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

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: Climate Action Reserve Offsets Registry Program

Official mailing address: 818 W 7th Street, Suite 710, Los Angeles, CA 90017

Telephone #: +1-213-891-1444 Official web address: www.climateactionreserve.org

B. Program Administrator Information

Full name and title: Robert Lee, Program Director

Employer / Company (if not Program):

E-mail address: rzlee@climateactionreserve.org Telephone #: +1-213-785-1230

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

Full name and title: Craig Ebert, President

Employer / Company (if not Program):

E-mail address: cebert@climateactionreserve.org Telephone #: +1 (213) 213-1239

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:

Craig Ebert, President
Gillian Calof, Vice President, Operations
Max DuBuisson, Director, Policy
Robert Lee, Director, Programs
John Nickerson, Vice President, Forestry
Jennifer Weiss, Vice President, Communications and Business Outreach

Board of Directors:

- Linda Adams, Former Secretary for Environmental Protection, California Environmental Protection Agency, Board Chair
- Gary Gero, Chief Sustainability Officer, County of Los Angeles, Vice Chair
- Jeff Kightlinger, General Manager, Metropolitan Water District of Southern California, Treasurer
• Peter Miller, Director, Western Region, Climate & Clean Energy Program, Secretary
• Teveia Barnes, Former Executive Director, California Infrastructure and Economic Development Bank
• Steve Corneli, Clean Energy Advisor
• Peter Liu, Managing Director, Clean Energy Advantage Partners
• Betsy Moler, Executive Vice President (Retired), Government Affairs and Policy, Exelon Corporation
• Heather O’Neill, President, Advanced Energy Economy
• Tim Profeta, Director, Nicholas Institute for Environmental Policy Solutions, Duke University
• Jan Schori, General Manager (Retired), Sacramento Municipal Utility District
• Dr. Stephan Schwartzman, Senior Director, Tropical Forest Policy, Environmental Defense Fund.
• Katie Sullivan, Managing Director, International Emissions Trading Association
PART 2: Program summary

Provide a summary description of your program

The Climate Action Reserve (Reserve) is an environmental nonprofit organization that encourages actions to reduce GHG emissions and works to ensure environmental benefit, integrity, and transparency in market-based solutions to address global climate change. Originally established in 2001 as the California Climate Action Registry by the California Legislature to assist with GHG reporting and early action, the Reserve establishes high quality standards for carbon offset projects, oversees independent third-party verification bodies, issues carbon credits generated from such projects and tracks the transaction of credits over time in a transparent, publicly-accessible system.

The transparent processes, multi-stakeholder participation and rigorous standards of the Reserve help earn confidence that registered emissions reductions or removals are real, additional, verifiable, enforceable and permanent. The Reserve’s expertise and insight helped inform the development of the State of California’s cap-and-trade program, which adopted five of the Reserve’s protocols for use in its regulation (out of six). The Reserve also serves as an approved Offset Project Registry (OPR) for the State of California’s Cap-and-Trade Program, playing an integral role in supporting the creation and administration of compliance offsets.

The Reserve operates two environmentally-robust programs for the issuance of ex post offset credits. As an OPR for the State of California, we provide registry services for projects following the California Air Resources Board’s Compliance Offset Protocols, issuing Registry Offset Credits (ROCs), which can be converted by the California Air Resources Board in ARBOCs (Air Resources Board Offset Credits) for use in California’s compliance cap-and-trade program. We follow a similarly-rigorous process for voluntary projects following our own voluntary offset project protocols, issuing Climate Reserve Tonnes (CRTs). Both CRTs and ROCs will be considered for qualification for use in the CORSIA program, as both credit types meet the Emissions Unit Criteria as adopted by ICAO.

The Climate Action Reserve, as an organization, also operates a separate program, known as Climate Forward, which specifically issues credits on an ex ante basis. These ex ante credits are known as Forecasted Mitigation Units (FMUs). The main objective of Climate Forward is to accelerate action on climate change by getting companies to voluntarily mitigate their emissions now from any future investment they will make that will increase GHGs. We are NOT proposing to qualify them for use in CORSIA. Nothing in our application should be construed as to apply to Climate Forward projects or FMUs.
### 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 Climate Action Reserve uses the term “protocol” for its offset project methodologies, since these documents are more comprehensive than what many other programs call “methodologies.” Each offset protocol is intended to be, as much as possible, a standalone document, containing all of the necessary guidance and information to develop an offset project, rather than requiring the user to cobble together several different modules. There are exceptions to this practice, such as supplementary quantification guidance or parameter tables that get updated over time.

The Reserve protocol development process involves a series of phases that a protocol passes through before it is presented to the Reserve Board of Directors for adoption (Board approval occurs in an open, public session for all any new protocol or significant revision of an existing protocol) or simply approved by staff for publication (minor technical revision of an existing protocol). These phases may include:

- Protocol concept submission
- Internal scoping process
- White paper/issues paper development (either internal or external, depending on expertise)
- Public scoping meeting (our use of the term “public” throughout this document includes outreach to anyone interested in the protocol, including use of various media to publicize the opportunity to participate, such as our regular newsletters, publication on our website, etc.)
- Public kick-off meeting
- Request for expert stakeholder workgroup statement of interest
- Multi-stakeholder workgroup formation
- Request for proposals for technical contractor (if needed)
- Staff works with workgroup members and contractor (if needed) to draft protocol
- Workgroup meetings (also open to public “observers”)
- Workgroup review and comment of draft protocol
- Staff revises protocol based on workgroup comment
- Public comment period (typically 30 days)
- Public comment webinar
- Staff reviews and publicly responds to submitted comments
- Staff revises draft protocol
- Reserve Board reviews and approves draft protocol
- Protocol finalized and published online
- Public and interested stakeholders notified of approved protocol

The development of a new protocol includes all of the steps above with the exception of the white paper or issues paper development and public scoping meeting, which are not always necessary depending on the project type. New protocol development always includes the steps from the public kick-off meeting onward. The Reserve’s protocol development is an open and transparent process where all information is publicly available on project protocol-specific webpages. New protocol development takes anywhere from six months to one year, or more, depending on the project type.

The Reserve performs two different types of protocol revisions: a significant or “policy” revision and technical or “program” revision. Significant protocol updates are conducted on an as-needed basis when new research presents itself to warrant a revision to the methodology or if new regulations are enacted that affect project activities, for example. Other technical or editorial updates are conducted more frequently via issuance of an Errata and Clarifications document, effective upon publication, that accompanies the respective protocol or via a program revision when several errata and/or clarifications are incorporated into the protocol. Errata are only issued in instances of material errors or typos in the protocol document. Clarifications are only issued when protocol text is unclear or incomplete for an issue which is faced by multiple projects, and where the same guidance should be given in every similar situation. Upon next revision, existing Errata and Clarifications are then incorporated into the updated protocol.

A policy revision involves a significant change to a protocol’s quantification methodology, baseline estimation, project definition, or eligibility requirements. This type of revision requires a public comment process and approval by the Reserve Board of Directors. A policy revision results in a full protocol version update (e.g., a full upgrade from Version 1.0 to Version 2.0). Some policy revisions may also require consultation with the original protocol workgroup members and a workgroup comment period prior to the public comment period.

A program revision involves editorial and technical changes to a project protocol such as clarified language and guidance, and less significant changes to quantification methodologies or monitoring requirements. A program revision results in a sub-version change (e.g., a minor upgrade from Version 1.0 to Version 1.1). The adoption date of the protocol is the date it is publicly available on the Reserve website. This type of revision does not significantly change the policies and eligibility requirements in the protocol, so it is not necessary for this revision to go through a public comment period and adoption by the Reserve Board. However, if additional input from stakeholders is desired, the protocol may be released for a public comment period, similar to the public comment process for new protocol development or policy revisions.

