Climate Action Reserve

Program Manual
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Program Manual

1. Introduction

The voluntary carbon market has the potential to significantly facilitate efforts to reduce greenhouse gases in the atmosphere and to help mitigate climate change. At the same time, there has been a great need for increased environmental integrity, transparency, rigor and accuracy in this market. The Climate Action Reserve (the Reserve) was created to meet this need by providing a rigorous set of protocols, guidelines, and tools to support the voluntary carbon market. The Reserve is intended to increase certainty and build confidence in the greenhouse gas (GHG) reduction market on the part of investors, project developers, the environmental community, and the public.

This Program Manual summarizes the overarching rules, policies and procedures for registering projects and creating offset credits with the Climate Action Reserve. It also describes the process used by the Reserve to develop protocols for determining the eligibility of, and quantifying reductions from, carbon offset projects.

Detailed information on the Reserve's general operating procedures and verification program can be found in the following documents:

- Climate Action Reserve Operating Procedures
  http://www.climateregistry.org/resources/docs/offsets/operatingprocedures.pdf
- Climate Action Reserve Terms of Use
  http://www.climateregistry.org/resources/docs/offsets/ccar-terms-of-use-05028.pdf
- Climate Action Reserve Verification Manual (under development)

1.1. The California Climate Action Registry

The California Climate Action Registry (CCAR) is a nonprofit organization committed to solving climate change through emissions accounting and reduction. It was created by the State of California in 2001 to promote and protect businesses' early actions to manage and reduce their GHG emissions. Through this mandate, CCAR established protocols to guide the development of emissions inventories and an online tool, the Climate Action Registry Reporting Tool (CARROT), to serve as a central database for emissions reports.

1.2. The Climate Action Reserve Program

The Climate Action Reserve is the national offsets program of the California Climate Action Registry. It was established to help ensure that the U.S. carbon market provides rigorously quantified environmental benefits while upholding integrity and financial value. It does this by establishing high-quality standards for quantifying and verifying GHG emission reductions from carbon offset projects; issuing carbon credits generated from such projects (called Climate Reserve Tonnes, or CRTs); and tracking the transfer and retirement of these credits in a transparent, publicly-accessible registry system. The Reserve's standards and registry system ensure the environmental integrity of using offsets. They also bring credibility and efficiencies to the carbon market, creating a trusted and valuable commodity.

At the heart of the Reserve is a publicly accessible web-based system where owners and developers of carbon offset projects can register project information along with verification reports demonstrating GHG emission reductions. Emission reductions are certified as CRTs (equal to one metric ton of GHG reduced/sequestered), which provide title assurance and unique serial number identifiers to assure that each tonne is counted and retired only once.

The Climate Action Reserve uses a rigorous, open, and comprehensive process for developing all of its protocols. The Reserve's primary focus is on accurate and conservative GHG accounting to ensure that the emission reductions it certifies are real, permanent, additional, verifiable, and enforceable. Notwithstanding the rigor of the Reserve's requirements, CRTs are not currently recognized as valid for compliance in any government-run trading program or regulatory system. Only the government authorities in charge of designing such systems can decide whether CRTs will be recognized for compliance purposes in the future.

1.3. Reserve Program Principles

The Reserve's program rules and procedures, eligibility criteria, and quantification and verification protocols are designed to ensure that GHG emission reductions certified by the Reserve are:

- **Real:** GHG reductions must have actually occurred (not merely be projected to occur), and should not be an artifact of incomplete or inaccurate emissions accounting. Methods for quantifying emission reductions should be conservative to avoid overstating a project's effects. The effects of a project on GHG emissions must be comprehensively accounted for, including unintended effects (often referred to as "leakage").
- **Additional:** GHG reductions must be additional to any that would have occurred in the absence of the Climate Action Reserve, or of a market for GHG reductions generally. "Business-as-usual" projects – i.e., those that would occur in the absence of a GHG-reduction market – should not be eligible for registration.
- **Permanent:** In order to function as offsets to GHG emissions, GHG reductions must effectively be "permanent." This means that if verified GHG reductions are reversed within 100 years after their registration (i.e., sequestered carbon is released back to the atmosphere), an equivalent number of CRTs must be retired to compensate for the reversal.
- **Verified:** GHG reductions must be verified on an *ex-post* basis. Verification requires third-party review of monitoring data for a project to ensure the data are complete and accurate.
- **Owned Unambiguously:** No parties other than the registered project owner must be able to reasonably claim ownership of the GHG reductions.

In addition, the Reserve strives to ensure that the offset projects it registers are **not harmful.** Projects must have no negative social, economic, or environmental consequences and ideally should result in benefits beyond climate change mitigation.

Finally, the Reserve strives for **practicality**, by integrating rigorous requirements with time- and cost-minimizing steps for project developers. Practicality involves alleviating potential barriers to GHG project implementation without compromising credibility.

