter 8 – Section 8.C:

- i. *A desk-based verification audit at each request for issuance of new ERTs. This is usually conducted annually, but may be more or less frequent at the discretion of the Project Proponent.*
 - ii. *A full verification including a field visit at the first verification and again at least every 5 years. Field verifications may be conducted more frequently (e.g., in the case of changes in monitoring and data management practices, or for particular project types with material parameters that can only be verified on site). Generally, for most project types, field verification is required at minimum every 5 years.*
 - iii. *Following any reversal of sequestration that requires updating the project baseline.*
- e) Emission mitigation activity is verified by an accredited and independent third-party verification body for each ACR project.

Per the ACR Standard Chapter 9 – Section 9.D: “VVBs shall be accredited for project validation and verification in the sector of the applicable methodology, and shall meet the competence requirements as set out in ISO 14065:2013.” And, “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 MoU in place.”

Per the ACR Validation and Verification Standard Chapter 13 – Section 13.A: “VVBs shall be accredited for project validation and verification in the scope of the applicable methodology, and VVB teams shall meet the competence requirements as set out in ISO 14065:2013. All ACR validators and verifiers must be accredited by an accreditation body that is a member of the IAF and with which ACR has a Memorandum of Understanding (MoU), to ISO 14065:2013 (or the latest version of the standard) in the applicable sectoral scope to conduct validation(s) and/or verification(s).”

- f) Ex-post verification of mitigation units is required. ERTs are only granted for actual quantifiable and verifiable GHG emission reductions/removals.

Per the ACR Standard Chapter 1 – Section 1.I: “A project-based offset is the result of a defined and eligible project action that yields quantifiable and verifiable GHG emissions reductions/removals. ACR will not issue ERTs for GHG emissions reductions or removals when an emission mitigation activity has not occurred or is not yet verified. ACR will not credit a projected stream of offsets on an ex-ante basis.”

And ACR Standard Table 2 “Eligibility Requirements” in Chapter 3 of the ACR Standard defines real: “GHG reductions and/or removals shall result from an emission mitigation activity that has been conducted in accordance with an approved ACR Methodology and is verifiable. ACR will not credit a projected stream of offsets on an ex-ante basis.”

Are provisions in place... (Paragraph 3.3.3)

- a) to manage and/or prevent conflicts of interest between accredited third-party(ies) performing the validation and/or verification procedures, and the Program and the activities it supports? YES
- b) requiring accredited third-party(ies) to disclose any conflict of interest? YES
- c) to address and isolate such conflicts, should they arise? YES

Summarize and provide evidence of the relevant policies and procedures:

- a) Per the ACR Standard Chapter 9 – Section 9.D: “Prior to commencing validation or verification work on ACR, all VVBs must be in good standing; have completed the application process described at <http://americancarbonregistry.org/carbonaccounting/verification>, including submitting an application form and Attestation of Validation/Verification Body, which details requirements for accreditation, 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.”

ACR requires that all VVBs apply for approval by ACR by submitting an application package in addition to a verifier attestation, which defines the VVB role and responsibilities, ensuring technical capabilities and no conflicts of interest. Validation and verification activities may not be conducted until the VVB has received approval from ACR. Once approved, the VVB’s must update ACR immediately about any changes in accreditation status or scope, enforcement activities, investigations, revocations or suspensions of the body itself, or any verifiers working on the VVB’s behalf.

Conflict of Interest provision in ACR Verifier Attestation (found here: <https://americancarbonregistry.org/carbon-accounting/verification/attestation-of-verification-body-2017.pdf>)

Conflict of interest. In connection with any ACR Verification, Verification Body will not conduct verification with respect to any project where the Verification Body or any member of the verification team has a financial interest in the project or corporation, has played a role in developing the project or has any other conflict of interest. (Absent unusual circumstances, validating a monitoring or verification protocol and/or serving as a member of a scientific peer review process does not constitute having a role in developing a project.) Without limiting the foregoing, Verification Body will not conduct verification with respect to a project if an independent observer could reasonably conclude that current or prior personal or business relationships between the Verification Body or verification team member(s) and the project, project proponent or corporation present a conflict of interest. In the verification statement, the verifier will disclose all relationships within the past three years between the Verification Body and verification team members, on the one hand, and the project proponent and project being verified, on the other, and will attest that neither the Verification Body nor any member of the verification team has a conflict of interest with respect to the verification work.

- b) All third-parties operating under ACR's program are required to disclose any conflict of interest. ACR requires that all verifiers execute a project-specific conflict of interest disclosure and attestation form, reviewed and approved by ACR prior to initiating any validation or verification work. VVBs must complete the conflict of interest form for each reporting period, regardless of prior approval. (This form can be found here: <https://americancarbonregistry.org/carbon-accounting/verification/verification>).

Per the ACR Standard Chapter 6 – Section 6.A: “ACR must approve the VVB prior to the start of validation and verification services based on proper accreditation, conflict of interest review, and rotation requirements.”

Per the ACR Validation and Verification Standard Chapter 13 – Section 13.A: “VVBs must also complete a project-specific conflict of interest form prior to initiating any validation or verification work. VVBs must complete the conflict of interest form for each reporting period, regardless of prior approval.”

- c) Per the ACR Validation/Verification Body Project-Specific Conflict of Interest Attestation, a conflict of interest mitigation plan is required to be disclosed in the event that a conflict is identified by a third-party VVB. Per ACR Standard Chapter 9 and ACR Validation and Verification Standard Chapter 13, ACR reviews all Conflict of Interest submittals prior to allowing a VVB to commence validation/verification services. As part of this review process, any proposed conflict of interest mitigation plan is reviewed and agreed with the VVB.

Are procedures in place requiring that renewal of any activity at the end of its crediting period includes a reevaluation and update of baseline? (Paragraph 3.3.4) YES

Summarize and provide evidence of the relevant policies and procedures:

By definition in the ACR Standard, Crediting Periods are established in order to require Project Proponents to re-confirm, at intervals appropriate to the project type, that the baseline scenario remains realistic and credible, the Project Activity remains additional, and the most accurate and technologically up-to-date GHG accounting is being used. ACR's eligibility criteria state that a Project Proponent may apply to renew the Crediting Period by complying with all then-current ACR requirements, re-evaluating the baseline scenario, reconfirming additionality, and using emission factors, tools, and methodologies in effect at the time of renewal, and validating the new GHG Project Plan within one year of the close of the previous crediting period. Except where specified in a methodology, ACR does not limit the number of renewals. An acceptable validation report is necessary for ACR to renew the Crediting Period and continue issuing offsets generated by the project.

For details regarding ACR's requirements to renew a crediting period, please reference section 6.I of the ACR Standard found here https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard/acr-standard-v6_final_july-01-2019.pdf

Are procedures in place to transparently identify units that are issued *ex-ante* and thus ineligible for use in the CORSIA? (Paragraph 3.3.5) YES

Provide evidence of the relevant policies and procedures:

ACR has no need to identify units that are issued *ex-ante* and thus ineligible for use in the CORSIA because ACR does not credit offsets on an *ex-ante* basis.

As stated in the ACR Standard, Chapter 1 Section I “*No Ex-Ante Crediting: A project-based offset is the result of a defined and eligible project action that yields quantifiable and verifiable GHG emissions reductions/removals. ACR will not issue ERTs for GHG emissions reductions or removals when an emission mitigation activity has not occurred or is not yet verified. ACR will not credit a projected stream of offsets on an ex-ante basis.*”

Table 2 “Eligibility Requirements” in Chapter 3 of the ACR Standard defines real: “*GHG reductions and/or removals shall result from an emission mitigation activity that has been conducted in accordance with an approved ACR Methodology and is verifiable. ACR will not credit a projected stream of offsets on an ex-ante basis.*”

4.4 Have a clear and transparent chain of custody

SECTION III, Part 3.4—Identification and tracking includes questions related to this criterion. No additional information is requested here.

4.5 Represent permanent emissions reductions

List any emissions sectors (if possible, activity types) supported by the Program that present a potential risk of reversal of emissions reductions, avoidance, or carbon sequestration:

All project types that claim offset credits from carbon sequestration (in vegetation, soil or geologic) inherently have a risk of reversal. ACR project types for which this is relevant include:

- Afforestation and Reforestation of Degraded Lands
- Improved Forest Management (IFM) for Non-Federal U.S. Forestlands
- Compost Additions to Grazed Grasslands
- Restoration of California Deltaic and Coastal Wetlands
- Restoration of Degraded Wetlands of the Mississippi Delta
- Restoration of Pocosin Wetlands
- Carbon Capture and Storage Projects
- Avoided Conversion of Grasslands and Shrublands to Crop Production

What is the minimum scale of reversal for which the Program provisions or measures require a response? (Quantify if possible)

There is no minimum threshold for reversal reporting and compensation. ACR requires reporting and compensation of reversals of any nature (intentional or unintentional) and of any scale.

For sectors/activity types identified in the first question in this section, are procedures / provisions in place to require and support these activities to...

- a) undertake a risk assessment that accounts for, *inter alia*, any potential causes, relative scale and relative likelihood of reversals? (Paragraph 3.5.2) YES
- b) monitor identified risks of reversals? (Paragraph 3.5.3) YES
- c) mitigate identified risks of reversals? (Paragraph 3.5.3) YES
- d) ensure full compensation for material reversals of mitigation issued as emissions units and used toward offsetting obligations under the CORSIA? (Paragraph 3.5.4) YES

Summarize and provide evidence of the relevant policies and procedures related to a) through d):

- a) Detailed descriptions and requirements for reversal risk mitigation are included in the ACR Standard, Chapter 5 Permanence. ACR defines two types of reversals; intentional and unintentional. Intentional reversals are those that arise from willful acts that release sequestered CO₂e back into the atmosphere. Examples of intentional reversals include over-harvesting timber stocks, converting a grassland into agriculture, or draining a peatland for terrestrial activities and, for geologic sequestration, the release of stored CO₂ that is intentional or that is a collateral effect of any planned activities affecting the storage volume. These willful, intentional acts result in the release of stored carbon, and must be compensated by the project proponent. Unintentional reversals are those that arise from natural disturbances including, fire, disease, pest infestation, or floods, among others for terrestrial activities and unanticipated release of CO₂ for geologic projects.