Provide evidence 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)

a) Future Protocol Development
Our website contains an exhaustive listing of all of our protocols and associated procedures. The specific websites for protocol development and related activities include:
http://www.climateactionreserve.org/how/future-protocol-development/

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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”.
Criteria for Protocol Development
http://www.climateactionreserve.org/how/future-protocol-development/criteria/

Program Manuals and Policies
http://www.climateactionreserve.org/how/program/program-manual/

b) Protocols
http://www.climateactionreserve.org/how/protocols/

Coal Mine Methane Project Protocol
http://www.climateactionreserve.org/how/protocols/coal-mine-methane/

Forest Project Protocol
http://www.climateactionreserve.org/how/protocols/current-forest-project-protocol/

Grassland Project Protocol
http://www.climateactionreserve.org/how/protocols/grassland/

Mexico Boiler Efficiency Project Protocol
http://www.climateactionreserve.org/how/protocols/mexico-boiler-efficiency/

Mexico Forest Protocol
http://www.climateactionreserve.org/how/protocols/mexico-forest/

Mexico Landfill Project Protocol
http://www.climateactionreserve.org/how/protocols/current-landfill-project-protocol-mexico/

Mexico Livestock Project Protocol
http://www.climateactionreserve.org/how/protocols/current-livestock-project-protocol-mexico/

Mexico Ozone Depleting Substances Project Protocol
http://www.climateactionreserve.org/how/protocols/mexico-ozone-depleting-substances-project-protocol/

Nitric Acid Production Project Protocol
http://www.climateactionreserve.org/how/protocols/current-nitric-acid-production-project-protocol/

Nitrogen Management Project Protocol
http://www.climateactionreserve.org/how/protocols/nitrogen-management/

Organic Waste Composting Project Protocol
http://www.climateactionreserve.org/how/protocols/current-organic-waste-composting-project-protocol/

Organic Waste Digestion Project Protocol
http://www.climateactionreserve.org/how/protocols/current-organic-waste-digestion/

Ozone Depleting Substances Project Protocol
http://www.climateactionreserve.org/how/protocols/current-ozone-depleting-substances-project-protocols/
Rice Cultivation Project Protocol  
http://www.climateactionreserve.org/how/protocols/rice-cultivation/

Urban Forest Management Project Protocol  
http://www.climateactionreserve.org/how/protocols/current-urban-forest-project-protocol/

Urban Tree Planting Project Protocol  
http://www.climateactionreserve.org/how/protocols/urban-forest/

U.S. Landfill Project Protocol  
http://www.climateactionreserve.org/how/protocols/current-landfill-project-protocol/

U.S. Livestock Project Protocol  
http://www.climateactionreserve.org/how/protocols/current-livestock-project-protocol/

3.2. Scope considerations

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

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:

Procedures for unit issuance and retirement/cancellation (3.3a) can be found in the publicly available Program Manual (http://www.climateactionreserve.org/how/program/program-manual/), specifically, Sections 3.3 and 3.5).

a) The process of unit issuance and retirement occurs within the online project registry, operated by APX, Inc. The procedures are detailed in the Program Manual (linked above). All issuances and retirements are public and can be viewed in specific public reports within the online registry without the need to open a registry account.

b) General policies around crediting periods are found in the Program Manual. Each protocol will have its own subsection devoted to crediting periods, where the length and ability to renew are detailed for that specific project type.

c) If there is any need for discounting the number of credits issued to a project for any reason (e.g., baseline uncertainty, reversal risk), those procedures will be detailed in the quantification guidance within each specific protocol. In addition, where a protocol employs a “ton-year” accounting approach to ensure permanence of emission reductions or removals, there will be mechanisms employed to discount the credit issuance based on the time value of the reduction in relation to the length of the permanence commitment. In this approach, those discounted credits may be issued to the project at a future date when additional atmospheric value has been achieved through continued permanence. There is no high level policy around unit discounting, beyond an overarching policy of conservativeness in GHG accounting to ensure that no over-crediting occurs.
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 registry activities are administered by the Climate Action Reserve, with software service and support provided by APX, Inc.

Do / does the Program registry / registries…:

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

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? (Paragraph 2.4.4) ☑ YES

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) The Reserve is able to denote through customized credit serialization as well as project level classification of credit eligibility for various programs. Policies and procedures related to serialization can be found in the Program Manual Sections 1.1, 3.3.13, Section 3.5, and the “Serial Number Guide” available on the Reserve website (http://www.climateactionreserve.org/how/projects/serial-number-guide/). In addition, the Reserve will work with APX to develop additional indicators within the software to facilitate the filtering of projects and/or units for CORSIA eligibility.

b-e) All credits are serialized and credit transactions are tracked within the registry at all phases of unit ownership/holding from issuance to cancellation/retirement. Serialization is assigned uniquely to each project reporting period, which designates the project’s country and sector of origin, vintage year, and credit type, as explained in the “Serial Number Guide” available on the Reserve website (http://www.climateactionreserve.org/how/projects/serial-number-guide/). Policies and procedures related to tracking of credit transactions can be found in the publicly available Program Manual (http://www.climateactionreserve.org/how/program/program-manual/) Sections 3.5.1, 3.5.2, 3.5.3 and 3.5.4. In addition to the information embedded in the serial number, the registry may be searched and filtered in a table format according to various parameters (e.g., project developer, protocol, country of origin, project status, vintage year, etc.).

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

APX (https://apx.com/), as our registry technology provider, ensures that all critical data are encrypted at rest and in transit through technologies such as digital certificates, asymmetric key cryptography, virtual private networks, and HTTPS/TLs/SFTP protocols. Critical data assets are secured via 256-bit asymmetric key encryption. Further, APX implements industry standard tools and technologies such as Extract, Transform, and Load (ETL) and Extensible Markup Language (XML) for the transmission of data.
via Application Programming Interface (API). Utilizing ETL tools such as SQL Server Integration Services (SSIS) allows the registry to define workflows for processing data and ensuring process integrity.

In March 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). 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.

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:

Because the program is administered by employees of the Climate Action Reserve, the policies applicable to this question are those dictating employee conflict of interest. Employees of the Climate Action Reserve shall at all times act in a manner consistent with their responsibilities to the Reserve and shall exercise particular care that no detriment to the organization results from conflicts between their personal interests and those of the Reserve. This policy is to be interpreted and applied in a manner that will best serve the interests of the Climate Action Reserve. A Conflict of Interest occurs if an Employee is in a position to participate in or influence a decision of the Reserve that will have a reasonably foreseeable material financial effect on one or more of the Employee’s interests and if that effect is distinguishable from the effect on the public generally.

The Reserve’s comprehensive conflict of interest policy, which is described in Section 2.9 of our Personnel Policy Handbook, is available upon request. Every employee signs a conflict of interest declaration on an annual basis, reaffirming their adherence to this policy.

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? ☑ YES (Paragraph 2.4.8)

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:

The Climate Action Reserve follows a strict Know Your Client (KYC) process for any and all account applications. Through this process, the applicant must submit a comprehensive compilation of documentation to ensure the legitimacy and integrity of the applicant. The applicant must also submit professional references. The Reserve reviews all documentation and contacts references to ensure the applicant is a good faith actor. The Reserve process is similar to the KYC process enforced by the California Air Resources Board for its compliance cap-and-trade program, but the Reserve process is more exhaustive and rigorous in its scope and application.

Applicants seeking an account are required to submit proof of identification, bank statements, articles of incorporation, board authorization to create an account, board authorization for the account manager to serve in that role, among other documentation, all of which is reviewed for legitimacy by multiple
Reserve staff. The Reserve additionally checks relevant government agencies for any record of legal action taken against the entity.


### 3.5 Legal nature and transfer of units

Does the Program define and ensure the underlying attributes and property aspects of a unit?  

![Yes](http://www.climateactionreserve.org/how/program/program-manual/)

(Paragraph 2.5)

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

In the Reserve, GHG reductions and removals are recognized as Climate Reserve Tonnes or CRTs, which are equal to one metric ton of carbon dioxide equivalent (CO2e) reduced or sequestered. After projects are registered, CRTs are issued based on the GHG reduction or removal amount reported by the project developer and confirmed by an approved independent verification body. CRTs are issued only on an ex post basis (i.e., after verification that reduction or removal activities have actually occurred) and only for GHG reductions or removals that occur within the project crediting period. For transparency, each CRT has a unique serial number with embedded information that identifies the project type, location, developer, and vintage. The unique serial number persists as CRTs are transferred between accounts or are retired and become offsets.

This is described in Section 3.5 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/)

In addition, each account holder must sign and adhere to a strict Terms of Use document prior to using the Reserve’s offset project registry (available here: http://www.climateactionreserve.org/open-an-account/). This document goes into further detail regarding the legal ownership rights around CRTs.

Both the Program Manual and Terms of Use are public documents, freely able to be reviewed at any time by any interested party.

### 3.6 Validation and verification procedures

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

- a) validation and verification processes?  
  ![Yes](http://www.climateactionreserve.org/how/program/program-manual/)

- b) validator and verifier accreditation?  
  ![Yes](http://www.climateactionreserve.org/how/program/program-manual/)

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

The Climate Action Reserve has operated a rigorous, third-party verification program since its inception, beginning with the inventory verification program developed by the California Climate Action Registry. The Reserve is an active member of the American National Standards Institute’s (ANSI) Greenhouse Gas Validation/Verification Accreditation Committee (GVAC). We require ANSI accreditation for verification bodies serving our voluntary program, and ARB accreditation for verification bodies serving our compliance registry. We also require individual lead verifiers to successfully complete (and pass an exam...
for) protocol-specific training, delivered by Reserve staff (or ARB, in the case of the compliance offset program).

Verification processes can be found in Section 3.4 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/). Verification processes in general are dictated by the standards set forth in the Verification Program Manual (http://www.climateactionreserve.org/how/verification/verification-program-manual/), which is available to the public.