2. Program Rules and Procedures

While each project protocol contains specific guidance on the eligibility, quantification and monitoring of project activities, there are general rules and procedures that apply to all project types. This section contains the rules, policies and procedures for registering projects and creating offset credits with the Climate Action Reserve.

2.1. Project Definition and Eligibility

A GHG project is a specific activity or set of activities intended to reduce GHG emissions, increase the storage of carbon, or enhance GHG removals from the atmosphere.[1] A GHG project is considered to be a "carbon offset" project if the reductions or removals it generates are used to compensate for GHG emissions occurring elsewhere.[2] The Climate Action Reserve's primary purpose is to certify GHG reductions as carbon offsets. Therefore, GHG projects are eligible to register with the Reserve only if they meet predefined eligibility rules designed to uphold the Reserve's program principles presented in Section 1.3. The Reserve's eligibility rules define, among other things, the types of activities that can create creditable GHG reductions, where GHG projects can be located geographically, and the earliest dates at which GHG projects can have begun operating. The Reserve's eligibility rules are explained in general terms below, but project developers should always cross reference the eligibility rules detailed in each project protocol to ensure that their GHG project meets all of the eligibility rules for a specific project type.

2.1.1. Project Types

The Reserve will only register GHG projects that follow approved project protocols. In other words, only projects meeting the requirements of project protocols that have been approved and adopted by the Reserve's Board are eligible for registration on the Reserve. The Reserve may establish linkages with additional programs in the future to allow other projects to be registered.

Approved project protocols are available for download at http://www.climateregistry.org/tools/protocols/project-protocols.html.

You can find information about additional project protocols in development at http://www.climateregistry.org/tools/protocols/protocols-in-progress.html.

2.1.2. Additionality

Additionality is the most important eligibility criterion for carbon offsets, but also the most difficult to practically define and implement. Put simply, if a GHG reduction is to function as an offset, it cannot be a reduction that would have occurred in the absence of an offset market. It is critical that offset reductions be a response to the incentives created by such a market. Otherwise, purchasers of offsets will simply subsidize activities that would have happened anyway, and cannot legitimately claim to be reducing emissions by their purchase. The challenge is to devise methods to identify activities that are "additional" to what would have happened anyway, in the absence of the Climate Action Reserve and carbon offset markets generally.

[1] World Resources Institute (WRI), World Business Council for Sustainable Development (WBCSD), 2005. *The GHG Protocol for Project Accounting*. World Resources Institute, Washington, D.C.
[2] Offset Quality Initiative, 2008. *Ensuring Offset Quality: Integrating High Quality Greenhouse Gas Offsets Into North American Cap-and-Trade Policy*. Available at: http://www.offsetqualityinitiative.org/

The Reserve applies a "top-down" or "standardized" approach to determining additionality. Under this approach, the Reserve establishes performance standards and other conditions or criteria that projects must meet in order to be considered additional. These standards and criteria are established separately for each project type, and are designed to exclude non-additional (or "business-as-usual") projects from eligibility. In all cases, projects that are required by law or regulation are excluded. Other criteria and conditions are specified in each project protocol.

This approach differs from some other offset programs, where additionality is assessed using information and analysis specific to each project. It avoids the need to subjectively interpret individual project developers' assertions about additionality, and sends a clear signal to market participants about which projects will be eligible and which ones will not. Like any testing method, however, it is potentially subject to error. The Reserve strives to establish rigorous standards for additionality that serve to exclude the vast majority of non-additional projects. At the same time, the Reserve acknowledges that no system of testing for additionality is perfect, and it reserves the right to update and modify additionality criteria over time in light of new data and information.

2.1.3. Project Location

Projects throughout the United States and its territories are eligible to be registered with the Reserve. Some project types will also be eligible in Mexico. Project developers should check the project location eligibility requirements specified in each project protocol.

2.1.4. Project Start Date

In general, the start date for a project will correspond to the start of the activity that generates GHG reductions (sometimes referred to as "start of operations"). Specific requirements for determining the start date of a project are contained in each protocol. Projects must be submitted to the Reserve for listing[3] no more than 6 months after their start date or they will not be eligible for registration.

Exceptions to this 6-month submittal period are made whenever the Reserve adopts a protocol for a new project type. After a new project protocol is adopted by the Climate Action Reserve Board, projects with a start date of January 1, 2001 or later are eligible for listing on the Reserve for 12 months from the protocol adoption date. This retroactive eligibility is tied to the launch date of CCAR and its establishment as a mechanism for registering GHG emissions and reductions. The launch of CCAR sent a signal to GHG-emitting entities and potential project developers that revenue from GHG reductions could be an important component of project financing. Projects implemented prior to January 1, 2001 are not eligible for registration on the Reserve.

2.1.5. Project Crediting Period

The project "crediting period" defines the period of time over which a project's GHG reductions are eligible to be certified as CRTs. In general, the start of a project's crediting period will correspond to its start date.

[3] A project is considered "listed" when the project developer has created an account with the Reserve, submitted the required project submittal forms and related required documents, paid the project submittal fee, and the Reserve has approved the project for listing.