For terrestrial sequestration projects, ACR requires risk to be assessed using the ACR Tool for Risk Analysis and Buffer Determination, which is found here: <https://americancarbonregistry.org/carbon-accounting/guidance-tools-templates/acr-risk-tool-v1-0.pdf/view>. The contribution to the buffer pool is based on the result of the (unintentional reversal) risk assessment using the ACR Tool for Risk Analysis and Buffer Determination. The assessment results in an overall risk rating for the project, which ranges from 13% to 33%, based on general and project-specific risk factors. The resulting percentage is deposited to the buffer pool at each issuance. While project size (offset volume) is not the basis for buffer pool contributions, larger projects generally contribute larger volumes proportionally (x% of a high-volume project results in more credits than the same % of a smaller volume project).

The risk assessment requires scoring risks in categories including financial risk, project management risk and social and political risk and assesses the likelihood of natural disasters

by assigning a higher risk to areas more prone to fire, disease, pests and water table changes. A deduction in the overall risk percentage is reduced if verifiable evidence can be provided of a legally binding and enforceable conservation easement that requires the protection of carbon stocks for the life of the project.

The ACR Buffer Terms and Conditions is in Appendix B of the ACR Standard, and also as an annex to the ACR Risk Mitigation Agreement, included as Attachment A. The Buffer Terms and Conditions outline the ACR requirements and procedures related to risk mitigation and reversal. Section 1.4 of the Buffer Terms and Conditions states the following:

“ASSESSMENT OF RISK. For AFOLU projects that have risk of Reversal, Project Proponent shall conduct a risk assessment addressing both general and project-specific risk factors using the ACR Tool for Risk Analysis and Buffer Determination. The output of the tool is an overall risk rating percentage for the project, translating into a number of offsets that will be deposited in the ACR Buffer Pool Account to mitigate the risk of reversals at the time of each issuance, the Minimum Buffer Percentage. The risk assessment, overall risk category and Minimum Buffer Percentage, and calculated buffer contribution amount shall be included in the GHG Project Plan. ACR evaluates the overall risk category and corresponding buffer contribution, and the VVB evaluates whether the risk assessment has been conducted correctly. If no Reversals occur, the project’s risk category and Minimum Buffer Percentage shall remain unchanged for five years. The risk analysis must be re-evaluated every five years, coincident with the interval of required site visit verification except in the event of a Reversal, in which case the risk category and Minimum Buffer Contribution shall be re-assessed and re-verified immediately.”

Further, each project must execute and submit the ACR Risk Mitigation Agreement, a legally binding contract, prior to offset credit issuance. This agreement lays out the obligations of the project proponent to both mitigate risk and compensate for reversals.

Geologic sequestration projects (CCS) do not undergo a project-specific reversal risk assessment, rather ACR requires CCS project proponents to monitor and quantify any atmospheric leakage during the entire project term which includes the CO₂ injection period and a post-project monitoring period that is determined according to the procedures discussed in the methodology. (To summarize, post injection monitoring is required until CO₂ plume stability is demonstrated for at least five years ensuring no atmospheric leakage). Projects must demonstrate proof of insurance (acceptable to ACR) or contribute 10% of the project’s offset credits to a Reserve Account, managed by ACR, from which offsets will be retired in the event of an unintentional reversal (atmospheric leaks of CO₂) during the Project Term.

Note, there are physical limits to how much and how fast CO₂ can be released from an underground formation. During the active injection phase, releases will be detected quickly from changes in pressure and a range of corrective actions can be taken to minimize the size of a release. Research and experience from decades of EOR demonstrate low risk of releases to the atmosphere from geologic sequestration for EOR at properly mapped and managed sites. ACR’s 10% Reserve Account (buffer pool) contribution is a conservative estimate of

the potential risk of release. To date there have been no known releases exceeding 1% of the CO₂ injected for EOR. Draft California rules recommend 3% to 11% contribution to a buffer pool for CCS. It is also important to note that the 10% Reserve Account contribution is not designed to compensate for reversals post project-term or for a "worst-case scenario" or intentional reversal, the procedures for which are described under c) below.

- b) All ACR projects with reversal risk must adhere to ongoing monitoring requirements as detailed in relevant methodologies, including ongoing verification during the Minimum Project Term.

For terrestrial sequestration projects, the Risk Assessment is subject to review at every verification, no less than every five years. This is stated in Section 9.C of the ACR Standard, as well as in Section 6.E of the ACR Validation and Verification Standard. This Section states:

"GHG reductions/removals from terrestrial sequestration or carbon storage activities are impermanent in the sense that they may be subject to some risk of future reversal, including unintentional reversals (e.g., fire, flood, and insect infestation for terrestrial projects) and intentional reversals (e.g., landowners or project participants choosing to discontinue project activities).

For AFOLU projects with a risk of reversal of GHG emission reductions/removals, Project Proponents must assess risk using an ACR-approved risk assessment tool and enter into a legally binding Reversal Risk Mitigation Agreement with ACR. Project Proponents must then mitigate reversal risk by contributing offsets to the ACR Buffer Pool (either from the project itself, or ERTs of any other type and vintage); by providing evidence of sufficient insurance coverage with an ACR- approved insurance product to recover any future reversal; or by using another ACR-approved risk management mechanism⁴.

The VVB shall review the AFOLU Project Proponent's project-specific risk assessment, which must be conducted using the ACR Tool for Risk Analysis and Buffer Determination, and its chosen risk mitigation mechanism, supporting documentation, and analytics. The VVB shall also review the risk reversal mitigation measures implemented to ensure they are consistent with the terms set forth in the ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement.

Note that ACR requires that the risk analysis and corresponding buffer contribution (if applicable) be evaluated in the GHG Project Plan. This will be included in ACR's eligibility screening report. The VVB shall independently evaluate whether the risk assessment has been conducted correctly."

For Geologic Sequestration, ACR requires a project-specific plan to monitor the field

⁴ Please note that while ACR has a provision allowing for approved insurance mechanisms in lieu of the buffer pool, no insurance products are currently approved for use. For any approved insurance product, ACR would have a legal agreement in place with the insurer defining all terms and conditions and requirements for reversal risk compensation.

pressures and the underground plume of CO₂. Project Proponents are required to demonstrate that the CO₂ captured and stored is permanently sequestered underground through detailed post-injection monitoring, required until it can be verified that no migration of injected CO₂ is detected across the boundaries of the storage volume and the modeled failure scenarios indicate that the CO₂ will remain contained within the storage volume. The Risk Mitigation Covenant details ongoing monitoring requirements.

- c) For terrestrial sequestration projects, ACR mitigates reversal risks through the legally binding AFOLU Carbon Project Reversal Risk Mitigation Agreement and Buffer Pool Terms and Conditions, which dictates requirements for a Buffer Pool contribution. The Reversal Risk Mitigation Agreement [**BUSINESS CONFIDENTIAL**] is form agreement included as Attachment A. This Agreement must be executed prior to any offset credit issuance, and outlines the requirement to 1) Assess risk 2) Mitigate risk through an ACR mechanism 3) Comply with the risk mitigation requirements including notifying ACR of the reversal, completing a verification to quantify the reversal amount, and 4) compensating for the reversal as applicable. This is further described in number 4 below.

In addition to requiring a buffer pool contribution, ACR allows projects to propose alternative risk mitigation mechanisms, such as another offset credit insurance pool. However, at this time, there are no approved risk mitigation mechanisms apart from the ACR Buffer Pool.

For geologic sequestration projects, requirements for monitoring, reporting and mitigation / compensation for reversals during the project term are detailed in the applicable methodology (e.g. sections 5.4 and 6.3 in the CCS methodology). To cover liability of atmospheric leakage (reversal), Project Proponents can purchase private insurance designed to cover damages associated with releases, including third-party liability and liability to ACR, and those resulting from lost credits due to reversals. Insurance premiums would be paid by the Project Proponent to the insurance company, and, in the event of CO₂ leakage to the atmosphere, the insurance company would cover obligations to compensate for reversals in GHG emissions reductions (e.g., purchase and retire ACR offset credits).

In lieu of insurance, Project Proponents may opt to contribute to an ACR Reserve Account. Each year the Project Proponent would deposit 10% of the project's offset credits in the Reserve Account. In the event of reversals, a debit shall be measured and reported, verified, and reconciled by the Account by retiring offset credits from the Reserve Account.

Mitigation post project-term is covered under a Risk Mitigation Covenant filed in the real property records of each county, parish and other governmental subdivision that maintains real property records showing ownership of and encumbrances on real property in the jurisdictions in which the CO₂ storage volume is located, prohibiting any intentional reversal (e.g., release of stored CO₂ that is intentional or that is a collateral effect of any planned activities affecting the storage volume) unless measures are taken in advance to compensate for the reversal by replacing the reversed offset credits for ACR's retirement pursuant to a plan acceptable to ACR.

- d) AFOLU reversals must be reported and compensated following requirements detailed in the ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement and the Buffer Pool Terms and Conditions. ACR's stringent procedures and legally binding Risk Mitigation Agreement ensures that all reversals are compensated in a timely manner.

If ACR is approved to supply units under CORSIA, requirements will promptly be added to applicable ACR Program rules to ensure that buffer contributions and reversal compensation for CORSIA units shall only be done with CORSIA-eligible offset credits.