The Climate Action Reserve program does not undertake validation due to the nature of our standardized protocol development process, background of which can be found in Section 3.4.1 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/). Therefore, there is no process for validation or validator accreditation. The steps which typically occur in validation in other programs do occur in the Reserve’s program, but they are conducted through other stages, such as protocol development, review and approval of project submittal documentation, and the initial verification of the project. Thus, at the end of the first project verification, it can reasonably be considered that the project has completed both validation and 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)

Provide evidence that this information is available to the public:

Details regarding program administration and decision making processes related to the issuance of CRTs can be found throughout the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/) as well as in Section 6 of the Verification Program Manual (http://www.climateactionreserve.org/how/verification/verification-program-manual/). All Reserve staff, along with their contact information, are listed on the website (http://www.climateactionreserve.org/about-us/staff/). There is also a detailed list of staff contacts for specific topics and project types: http://www.climateactionreserve.org/contact-us/. Generic email aliases are employed in several instances to ensure that queries will receive a timely response regardless of individual staff availability.

The program administration and decision-making process are somewhat different for the Reserve’s work as an Offset Project Registry for the State of California. This affects the units known as Registry Offset Credits (ROCs) in the project registry. For this program, rules and procedures are set out by the official text of the California Cap-and-Trade Regulation (California Code of Regulations, Title 17, Sections 95801-96022, available online at http://oal.ca.gov/publications/ccr/). Reserve staff process projects and implement registry services according to direct guidance from the California Air Resources Board (CARB). Where CARB has not issued guidance for a particular issue, Reserve staff consult directly with CARB staff. All information relating to the California compliance offset program, including copies of the approved Compliance Offset Protocols and contact information for program staff and management can be found at: https://ww3.arb.ca.gov/cc/capandtrade[offsets]/offsets.htm.

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 Climate Action Reserve has been in continuous operation (originally under the name “California Climate Action Registry”) since 2001. The genesis of the organization is documented through the enabling legislation, California Senate Bill 1771 (http://www.leginfo.ca.gov/pub/99-00/bill/sen/sb_1751-1800/sb_1771_bill_20000930_chaptered.pdf) and, subsequently, CA SB 527 (http://www.leginfo.ca.gov/pub/01-02/bill/sen/sb_0501-0550/sb_527_bill_20011012_chaptered.pdf). In terms of evidence of continued operation specifically for the last two years, the following evidence is available:

- Annual reports through calendar year 2017: http://www.climateactionreserve.org/about-us/
- Records of continuous CRT issuance in the online registry: https://thereserve2.apx.com/myModule/rpt/myrpt.asp?r=112
- Regular program announcements from 2009-2019: http://www.climateactionreserve.org/category/announcements/
- Recordings of webinars and presentations from 2009-2019: http://www.climateactionreserve.org/resources/presentations/
- The Form 990 which is submitted to the United States Internal Revenue Service each year is available upon request.

b) The Climate Action Reserve has an active, engaged, and knowledgeable Board of Directors who would see to an orderly transition of long-term program elements in the case of a dissolution of the Reserve. This could include ongoing offset projects, which would have opportunities to transition to other registries, as well as the ongoing monitoring and reporting related to project types which are subject to the risk of reversal. No such plan is available in written form, but we will consider developing such a document.

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)

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

Summarize and provide evidence of the relevant policies and procedures:

Employees of the Climate Action Reserve shall at all times act in a manner consistent with their responsibilities to the Reserve and shall exercise particular care that no detriment to the organization results from conflicts between their personal interests and those of the Reserve (policy detailed in the Reserve’s Personnel Policy Handbook). This policy is to be interpreted and applied in a manner that will best serve the interests of the Climate Action Reserve. A Conflict of Interest occurs if an Employee is in a position to participate in or influence a Decision of the Reserve that will have a reasonably foreseeable Material Financial Effect on one or more of the Employee’s interests and if that effect is distinguishable from the effect on the public generally.

The Reserve’s comprehensive conflict of interest policy, which is described in Section 2-9 of our Personnel Policy Handbook, is available upon request. Every employee signs a conflict of interest declaration on an annual basis, reaffirming their adherence to this policy.

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:

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):

Publicly disclosed information is detailed in Section 3.3.13 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/). Local stakeholder consultation requirements are currently being drafted and will be implemented in the next version of the Program Manual. The only existing Reserve protocol where it has been deemed that public consultations are necessary prior to project implementation (the Mexico Forest Project Protocol) already contains explicit provisions on this topic. Public comment provisions and requirements are described in Section 4.2.4 of the Program Manual. Public comment periods (and publication of the Reserve’s responses) are required for all new protocol development, as well as significant protocol revisions. We also welcome unsolicited comments and feedback at any time, although such comments will not necessarily have their responses made public.

Does the Program conduct public comment periods? ✔ YES

Provide evidence of the relevant policies and procedures:

Public comment periods are described in Section 4, and specifically Section 4.2.4, of the Program Manual. Public comment periods (and publication of the Reserve’s responses) are required for all new protocol development, as well as significant protocol revisions. We also welcome unsolicited comments and feedback at any time, although such comments will not necessarily have their responses made public.

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:

Section 2.4.6 of the Reserve’s Program Manual (http://www.climateactionreserve.org/how/program/program-manual/) enshrines guidance to ensure all Reserve offset protocols contain terms to ensure that GHG projects do no harm. The scope of this requirement includes environmental and social themes that include air and water quality, natural ecosystems and specialized habitats, sustained economies, and environmental justice. A number of mechanisms are employed to ensure these requirements are met. For every offset project, project developers must sign an Attestation of Regulatory Compliance, attesting that their projects have met these requirements. Each time offsets are sought, the project developer must also provide evidence to the verifier reviewing their project that the project continues to meet these requirements.
In addition, the Reserve is developing a public grievance process by which any stakeholder can raise objection to the issuance of units to a specific project or project type. This process will be included in the next edition of the Program Manual, to be published in mid-2019. It will explain how such grievances are to be raised and how they will be considered and acted upon by the Reserve’s management and, in some cases, Board of Directors. Currently, any member of the public is free to submit her/his concerns/questions about any Reserve-related project directly to the Reserve via our website.

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)

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

The Reserve’s offsets program does not currently require reporting against the UN Sustainable Development Goals (SDGs), or other sustainable development criteria, beyond the environmental and social themes mentioned above, including air and water quality, natural ecosystems and specialized habitats, sustained economies, and environmental justice. However, beyond GHG reductions and removals, the Program Manual (http://www.climateactionreserve.org/wp-content/uploads/2015/08/Climate_Action_Reserve_Program_Manual_090115.pdf) includes explicit policies to ensure that projects do not cause environmental harms. Section 2.4.6 lays out the relevant policies and the Reserve’s rationale. In addition, the Reserve is preparing an update to the Program Manual, expected to be issued in mid-2019, which will explicitly encourage project developers to “identify, measure, and report on any non-GHG benefits of the project activities, such as alignment with the United Nations’ Sustainable Development Goals.”

The Reserve always considers the non-GHG impacts of offset projects during the development of our standardized offset project protocols. All of our offset project activities contribute to the Sustainable Development Goals (SDGs) in some way (mainly SDGs 6, 7, 8, 9, 11, 12, and 13). When choosing project protocols to pursue, we give extra weight to those with additional co-benefits, though this does not mean we will not pursue high-quality GHG emission reduction activities that do not provide significant co-benefits. For any project activities with the potential for negative non-GHG environmental outcomes (e.g., forestry), we prescribe implementation of environmental safeguards. This is all detailed within the individual project protocols (generally a subsection of Section 3, Eligibility). In all cases projects are not eligible for crediting during periods when they are out of compliance with applicable environmental regulations. There is also a published environmental safeguards policy on our website.

The Reserve is currently working to expand our information and reporting related to co-benefits. This work will result in additional information on our website, including guidance for project developers on the relevant co-benefits for different project types, their associated metrics, and best practices for reporting. These updates are expected to be made public by the middle of 2020.

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.

See Section III, Part 4.7
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)*

All accounting within the Reserve’s protocol follows the principle of conservativeness. Where uncertainty exists in setting a parameter value, the protocols err on the side of issuing fewer credits, as opposed to more. Throughout this application, the word “conservative” should be taken to mean “erring on the side of under-crediting.” When developing offset protocols, the Reserve maintains the following general rule (stated in Section 2.6.4 of the Program Manual; [http://www.climateactionreserve.org/how/program/program-manual/]: “methods should ensure 95% confidence that actual emissions are within +/- 5% of measured or calculated values, although required levels of accuracy will often depend on the specific magnitudes involved and their materiality.”