The length of a project's crediting period is defined in each project protocol. For most projects registered with the Reserve, there is a 10-year non-renewable crediting period. For forest projects, the crediting period is 100 years.

Notwithstanding any predefined crediting period, projects that become required by law will not be eligible to receive CRTs for the reductions they generate. Thus, if a project becomes subject to a regulation, ordinance, or permitting condition that effectively requires its implementation, the project can no longer be considered additional and its crediting period will be terminated. The crediting period will likewise be terminated if the emissions sources affected by a project become regulated (directly or indirectly) under a cap-and-trade program.

Details on the effective crediting period for each type of project recognized by the Reserve are contained in each protocol.

2.1.6. Bundling/Aggregation of Projects

The Reserve does not allow individual GHG projects to be aggregated for reporting purposes. Each GHG project, as defined by its project boundary (defined in each protocol), must register separately with the Reserve. However, protocols for certain project types may allow project boundaries to span multiple activities or locations. For example, the Livestock Project Protocol covers centralized manure digesters by allowing the project boundary to include all individual livestock operations that contribute manure to the centralized processing facility, as well as the centralized facility itself.

Project developers should check specific project protocols for guidance on whether aggregation of individual activities is allowed under a single project.

2.1.7. Co-Benefits and Other Impacts

The Reserve requires project developers to demonstrate that their GHG projects will not undermine progress on other environmental issues such as air and water quality, endangered species and natural resource protection, and environmental justice. When registering a project, the project developer must attest that the project is in compliance with all applicable environmental regulations. In addition, individual protocols may allow for project developers to report measures taken to avoid negative impacts. Individual protocols may also encourage GHG project developers to report on the potential environmental co-benefits of their projects, such as reductions in other air pollutants, improvements in water quality, enhancement of wildlife habitat, etc.

The Reserve coordinates with government agencies and environmental representatives to ensure that its climate-oriented work complements other environmental policies and programs.

2.2. Project Registration

This section summarizes the administrative steps a project developer must follow to register a project with the Climate Action Reserve. The timing of project registration may be independent of its start date. In other words, projects may be registered after they begin operation (subject to the eligibility restrictions on the project start date described above), or before. However, the steps detailed in this section must be followed in order for the Reserve to issue CRTs to a project.

Detailed information on the Reserve's software operating procedures, including step-by-step instructions for creating accounts, entering information, receiving CRTs, and transferring CRTs

among accounts can be found in the Reserve's Operating Procedures Manual: http://www.climateregistry.org/resources/docs/offsets/operatingprocedures.pdf.

2.2.1. Fee Structure Summary

The Reserve imposes required fees that are automatically charged to account holders during the project registration process (Sections 2.2.2-2.3.1). A summary of those fees is below:

Account Maintenance Fee (annual)	$500
Project Submittal Fee (per project)	$500
CRT Issuance Fee (per CRT issued)	$0.15
CRT Transfer Fee (per CRT transferred)	$0.03
Retirement (per CRT retired)	no charge

2.2.2. Account Registration

As a first step, a project developer must set up an account with the Reserve. Account registration only needs to occur once; any number of projects can be registered under the same account.

Any person or organization may apply for a Reserve account regardless of location or affiliation. Account applications are completed through the Reserve software. Along with completing an online application, each user must also agree to the legal Terms of Use for the Reserve. The Terms of Use document can be found at http://www.climateregistry.org/resources/docs/offsets/ccar-terms-of-use-05028.pdf.

When a new account is approved by the Reserve, the account holder will receive an invoice for the account maintenance fee ($500 annually). Payment is due within 30 days of approval to avoid cancellation of the new account.

2.2.2.1. Types of Accounts

There are four types of accounts in the Reserve:

1. **Project Developer**. An organization that wishes to develop projects that generate GHG reductions/removals. This account type can also transfer and manage CRTs.
2. **Trader/Broker/Retailer**. This type of account will transfer and manage CRTs, but not develop its own projects.
3. **Verifier**. Verifiers who have been authorized by the Reserve to verify projects. There is no annual account fee for verifiers.
4. **Reviewer**. This account type is only for those who have been asked by the Reserve to serve as a project reviewer. There is no annual account fee for reviewers.

The public also has the ability to view information on the Reserve, but an account is not needed to view publicly available information.

2.2.3. Project Submittal

Project developers must complete and upload the appropriate project submittal forms for the project type and pay a project submittal fee to the Reserve ($500 per project). Submittal forms are specific to the project type and include project descriptions and preliminary information used to assess eligibility. All projects must also submit an Attestation of Title (see section 2.2.4). The submittal forms for each type of project are available for download at

http://www.climateregistry.org/offsets/project-registration.html. A project is considered "submitted" when all of the appropriate forms have been uploaded and submitted to Reserve software, and the project developer has paid the project submittal fee.