Section 5 of the Risk Mitigation Agreement, and section B.5 of the ACR Buffer Terms and Conditions describe the ACR requirements related to compensation of reversals, which are summarized here:

- i. A project proponent must notify ACR of a reversal (both intentional and unintentional) immediately upon discovery or knowledge of the reversal. Such notice must include an estimate of the size of the reversal, the "Estimated Lost Offset Amount".
- ii. In all cases (regardless of the type of reversal) the project proponent must comply with ACR requests for additional information and analyses relating to the reversal, and must have the reversal volume verified by an accredited verification body with 6 months of reporting the reversal. The final volume is referred to as the "Verified Lost Offset Amount".
- iii. In the case of an unintentional reversal, ACR will then cancel a number of offsets equal to the "Estimated Loss Amount" from the ACR Buffer Pool. If the Lost Offset Amount from the Reversal exceeds the Proponent's Buffer Contributions to date, the Project Proponent shall pay a "deductible" of 10% of the Lost Offset Amount, depositing this additional offset amount in the ACR Buffer Pool within thirty (30) days of the cancellation, and the Buffer Pool covers the remainder. The deductible contribution may be of ACR offsets of any type and vintage. Following unintentional reversals, the Proponent is not required to replenish the buffer unless the Minimum Buffer Percentage increases based on the risk assessment update. If the Verified Lost Offset Amount is greater than the Estimated Lost Amount, ACR will cancel from the Buffer Pool the difference.
- iv. In the case of an intentional reversal, ACR will then cancel the number of offsets equal to the "Estimated Loss Amount" from the project proponent's ACR account or from the buffer pool. The project proponent must compensate by reimbursing the buffer pool with the Estimated Loss Amount within 30 days of the reporting the reversal. This Buffer Contribution may be made using ACR offsets of any type or vintage. If the Project Proponent does not make this Buffer Contribution within thirty (30) days, ACR retains the right to freeze the account and use any existing offsets to compensate for the Reversal.
- v. Projects will terminate automatically if a Reversal causes project stocks to decrease below baseline levels prior to the end of the Minimum Project Term. In cases where this decrease is intentional (e.g., forest conversion or over-harvesting) the project proponent shall compensate for all issued offsets to that project. In cases where this decrease in unintentional the buffer pool will compensate for the reversal.

- vi. Project proponents that choose to terminate early (i.e., prior to the Minimum Project Term of 40 years) ACR assumes that all offset credits issued to the project to date are lost due to an intentional reversal and must be compensated by the project proponent.

Geologic sequestration reversals must be reported and compensated following requirements as detailed in applicable methodology (e.g. Section 5.4 and 6.3 in the CCS methodology). In the event of reversals during the project term, the quantity shall be measured and reported, verified and compensated through insurance or by retiring offset credits from the Reserve Account. Reversals post-Project Term are compensated as outlined in the Risk Mitigation Covenant, which prohibits any intentional reversal unless there is advance compensation to ACR.

The Risk Mitigation Covenant shall require that the Project Proponent and the owner of the property notify ACR upon discovery of the occurrence of or plans to conduct any activity that results in a reversal, shall require that the Project Proponent and owner of the property submit an annual attestation of compliance to ACR, and shall afford ACR an access right to the property in order to conduct inspections. The obligations under the Risk Mitigation Covenant shall be secured by a lien in favor of ACR against the CO₂ and the pore space comprising the CO₂ storage volume, which lien shall be included in the Risk Mitigation Covenant.

Are provisions in place that... (Paragraph 3.5.5)

- a) confer liability on the activity proponent to monitor, mitigate, and respond to reversals in a manner mandated in the Program procedures? YES
- b) require activity proponents, upon being made aware of a material reversal event, to notify the Program within a specified number of days? YES
- c) confer responsibility to the Program to, upon such notification, ensure and confirm that such reversals are fully compensated in a manner mandated in the Program procedures? YES

Summarize and provide evidence of the relevant policies and procedures related to a) through c):

- a) For terrestrial sequestration projects, ACR requires all project proponents to execute a legally binding Risk Mitigation Agreement (a proprietary and confidential legal document included as **BUSINESS CONFIDENTIAL** Attachment A). This agreement must be executed jointly by Winrock International (ACR's parent company) and the project proponent, and submitted to ACR prior to any offset credit issuance. The Risk Mitigation agreement outlines the following:
- Requires proponent to assess risk of reversal.
 - Requires proponent to update risk of reversal at regular intervals.
 - Requires proponent to contribute to the buffer pool (or other approved mitigation mechanism).

- Requires proponent to report and estimate reversal within 10 days of discovery.
- Requires proponent to verify estimated reversal within 6 months.
- Requires proponent to compensate for reversal when intentional, or when buffer contribution to date is insufficient to cover.
- Defines default and remedies.

[BUSINESS CONFIDENTIAL]:

[END BUSINESS CONFIDENTIAL].

Geologic sequestration projects, must monitor, report and compensate reversals by contributing ACR offset credits to the ACR Reserve Account; providing evidence of sufficient insurance coverage with an ACR-approved insurance product to recover any future reversal; or using another ACR-approved risk mitigation mechanism. ACR requires geologic sequestration Project Proponents to use approved methodologies that assure permanence including ongoing QA/QC and long-term monitoring and reversal risk mitigation measures. Monitoring, reporting and compensation for reversals post project-term are covered under a Risk Mitigation Covenant filed in the real property records of each county, parish and other governmental subdivision that maintains real property records showing ownership of and encumbrances on real property in the jurisdictions in which the CO₂ storage volume is located, prohibiting any intentional reversal (e.g., release of stored CO₂ that is intentional or that is a collateral effect of any planned activities affecting the storage volume) unless measures are taken in advance to compensate for the reversal by replacing the reversed offset credits for ACR's retirement pursuant to a plan acceptable to ACR. Atmospheric leakage (reversal) mitigation procedures are outlined in table 6.4 in the [ACR CCS methodology](#).

- b) The ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement requires project proponents to report a reversal immediately, but no later than 10 days of becoming aware of it. There is no materiality threshold – all reversals must be reported.

Geologic sequestration projects must notify ACR upon discovery of a reversal (per section 5.4 of the [CCS methodology](#) that details requirements of the Risk Mitigation Covenant). The Risk Mitigation Covenant shall require that the Project Proponent and the owner of the property notify ACR upon discovery of the occurrence of or plans to conduct any activity that results in a reversal, shall require that the Project Proponent and owner of the property submit an annual attestation of compliance to ACR, and shall afford ACR an access right to the property in order to conduct inspections. ACR retains the right to freeze the Proponent's project account and retire any existing offset credits to mitigate the unreconciled quantity.

- c) For terrestrial projects, the ACR Buffer Terms and Conditions sets out the process that is undertaken by ACR program staff when notified of a reversal. This process includes canceling offset credits upon notification of a reversal to ensure immediate compensation and wholeness of the program and verification of the reversed volume within six (6) months. Compensation for intentional and unintentional reversals must occur within 30 days per Section B.5 of the Buffer Pool Terms and Conditions of the ACR Standard.

For geologic sequestration projects, reversals must be reported and compensated within 45 days (per section 6.3 of the [CCS methodology](#)) following requirements as detailed in applicable methodology (e.g. Section 5.4 and 6.3 in the CCS methodology). In the event of reversals during the project term, the quantity shall be measured and reported, verified, and compensated through insurance or by retiring offset credits from the Reserve Account. Reversals post-Project Term are compensated as outlined in the Risk Mitigation Covenant, which prohibits any intentional reversal unless there is advance compensation to ACR.

Does the Program have the capability to ensure that any emissions units which compensate for the material reversal of mitigation issued as emissions units and used toward offsetting obligations under the CORSIA are fully eligible for use under the CORSIA? (Paragraph 3.5.6) YES

Summarize and provide evidence of the relevant policies and procedures:

The ACR registry allows the specification of project type and vintage of all credits used for compensating reversals and for buffer contributions. Therefore, as mentioned in section 3.5(c), ACR can easily ensure that all offset credits contributed to the buffer pool and used for reversal compensation for ICAO-eligible projects meet ICAO EUC in terms of project type, vintage or other specified requirements.

Would the Program be willing and able, upon request, to demonstrate that its permanence provisions can fully compensate for the reversal of mitigation issued as emissions units and used under the CORSIA? (Paragraph 3.5.7) YES

ACR is willing and able to demonstrate that our permanence provisions can fully compensate for the reversal of emissions units and used under the CORSIA. ACR is confident that our AFOLU buffer pool, combined with risk mitigation procedures, is more than adequate to cover any reversal(s) that might occur. Since the buffer pool is only used for compensating unintentional reversals, and a penalty (additional buffer contribution) is assessed for any unintentional reversal that exceeds cumulative buffer contributions, it is extremely unlikely that a reversal large enough to deplete the pool would occur. No unintentional reversals have been reported to have occurred to date.

As of June 2019, the average buffer pool contribution from active AFOLU projects is 22%. Only one project has issued more credits than are currently in the buffer pool. However, that project is an aggregated reforestation project that includes over 450 landowners over an extended geographic region (120,000+ acres), so an unintentional reversal that exceeds the buffer pool is exceptionally unlikely. Further, 76% of buffer credits are from non-reversible sources such as landfill gas capture and combustion (24% are from the forest projects themselves). The 76% from non-reversible tonnes strengthens the buffer pool by protecting against black swan events such as an entire project being reversed unintentionally, which would also reverse any buffer pool contribution from the project itself. Additionally, that over 65% of the issued credits being backed by the buffer are from two aggregated projects that include ~500 landowners further diversifies the reversal risk.

In summary, a critical factor for the proper functioning of a buffer pool is to have adequate contributions from a pool of projects, and the larger and more diverse the project pool the better. Additional protection is provided by allowing buffer pool contributions from non-reversible offsets. The ACR buffer pool adequately incorporates both of these features.

4.6 Assess and mitigate against potential increase in emissions elsewhere

YES

List any emissions sectors (if possible, activity types) supported by the Program that present a potential risk of material emissions leakage:

Activity types that present potential risk of material emissions leakage in the ACR program include Improved Forest Management and Avoided Conversion of Grasslands, and to a lesser degree, Wetland Restoration, Afforestation/Reforestation, and Transition to Advanced Formulation Blowing Agents in Foam Manufacturing and Use. While it is generally acknowledged that land-based carbon offset sectors may be susceptible to leakage, this mere potential does not make susceptible project sectors unattractive. The inclusion of conservative measures to estimate and account for leakage ensures the integrity of emissions reductions resulting from an offset project or program.