In regard to the verification of project emission reduction or removal assertions, the Reserve adheres to a tiered approach to the threshold for materiality, based on the volume of emission reductions or removals generated by a project in a given year. This is detailed in Section 2.3 of the Verification Program Manual ([http://www.climateactionreserve.org/how/verification/verification-program-manual/]:

- Projects registering ≤25,000 CRTs over a 12-month period shall achieve a >95% level of accuracy (<5% error) relative to the verification body’s calculated emission reductions or removals.
- Projects registering >25,000 CRTs but ≤100,000 CRTs over a 12-month period shall achieve a >97% level of accuracy (<3% error) relative to the verification body’s calculated emission reductions or removals.
- Projects registering >100,000 CRTs over a 12-month period shall achieve a >99% level of accuracy (<1% error) relative to the verification body’s calculated emission reductions or removals.
- Underestimates of emission reductions or removals are not considered material, only overestimates.

There is also a qualitative assessment of conformance with the protocol. Even if the project’s emission reduction or removal assertion meets the quantitative threshold for materiality, the project must still be in conformance with the protocol requirements (e.g., frequency of metering, etc.). Nonconformances must be rectified or the project may seek a limited variance through the official variance process (Program Manual, Section 3.3.4).

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

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

Each of the Reserve’s standardized offset project protocols provides detailed guidance regarding standards for eligibility and additionality (Section 3 in each protocol), as well as verification guidance for the assessment of project conformance with these standards (protocols Section 8).

Each project:
- Must be additional to activities mandated by relevant laws, regulations, court orders, or other legally-binding mandates; and,
- Go above and beyond business as usual (i.e., common practice), as evidenced by conformance with each protocol’s specific Performance Standard Test. This could include technology benchmarks, performance benchmarks, financial screens, or other screens for eligibility; and,
- Must have a credible baseline, developed in accordance with protocol guidance and assessed by an accredited (and appropriately trained) third-party verifier; and,
- Have its verification report reviewed and approved by the Reserve prior to each unit issuance.

The Reserve’s approach to additionality is explained in Section 2.4 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/). When a project is first submitted for listing in the project registry, Reserve staff review it against the standards and requirements of the relevant protocol prior to approval. In addition, independent, third-party verifiers must reach reasonable assurance that the project conforms to the eligibility rules prior to every credit issuance.

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:

As explained in Section 2.4 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/), the Reserve employs standardized, rather than project-specific determinations of additionality. Standardized additionality assessments have several advantages over project-specific additionality assessments. These include less reliance on subjective additionality tests, which are subject to “gaming” by project proponents; reduced costs of project development and verification, enabling smaller projects to participate in markets; increased transparency for stakeholders; increased certainty for project developers; reduced time for project development and verification; and increased consistency across projects as well as programs. The Reserve’s standardized approach to additionality has been adopted by sub-national governments in North America as the preferred method for compliance offset programs.

Every protocol contains a section with a well-defined Legal Requirement Test. A project passes the legal requirement test when there are no laws, statutes, regulations, court orders, environmental mitigation agreements, permitting conditions or other legally binding mandates requiring its implementation, or requiring the implementation of similar measures that would achieve equivalent levels of GHG emission reductions or removals.
In addition, every protocol contains other additionality analyses/tests which are tailored to the relevant sector and project activities. These could include some assessment of going above and beyond common practice, a technology-based threshold, an emission rate threshold, or some other approach. All five of the analyses listed in the ICAO criteria are explicitly considered during the protocol development process. In some cases, the results of these analyses can lead to a simple, sector-wide threshold, such as the installation of an anaerobic digester at a dairy which previously employed an open, anaerobic lagoon. In other cases, the result of the analyses could lead to more complex, multi-part thresholds, such as the grassland protocol, which has a financial additionality screen that is applied regionally, and a soil suitability screen which is applied locally.

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

The protocol development processes, including scoping meetings, workgroup meetings, and public comments, are all made public, with materials and meeting recordings posted online. Thus, there is a transparent record available of the decision-making process. Where feasible, the Reserve strives to employ approaches and methodologies which have already been tried and tested in the marketplace, meaning there will be additional evidence supporting the project benefits available through other programs. All development information is made available via the individual protocol webpages, accessible here: [http://www.climateactionreserve.org/how/protocols/](http://www.climateactionreserve.org/how/protocols/).

In addition, it is standard practice for the Reserve to include an informational appendix in each offset protocol, detailing the development of the Performance Standard Test(s) for that project type. This appendix is updated in subsequent versions whenever there is an update to the Performance Standard Test(s).

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)*

As explained in Section 2.4 of the Program Manual ([http://www.climateactionreserve.org/how/program/program-manual/](http://www.climateactionreserve.org/how/program/program-manual/)), the Reserve employs standardized, rather than project-specific determinations of additionality. Through a rigorous protocol development process, thorough project review by Reserve staff prior to project listing in the registry, as well as ex post verification of the project by an independent third-party prior to credit issuance, the Reserve and its stakeholders can be reasonably assured that all credits are additional to the level of emission reductions or removals which would have occurred in the absence of the program.

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:

Baseline setting is explained in Section 2.6.2 of the Program Manual ([http://www.climateactionreserve.org/how/program/program-manual/](http://www.climateactionreserve.org/how/program/program-manual/)). The approach to setting the baseline differs for each project type, but is always directly linked to an analysis conducted when developing the Legal Requirement Test and the Performance Standard Test(s). The protocols, including the protocol development process, are public, and describe the process through which each project should define and measure its baseline. This includes Section 2 (project definition), Section 3 (eligibility), Section 4 (GHG assessment boundary), and Section 5 (quantification). All of these sections must be considered in tandem when defining and measuring the baseline.

At the project level, each verification report includes details about the project baseline, including the basis for its determination, and how it will be monitored and reported during each reporting period. These verification reports are published in the project registry, accessible at: [https://thereserve2.apx.com/](https://thereserve2.apx.com/).

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
Baseline setting is explained in Section 2.6.2 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/). The approach to setting the baseline differs for each project type, but is always directly linked to an analysis conducted when developing the Legal Requirement Test and the Performance Standard Test(s). The protocols, including the protocol development process, are public, and describe the process through which each project should define and measure its baseline. Wherever there is uncertainty around the value of a parameter or the use of a model, the protocols err on the side of conservatism to avoid over-crediting.

The protocol development processes, including scoping meetings, workgroup meetings, and public comments, are all made public, with materials and meeting recordings posted online. Thus, there is a transparent record available of the decision-making process. In addition, the Reserve strives to employ approaches and methodologies which have already been tried and tested, where feasible, in the marketplace, meaning there will be additional evidence available through other programs which have employed the same approaches and/or methodologies. All development information is made available via the individual protocol webpages, accessible here: http://www.climateactionreserve.org/how/protocols/.

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)

Summarize and provide evidence of the relevant policies and procedures:

The adjustment of project baselines is handled on a protocol-by-protocol basis. For many protocols, a project baseline is considered valid for the entirety of the crediting period (the length of which varies based on the protocol, but is typically 10 years for protocols other than forest and grassland). Where protocols allow for a project to apply for a second crediting period, the projects must adhere to the requirements (including the Performance Standard Test) of the most recent version of the protocol. This means that if market conditions have changed over time, and the Reserve has responded by updating the protocol to reflect these changes, the projects must update their own baseline assumptions to reflect the new protocol.

Protocol revisions are explained in Section 4.3 of the Program Manual (http://www.climateactionreserve.org/how/program/program-manual/).

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? (Paragraph 3.3) ☑ YES

Summarize and provide evidence of the relevant policies and procedures related to a) through f):
a) Sections 2.6 (Quantifying GHG Reductions) and 2.7 (Project Monitoring) of the Reserve’s Program Manual (http://www.climateactionreserve.org/how/program/program-manual/) provide a general description of how credits are quantified and monitored. Each project protocol will specify the specific quantification approach (generally Section 5). There may also be supplemental guidance and/or quantification tools provided by the Reserve, as applicable. Each project protocol will also specify requirements for project monitoring, quality assurance, and quality control procedures to ensure that adherence to the monitoring requirements results in credible, accurate performance data. All projects are verified by an accredited, independent, third-party verification body, and subsequently undergo an internal review by the Reserve, to ensure conformance with the protocol requirements prior to credit issuance.

b) Section 3.4.1 of the Reserve’s Program Manual (http://www.climateactionreserve.org/how/program/program-manual/) describes how the Reserve does not require an explicit “validation” step in its program. Eligibility criteria and methodologies for emission reduction and removal calculations are built into the Reserve’s protocols. Because the Reserve’s eligibility criteria are standardized, determination of eligibility is usually straightforward and requires minimal interpretative judgment by verification bodies. The first time a project is verified, verification bodies are required to affirm the project’s eligibility according to the rules defined in the relevant project protocol. Project developers may choose to have a project verified without verifying credits for issuance in order to establish its eligibility for registration and provide more certainty to potential CRT buyers or sellers. However, when a project developer is seeking to register credits, a full verification must be conducted.