Once a project is submitted, it must be registered[4] within 30 months. Otherwise, the project must be re-submitted for registration under the most current version of its associated protocol.

2.2.4. Attestation of Title

In addition to other project submittal forms, project developers must submit an Attestation of Title form indicating that they have exclusive rights to the GHG reductions or removals associated with the project and for which the Reserve will issue CRTs. The Attestation of Title stipulates that GHG reductions or removals for which CRTs are issued will not be registered on another system or claimed as an offset outside of the Reserve. The Attestation to Title form can be downloaded at http://www.climateregistry.org/resources/docs/offsets/Project-registration/proofoftitle.pdf.

2.2.5. Project Listing

Once the project submittal fee has been received, the Reserve will review the forms to determine whether they are complete and conduct a preliminary assessment of the project's eligibility. Once this review is satisfactorily completed, the project is "listed" on the Reserve. Project verification activities cannot begin until a project is listed. Review of submitted forms will generally take about two weeks.

2.2.6. Initiation of Project Verification and Conflict of Interest Evaluation

As described in Section 2.4, the Reserve requires third-party verification of all GHG reductions by a Reserve-approved verifier. Once the project developer has selected a verifier, the verifier must submit a Notice of Verification Activities and Conflict of Interest Evaluation Form (NOVA/COI Form) to the Reserve at least 10 business days prior to the commencement of verification activities. The Reserve will use this information to assess the potential for conflict of interest between the verifier and the project developer. In order for verification activities to begin, the Reserve must determine that the potential for conflict of interest between the project developer and the verifier is low. The conflict of interest evaluation must be completed before verification activities can begin. The NOVA/COI Form is available for download at http://www.climateregistry.org/offsets/project-verifiers.html.

Once the conflict of interest evaluation is complete, the project developer must enter project data into the Reserve software. Required data is described in each protocol, and can include project information, monitored GHG emissions data, estimated GHG emission reductions, and other data required by the project monitoring guidelines. Once the project data is complete, the project developer submits the project data and then project as a whole for verification.

The verifier then reviews the project data, conducts site visits as needed, and verifies that the listed project has fully complied with the appropriate project protocol and that the GHG reductions/removals have been appropriately quantified. The verifier then submits a Verification Opinion and Verification Report to the Reserve through the Reserve's software interface. Once

[4] A project is considered "registered" when the project has been verified by an approved third-party verifier, submitted by the project developer to the Reserve for final approval and approved by the Reserve.

the verifier has submitted these items, the status of the project changes from listed to "verified" in the Reserve software.

2.2.7. Approval of Verification and Project Registration

Once the verifier completes the Verification Opinion and Report, the project developer reviews the verifier's documents and then formally submits the project to the Reserve for final approval of the verification. The Reserve reviews the submission for completeness, reviews the Verification Opinion and Verification Report, and either approves the verification or requests a re-submittal of one or more components. Upon approval, the project developer receives an invoice for the issuance of CRTs generated by the project ($0.15 per CRT).

A project becomes "registered" with the Reserve after its first Verification Report is approved. The status of the project then changes from verified to registered in the Reserve software. See Section 2.4 below and the Climate Action Reserve Verification Manual for further information about the project verification cycle.

2.2.8. Record Keeping

According to the Terms of Use, the Reserve has the right to examine, audit, and obtain copies of users' non-proprietary records from the most recent 12 month period. The Reserve does not anticipate this being a routine need, but rather a rare event to verify the accuracy of any attestation, transfer, or statement, or to review account holders' performance of obligations under the protocols, the Terms of Use, or the Reserve's Operating Procedures.

At a minimum, project developer account holders on the Reserve must also maintain copies of all relevant records related to their projects and associated account usage for at least five years after the end of the crediting periods for their projects.

2.2.9. Publicly Available Information

The Reserve is intended to serve both account holders and the interested public. To this end, information about each project registered with the Reserve is accessible to the public. This openness and transparency provides interested parties with valuable information and helps instill confidence in the Reserve and enhance the credibility of the offset credits it certifies.

The public and all account holders can access the following information online:

- **Participating companies.** Organizations that have an active Reserve account (address or contact information is not disclosed).
- **Projects**. Projects that are listed, verified, or registered with the Reserve. (Cancelled or rejected projects are not displayed).
- **Project CRTs issued.** Projects for which CRTs have been issued along with the original quantity of CRTs issued to each project. Current CRT balances in individual accounts are not automatically displayed.
- **Search of CRT serial numbers**. The Reserve's software allows searching for a CRT serial number by batch number or block start or end numbers. This search feature is designed for someone who wants see details about a given CRT batch (for example, a CRT buyer). It cannot be used to search every CRT issued for a company or project. Search results include whether the CRTs are active or retired and, if retired, the time and date of retirement.
- **Accounts disclosed to public.** Active or retirement CRT balances that account holders have chosen to be shown to the general public.

- **Retired CRTs.** Displays the CRTs that have been retired by account holders.