Are measures in place to assess and mitigate incidences of material leakage of emissions that may result from the implementation of an offset project or program? (Paragraph 3.6) YES

Summarize and provide evidence of the relevant policies and procedures:

For the project types listed above, leakage mitigation is addressed in each methodology by requiring deductions of offset credits from each issuance. Deductions range from 10% - 40% depending on the methodology, and in all cases, are deemed conservative and likely to over-compensate for leakage.

The ACR Standard Section A.4.8 and ACR Validation and Verification Standard Section 9.H detail requirements to assess and mitigate leakage. Risk of leakage must be considered for any project type under ACR, and must be quantified or estimated and compensated for in all cases where it is deemed greater than ACR's *de minimis* threshold of 3%. Procedures to assess and quantify leakage for particular project types are defined within each relevant methodology.

Are provisions in place requiring activities that pose a risk of leakage when implemented at the project-level to be implemented at a national level, or on an interim basis on a subnational level, in order to mitigate the risk of leakage? (Paragraph 3.6.2) YES

Summarize and provide evidence of the relevant policies and procedures:

At this time ACR does not implement sectoral, national or subnational level crediting. Based upon studies examining leakage across varying geographic scales (Chomitz 2002; Gan and McCarl 2007; Wear and Murray 2004) as well as principles of market elasticity, leakage at the scale of U.S. based offset projects is mitigated by applying a scientifically-based, conservative deduction at the time of issuance.

Are procedures in place requiring activities to monitor identified leakage? (Paragraph 3.6.3)

YES

Summarize and provide evidence of the relevant policies and procedures:

All projects must monitor leakage at each verification. The ACR Validation and Verification Standard, section 6.F, states the following:

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 account for, and mitigate leakage, and provide documentation to support mitigation assertions if the ACR Standard or approved methodology requires it. Project Proponents must deduct leakage that significantly reduces the GHG emissions reduction and/or removal benefit of the project. Specific leakage guidance is given in the ACR Standard, sector-specific standards, and approved methodologies. The VVB shall confirm whether a leakage assessment is required. If one is required, it shall confirm that the leakage analysis and leakage deduction in the GHG Project Plan conforms to the requirements of the chosen methodology and the ACR Standard.

The ACR Validation and Verification Standard, Section 9.H, states the following:

Leakage is a decrease in sequestration or increase in emissions outside project boundaries as a result of project implementation. Leakage may be caused by shifting of the activities of people in the project area or by market effects whereby emission reductions are countered by emissions created by shifts in supply of and demand for the products and services affected by the project.

Some ACR-eligible project types require leakage to be assessed and, if deemed significant, deducted from the calculation of net emission reductions. Requirements to assess and deduct leakage will be included in the ACR-approved methodology.

Verification of estimates of leakage as part of a GHG project verification is integrally related to the validation of project assessment boundaries per Chapter 3. The VVB shall use the results of the project assessment boundaries validation, the Project Proponent's estimation of the GHG project leakage, leakage guidance in the approved methodology, and the VVB's sectoral knowledge to make an independent assessment of leakage. If there is a material discrepancy between the leakage assessment and deduction included in the GHG Project Plan or GHG assertion and the VVB's independent assessment, this discrepancy must be resolved with the Project Proponent and corrected prior to ERT issuance.

Chapter 3 Table 2 of the ACR Standard states the following:

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 leakage that reduces the GHG emissions reduction and/or removal benefit of a project in excess of any applicable threshold specified in the methodology.

Section A.4.8 of the ACR Standard (AFOLU requirements) states the following:

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. 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 peer-reviewed studies on market leakage rates or similar). If A/R 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 AR methodologies must be followed.

Are procedures in place requiring activities to deduct from their accounting emissions from any identified leakage that reduces the mitigation benefits of the activities? YES
(Paragraph 3.6.4)

Summarize and provide evidence of the relevant policies and procedures:

Relevant ACR approved methodologies include required deductions for leakage. They include:

Improved Forest Management (IFM) for Non-Federal U.S. Forestland	For market leakage: When baseline wood products exceed project wood products by 5-25%, leakage deduction equals 10% When baseline wood products exceed project wood products >25% leakage deduction equals 40% For activity shifting leakage: All projects must demonstrate sustainable forest management across ownership.
Avoided Conversion of Grasslands	20% deduction for all projects
Restoration of California Deltaic and Coastal Wetlands	Only if active agricultural land is converted to wetland and is above 35,000 acres (which is unlikely to ever occur).
Afforestation and Reforestation of Degraded Lands	Only when baseline is agricultural land, which is unlikely to ever occur (because it would not be economically feasible)
Transition to Advanced Formulation Blowing Agents in Foam Manufacturing and Use	Activity-shifting leakage is assessed on a project level only if hydrofluorocarbon foam dispensing equipment is moved/replaced as part of a project activity and continues to be used outside of the offset project boundary

Example of basis for leakage deduction: Improved Forest Management

Leakage estimates from the forestry sector have been primarily limited to product flow models of no-harvest conservation scenarios or ex-ante simulations narrowly examining specific market processes, both of which are not directly relatable to carbon leakage (Murray et al. 2004; Wear and Murray 2004). Such estimates are expected to be inflated because forest carbon projects often include extensive harvest activities and age class management, which decreases the difference in baseline versus project scenario harvest levels and potential leakage. Studies examining leakage specifically in a carbon context have quantified leakage ranging from 2 to 42% of reduced project harvest levels (Lasco et al. 2007; Sedjo and Sohngen 2000; Sohngen and Brown 2004; US EPA 2005).

The ACR IFM Methodology applies a leakage deduction to the total emission reduction value (pre-buffer contribution) for each reporting period, rather than deducting a leakage percentage from the difference between baseline and project scenario harvested wood quantities. This results in a highly conservative leakage deduction of up to 40% applied to the total emissions reductions in each reporting period, regardless of harvest levels. This deduction is comparable to a more than a 100% leakage deduction if applied to differences in harvested wood. Hence, the ACR IFM leakage deduction is conservative under even the highest estimates of leakage in the literature. ACR is working with leading experts to better quantify leakage dynamics in the specific context of carbon offsets, a subject in need of more research, with the goal to reassess our leakage deduction rates as pertinent data becomes available.

4.7 Are only counted once towards a mitigation obligation

Are measures in place to avoid the following, as defined in the corresponding Paragraphs, particularly with respect to registry-related protocols and/or oversight?

- a) double-issuance? (Paragraphs 3.7.1 and 3.7.5) YES
- b) double-use? (Paragraphs 3.7.2 and 3.7.6) YES
- c) double-selling? (Paragraph 3.7.7) YES

Summarize and provide evidence of the relevant policies and procedures related to a) through c):

As published in the ACR Standard, Chapter 10, “in the context of climate change mitigation, double counting refers to 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. ACR has program rules and operational processes, tracking systems, and oversight to mitigate these double counting risks and incorporates by reference the procedures to avoid double counting as detailed in [Guidelines on Avoiding Double Counting for the Carbon Offsetting and Reduction Scheme for International Aviation](#) version

1.0 of June 2019⁵ and any future updates to this document in which ACR participates as a workgroup member. ACR will adhere to any future requirements established by the UNFCCC and International Civil Aviation Organization to prevent double counting and to ensure the environmental integrity of emissions reductions.”

- a) ACR Standard Chapter 10, Section A notes “*Double issuance occurs when more than one unique unit is issued for the same emissions reduction or removal, within the same program/registry or involving concurrent issuance under more than one program(s)/registry(ies). ACR has rules and procedures in place to mitigate the risk of double issuance, including checks of duplicate registration under other programs and requirements for disclosure of other registrations, as well as for cancelation of the units on one registry prior to re-issuance on another.*”

For example, ACR Standard Chapter 10, Section A.1 “*allows for offset project registration simultaneously on ACR and other voluntary or compliance GHG programs or registries in only two circumstances: 1) the simultaneous registration is disclosed and approved by both programs/registries, including explicitly through regulation (such as is the case for California’s cap-and-trade program), and 2) offsets issued for the same unique emissions reductions (project boundary and vintage) do not reside concurrently on more than one registry.*”

To prevent double issuance (and double use) of offsets for projects registered simultaneously on ACR and another GHG program, 1) offsets representing the same emissions reduction must be publicly canceled from one registry before they can be converted and re-issued on another registry or 2) offsets 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 offset represents unique emissions reductions in terms of location (project boundary) and vintage.

For example, ACR issues registry offset credits under the rules of the California cap-and-trade regulation. Prior to those credits being issued by the California Air Resources Board (ARB), the State regulatory agency, for use by capped entities, ACR cancels the credits and reports the cancelation to ARB.

- b/c) ACR standard Chapter 10, Section A notes that “*Double use refers to 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 annual attestation of unique, uncontested ownership and legal rights to the emissions*

⁵ <https://americancarbonregistry.org/carbon-accounting/guidance-tools-templates/guidelines-for-adc-with-corsia-june-2019.pdf> and <https://www.adc-wg.org/guidelines-version-1-0>.

reductions as well as that no emissions reductions issued by and registered on ACR have been serialized, registered, retired or otherwise transacted on another registry and/or by another standard nor have they been transferred, retired or otherwise used or disposed of other than as duly recorded on the ACR registry.”

ACR’s (ToU) Agreement has clear rules against double use and selling as detailed in ToU Section 7, excerpts included below, which detail rules against double registration of unique emissions reductions on any other registry or database and duplicate use of emissions reductions including a prohibition on the transfer or use of credits off-registry as well as requirements for retailers to retire credits on the registry if they are being claimed to satisfy voluntary or regulatory emissions reduction obligations.

ACR standard Chapter 10, Section A.2 describes that “For projects transferring from another GHG 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 / double selling of the same GHG reduction or removal, any offsets that had been issued that were not transferred, sold, or retired must be canceled from the other program’s registry before conversion and re-issuance by ACR. For projects transferring from ACR to another GHG program, Project Proponents must cancel from ACR all offsets that have not been transferred, sold, or retired to allow for conversion and re-issuance of offsets by the other GHG program on its registry.”