c) All verification reports are published in the project registry, accessible at: https://thereserve2.apx.com/. Additionally, the original project submittal document, against which the Reserve staff assessed the project’s eligibility with the protocol, is published in the registry.

d) Section 2.7 (Project Monitoring) of the Reserve’s Program Manual (http://www.climateactionreserve.org/how/program/program-manual/) provides a general description of how project activities are monitored. Each individual project protocol will specify requirements for project monitoring, quality assurance, and quality control procedures to ensure that adherence to the monitoring requirements will result in credible, accurate performance data. All projects are verified by an accredited, independent, third-party verification body to ensure conformance with the protocol requirements prior to credit issuance. The protocols also contain clear guidance (generally in Section 7) around the method and frequency of reporting to the Reserve. All projects are required to report on project performance on at least an annual basis, although each protocol will specify the frequency with which these reports must be verified in order to issue credits.

e) Section 3.4 (Project Verification) of the Reserve’s Program Manual (http://www.climateactionreserve.org/how/program/program-manual/) provides a general description of how project activities are verified. Credits are only issued following successful, ex post verification of the project’s performance for a given reporting period. The Reserve’s Verification Program Manual (http://www.climateactionreserve.org/how/verification/verification-program-manual/) provides extensive detail on the process and program for verification. Verification bodies are required to obtain accreditation through the American National Standards Institute or Entidad Mexicana de Acreditacion, A.C. (for verification bodies in Mexico). In addition, individual lead verifiers are required to complete training on individual Reserve protocols.

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
Verification body conflict of interest rules are clearly laid out in Section 3.6 of the Reserve’s Verification Program Manual (http://www.climateactionreserve.org/how/verification/verification-program-manual/). Prior to the initiation of verification activities, the verification body must complete and submit a Notification of Verification Activities and Request for Evaluation of Potential for Conflict of Interest (NOVA/COI) form (available for download from http://www.climateactionreserve.org/how/verification/verification-documents/).

Each verification body must provide information to its accreditation body about its organizational relationships, internal structures, and management systems for identifying potential conflicts of interest (organizational COI). Then, on a case-by-case basis, the Reserve will review any pre-existing relationships between a verification body and project developer and assess the potential for conflict of interest in light of the individuals involved. The Reserve staff base the review on the verification body’s self-reported information submitted against the criteria laid out in the Verification Program Manual. The verification body must assess all potentially conflicting services it has provided to the project developer, specifying the nature, timing, location, financial value, etc. This information is evaluated and cross-checked against the Reserve’s internal records.

If the Reserve finds that there is low risk of COI, a determination is made in writing and sent to the verification body allowing verification services to proceed. After that point, the project developer and verification body may finalize negotiations of their contract and begin verification activities. Following completion of the verification, the verification body must monitor for COI through the next 12 months, as any new business relationship could increase the potential for COI (known as emerging COI).

If the Reserve finds that there is a medium or high risk of COI, it may request further information or the development of a mitigation plan before a final determination is made. For these cases, the Reserve will convene a COI Committee comprised of three or more staff members (with a minimum of one management-level staff member) in order to discuss the issue. The determination will be communicated to the verification body, the project developer, and any relevant body performing oversight. If the verification body disagrees with the determination, it may appeal (the appeals process is detailed in Section 6.4).

In the event that a verification body violates COI procedures, the Reserve, in consultation with the accreditation body and at its discretion, may disqualify an approved verification body from providing services under the Reserve.

The Verification Program Manual goes into great detail as to the nature of different potential sources of COI, and the potential for COI mitigation.

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:

The adjustment of project baselines is handled on a protocol-by-protocol basis. Where protocols allow for a project to apply for a second crediting period, the projects must adhere to the requirements (including the Performance Standard Test) of the most recent version of the protocol. As market conditions change over time, the Reserve responds by updating the protocols to reflect these changes, and projects must update their own baseline assumptions to reflect the updated protocol at the time they apply to renew their crediting period.

Protocol revisions are explained in Section 4.3 of the Program Manual.
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:

Offset credits are only issued by the Reserve following successful, ex post verification of project performance. There are some project types where an ex post action leads to a reduction in emissions which may have otherwise occurred over a period of time. For example, the composting of food waste avoids methane emissions which would have occurred at a landfill over several years. Similarly, the destruction of CFC-12 which could have been reclaimed and reused avoids refrigerant emissions which would have occurred over several years. However, in both cases, once the project activity has occurred, the emissions are avoided, both entirely and permanently. Thus, even these credits are considered to be ex post, if the project ceases operation following credit issuance, the previously-issued credits remain permanent and valid. The Reserve has released a memorandum detailing the rationale behind this, entitled “Immediate Crediting of Future Avoided Emissions” (September 7, 2010) (http://www.climateactionreserve.org/wp-content/uploads/2009/04/Policy_Brief_on_Immediate_Crediting_of_Future_Avoided_Emissions.pdf).

The Climate Action Reserve, as an organization, also operates a separate program, known as Climate Forward, which specifically issues credits on an ex ante basis. This program is designed for use by companies to voluntarily invest in mitigation projects now to mitigate the impact of GHG emissions from future investments. These ex ante credits are known as Forecasted Mitigation Units (FMUs), and we are NOT proposing to qualify them for use in CORSIA. Nothing in our application should be construed as to apply to Climate Forward or FMUs.

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:

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<tr>
<th>Sector: Forestry</th>
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<td>• Activities:</td>
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<td>o Improved Forest Management (US and Mexico)</td>
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<td>o Avoided Conversion</td>
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<td>o Reforestation (US)</td>
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<th>Sector: Other land use</th>
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<td>o Avoided Grassland Conversion (US)</td>
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<td>o Avoided Grassland Conversion (Canada) forthcoming</td>
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</table>

What is the minimum scale of reversal for which the Program provisions or measures require a response? (Quantify if possible):
The Reserve requires that any reversal be compensated for. The Reserve requires that Climate Reserve Tonnes (CRTs) reversed for avoidable reasons be replaced in proportion to any reversals, such that the total number of CRTs issued to a project does not exceed the total quantity of CO2 avoided or sequestered by the same project. For forest projects, reversals are defined in terms of tonnes of carbon, whereas for grassland projects they are defined in terms of acres disturbed. For unavoidable reversals (those due to acts of nature), project types with a risk of reversal include procedures to quantify that risk and then deposit a commensurate quantity of CRTs into a shared buffer pool. This insurance mechanism is publicly administered by the Reserve, and CRTs from the buffer pool are used in cases of unavoidable reversals.

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):

The Reserve requires that credited GHG reductions and removals be effectively “permanent”; for forest and avoided grassland conversion projects, this requirement is met by ensuring that the carbon associated with credited GHG reductions and removals remains stored for at least 100 years.

The Reserve ensures the permanence of GHG reductions and removals through three mechanisms:

1. The requirement for all project operators to monitor onsite carbon stocks, submit regular monitoring reports, and submit to regular third-party verification of those reports along with periodic verification site visits.
2. The requirement for all project operators to sign a legally-binding, long-term Project Implementation Agreement with the Reserve, which obligates project operators to replace CRTs to compensate for avoidable reversals of GHG reductions and removals for 100 years following credit issuance.
   a. Under the Reserve’s Mexico Forest Protocol, the Project Implementation Agreement is optional and ton-year accounting principles are used to quantify the time-value of storing carbon as a relative proportion of the 100-year permanence (further details are provided below).
3. The maintenance of a Buffer Pool to provide insurance against reversals of GHG reductions and removals due to unavoidable causes (including natural disturbances).

Forest and avoided grassland conversion projects are required to identify and quantify the risk of reversals from different agents based on project-specific circumstances. For urban forest and Mexico forest projects, a conservative standardized risk rating is applied to all projects. The resulting risk rating determines the quantity of CRTs that the project must contribute to the Reserve’s Buffer Pool to insure against unavoidable reversals. Depending upon the protocol, projects that implement specific activities that reduce the risk of a reversal, such as implementing vegetation treatments to enhance forest resilience, may receive a lower risk rating and thus have a lower contribution to the Buffer Pool.

Project owners must demonstrate, through annual reporting and periodic site visit verification, that stocks associated with credited GHG reductions and removals are maintained for a period of time
considered to be permanent (i.e., 100 years). If the quantified GHG reductions and removals in a given year are negative, and CRTs were issued to the project in any previous year, the Reserve requires full compensation for the reversal.

Compensation is managed differently for avoidable versus unavoidable reversals. An unavoidable reversal is any reversal not due to the project operator’s negligence, gross negligence, or willful intent, which includes natural disasters. For unavoidable reversal, the Reserve will retire a quantity of CRTs from the Buffer Pool equal in size of the reversal in CO2e metric tons. An avoidable reversal is any reversal that is due to the project operator’s negligence, gross negligence, or willful intent. For avoidable reversals, compensation is enforced through the Project Implementation Agreement, and the project operator is required to replace a quantity of CRTs equal to the size of the reversal in CO2e metric tons.