Information that is never shared with the public includes:

- Company street addresses
- Company phone, fax, or email addresses
- Internal company information, like billing addresses
- Any person's contact information

Account holders' contact information is not used by the Reserve except to notify users of important system occurrences, and is not shared with other parties.

2.3. Climate Reserve Tonnes (CRTs)

In the Reserve, GHG reductions/removals are recognized as Climate Reserve Tonnes or CRTs, which are equal to one metric ton of GHG reduced/sequestered. After projects are registered, CRTs are issued based on the GHG reduction/removal amount reported by the project developer and confirmed by an approved verifier. CRTs are issued only on an ex-post basis (i.e., after verification that reductions have actually occurred) and only for GHG reductions/removals that occur within the project crediting period. CRTs are issued in vintages according to the year in which verified GHG reductions/removals occurred. 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 retired.

2.3.1. Issuance of CRTs

CRTs are issued by the Reserve for actual GHG reductions/removals achieved by a project, as determined in approved Verification Reports. Once a project is registered and the project's account holder pays the appropriate CRT Issuance Fee, CRTs for verified GHG reductions/removals are released into the account holder's primary CRT account. CRTs will not be issued until the CRT Issuance Fee is received by the Reserve. CRTs can then be transferred to another Reserve account holder's account; moved into one of the project account holder's other accounts; or retired.

2.3.2. Transfer of CRTs

In order to transfer CRTs to another party, that party must have an approved account with the Reserve. There is a transfer fee ($0.03 per CRT charged to the transferer) to transfer CRTs from one account holder to another. The transfer is conducted via the software between the two account holders; the Reserve does not play a role in the transfer.

Note: The Reserve does not function as a trading system or commodity exchange. The sale or purchase of CRTs takes place outside of the Reserve. Account holders may record sales by using the Reserve to move CRTs from one account to another. However, the Reserve makes no warranties concerning, and has no control over, the legal ownership of CRTs that may be held in individual accounts.

2.3.3. Retirement of CRTs

CRTs may be "retired" to indicate that the emission reductions/removals they represent have been used to satisfy a voluntary GHG emissions-reduction claim. To support such claim, CRTs must be taken out of circulation so that they cannot be used to support any further claims. The

Reserve retires CRTs by transferring them to a locked retirement account, where they remain permanently, precluding further use or transfer to other parties. Each account holder has its own associated retirement account. There is no charge to retire CRTs.

2.3.4. Ensuring Permanence of CRTs

The Reserve promotes projects that result in permanent reductions of GHG emissions or increased sequestration (removals). The underlying standard for permanence is that carbon is sequestered from the atmosphere and remains stored for a period of not less than 100 years.

Permanence Insurance Requirements

To be determined by forest project protocol workgroup

2.4. Project Verification

The Reserve requires periodic third-party verification[5] of all GHG projects, as specified in each project protocol. This provides an independent review of data and information used to produce offset credits (CRTs). For every project, a third-party verifier reviews and approves documentation, monitoring data, and procedures used to estimate GHG reductions/removals. Verifiers submit a Verification Opinion and Verification Report that provide the basis for determining the quantity of CRTs that can be issued to the project. The Reserve makes these reports publicly available. Verifiers conducting verification activities for projects listed or registered on the Reserve must be trained by the Reserve or its approved designees and employed by or subcontracted to an accredited verification body. A list of accredited verification bodies is available at http://www.climateregistry.org/tools/verification/verifiers.html.

Verifiers follow guidelines set forth in the Reserve's Project Verification Manual, as well as rules and procedures described in the specific verification protocols that accompany each project protocol.

2.4.1. Validation

Validation involves determining whether a project is eligible to be registered with the Reserve. Unlike some other offset programs, the Reserve does not require that validation be conducted separately from verification. Instead, when a project is verified for the first time, verifiers 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 early (e.g., prior to the end of its first year of operation) in order to establish its eligibility for registration. Because the Reserve's eligibility criteria are mostly standardized, determination of eligibility is usually straightforward and requires minimal interpretative judgment by verifiers.

2.4.2. Verification Cycle

All projects must go through verification within 30 months of being submitted to the Reserve. Following initial verification and registration, all non-forest projects must be verified at least annually. Project developers may choose to verify more frequently (e.g., quarterly or biannually). Forest projects may submit annual monitoring reports in lieu of annual verification, but may not

[5] CCAR is updating the terminology used for the verification process to be in agreement with generally accepted national and international terminology. In the past, protocols and guidance documents have used the term "certification" to represent the activity of "verifying." CCAR is now using the more widely accepted terms "verification" and "verifier". Some protocols may still use the terms certification and certifier, but are scheduled to have that language updated in the next 6 months.

go longer than six years between verifications. CRTs are issued according to the quantity of verified reductions achieved during a verification period, regardless of the period's length.

Verification Opinions and Verification Reports must be submitted within 6 months of the end of the time period for which project activities were verified. For example, a Verification Opinion and Report for GHG reductions achieved between January 1, 2008 and December 31, 2008 would have to be submitted by June 30, 2009.