The following are requirements of all ACR account holders in the legal ACR Terms of Use Agreement Section 7 to prevent double issuance, double use and double selling:

- i. Account Holder will only use the Registry for creating, transferring, retiring and/or canceling ERTs or ROCs that are attributable to the GHG reduction projects included in the Registry and specifically acknowledges that it shall not use any other database for the same purpose at the same time as such GHG reduction projects are registered in the Registry;
- ii. Account Holder has not registered and will not register any GHG reduction simultaneously both in the Registry and in any other system that tracks the emissions, emission reductions, emission offsets, or other environmental attributes related to emission reduction projects nor will any transaction of the same emissions, emission reductions, emission offsets, or other environmental attributes related to emission reduction projects be conducted outside of the Registry, other than in another ACR approved registry or upon cancelation of ERTs or ROCs for issuance of ARBOCs by ARB;
- iii. Account Holder commits not to claim ERTs or ROCs which have already been or are expected to be registered with another compliance or voluntary emissions reduction program except as allowed for Early Action offset credits and Registry Offset Credits to be converted to ARBOCs by ARB;
- iv. Neither Account Holder nor any Indirect Owner, if any, has retired, sold, claimed, represented elsewhere or used, nor will it retire, sell, claim or represent elsewhere or use

to satisfy obligations in any jurisdiction outside of the Registry, any of the GHG reductions by the project associated with Account Holder's ERTs or ROCs without reporting such disposition within the Registry

- v. Collectively, Account Holder and the Indirect Owners, if any, having a Beneficial Ownership Right in the ERTs or ROCs held in one of Account Holder's Accounts or Sub-Accounts have legal title and all Beneficial Ownership Rights with respect to the ERTs or ROCs issued or to be issued to Account Holder and/or held in Account Holder's Accounts or Sub-accounts and the GHG reductions for which Account Holder is seeking credit, and no other person or entity can claim the right to the ERTs or ROCs or to the GHG reductions for which Account Holder is seeking credit.

Are measures in place (or would the Program be willing and able to put in place measures) to avoid double-claiming as defined in Paragraph 3.7.3? YES

As resolved as in Paragraphs 3.7.8 – 3.7.9? YES

Summarize and provide evidence of any relevant policies and procedures:

ACR has measures in place to avoid double claiming. The ACR Standard, Chapter 10, Section B describes that “*Double claiming occurs when two or more parties claim the same GHG reduction, removal, or other mitigation outcome toward their regional, national, or sector-wide emissions reduction cap or target(s) / pledge(s) / contributions / commitments (collectively “target”).*

In the pre-2020 carbon market context, double claiming occurs if emissions reductions that reduce or remove emissions from activities that are part of a binding GHG emissions trading program, or that take place in a jurisdiction or sector in which there is a binding limit/cap established on GHG emissions, are being issued as offsets for use outside of those programs. This would include emissions reductions in Annex I countries that ratified the Kyoto Protocol, in the EU Emissions Trading System, in the California cap-and-trade program, and in the Regional Greenhouse Gas Initiative. In these instances, offset Project Proponents shall provide evidence that the reductions and removals the project generated have not and will not be used in the emissions trading program or for the purpose of demonstrating compliance with binding limits that are in place in that program or jurisdiction.

If Project Activities take place in such a program or jurisdiction, the Project Proponent shall include in its GHG Project Plan a written statement from the GHG emissions program operator, as well as other documentation in a form acceptable to ACR, that it has canceled from the program or national or regional cap (as applicable) a number of emissions allowances, offsets or other (acceptable) GHG credits equivalent to the reductions and removals generated by the project so that they can no longer be used within the operator's GHG program. Alternately, the Project Proponent may provide evidence of purchase and cancelation of GHG allowances equivalent to the GHG emissions reductions or removals the project generated related to the program or national cap.

In order to prevent double-counting of GHG emission reductions or removal enhancements for offset projects in non-Annex I countries under the UNFCCC, Project Proponents shall provide

documentation that they have notified the relevant project host country Designated National Authority (DNA) of their project registration in the voluntary market, including the project's expected GHG reductions/removals.”

ACR Standard, Chapter 10, Section B.1 addresses double claiming under the Paris Agreement and the ICAO CORSIA:

“In the post-2020 carbon market context, in which all signatories to the Paris Agreement have emissions reduction targets/pledges as formulated in the nationally determined contributions (NDCs) and air carriers have an offsetting obligation under the International Civil Aviation Organization Carbon Offset Reduction Scheme for International Aviation (CORSIA), double claiming occurs when two or more Parties claim the same emission reduction to comply with their mitigation targets/pledges/obligations. Transparent reporting and accounting procedures at both the national and international level will be developed to track emissions reductions transferred to / from other Parties to meet targets. In these instances, as required by the UNFCCC, a corresponding adjustment may be made by the host country of the emissions reduction activity to account for the transfer of the emissions reduction for use by another Party / CORSIA. The adjustment will be applied, as determined by the UNFCCC, to the host country national GHG inventory or NDC, and will also be reported by the receiving Party.

To mitigate the risk of double claiming in these instances, ACR will require notification by the owner of the emissions reductions of the export of any emissions reductions for these purposes as well as host country acknowledgement of use of the emissions reductions by another Party, including for the CORSIA. ACR will report to the project host country's national UNFCCC focal point and the transferee country's UNFCCC focal point the details of any ACR units transferred / retired for use by another Party toward fulfillment of its Paris Agreement targets / pledges and/or canceled by/for an airline toward its CORSIA obligation.

ACR will maintain documentation of the national UNFCCC focal point acknowledgement of transfers / cancelations of emissions reductions, posting these on the registry. ACR will make public all retirements / cancelation of units toward a CORSIA offsetting obligation, and will report such information to host countries as required to confirm that the units are included in national emissions reporting to facilitate GHG accounting reconciliation via corresponding adjustments, as ultimately deemed appropriate under the UNFCCC and the CORSIA.”

If no measures are currently in place, describe what measures the Program would consider putting in place in relation to the guidelines in Paragraphs 3.7.3 and Paragraphs 3.7.8 – 3.7.9:

ACR has measures in place to avoid double counting in all of its forms, as detailed above. As noted in the ACR standard, ACR will adhere to any future requirements established by the UNFCCC and ICAO to prevent double counting and to ensure the environmental integrity of emissions reductions.

Are measures in place (or would the Program be willing and able to put in place measures) to...

- a) make publicly available any national government decisions related to accounting or the underlying mitigation associated with units used in ICAO, including the contents of host country attestations described in the criterion guidelines (Paragraph 3.7.10) YES
- b) update information pertaining to host country attestation as often as necessary to avoid double-claiming? (Paragraph 3.7.10) YES
- c) monitor for double-claiming by relevant government agency(ies) that otherwise attested to their intention to not double-claim the mitigation? (Paragraph 3.7.11) YES
- d) report to ICAO's relevant bodies, as requested, performance information related to, *inter alia*, any material instances of and Program responses to country-level double-claiming; the nature of, and any changes to, the number, scale, and/or scope of host country attestations; any relevant changes to related Program measures? (Paragraph 3.7.12) YES
- e) to compensate for, replace, or otherwise reconcile double-claimed mitigation associated with units used under the CORSIA which the host country's national accounting focal point or designee otherwise attested to its intention to not double-claim? (Paragraph 3.7.13) YES

Summarize and provide evidence of any relevant policies and procedures related to a) through e):

a/b) Winrock/ACR has measures in place for a and b above, referred to in the ACR Standard as "*host country letter of assurance and authorization of use of emissions reductions by another Party, including CORSIA, and host country acknowledgement of transfers*" and as detailed in the response above and included below.

In the ACR Standard Chapter 10, Section B.1: The Paris Agreement and the International Civil Aviation Organization Carbon Offset Reduction Scheme for International Aviation, to mitigate the risk of double claiming for emissions reductions used under the CORSIA, ACR requires "*notification by the owner of the emissions reductions of the export of any emissions reductions for these purposes as well as a formal host country letter of assurance and authorization of the use of the emissions reductions by another Party, including for the CORSIA. ACR will report to the project host country's national UNFCCC focal point and the transferee country's UNFCCC focal point the details of any ACR units transferred / retired for use by another Party toward fulfillment of its Paris Agreement targets / pledges / contributions / commitments and/or canceled by/for an airline for use toward its CORSIA obligation.*"

"ACR will post publicly on the registry the national UNFCCC focal point letter of assurance and authorization of transfers / cancelations of emissions reductions towards a mitigation target / obligation. ACR will make public on the registry details of all retirements / cancelation of units toward a CORSIA offsetting obligation. In addition, ACR will report

such information to ICAO and to host countries as required to confirm that the units are included in national emissions reporting to facilitate GHG accounting reconciliation via corresponding adjustments, as determined by the UNFCCC and the CORSIA.”

The host country letter of assurance and authorization will:

- Attest to the intention to properly report for and/or account (as applicable) for the export of the emissions reductions towards offsetting obligations under the CORSIA; and
- Describe steps that have been/will be taken to avoid double claiming the emissions reductions toward the host country’s national mitigation target(s) in conformance with relevant and applicable international provisions.

If no measures are currently in place, describe what measures the Program would consider putting in place in relation to the guidelines in *Paragraphs 3.7.10 – 3.7.13*:

Per the ACR Standard Chapter 10, ACR has program rules and operational processes, tracking systems, and oversight to mitigate these double counting risks and incorporates by reference the procedures to avoid double counting as detailed in “[Guidelines on Avoiding Double Counting for the Carbon Offsetting and Reduction Scheme for International Aviation](#)” version 1.0 of June 2019 and any future updates to this document in which ACR participates as a workgroup member.

ACR will adhere to any future requirements established by the UNFCCC and International Civil Aviation Organization to prevent double counting and to ensure the environmental integrity of emissions reductions. ACR will address c, d and e, respectively by:

- Monitoring for and reporting to ICAO and the UNFCCC instances of double claiming (i.e. required accounting adjustments have not been made to national emissions reporting of host country); and
- Putting in place a mechanism to compensate for, replace or otherwise reconcile instances of double claiming, as required by ICAO.