Under the National Agrarian Law in Mexico, communal and ejidal landowners cannot enter into contracts for periods of time longer than 30 years. Consequently, under the Reserve’s Mexico Forest Protocol, projects may choose to enter into the Project Implementation Agreement for any length of time, rather than require that all projects sign the contract for 100 years. However, project crediting is based on the proportion of carbon that is stored or secured through contract over a 100-year permanence period: one CRT is issued for each ton of CO2e removed from the atmosphere for a period of 100 years. Tons of CO2e sequestered and stored for shorter periods receive a fractional amount of credits according to the length of time the sequestered CO2e is stored and/or contractually secured. Specifically, for each additional ton of CO2e that is stored and verified, credits are issued proportional to the value of the atmospheric impact of sequestering and maintain each ton for the amount of time for which it is secured. The commitment and terms to secure the CO2e is established through the Project Implementation Agreement.

For more information see the Mexico Forest Protocol v1.5 Section 3.14 and 9, the Forest Project Protocol v4.0 Section 7, the Urban Forest Management Project Protocol V1.1 Section 6, and the Grasslands V2.0 Section 5.4.

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):
Projects are required to undergo annual monitoring and reporting for the life of the project.

If an avoidable reversal has been identified during annual monitoring, the project operator must give written notice to the Reserve within thirty days of identifying the reversal. Within a year of notifying the Reserve of an avoidable reversal, the project operator must provide the Reserve with a verified estimate of current onsite carbon stocks (forest and urban forest projects only – grassland projects do not require that the reversal be additionally verified). For grassland projects, the Project Owner will identify the specific acres that were affected and determine how many reversible CRTs have been issued in relation to those acres. Within four months of the Reserve’s approval of the verified estimate of onsite carbon stocks or area-based estimate of grassland reversal, the project operator must retire a quantity of CRTs equal to the size of the reversal in CO2e metric tons.

If an unavoidable reversal has been identified during annual monitoring, the project operator must give written notice to the Reserve within six months of its occurrence (forest projects), or within thirty days of its occurrence (grassland projects). The project operator must explain the nature of the unavoidable reversal and provide a verified estimate of onsite carbon stocks so that the reversal can be quantified (forest and urban forest projects only – grassland projects require that the reversal be described and quantified by the Project Owner). For forest projects, a verified estimate of the onsite carbon stocks must be submitted to the Reserve no later than 2 years following the occurrence. If the Reserve determines that there has been an unavoidable reversal, it will retire a quantity of CRTs from the Buffer Pool equal in size to the reversal in CO2e metric tons.

For more information see the Mexico Forest Protocol v1.5 Section 9.2, the Forest Project Protocol v4.0 Section 7.3, the Urban Forest Management Project Protocol V1.1 Section 6.2, and the Grassland Project Protocol V2.0 Section 5.4.1 and 5.4.2.

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)

Summarize and provide evidence of the relevant policies and procedures:

The Reserve requires that reversals be compensated for in order to ensure the integrity of CRTs and to maintain their effectiveness at offsetting GHG emissions. When reversals take place, preference is given to replacing those CRTs with other CRTs of the same type (e.g., forest CRTs replaced with forest CRTs, or grassland CRTs replaced with grassland CRTs). Where not possible, CRTs from a related protocol are given second preference (e.g., CRTs from other land use projects). If this is still not possible, other CRTs will be used. The Reserve does not allow for emissions units issued outside of the Reserve program be used to compensate for a reversal. Any units from projects at risk of reversal which have been qualified for use in CORSIA are fully protected by the Reserve’s permanence policies for the full 100-year lifetime of the permanence period for each unit. CORSIA participants who use CRTs for compliance bear no risk of the environmental integrity of their specific units.

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)

4.6 Assess and mitigate against potential increase in emissions elsewhere

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

Sector: Forestry
- Activities: Improved Forest Management (US and Mexico), Avoided Conversion, Reforestation (US), and Reforestation/Afforestation (Mexico)
- Risk of emissions leakage: shifting of harvest activities outside the project area; shifting of forestland conversion outside the project area

Sector: Other land use
- Activities: Avoided Grassland Conversion
- Risk of emissions leakage: shifting of grassland conversion outside the project area

Sector: Agricultural
- Activities: Nitrogen Management (synthetic nitrogen application rate reduction); Rice Cultivation (reduced methane emissions from approved rice cultivation techniques)
- Risk: shifting of cultivation activities from the project area to other agricultural lands

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)

Summarize and provide evidence of the relevant policies and procedures:

The Reserve’s program includes policies that ensure all relevant project sources, sinks, and reservoirs (SSRs) are accounted for in a complete, conservative, and accurate manner. The Program Manual discusses leakage accounting and explains that Reserve protocols account for all effects of a GHG reduction project, both positive and negative. Where conceptually helpful, it is the Reserve’s policy to have protocols identify Sources, Sinks and Reservoirs (SSRs) that are associated with “secondary” or unintended effects of the project and may specifically name leakage as a possible emissions source. Where material risk of leakage is identified, quantification methods are provided.

For each of the sectors identified above, risk of leakage is addressed by the specific protocol for those offset projects. Relevant policies, by sector, are listed below:
- Forestry:
  - The Forest Project Protocol identifies a potential risk of activity-shifting leakage, both in terms of land use and harvested wood product production, depending on the project activity. Improved Forest Management Projects involve a variety of activities that result in increased sequestration or avoided emissions on managed forestland through a range of more sustainable management practices. In some cases, projects may observe a change in harvested wood product production, depending on the project activity undertaken.

  The protocol requires projects to monitor project wood product production and make comparisons to baseline wood product production. A conservative leakage risk factor is applied to the difference between project and baseline harvest levels in cases where baseline harvest levels are higher than project harvest levels, which results in a deduction to the project emission reductions/removals. This risk is assessed over the 100-year lifetime of the project. If cumulative wood products ultimately increase in the project, as compared to the baseline, then projects may recoup leakage related discount due to a previous assessment of leakage risk. Projects are never credited for net “positive” leakage as a result of increasing wood product production, compared to baseline harvesting, beyond what may be recouped. Certain elements of the protocol, such as the sustainable harvesting requirement, are applied across a landowner’s entire ownership, to reduce the risk of harvest activity leakage from the project area to other areas within the owner’s landholdings.

  Avoided Conversion forest projects are subject to a risk of leakage if the type of land use conversion that would have occurred in the baseline shifts outside the project area to other lands, resulting in a zero net gain. The protocol applies a conservative risk factor...
Reforestation projects may also be subject to the risk of leakage if cropland or grazing land shifts outside the project area as a result of the project activity of planting trees. The protocol includes a process to determine if the project area was viable as cropland or grazing land. If the other land use type was viable, then a leakage risk percentage is applied as a deduction, based on the difference in actual onsite carbon stocks as compared to baseline onsite carbon stocks.

- Other land use:
  - The Grassland Project Protocol identifies a potential risk of leakage related to shifting conversion activities. If the avoided grassland conversion project causes grassland conversion to shift elsewhere, the emissions would not actually be avoided. This risk depends on the economics of crop production. The protocol evaluated several studies related to leakage/”slippage” caused by conservation of arable land. Based on this review, a conservative 20% discount factor is applied to baseline emissions to account for possible leakage emissions related to the project activities. This approach and quantitative estimate is in line with avoided grassland conversion protocols adopted by other programs.

- Agricultural:
  - The Nitrogen Management Project Protocol identifies a potential risk of leakage related to shifted production, in that decreased project yields may result in increased cultivation outside the project area. Significant decreases in yield must be accounted for in order to assess this risk. The protocol includes an equation to estimate increased nitrogen emissions outside the project area, if project-area yields have decreased significantly.
  - The Rice Cultivation Project Protocol identifies a potential risk of leakage related to shifted production. Like the Nitrogen Management Project Protocol, any significant decreases in yield must be accounted for, and GHG emissions associated with the significantly decreased yield is assumed to shift outside the project area. The protocol includes equations to estimate these emissions.

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)

Summarize and provide evidence of the relevant policies and procedures:

Our program does not have the authority to mandate national or subnational level activities, nor do we believe such authority is needed given how our program operates. However, the Mexico Forest Project Protocol is designed to align with the developing jurisdictional framework of Mexico’s REDD+ Strategy (ENAREDD+). In addition, as explained in the previous question, all project-level leakage risks are managed (and in some cases, accounted for) at the protocol level. If a particular sector or project activity presented a risk of leakage that could not be mitigated at the project level, the Reserve would not move forward with the development and adoption of a project-level reporting and verification protocol.
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:

For certain sectors and activities where a risk of leakage has been identified, leakage is accounted for using a conservative discount factor that does not vary based on project factors. This includes Avoided Conversion (both forest and grassland) and Reforestation (US) and Reforestation/Afforestation (MX) activities, where leakage risk is due to potential activity-shifting outside the project area. Since a conservative default value is used, monitoring is not required. Leakage is assumed to have occurred, to be conservative. For more information, see Forest Project Protocol v4.0 Equations 6.3 and 6.13, Forest Project Protocol v5.0 (draft for public comment) Equation 6.13, Mexico Forest Project Protocol v1.5 Equation 8.1, and Grassland Project Protocol v2.0 Equation 5.12.