For those projects that require annual verification, Verification Opinions and Reports may cover a maximum of 12 months of project activity. The only exception is for pre-existing projects undergoing their first verification; the first Verification Opinion and Report for these projects may cover multiple years, back to the project's start date.

All projects require site visits as part of project verification. This is to allow the verifier to perform an in-depth review of certain aspects of the data management systems and confirm that project activities are occurring per the submitted monitoring reports. Individual verification protocols (which accompany each project protocol) contain additional details and requirements regarding site visits, and their frequency, for each project type.

2.4.3. Accreditation of Verification Bodies and Verifier Approval

In order to verify projects listed or registered with the Reserve, a verifier must be employed by or subcontracted to an accredited verification body and be properly trained to verify projects of the appropriate type. Not all verifiers are approved to verify all project types. Similarly, the verification body itself must be accredited and eligible to conduct verifications for specific project types. A list of verification bodies accredited for each project type is available at http://www.climateregistry.org/tools/verification/verifiers.html.

As of January 1, 2010, the Reserve will require that all verification bodies be accredited (or undergoing accreditation) by the American National Standards Institute (ANSI). ANSI's GHG accreditation program operates according to requirements defined in ISO 14065:2007. Once accredited by ANSI, the individual verifiers employed by or subcontracted to the verification body must also:

1. Complete Reserve training on protocols specific to the project type that the verifier is applying to be approved under;
2. Demonstrate a thorough understanding of the project reporting and verification protocols through Reserve testing; and
3. Meet all internal training and testing requirements of their verification body to qualify as a project verifier.

Although verifiers determine project eligibility as part of a project's initial verification (see Section 2.4.1), the Reserve does not require verification bodies to become accredited as validation bodies under ISO 14065:2007. This is because the Reserve's standardized eligibility criteria require only minimal interpretation by verifiers in order to "validate" projects.

2.5. Transferring Projects into the Climate Action Reserve

Existing projects that have been registered with other carbon offset programs may be transferred to the Climate Action Reserve if they are determined by a Reserve-approved verifier to meet the Reserve's eligibility requirements. Such projects must submit a Project Transfer Form, available for download at http://www.climateregistry.org/offsets/project-registration.html.

The Project Transfer Form requires additional information and documentation to determine the status of the project and any offset credits issued for it under other programs.

The project developer must also provide the Reserve with a signed Project Transfer Letter, which must be sent to the administrator of the other program where the project was registered, confirming that no further emission reductions/removals for the project will be verified, registered, or certified under the other program. The project must be removed from the other program's registry before it can be transferred to the Reserve.

The crediting period for a transferred project will be reduced by the length of time that the project generated offset credits under other programs.

Note that while projects can be transferred from another program to the Reserve, previously issued credits from another program cannot be transferred to the Reserve.

2.6. Transferring Projects from the Climate Action Reserve

CRTs may be transferred to other GHG registries and offset programs under a process that remains to be determined. The process will include cancellation of the CRTs in the Reserve and the assignment of new serial numbers in the receiving registry or program.

3. Project Protocol Development Process

The Reserve is committed to producing high quality GHG project accounting protocols, and to this end uses an intensive multi-stakeholder process to develop its project protocols. This approach integrates extensive data collection and analysis with review and input from a diverse range of experts and stakeholders. Reserve staff guide this process to ensure that final protocols adhere to the principles outlined in Section 1.3. This process produces high quality, well-vetted, and credible protocols based on best practices from national and international standards. This section details the Reserve's unique and rigorous project protocol development process.

3.1. Screening Process

The Reserve uses an internal screening process to identify candidate project types with good potential for offset protocol development. The Reserve takes into consideration a number of issues when assessing a project type for further development, including:

- Does the project type create direct or indirect emission reductions? All else equal, the Reserve will focus on project types that result in direct reductions. Direct emission reductions are generally easier to verify because the sites where they occur can be directly monitored. When emission reductions occur at sites or sources owned by the project developer, there is also less risk that an entity other than the project developer will claim ownership of the reductions. Thus, these projects are unlikely to be at risk for double counting or ownership issues.

- What is the likelihood that the sector where the project activity occurs will be covered under a future cap-and-trade system? Since issuing offset credits for reductions that occur at capped emissions sources would result in double counting, the Reserve prefers to focus on projects affecting GHG emissions that are unlikely to be capped.

- What are the total potential GHG reductions that could result from this type of project? As it takes significant effort and resources to produce a standardized project protocol, there should be large and geographically diverse potential reduction opportunities.

- Are there potential positive or negative environmental impacts from this type of project activity? Negative effects should be avoided. All else equal, the Reserve will prioritize project types that can create significant co-benefits for the habitats and communities where projects take place.

- Are there existing methodologies or protocols that could serve as a starting point? Standardized protocols are more easily developed where sound scientific methods already exist to determine baselines and quantify emission reductions.