4.8 Do no net harm

Are procedures in place to ensure that offset projects do not violate local, state/provincial, national or international regulations or obligations? (*Paragraph 3.8*)

YES

Summarize and provide evidence of the relevant policies and procedures:

Projects registered on ACR must maintain material regulatory compliance. Regulatory compliance is defined by the ACR Standard as “*Adherence to all laws, regulations, and other legally binding mandates directly related to Project Activities.*” Per ACR Standard Chapter 3, Table 2 Eligibility Criteria:

Regulatory Compliance: *Projects must maintain material regulatory compliance. To do this, a regulatory body/bodies must deem that a project is not out of compliance at any point during a reporting period. Projects deemed to be out of compliance with regulatory*

requirements are not eligible to earn ERTs during the period of non-compliance. Regulatory compliance violations related to administrative processes (e.g., missed application or reporting deadlines) or for issues unrelated to integrity of the GHG emissions reductions shall be treated on a case-by-case basis and may not disqualify a project from ERT issuance. Project Proponents are required to provide a regulatory compliance attestation to a verification body at each verification. This attestation must disclose all violations or other instances of non-compliance with laws, regulations, or other legally binding mandates directly related to Project Activities.

The Project Attestation can be found here: https://americancarbonregistry.org/carbon-accounting/guidance-tools-templates/annual-project-attestation_2016.docx.

Provide evidence that the Program complies with social and environmental safeguards: (Paragraph 3.8)

ACR's environmental and community safeguard requirements are described in Chapter 8 of the ACR Standard (<https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>) and further described in Section 2.9 of this application.

Per the ACR Standard Chapter 3, Table 2 Eligibility Requirements:

Environmental and Community Safeguards: *ACR requires that all projects develop and disclose an impact assessment to ensure compliance with environmental and community safeguards best practices. Environmental and community impacts should be net positive, and projects must "do no harm" in terms of violating local, national, or international laws or regulations.*

Project Proponents must identify community and environmental impacts of their project(s). Projects may disclose positive contributions as aligned with applicable sustainable development goals. Projects 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.

ACR does not require that a particular process or tool be used for the impact assessment as long as basic requirements defined by ACR are addressed. (See Chapter 8) ACR projects can follow internationally recognized approaches such as The World Bank Safeguard Policies, or can be combined with the Climate Community and Biodiversity Alliance (CCBA) Standard or the Social Carbon Standard for the assessment, monitoring, and reporting of environmental and community impacts.

Project Proponents shall disclose in their Annual Attestations any negative environmental or community impacts or claims thereof and the appropriate mitigation measure. ACR reserves the right to refuse to list or issue credits to a project based on community or environmental impacts that have not or cannot be mitigated, or that present a significant risk of future negative environmental or community impacts.

Project documents submitted to ACR must include an assessment of environmental and social risks demonstrating that the impact is net positive. These assessments are public in the project GHG Plans on the registry (under “view documents”).

For example, ACR 222, Prairie Pothole Avoided Conversion of Grasslands and Shrublands (view documents tab) includes in the publicly available GHG Plan section F.1 a description of “New Positive Impacts” and Section F.2 “Stakeholder Comments.”

<https://acr2.apx.com/mymodule/reg/TabDocuments.asp?r=111&ad=Prpt&act=update&type=PRO&aProj=pub&tablename=doc&id1=222>)

And ACR 188, IdleAir Truck Stop Electrification project (view documents tab) includes in the publicly available GHG Plan section F.1 a description of “New Positive Impacts” and Section F.2 “Stakeholder Comments.”

<https://acr2.apx.com/mymodule/reg/TabDocuments.asp?r=111&ad=Prpt&act=update&type=PRO&aProj=pub&tablename=doc&id1=188>)

Additionally, the annual ACR attestation required by ACR to be executed for all projects (found on the ACR website: (<https://americancarbonregistry.org/how-it-works/membership>)) includes the following attestations to environmental and community impacts of the project:

- (6) At no time during or since the development of the Project have there been any undisclosed or unmitigated adverse environmental or community impacts as a result of the development, construction, operation and/or maintenance of the Project;
- (7) Any comments that were received from stakeholders regarding environmental or community impacts during the development, construction, operation and/or maintenance of the Project have been addressed, and when necessary response actions have been implemented by the Member or Proponent and a true and accurate summary of any and all such communications/actions is attached hereto.

Provide evidence of the Program’s public disclosure of the institutions, processes, and procedures that are used to implement, monitor, and enforce safeguards to identify, assess and manage environmental and social risks: (Paragraph 3.8)

The public disclosure of the institutions, processes and procedures that are used to implement, monitor and enforce safeguards for environmental and social risks are included in Chapter 8 of the ACR Standard (<https://americancarbonregistry.org/carbon-accounting/standards-methodologies/american-carbon-registry-standard>) including:

8.B Ongoing Disclosure and Enforcement

In their Annual Attestations to ACR, Project Proponents shall disclose any negative environmental or community impacts or claims of negative environmental and community impacts and the appropriate mitigation measure.

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

In addition, to Project Proponents disclosing environment and community impacts and mitigation measures, VVBs are required to confirm assertions at Validation and at each Verification for the duration of the project crediting period.

The Annual Attestation, which is required to continue crediting, is defined in the ACR Standard as “The statement that a Project Proponent provides annually to ACR relating to the continuance, ownership and community impacts of a project.”

PART 5: Program comments

Are there any additional comments the Program wishes to make to support the information provided in this form?

Winrock International is pleased to submit an application for its American Carbon Registry (ACR) enterprise to be evaluated for ICAO approval to supply emissions reductions for the CORSIA. Winrock oversees ACR to ensure the credibility of carbon markets, ensuring environmental and scientific integrity of emissions reduction claims and transparency throughout the program cycle from methodology approval to project registration, third-party verification and the issuance and tracking of serialized offset credits on a public registry system. We are confident that our robust rules and procedures and our competent Winrock and ACR team that oversee ACR’s operations will meet the ICAO Emissions Unit Criteria. Please don’t hesitate to contact us with any questions.

SECTION IV: SIGNATURE

I certify that I am the administrator or authorized representative (“Program Representative”) of the emissions unit program (“Program”) represented in a) this form, b) evidence accompanying this form, and c) any subsequent oral and/or written correspondence (a-c: “Program Submission”) between the Program and ICAO; and that I am duly authorized to represent the Program in all matters related to ICAO’s analysis of this application form; and that ICAO will be promptly informed of any changes to the contact person(s) or contact information listed in this form.

As the Program Representative, I certify that all information in this form is true, accurate, and complete to the best of my knowledge.

As the Program Representative, I acknowledge that:

the Program’s participation in the assessment does not guarantee, equate to, or prejudice future decisions by Council regarding CORSIA-eligible emissions units; and

the ICAO is not responsible for and shall not be liable for any losses, damages, liabilities, or expenses that the Program may incur arising from or associated with its voluntary participation in the assessment; and

as a condition of participating in the assessment, the Program will not at any point publicly disseminate, communicate, or otherwise disclose the nature, content, or status of communications between the Program and ICAO, and of the assessment process generally, unless the Program has received prior notice from the ICAO Secretariat that such information has been and/or can be publicly disclosed.

Signed:

Mary Grady

July 12, 2019

Full name of Program Representative (*Print*)

Date signed (*Print*)



Program Representative (*Signature*)

(This signature page may be printed, signed, scanned and submitted as a separate file attachment)

**ATTACHMENT A: AFOLU CARBON PROJECT
REVERSAL RISK MITIGATION AGREEMENT
[*BUSINESS CONFIDENTIAL*]**

ACR BUFFER POOL TERMS AND CONDITIONS

THESE BUFFER POOL TERMS AND CONDITIONS (the “Buffer Pool Terms”) govern the use of the American Carbon Registry® Buffer Pool (the “ACR Buffer Pool”) by a Project Proponent in and apply to the ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement.

A.1 CONDITIONS TO PARTICIPATION IN ACR BUFFER POOL

To use the ACR Buffer Pool in connection with a project, a Project Proponent must first satisfy the following conditions:

- I. The Project Proponent must have entered into the American Carbon Registry® AFOLU Carbon Project Reversal Risk Mitigation Agreement for the project (as amended from time to time, the “Reversal Risk Mitigation Agreement”).
- II. There must be a GHG Project Plan for the project which, among other things, includes a risk assessment conducted in accordance with the ACR Tool for Risk Analysis and Buffer Determination, a risk category and an approved buffer contribution amount equal to a minimum percentage of the offsets issued by ACR in connection with the project (as amended from time to time due to updated ACR-approved risk assessments, the “Minimum Buffer Percentage”).

A.2 DEFINITIONS

Terms capitalized in these Buffer Pool Terms but not defined herein shall have the meanings given such terms in the Reversal Risk Mitigation Agreement or, if not defined therein, shall have the meanings given such terms in the Definitions section of the ACR Standard (as in effect as of the execution date of the Reversal Risk Mitigation Agreement, the “ACR Standard”).

A.3 BUFFER POOL ACCOUNT

ACR will establish an American Carbon Registry® Buffer Pool Account (the “Buffer Pool”), over which it has sole operational and management control, to hold the Buffer Contribution from the Project (as defined below). ACR shall have the right to hold buffer contributions from all agriculture, forest and other land use (AFOLU) carbon projects registered with ACR in one or more co-mingled accounts. As long as offsets deposited by a Project Proponent are retained in the Buffer Pool Account, the Project Proponent may not transfer, sell, pledge, retire, or otherwise dispose of such offsets.

In the event that ACR is no longer operational or able to manage the Buffer Pool Account, the account will be managed by ACR's parent organization, Winrock International ("Winrock") or a comparable, qualified organization of Winrock's election.