Where the risk of leakage is variable, metrics are provided to monitor the risk of leakage. For Improved Forest Management activities (US and MX), this is monitored through quantifying harvested wood product production. Baseline and project harvest volume and harvested wood products are quantified and compared (both annually, and cumulatively over the life of the project), in order to assess whether there is a risk of leakage occurring. For more information, see Forest Project Protocol v4.0 Equation 6.10, Forest Project Protocol v5.0 (draft for public comment) Equations 6.1 and 6.10, Mexico Forest Project Protocol v1.5 Equation 8.1, and pending Mexico Forest Project Protocol update (under development), Equation 8.1.

Nitrogen Management and Rice Cultivation projects similarly monitor crop yields as a means of monitoring the risk of leakage. Where crop yields are shown to have decreased significantly (based on a comparison of normalized project yields vs. historical baseline average yields), there is a risk of leakage that must be accounted for. For more information, see Nitrogen Management Project Protocol v2.0 Equations 5.17 and 5.18, and Rice Cultivation Project Protocol v1.1 Equations 5.8 and 5.9.

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

Summarize and provide evidence of the relevant policies and procedures:

For sectors and activities where a risk of leakage has been identified, the relevant project protocols provide standardized equations to be used for accounting for emissions of leakage that may reduce the mitigation benefits of the activities. As described above, certain activities achieve this through the application of a conservative default deduction factor, based on the risk of activities resulting in leakage. These conservative default values are based on a literature review of the best available information at the time of protocol development and can be updated as new information becomes available.

Avoided Conversion (both forest and grassland), Reforestation (US) and Reforestation/Afforestation (US and MX) projects account for emissions from leakage in this way. The standardized equations relevant to these activities include Forest Project Protocol v4.0 Equations 6.3 and 6.13, Forest Project Protocol v5.0 (draft for public comment) Equation 6.13, Mexico Forest Project Protocol v1.5 Equation 8.1, and Grassland Project Protocol v2.0 Equation 5.12.

Other sectors and activities require monitoring of specific baseline and project factors. For Improved Forest Management (US and MX), baseline and project harvest volumes are quantified and compared against each other. No leakage is assumed if project harvesting exceeds baseline harvesting. A leakage risk is determined if baseline harvest exceeds project harvest. In such a case, the difference in harvested wood products is quantified (in tCO2e) and a conservative leakage risk factor is applied. Additionally, in the US Forest Protocol, a conservative market effects factor is applied to the difference in wood products to quantify the percentage of this carbon that is assumed to have “leaked” in the form of wood product production from land outside the project area. The standardized equations for quantifying this identified leakage are provided in the relevant project protocols.

Leakage is quantified through analysis of crop yields for Nitrogen Management and Rice Cultivation projects. A leakage risk is applied where crop yields are shown to have decreased significantly (based on a comparison of normalized project yields vs. historical baseline average yields). For Nitrogen Management projects, emissions are quantified as increased methane emissions due to increases in production outside the project area. For Rice Cultivation projects, emissions are quantified as increased methane emissions due to increases in production outside the project area. The relevant standardized equations for quantifying these emissions include Nitrogen Management Project Protocol v2.0 Equations 5.17 and 5.18, and Rice Cultivation Project Protocol v1.1 Equations 5.8 and 5.9.

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):

Double counting is addressed via multiple layers of activity at different stages of our process:

- As detailed in our protocol screening process (http://www.climateactionreserve.org/how/future-protocol-development/criteria/), we avoid developing and adopting protocols that are likely to present a risk of double counting or ownership issues. One example would be our avoidance of offset crediting for renewable energy generation, which is well-accounted for by other incentive mechanisms in our target countries. We also avoid project types where it will be difficult to establish clear ownership of the GHG reductions and/or removals. We avoid capped sectors, or sectors potentially subject to a future cap.

- During protocol development we explore how the project definition, eligibility criteria, and monitoring requirements must be crafted to ensure clear ownership and avoid double counting.

- When a project is submitted, we search other offset registries to determine whether that project is listed elsewhere. Projects are allowed to transfer, for which we gather specific information regarding previously-issued vintages.

- Before a project is registered (this is our term for the approval of verification results and the issuance of credits), we once again search other offset registries to avoid double issuance.

- All credits are tracked with unique serial numbers. All issuances and retirements are immediately public, including the serial numbers.

- There are also going to be several changes implemented following the publication of the Guidelines for Avoiding Double Counting (https://www.adc-wg.org/guidelines-version-1-0), including a new section of our Program Manual. The first version of the guidelines has only just been published, so updates to our program documents and procedures are currently underway and expected to be completed by the end of 2019. The Reserve is an active member of the Avoiding Double Counting Working Group and provided extensive assistance with the development of the Guidelines.

To summarize in relation to the three questions above:

a) Double issuance is avoided through rigorous protocol development, transparent registry operations, legal attestations, and credit serialization.
b) Double use is avoided through credit serialization, public retirement reports, software controls around credit retirement and/or cancellation, and a strict Terms of Use agreement which must be signed by all registry account holders (http://www.climateactionreserve.org/open-an-account/).

c) Double selling is avoided through credit serialization, public retirement reports, software controls around credit retirement and/or cancellation, and a strict Terms of Use agreement which must be signed by all registry account holders.

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:

Double claiming is prohibited by the Reserve’s Terms of Use (http://www.climateactionreserve.org/open-an-account/). Enforcement is supported through the serialization of offset credits and the transparent publication of information related to projects, credits, issuance, and retirement.

There are going to be several changes implemented following the publication of the Guidelines for Avoiding Double Counting (https://www.adc-wg.org/guidelines-version-1-0), including a new section of our Program Manual (http://www.climateactionreserve.org/how/program/program-manual/). The first version of the guidelines has only just been published, so updates to our program documents and procedures are currently underway and expected to be completed by the end of 2019. The Reserve is an active member of the Avoiding Double Counting Working Group and provided extensive assistance with the development of the Guidelines.

We will create a new section of the Reserve’s website with links to clear guidance regarding the process for qualifying credits for CORSIA, including guidance on the procurement of a Letter of Authorization from the project’s host country, as required (and where the host country has appropriate policies and mechanisms in place for such authorizations).

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:

There are going to be several changes implemented following the publication of the Guidelines for Avoiding Double Counting (https://www.adc-wg.org/guidelines-version-1-0), including a new section of our Program Manual (http://www.climateactionreserve.org/how/program/program-manual/). The first version of the guidelines has only just been published, so updates to our program documents and procedures are currently underway and expected to be completed by the end of 2019. The Reserve is an active member of the Avoiding Double Counting Working Group and provided extensive assistance with the development of the Guidelines. Procedures will be put in place for staff to actively track host country authorizations and reported adjustments. Procedures will also be developed for reporting to ICAO in this context.

We will create a new section of the Reserve’s website with links to clear guidance regarding the process for qualifying credits for CORSIA, including procurement of a Letter of Authorization from the project’s host country.

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 for 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):

| There are going to be several changes implemented following the publication of the Guidelines for Avoiding Double Counting ([https://www.adc-wg.org/guidelines-version-1-0](https://www.adc-wg.org/guidelines-version-1-0)), including a new section of our Program Manual ([http://www.climateactionreserve.org/how/program/program-manual/](http://www.climateactionreserve.org/how/program/program-manual/)). The first version of the guidelines has only just been published, so updates to our program documents and procedures are currently underway and expected to be completed by the end of 2019. The Reserve is an active member of the Avoiding Double Counting Working Group and provided extensive assistance with the development of the Guidelines. Procedures will be put in place for staff to actively track host country authorizations and reported adjustments. Procedures will also be developed for reporting to ICAO in this context. | 🟢 YES |
| --- |
| We will create a new section of the Reserve’s website with links to clear guidance regarding the process for qualifying credits for CORSIA, including procurement of a Letter of Authorization from the project’s host country. In addition, the registry software will be updated to clearly identify credits which have been qualified for use in CORSIA, as well as the status of any Letter of Authorization, and access to relevant documents. | 🟢 YES |