- Are there high quality datasets to evaluate "business as usual" activities for the sector in which the project activity occurs? Setting performance thresholds and other standardized tests for additionality requires defensible data on the current state of the sector.

Once the internal screening process is complete, project types with good potential are either explored more fully through the development of an issues paper, or the Reserve holds a

scoping meeting to engage stakeholders in further evaluating what types of activities should be targets for protocol development.

3.1.1. Issues Paper

An issues paper evaluates the feasibility and desirability of developing a protocol (or set of protocols) for a particular project type. It assesses possible issues with developing a standardized protocol for the project type, including an evaluation of potential approaches to GHG emissions quantification; exploration of options for defining eligible project activities; evaluation of approaches to setting project boundaries; and assessment of the availability of datasets and other pertinent information. Issues papers are prepared by researching existing sector methodologies and datasets and consulting sector experts. After completion, the issues paper may be sent to interested parties (industry experts, environmental groups, state agencies, academics) for review and comment.

3.1.2. Scoping Meeting

Interested parties may be invited to a scoping meeting to discuss protocol development options and challenges for the project type in question. At the scoping meeting stage, the Reserve will generally propose a series of activities within the project type category for which specific accounting and certification standards could be developed. Feedback from the scoping meeting is used to determine whether the Reserve will move forward in developing a protocol, and which activities the protocol should encompass.

3.2. Development Process

After a project type is identified, the Reserve follows a rigorous multi-stakeholder consultation process to develop an appropriate protocol.

3.2.1. Workgroup Assembly

To initiate the project protocol development process, the Reserve assembles a balanced multi-stakeholder voluntary workgroup, drawing from industry experts, state and federal agencies, environmental organizations, and other various stakeholders. Workgroups are assembled by invitation, but all parties are encouraged to express their interest in participating in the workgroup process. Throughout the protocol development process, the workgroup provides expert review and direct input into the development of the project protocol.

3.2.2. Options Paper

Where appropriate, the Reserve may develop an options paper to further address and lay out different approaches for key elements of the protocol. A draft is shared with the workgroup, and comments are incorporated into a final options paper that forms the basis of the draft protocol.

3.2.3. Draft Protocol

The Reserve develops a draft protocol based on expert input and insights from an issues paper or the final options paper. The draft protocol is released to the workgroup for review and revision. The draft protocol review process usually includes at least one or more in-person workgroup meetings in which members are invited to discuss issues at length. Written comments from the workgroup are incorporated into the draft protocol, which may go through multiple iterations of workgroup review before it is ready for public review.

3.2.4. Public Review Period and Public Workshop

The revised draft protocol is posted on the Reserve's website for a 30-day public comment period. The public is notified via the Reserve's listserv database and other venues, and reviewers are asked to submit written comments. During the 30-day public review period, the Reserve also hosts a public workshop to solicit feedback and address concerns regarding the draft protocol in an open forum. After receiving written feedback, all comments are recorded and addressed. A final protocol is produced, taking into account public comments and any further workgroup feedback.

3.2.5. Board Approval

The Reserve's Board must vote to adopt each project protocol. Protocols are presented at quarterly board meetings, which are open to the public, and issues raised throughout the development process are reviewed, giving workgroup members and interested stakeholders a chance to raise any last concerns or questions. After the Board adopts the protocol, it becomes an official Reserve protocol and is immediately available for use.

3.2.6. Ongoing Public Feedback and Comments

After Board approval, the Reserve continues to solicit, document, and respond to public feedback and comments on the current version of the project protocol. A standardized Protocol Comment Form is available at http://www.climateregistry.org/tools/protocols.html. The public is also welcome to contact Reserve staff directly to discuss their comments and concerns.

Public feedback and comments are assessed on an ongoing basis, and may initiate a revision to a project protocol.

3.3. Revisions to Project Protocols

After Board approval, the protocols are periodically revised in light of public comments, on-the-ground experience, and technological, scientific, and regulatory developments. In addition, the Reserve may review and update performance standards and standardized baselines to ensure they continue to effectively screen projects for additionality and accurately represent "business as usual" emissions. There are two types of revisions to project protocols – policy revisions and technical revisions.

3.3.1. Policy Revisions

Policy revisions are those that concern questions of project definition or eligibility, or that involve significant (non-technical) judgment calls about baseline estimation and the quantification of emission reductions/removals. For policy revisions, the Reserve reconvenes an expert stakeholder workgroup and reaches out to stakeholders involved in the initial protocol development process. A revision is generally focused on specific elements of the protocol, and is not necessarily an opportunity to revisit all decisions made in the initial protocol development process.

Depending on the extent of the revision, the workgroup is asked to comment on a revised draft protocol, or is reconvened to discuss key issues prior to draft changes being circulated for comment. Policy revisions require a 30-day public comment period and adoption by the Reserve's Board. Policy revisions are brought for adoption at the quarterly board meetings, or are brought to the executive committee of the Board for adoption if expedited action is required. When adopted, a policy revision creates a new version of the project protocol (e.g. Version 1.0 undergoes a policy revision to become Version 2.0).