A.4 BUFFER POOL CONTRIBUTION

- I. **ASSESSMENT OF RISK.** For AFOLU projects that have risk of Reversal, Project Proponent shall conduct a risk assessment addressing both general and project-specific risk factors using the ACR Tool for Risk Analysis and Buffer Determination. The output of the tool is an overall risk rating percentage for the project, translating into a number of offsets that will be deposited in the ACR Buffer Pool Account to mitigate the risk of reversals at the time of each issuance, the Minimum Buffer Percentage. The risk assessment, overall risk category and Minimum Buffer Percentage, and calculated buffer contribution amount shall be included in the GHG Project Plan. ACR evaluates the overall risk category and corresponding buffer contribution, and the VVB evaluates whether the risk assessment has been conducted correctly. If no Reversals occur, the project's risk category and Minimum Buffer Percentage shall remain unchanged for five years. The risk analysis must be re-evaluated every five years, coincident with the interval of required site visit verification except in the event of a Reversal, in which case the risk category and Minimum Buffer Contribution shall be re-assessed and re-verified immediately.
- II. **BUFFER CONTRIBUTION REQUIREMENT AND TIMING.** As set forth herein and in the ACR Standard, concurrent with each issuance of offsets to the project, Project Proponent shall contribute offsets to the Buffer Pool Account equal to the number of offsets being issued multiplied by the Minimum Buffer Percentage. Project Proponent may, at its option, contribute a number of offsets greater than the number required by application of the Minimum Buffer Percentage. The number of offsets contributed to the Buffer Pool Account shall be referred to as the "Buffer Contribution." In the event of an increase in the Minimum Buffer Percentage due to an updated risk assessment, Project Proponent shall make the required additional Buffer Contribution within ten (10) days following ACR's approval of the updated risk assessment.
- III. **COMPOSITION OF BUFFER CONTRIBUTION.** The Buffer Contribution shall consist of offsets generated by the Project, offsets of any other type or vintage held in an ACR registry account by the Project Proponent, or any combination thereof.

A.5 REVERSAL

- I. **NOTICE OF REVERSAL.** Project Proponent shall provide written notice to ACR immediately upon becoming aware of any Unintentional or Intentional Reversal or Early Project Termination decision. Such notice shall include the number of offsets affected by the Reversal (the "Estimated Lost Offset Amount"), a description of how the Estimated Lost Offset Amount was determined, a description of the nature and cause of the Reversal and all other relevant facts. Project Proponent shall, at its expense, promptly and fully comply with all ACR requests for additional information or analyses relating to the Reversal. ACR requires the quantification of carbon stocks after the Reversal as verified by a VVB, at the Project Proponent's expense, to be reported to and confirmed by ACR (the "Verified Lost Offset Amount") within six months of the Reversal.

- II. LOSS MITIGATION FOR AN UNINTENTIONAL REVERSAL.** ACR mitigates the loss from an Unintentional Reversal by canceling from the Buffer Pool the Estimated Loss Amount at Project Proponent's expense (including payment of then-applicable offset activation and cancelation fees). If the Lost Offset Amount is less than the Project Proponent's net Buffer Contributions up to that time, then the Buffer Contributions cover the Reversal. If the Lost Offset Amount from the Reversal exceeds the Proponent's Buffer Contributions to date, the Project Proponent shall pay a "deductible" of 10% of the Lost Offset Amount, depositing this additional offset amount in the ACR Buffer Pool within thirty (30) days of the cancelation, and the Buffer Pool covers the remainder. The deductible contribution may be of ACR offsets of any type and vintage. Following unintentional reversals, the Proponent is not required to replenish the buffer unless the Minimum Buffer Percentage increases based on the risk assessment update. The Verified Offset Amount must be submitted to ACR within six months of Reversal unless additional time is granted by ACR in writing. If the Verified Lost Amount is greater than the Estimated Lost Amount, ACR will cancel from the Buffer Pool the difference.
- III. LOSS MITIGATION FOR AN INTENTIONAL REVERSAL.** ACR mitigates the loss from an Intentional Reversal, which is assumed as all affected carbon stocks, by canceling the associated volume of credits from the Project Proponent's account and/or canceling from the Buffer Pool the Estimated Loss Amount (as applicable) at Project Proponent's expense (including payment of then-applicable offset activation and cancelation fees) upon notification by the Project Proponent. Cancelation of all non-transacted offsets will occur for a project that has terminated early. The Project Proponent shall, at the Project Proponent's expense, contribute the Estimated Lost Offset Amount to the Buffer Pool Account within thirty (30) days of the Reversal. This Buffer Contribution may be made using ACR offsets of any type or vintage. If the Project Proponent does not make this Buffer Contribution within thirty (30) days, ACR retains the right to freeze the account and use any existing offsets to compensate for the Reversal. The Verified Offset Amount must be submitted to ACR within six months of Reversal unless additional time is granted by ACR in writing. If the Verified Lost Amount is greater than the Estimated Lost Amount, Project Proponent shall contribute an additional amount for the difference, which will be canceled by ACR.
- IV. EARLY PROJECT TERMINATION DUE TO REVERSAL.** Sequestration projects will terminate automatically if a Reversal, Intentional or Unintentional, causes project stocks to decrease below baseline levels prior to the end of the Minimum Project Term. In cases where this decrease is caused by intentional reductions to stocks (e.g., forest conversion or over-harvesting), which is considered an Intentional Reversal, the Project Proponent shall compensate for all issued offsets to that project following the process in III above.
- V. EARLY PROJECT TERMINATION.** If a Project Proponent opts to terminate the project at any time prior to the end of the Minimum Project Term by discontinuing required project monitoring, verification and reporting activities for the Project (or subset of the project in an aggregated or PDA project) or leaves the carbon program, ACR conservatively considers the cumulative sequestration of the project to be lost (i.e., all offsets issued to the project). Project Proponents must compensate for the full amount of all offsets issued cumulatively to the project upon termination. If only a portion of the project land owners (i.e., in the case of an aggregated or POA project) chooses to terminate, the remaining land owners may continue project activities if the area which was terminated is compensated. The Project Proponent shall have the responsibility to compensate for project termination following the process in III above. In the case of Early Project Termination in order to re-enroll the project in another voluntary, state or federal program, the Project Proponent must compensate for all offsets issued to the

Project following the process in III above. This is because ACR does not have the ability to enforce the actions of a Project Proponent on a project that is no longer registered on ACR.

VI. RISK ASSESSMENT UPDATE. Project Proponent shall comply with the risk assessment update requirements pursuant to the Reversal Risk Mitigation Agreement upon occurrence of a Reversal. Frequent recurring reversals will lead to a higher assessed risk and accordingly increased Minimum Buffer Percentage.

A.6 END-OF-TERM BUFFER POOL ACCOUNT BALANCE TRANSFER TO ACR

To the extent required under the ACR Standard, ACR shall, following the termination of the Project Term, decide to continue to hold or to retire any remaining offsets contributed to the Buffer Pool Account with respect to the Project. For purposes hereof, "Project Term" shall mean the period ending at the termination of the later of (i) the Minimum Project Term (including any renewals or extensions) and (ii) any additional period in which, pursuant to the ACR Standard, Project Proponent has agreed to document project continuance.

A.7 EVENTS OF DEFAULT; REMEDIES

The following events and circumstances shall constitute an Event of Default under these Buffer Pool Terms: (i) Project Proponent's failure to notify ACR within ten (10) days after becoming aware of a reversal or Early Project Termination decision; (ii) Project Proponent's failure to cure a breach of these Buffer Pool Terms within ten (10) days following notice of such breach by ACR to Project Proponent; (iii) the occurrence of an Event of Default under the Reversal Risk Mitigation Agreement; and (iv) a bankruptcy, receivership or other insolvency proceeding by or against Project Proponent and not dismissed within sixty (60) days of the making of a general assignment for the benefit of creditors, insolvency, or the institution of bankruptcy, reorganization, liquidation or receivership proceedings, by or against Project Proponent.

Upon the occurrence of an Event of Default, ACR may, in its sole discretion and without limitation of ACR's right to pursue other available legal or equitable remedies, pursue any of the remedies set forth in the Reversal Risk Mitigation Agreement.

A.8 LIMITATION OF LIABILITY; INDEMNIFICATION

LIMITATION OF LIABILITY. In no event shall ACR, its owners, affiliates or subsidiaries, and their respective officers, directors, independent contractors, employees, agents, or donors (the "ACR Parties") be liable for damages arising out of or in connection with these Buffer Pool Terms, except to the extent caused by the ACR's negligence or willful misconduct.

UNDER NO CIRCUMSTANCES SHALL ANY ACR PARTY BE LIABLE FOR LOST PROFITS OR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THESE BUFFER POOL TERMS. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT, IN NO EVENT SHALL THE AGGREGATE LIABILITY OF THE ACR PARTIES TO PROJECT PROPONENT OR ANY THIRD PARTIES UNDER OR IN CONNECTION WITH THESE

BUFFER POOL TERMS EXCEED THE AMOUNT OF FEES PAID BY PROJECT PROPONENT TO THE REGISTRY UNDER THE ACR MEMBER AGREEMENT. Project Proponent acknowledges and agrees that the foregoing limitations are independent of any remedy and will remain in full force and effect notwithstanding the failure of the essential purposes of any such remedy. The provisions of this section shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss, whether in contract, statute, tort (including, without limitation, negligence), or otherwise.

INDEMNIFICATION. Project Proponent agrees to indemnify and hold the ACR Parties harmless from any losses, damages, liabilities, judgments, settlements, fines, taxes, liens, impositions, encumbrances, penalties, claims, suits, costs and expenses, including reasonable attorneys' fees, arising out of or related to: (i) Project Proponent's breach of these Buffer Pool Terms; or (ii) violation by Project Proponent of any law or regulation, or the rights of a third party.

A.9 MODIFICATIONS

ACR reserves the right, in its sole discretion, to augment, segment, reformat, reconfigure, delete elements of, or otherwise modify at any time these Buffer Pool Terms or create new types or versions thereof. ACR shall provide Project Proponent with at least thirty (30) days' prior notice of material modifications to the Buffer Pool Terms. Such modifications shall be effective upon the date set forth in the notice. Continued use of the American Carbon Registry® by Project Proponent after the effective date set forth in the notice shall constitute acceptance of such modifications.

A.10 NOTICE

All notices and other communications required, made or permitted hereunder shall be made in the manner set forth in the Reversal Risk Mitigation Agreement. ACR also may provide notices of changes to the ACR Standard, the Buffer Pool Terms or other matters by displaying notices or links to notices to Project Proponents generally on the American Carbon Registry® website.