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:

| There are going to be several changes implemented following the publication of the Guidelines for Avoiding Double Counting ([https://www.adc-wg.org/guidelines-version-1-0](https://www.adc-wg.org/guidelines-version-1-0)), including a new section of our Program Manual ([http://www.climateactionreserve.org/how/program/program-manual/](http://www.climateactionreserve.org/how/program/program-manual/)). The first version of the guidelines has only just been published, so updates to our program documents and procedures are currently underway and expected to be completed by the end of 2019. The Reserve is an active member of the Avoiding Double Counting Working Group and provided extensive assistance with the development of the Guidelines. Procedures will be put in place for staff to actively track host country authorizations and reported adjustments. Procedures will also be developed for reporting to ICAO in this context. | 🟢 YES |
| We will create a new section of the Reserve’s website with links to clear guidance regarding the process for qualifying credits for CORSIA, including procurement of a Letter of Authorization from the project’s host country. In addition, the registry software will be updated to clearly identify credits which have been qualified for use in CORSIA, as well as the status of any Letter of Authorization, and access to relevant documents. | 🟢 YES |
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)

Summarize and provide evidence of the relevant policies and procedures:

Section 2.4.6 of the Reserve’s Program Manual (downloadable here: http://www.climateactionreserve.org/how/program/program-manual/) enshrines guidance to ensure all Reserve offset protocols and projects demonstrate that GHG projects do no net harm. The scope of this requirement includes environmental issues such as air and water quality, endangered species, natural resource protection, and environmental justice. A number of mechanisms are employed to ensure these requirements are met. For every offset project, project developers must sign an Attestation of Regulatory Compliance, attesting that their projects have met these requirements. Each time offsets are sought, the project developer must also provide evidence to the verifier reviewing their project that the project continues to meet these requirements.

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

This is typically done in two ways: First, project developers provide copies of all relevant permits, approvals etc., for their project; second, project developers disclose any and all instances of infractions against any legal requirements. For the latter, verifiers then assess whether these regulatory violations are related to the project and, if so, whether they are material. Further detailed guidance is provided in the Program Manual regarding these two elements. Projects that are found to have failed these requirements are not issued offset credits for the period of time that the project was out of regulatory compliance. In addition to these methods, verifiers are also required to proactively seek out information to determine whether regulatory violations have occurred. There are three methods verifiers typically employ in this regard: First, verifiers look up information published in central repositories such as the U.S. E.P.A.’s Enforcement and Compliance History Online (ECHO) database (accessible here: https://echo.epa.gov/). Verifiers can search for the project within the ECHO database (using a variety of search terms including address, facility name etc.) and then download printouts of results, to submit those to the Reserve. This database is not always complete or up to date, but it often provides very useful indications of regulatory compliance or otherwise. Second, verifiers engage with relevant regulators that have jurisdiction over the project to ascertain whether any regulatory violations have occurred. Verifiers must proactively contact relevant regulators to confirm whether regulatory compliance issues have arisen during the timeframes in question. Third, verifiers make enquiries with project staff, either over the phone or during site visits, as to whether there have been any regulatory issues at the project. This third layer is often also quite useful and can be the source of valuable information that sometimes does not emerge from all other checks.

Lastly, the general public may contact us at any time with questions or concerns around a specific project, program participant, or protocol. We maintain a detailed list of contacts, as well as generic email aliases for specific purposes, to ensure that inquiries may be appropriately targeted and responded to in a timely manner. This contact information may be found at: http://www.climateactionreserve.org/contact-us/.

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)
Section 2.4.6 of the Reserve’s Program Manual (downloadable here: http://www.climateactionreserve.org/how/program/program-manual/) enshrines guidance to ensure all Reserve offset protocols and projects demonstrate that GHG projects do no net harm. Each time projects are issued offsets, a Verification Report will be made available publicly, which includes a summary of all of the efforts undertaken by the verification team to assess whether these do no harm principles have been met. The Verification Report also contains information on all evidence reviewed by the verification team, and a discussion of all relevant issues raised. Finally, the Verification Report contains confirmation that the project has met these do not harm principles.
PART 5: Program comments

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

Ensuring the environmental integrity of any credits issued from any program needs to be the primary goal of any carbon registry. At the Climate Action Reserve we believe we have an unparalleled process for ensuring the integrity of all credits issued. This process was developed in concert with the State of California to ensure that any offset credits used in its compliance program represent the highest quality credits available. The Reserve applies these same principles and processes to its voluntary offset credit programs, as detailed in our answers to this application. We have also had the benefit of learning from earlier programs, including the CDM and JI provisions of the Kyoto Protocol, to avoid the pitfalls often associated with project-level baseline establishment. Our reliance on standardized baselines is a very transparent, conservative approach to credit recognition and the Reserve has built safeguards into our programs and protocols to ensure the highest level of environmental integrity. Nevertheless, the Reserve also understands that ICAO is attempting to develop an unique program with CORSIA that may require additional actions and guidance that have not yet been fully contemplated. The Climate Action Reserve is ready to support CORSIA today, but we are also very receptive to adapting our programs and protocols to meet CORSIA’s evolving needs. We welcome the opportunity to address any questions ICAO may have and to collaborate with you in any way we can. The world is out of time to address climate change and let’s move aggressively to enhance climate ambition.
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:

Craig Ebert

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)
CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFRMS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. IF SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Arthur J. Gallagher & Co.
Insurance Brokers of CA. Inc. LIC # 0726293
505 N Brand Blvd, Suite 600
Glendale CA 91203

INSURED
Climate Action Reserve
818 W. 7th Street, Suite 710
Los Angeles, CA 90017

CONTAC NAME:
Jenny Kim
PHONE: 818.539.8611
E-MAIL: jenny_kim@ajg.com

INSURER(S) AFFORDING COVERAGE

INSCRIBED AUTHORIZED REPRESENTATIVE
Nonprofits’ Insurance Alliance of CA
New York Marine And General Insurance Company
Lloyd’s Syndicate 2987
Lexington Insurance Company

COVERAGES

COVERAGE
COMMERCIAL GENERAL LIABILITY
AUTOMOBILE LIABILITY
UMBRELLA LIABILITY
WORKERS COMPENSATION

Policy Type:
COMMERCIAL GENERAL LIABILITY
AUTOMOBILE LIABILITY
UMBRELLA LIABILITY
WORKERS COMPENSATION

POLICY NUMBER:
2019-22445-NPO
2019-22445-NPO
NPXS20190002
WC201900005732

POLICY EFF
1/1/2019
1/1/2019
1/1/2019
5/1/2019

RETENTION
100,000
1,000,000
5,000,000
$0

LIMITS
$1,000,000
$1,000,000
$2,000,000
$5,000,000

DATE (MM/DD/YYYY)
6/5/2019
6/5/2019
6/5/2019
6/5/2019

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Policy: Professional Liability
Policy #: 2019-22445-NPO
Carrier: Nonprofits’ Insurance Alliance of CA
Policy Term: 1/01/2019 To 1/01/2020
Each Claim: $1,000,000, Aggregate: $3,000,000
Policy: Sexual Abuse
Policy #: 2019-22445-NPO
See Attached...

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

Evidence of Coverage

AUTHORIZED REPRESENTATIVE
Melissa Cury

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ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD
<table>
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<td>POLICY NUMBER</td>
<td>LOC #:</td>
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<tr>
<td></td>
<td>818 W. 7th Street, Suite 710</td>
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<td>Los Angeles, CA 90017</td>
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<tr>
<td>Policy: Directors &amp; Officers Liability</td>
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<tr>
<td>Sector</td>
<td>Supported activity type(s)</td>
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<tr>
<td>------------------------</td>
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<tr>
<td>Waste, Energy</td>
<td>e.g., Landfill methane capture; Coal mine methane capture;</td>
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<tr>
<td>Forest</td>
<td>Improved forest management; reforestation; avoided forest conversion; urban forest management; urban tree planting</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Crop land nitrogen rate reduction; livestock manure digestion; rice cultivation</td>
</tr>
<tr>
<td>Waste Management</td>
<td>Landfill methane capture; mine ventilation or mine capture; pre-mine drainage methane capture; organic waste composting; organics waste digestion</td>
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<tr>
<td>Industrial Gases</td>
<td>Destruction of ozone depleting substances (ODS) used as refrigerants; destruction of ODS used as foams blowing agents; NOx destruction at nitric acid plants</td>
</tr>
<tr>
<td>Non-Forest Land Use</td>
<td>Avoided grassland conversion</td>
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<tr>
<td>Energy Efficiency</td>
<td>Industrial boiler efficiency improvement</td>
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**Sheet A: Described Activities**

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

<table>
<thead>
<tr>
<th>Sector</th>
<th>Supported activity type(s)</th>
<th>Implementation level(s)</th>
<th>Geography(ies)</th>
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<tr>
<td>Methodology / Protocol Name</td>
<td>Version / Identification</td>
<td>Applicable methodology (versions)</td>
<td>Date of entry into force of most recent version</td>
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<td>Grassland Project Protocol</td>
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<td>Urban Forest Management Project Protocol</td>
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<td>Urban Tree Planting Project Protocol</td>
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<td>Rice Scheduling Project Protocol</td>
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