3.3.2. Technical Revisions

Technical revisions are editorial or technical in nature and do not require a workgroup to be reconvened. These revisions do not significantly change the policies or eligibility in the project protocol. Technical revisions create a new sub-version of the protocol (e.g. Version 1.0 undergoes a program revision to become Version 1.1). Technical revisions do not require adoption by the Reserve's Board. Technical revisions are considered adopted on the date they are posted to the Reserve website. A protocol revision notification is sent to the Reserve's listserv at that time.

3.3.3. Grace Period for Registration under Prior Protocol Versions

Project developers have 90 days from the date on which a revised protocol is adopted to submit[6] a project to the Reserve using the previous version of the protocol. As with all projects, the project must be registered[7] within 30 months of the project being submitted to the Reserve. Otherwise, the project must be resubmitted for registration under the most current version of the protocol.

Projects that have been registered using a previous version of the protocol are not required to have their projects verified under any updated versions. Instead, projects may continue being verified against the original protocol version. Project developers always have the option, however, of voluntarily choosing to verify against a new version. Applying a revised protocol to a project does not change the project's crediting period.

For forest projects that choose to employ a conservation easement, the project developer has a maximum of 12 months from the project submittal date to record a conservation easement. Projects that fail to record a conservation easement within 12 months must re-submit and follow the version of the Forest Project Protocols in effect at the time of re-submittal. Forest project developers still have 30 months from project submittal to get the project registered.

3.4. Communication with Public

Information about new project protocols or protocols in development is available at http://www.climateregistry.org/tools/protocols/protocols-in-progress.html.

While undergoing a revision, draft protocols for public comment and additional information about the revision can be found by visiting http://www.climateregistry.org/tools/protocols/project-protocols.html. Each project protocol has its own dedicated webpage that can be accessed from here.

Current versions of each project protocol are available for download at http://www.climateregistry.org/tools/protocols/project-protocols.html.

[6] A project is considered "submitted" when all of the appropriate forms have been uploaded and submitted to Reserve software, and the project developer has paid the project listing fee.
[7] A project is considered "registered" when the project has been verified by an approved third-party verifier, submitted by the project developer to the Reserve for final approval and approved by the Reserve.

4. Glossary

California Climate Action Registry	a nonprofit organization committed to solving climate change through emissions accounting and reduction. The Climate Action Reserve is a program of the California Climate Action Registry.
Climate Action Reserve	the national offsets program of the California Climate Action Registry that establishes standards for quantifying and verifying GHG emission reduction projects, issues carbon credits generated from such projects, and tracks the transfer and retirement of credits in a publicly-accessible online system.
Climate Reserve Tonne or CRT	the unit of offset credits used by the Climate Action Reserve. One Climate Reserve Tonne is equal to one metric ton of GHG reduced/sequestered.
Listed	a project is considered "listed" once the Reserve has satisfactorily reviewed all project submittal forms and tentatively accepted the project into the Reserve. The project will now appear in the public interface of the Reserve system.
Project developer	an organization or individual that develops projects for the purpose of generating emission reductions or removals. In the Reserve software system, project developers may be issued CRTs for the verified emission reductions/removals that their projects achieve. They can also transfer and manage CRTs.
Project protocol	a Reserve-developed document that contains the eligibility rules, GHG assessment boundary, quantification methodologies, monitoring and reporting parameters, etc. for a specific project type. Project protocols are akin to "methodologies" in other offset programs.
Reduction	A verified decrease in GHG emissions caused by a project, as measured against an appropriate forward-looking estimate of baseline emissions for the project.
Registered	A project is considered "registered" when the project has been verified by an approved third-party verifier, submitted by the project developer to the Reserve for final approval, and approved by the Reserve.
Removal	A verified increase in carbon stocks caused by a forest project, as measured against an appropriate forward-looking estimate of baseline carbon stocks for the project.

Retired	when CRTs are transferred to a retirement account in the Reserve System, they are considered retired. Retirement accounts are permanent and locked, so that a retired CRT cannot be transferred again. CRTs are retired when they have been used to offset an equivalent tonne of emissions or have been removed from further transactions on behalf of the environment.
Submitted	a project is considered "submitted" when all of the appropriate forms have been uploaded and submitted to Reserve software, and the project developer has paid the project listing fee.
Trader/Broker/Retailer	an organization or individual that transfers and manages CRTs in the Reserve system, but does not develop its own projects.
Verified	a project is considered "verified" when the project verifier has submitted the project's Verification Opinion and the Verification Report in the Reserve system.
Verification Body	an organization or company that has been accredited by ANSI to ISO 14065:2007 standards or approved by the CCAR to perform GHG verification activities for specific project protocols.
Verifier	an individual that is employed by or subcontracted to an ANSI accredited or CCAR approved verification body and is qualified to provide verification services for specific project protocols.