DEFINITIONS

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.
Buffer Contribution	The number of offsets contributed to the Buffer Pool for AFOLU projects with a risk of reversal.
Buffer Pool	An account managed by ACR as a reversal risk mitigation mechanism for AFOLU projects into which Project Proponents contribute a determined quantity of offsets to replace unforeseen losses in carbon stocks. The Buffer Contribution is a percentage of the project's reported offsets, the Minimum Buffer Percentage, determined through a project-specific assessment of the risk of reversal. The buffer contribution may be made in offsets of any type and vintage.
Cancel or Cancellation	The permanent removal of an offset credit from the Registry so that it cannot be transferred, transacted, retired or applied towards any emissions reduction targets as an ACR offset credit unit. If the offset credit has been canceled so that the equivalent can be reissued on another offset program, ACR no longer tracks the credit ownership and permanence (if applicable).
Intentional Reversal	The decrease of average carbon stocks within a project area below levels associated with previously issued offsets as a result of intentional, willful activity (e.g., harvesting, forest conversion) 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.
Minimum Buffer Percentage	An overall reversal risk rating for an AFOLU project based on the ACR Tool for Risk Analysis and Buffer Determination, which translates into the number of offsets that will be deposited in the ACR Buffer Pool at each issuance to mitigate the risk of reversals.
Minimum Project Term	The minimum period for which a Project Proponent commits to project continuance, monitoring, and verification.
Permanence	A reference to the perpetual nature of GHG removal enhancements and the risk that a project's atmospheric benefit will not be permanent (i.e. could be reversed). GHG 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 ₂ e for which offset credits were issued.
Permanence Risk Analysis	To account for and mitigate against the risk of reversal in some AFOLU projects, ACR requires Project Proponents to conduct a risk analysis to determine the number of offsets 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.

Retire or Retirement

The permanent removal of an offset credit from circulation as a transactable unit so that it represents a permanent reduction or removal of CO₂e from the atmosphere. A retired credit may be applied toward the emissions reduction target of the ACR account holder that retired the credit, or on behalf of a third party.

Reversal

An intentional or unintentional event that results in the emissions into the atmosphere of stored or sequestered CO₂e for which offsets were issued.

Unintentional Reversal

The decrease of average 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.

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 verification.

Verification

The systematic, independent, and documented assessment by a qualified and impartial third party of the GHG assertion for a specific reporting period. The verification process is intended to assess the degree to which a project complies with ACR-approved methodologies, tools, eligibility criteria, requirements, and specifications, and has correctly quantified net GHG reductions or removals.

**ATTACHMENT B: WINROCK INTERNATIONAL
PROFESSIONAL LIABILITY INSURANCE FOR \$5
MILLION [*BUSINESS CONFIDENTIAL*]**

**ATTACHMENT C: EXAMPLES OF BACK-END AND
PUBLIC FACING ACR REGISTRY FUNCTIONALITY
FOR CORSIA *[BUSINESS CONFIDENTIAL]***

**APPENDIX: PROGRAM SCOPE INFORMATION
REQUEST ACR**



ICAO

Program Application Form, Appendix B

Program Scope Information Request

CONTENTS: This document collects information from emissions unit programs pertaining to the following:

- Sheet A) Activities the program describes in this form, which will be assessed by ICAO's body of experts
- Sheet B) Any activities that the program does not wish to submit for assessment
- Sheet C) List of all methodologies / protocols that support activities described under Sheet A

SHEET A: DESCRIBED ACTIVITIES (Here, list activities supported by the program that are described in this form for further assessment)

Sector	Supported activity type(s)	Implementation level(s)	Geography(ies)
e.g. Waste, Energy	e.g. Landfill methane capture, Coal mine methane capture, Forest carbon, wetland restoration, cropland management;	e.g., Project-level only; Programs of activities; Sector-scale	e.g., Global, Non-Annex I-only, Country X only
Agriculture, Forestry, Land Use	Grassland management;	Project level, Programs of Activities	Global (Forest Carbon North America only)
Livestock	Livestock methane emission reduction, grazing land management	Project level, Programs of Activities	Global
Transport	Truckstop electrification; Fleet efficiency	Project level, Programs of Activities	Global
Fugitive Emissions from Industrial	Industrial gas substitution; Destruction of ozone depleting substances; Recycling/reclamation of high GHG industrial products; Pipeline retrofits	Project level, Programs of Activities	Global
Waste Handling and Disposal	Landfill gas capture and combustion; Wastewater treatment; Livestock waste management	Project level	Global
Geologic Sequestration	Carbon Capture and Storage	Project level	Global
Energy Generation	Renewable energy generation; Fuel switching; Recycling T	Project level, Programs of Activities	Global for direct onsite displacement
Energy Demand	Energy efficiency improvements	Project level, Programs of Activities	Global for direct onsite displacement

SHEET B: EXCLUDED ACTIVITIES (Here, list activities supported by the program that are *not* described in this form for further assessment)

Sector	Supported activity type(s)	Implementation level(s)	Geography(ies)
c.g. Waste, Energy	e.g., Landfill methane capture; Coal mine methane capture;	e.g., Project-level only; Programs of activities; Sector-scale	e.g., Global, Non-Annex I-only, Country X only
Not applicable (no excluded sectors)	Not applicable (no excluded activities)	Not applicable	Not applicable

SHEET C: METHODOLOGIES / PROTOCOLS LIST (Here, list all methodologies / protocols that support activities described in Sheet A)

Methodology name	Unique Methodology / Protocol Identifier	Applicable methodology version(s)	Date of entry into force of most recent version	Prior versions of the methodology that are credited by the Program (if applicable)	Greenhouse / other gases addressed in methodology	Web link to methodology
e.g. "Methodology to XYZ"	e.g. ABC-123-V 20-XXXX	e.g. V2.0	1/1/2018			
Recycling of Transformer Oil	N/A	1.0	February 2014	N/A	CO2	methodologies/methodology-for-reduction-of-emissions-from-the-recycling-of-transformer-oil
Truck Stop Electrification	N/A	1.1	July 2013	1.0	CO2	https://americancarbonequity.org/carbon-accounting-standards-methodologies/emission-reductions-through-truck-stop-electrification
Destruction of Ozone Depleting Substances and High-GWP Foam	N/A	1.1	September 2017	1.0	CO2, CFC-11, CFC-12, CFC-13, CFC-113, CFC-114, CFC-115, HCFC-22, HCFC-141b, HFC-134a, HFC-245fa, Halon 1211, Halon 1301	https://americancarbonequity.org/carbon-accounting-standards-methodologies/destruction-of-ozone-depleting-substances-and-high-gwp-foam
Replacement of SF6 with Alternate Cover Gas in the Magnesium Industry	N/A	2.1	June 2015	1.0	SF6, SO2, HFC134a, Perfluoro-2-methyl-3-pentamene	https://americancarbonequity.org/carbon-accounting-standards-methodologies/replacement-of-sf6-with-alternate-cover-gas-in-the-magnesium-industry
Refrigerants and Advanced Refrigeration Systems	N/A	1.0	October 2015	N/A	HFCs, CO2	methodologies/methodologies-of-reclaimed-hfc-refrigerant-and-advanced-refrigeration-systems
Landfill Gas Destruction and Beneficial Use Projects	N/A	1.0	March 2017	N/A	CH4, CO2	https://americancarbonequity.org/carbon-accounting-standards-methodologies/landfill-gas-destruction-and-beneficial-use-projects
Methane Recovery in Animal Manure Management Systems	N/A	20.1	September 2017	N/A	CH4, CO2	https://americancarbonequity.org/carbon-accounting-standards-methodologies/methane-recovery-in-animal-manure-management-systems
Afforestation and Reforestation of Degraded Lands	N/A	1.2	May 2017	1.1	CH4, CO2	methodologies/methodologies-for-forest-restoration-of-degraded-lands
Improved Forest Management (IFM) for Non-Federal U.S. Forestlands	N/A	1.3	April 2018	1.2	CH4, CO2	methodologies/improved-forest-management-ifm-methodology-for-non-federal-us-forestlands
Avoided Conversion of Grasslands and Shrublands to Crop Production	N/A	2.0	Finalizing update; publication expected September 2019	1.0	CO2, CH4, N2O	https://americancarbonequity.org/carbon-accounting-standards-methodologies/methodology-for-avoided-conversion-of-grasslands-and-shrublands-to-crop-production
Compost Additions to Grazed Grasslands	N/A	1.0	October 2014	N/A	CO2, CH4, N2O	methodologies/methodology-for-greenhouse-gas-emission-reduction-from-compost-additions-to-grazed-grasslands
Restoration of California Deltaic and Coastal Wetlands	N/A	1.1	November 2017	1.0	CO2, CH4, N2O	https://americancarbonequity.org/carbon-accounting-standards-methodologies/restoration-of-california-deltaic-and-coastal-wetlands
Restoration of Degraded Wetlands of the Mississippi Delta	N/A	2.0	August 2015	1.0	CO2, CH4, N2O	methodologies/restoration-of-degraded-deltaic-wetlands-of-the-mississippi-delta
Restoration of Pocosin Wetlands	N/A	1.0	October 2017	N/A	CO2, CH4, N2O	https://americancarbonequity.org/carbon-accounting-standards-methodologies/pocosin-wetlands-restoration
Carbon Capture and Storage Projects	N/A	1.0	April 2015	N/A	CO2, CH4, N2O	https://americancarbonequity.org/carbon-accounting-standards-methodologies/carbon-capture-and-storage-in-oil-and-gas-reservoirs
Blowing Agents in Foam Manufacturing and Use	N/A	2.0	April 2018	N/A	HFCs	methodologies/conversion-of-foam-blowing-agents-from-high-gwp-to-low-gwp-materials
Thermal energy production with or without electricity	AMS-I.C.	20	June 2014	19	CO2	https://americancarbonequity.org/carbon-accounting-standards-methodologies/ams-ic-thermal-energy-production-with-or-without-electricity
Capturing and Destroying Methane from U.S. Coal and Trona Mines	N/A	1.0	Publication expected July 2019	N/A	CH4, CO2	methodologies/capturing-and-destroying-methane-from-us-coal-and-trona-mines

