

Public Comment Webinar Argentina Landfill Protocol

April 30, 2025

Introduction









- All attendees are in listen-only mode
- Please submit your questions in the Zoom question box and we'll try to answer them at the end, time permitting
- We will follow up via email to answer any questions not addressed during the meeting
- The slides and a recording of the presentation will be posted online on the Climate Action Reserve webpage <u>https://climateactionreserve.org/how/protocols/waste/argentina-landfill/dev/</u>

AGENDA

- Climate Action Reserve
- Protocol development process/timeline REMINDER:
 - Submit comments by May 8, 2025
- Argentina Landfill Protocol Key considerations
 - ✓ Project definition
 - ✓ Project ownership
 - ✓ Additionality
 - ✓ Permanence
 - ✓ Quantification
 - ✓ Monitoring / Reporting / Verification
- Next steps





Mission: to develop, promote and support innovative, credible marketbased climate change solutions that benefit economies, ecosystems and society

- Develop high-quality, standardized carbon offset project protocols internationally, stakeholder-driven, across North America and Latin America and the Caribbean, and China
- Accredited Offset Project Registry for compliance and voluntary carbon markets (California cap-and-trade program, Washington capand-invest program)
- Reputation for integrity and experience in providing best-in-class registry services for GHG emissions offsets markets

The Climate Action Reserve



Ensure that the carbon market generates environmental benefits while maintaining financial integrity and value Develop North American and LAC GHG removal standards and quantification and verification guidelines.

Emit carbon credits generated by Projects, known as Climate Reserve Tonnes (CRTs).

Monitor and record the transfer and withdrawal of credits in a transparent and publicly accessible system

Develop practical and useful accounting tools and training to facilitate project development.



As of 3/10/2025. For questions, please contact jmao@climateactionreserve.org

What is an Offset Credit Project?



An offset credit project is an activity or set of activities that:

- Reduce GHG emissions (i.e. methane)
- Increase the sequestration or storage of carbon removed from the atmosphere.



Principles of the Reserve Program



All registered projects and credits issued by the Reserve must be:

ADDITIONAL	VERIFIED	REAL	PERMANENT	ENFORCEABLE
 Beyond common practices Beyond regulatory requirements 	 Standardized eligibility criteria and quantification methodologies Independent third- party review. 	 Conservative emissions accounting Prescriptive models and equations Uncertainty reduction 	 Monitoring and reporting processes Any leakage or loss is quantified and compensated 	 Processes to ensure program compliance Accountability mechanisms

- The Reserve seeks to be practical and ensures that projects do not have negative impacts
- Protocols include social and environmental safeguards to ensure the participation and benefit of the participants

GHG Accounting Standardization

Two elements:

- Determination of project eligibility and additionality using standardized criteria rather than project-specific assessments.
- Quantification of GHG reductions/removals through a baseline established under certain assumptions, emission factors and monitoring methods.

Objectives:

- Minimize personal judgment in project assessment
- Reduce transaction costs for the project developer, minimize uncertainties for investors, and increase the transparency of the project when it is approved and verified

Rigorous, Inclusive and Transparent Process for the Protocol Development





Inclusive Process: A balanced multi-stakeholder working group is formed with experts of the sector (landfill) and jurisdiction (Argentina), state and federal agencies, environmental organizations, and other stakeholders.

• Stakeholders that are not part of the working group can still participate in the process as "observers".

Transparent Process: All working group meetings and webinars for the public comment period are recorded and posted on the website along with the drafts



PROTOCOL DEVELOPMENT PROCESS & TIMELINE

Protocol Development Timeline

- 1. Kick-off meeting (November 27, 2024)
- 2. Workgroup process
 - Formation (*December 2024 January 2025*)
 - Meeting 1 (*January 22, 2025*)
 - Meeting 2 (*February 12, 2025*)
 - Meeting 3 (March 10, 2025)
- 3. 30-day public comment period (April 8 May 8, 2025)
- 4. Revisions based on public comments (May 2025)
- 5. Propose to Board adoption (June 4, 2025)

~7 months	



KEY CONSIDERATIONS FOR PROTOCOL DEVELOPMENT

Adapting the Landfill Protocol to Argentina

- Use the Mexico and U.S. Landfill Protocol as a base to facilitate protocol development
 - US and Mexico Landfill Protocols are comprehensive and have over 15 years since publication
 - Worked with MexiCO2 and the Province of Córdoba to facilitate the partial financing and technical support of the initial revision
- The main changes include:
 - Evaluated Argentina's laws, regulations, and common practice
 - Evaluated need for applicable safeguards
 - Reviewed with Argentina stakeholders

Key considerations for protocol development

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- Project definition
- Project ownership
- Additionality
- Quantification
- Monitoring
- Reporting & Verification

Project Definition



- Collection of methane gas from one or more specified cells at an eligible landfill, and the destruction of such methane from one or more destruction devices.
- Expansion of an existing gas collection and control system (GCCS) to a new cell(s) can be optionally included within existing project or submitted as new project.
- Captured landfill gas (LFG) may be destroyed on site or transported for offsite use. Regardless, the ultimate fate of the LFG must be destruction.
- Qualified devices includes utility flares, enclosed flares, engines, turbines, microturbines, boilers, pipelines, leachate evaporators, kilns, sludge dryers, burners, furnaces, or fuel cells.
 - Other devices may be eligible, pending Reserve approval



An eligible landfill is one that:

- 1. Is not subject to regulations or other legal requirements requiring the destruction of methane gas;
- 2. Is not a bioreactor, as defined by the U.S. EPA: "a MSW landfill or portion of a MSW landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste."; and
- 3. Does not add any liquid other than leachate into the waste mass in a controlled manner.

Project Ownership



- Project developer is an entity with an active account on the Reserve and is responsible for all project monitoring and verification. Project developers can be:
 - Landfill owners and operators
 - GHG Project financiers,
 - Energy or utility company
 - Or other entities
- Must have clear ownership of the reductions and established through explicit title and must sign the Attestation of Title
 - May be contracts in place between facility owner and project financiers





Rule I: Location

Rule II: Project Start Date

Rule III: Project Crediting Period

Rule IV: Additionality

Rule V: Regulatory Compliance

Eligibility Rules



Argentina only



Project Start Date



- No more than 90 days after the LFG is first destroyed by a project destruction device, regardless of whether there's sufficient monitoring data are available to report reductions
- Projects must be submitted to the Reserve within 12 months after the project start date
 - A project is considered "submitted" when the project developer has fully completed and filed the appropriate Project Submittal Form, available on the Reserve's website

Project Crediting Period

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- Crediting period is defined as 10 years following the project's start date
 - The project crediting period begins at the project start date regardless of whether sufficient monitoring data is available to verify GHG reductions.
- Eligible up until a regulatory body legally requires the landfill to install a GCCS
- May apply for a renewed crediting period
 - Project lifespan: 3, 10-year crediting periods for 30 years total
 - Must apply within 6 months of the end of the final reporting period
 - Must meet the requirements of the newest version of the protocol

Additionality



- Must be above and beyond business-as-usual scenarios
- Must pass two additionality eligibility rules
 - **1. Performance Standard Test**
 - Better than business-as-usual
 - Practice-based threshold that focuses on the baseline scenario and changes made in the project scenario

2. Legal Requirements Test

- Passes when there are no laws, statutes, regulations, court orders, environmental mitigation agreements, permitting conditions, or other legally binding mandates requiring project activities
- No longer eligible on the date destruction becomes legally required

To ensure additionality of the emission reductions, **projects with baseline destruction will need to take a deduction** related to the amount of methane collected and destroyed in the preproject scenario.

Performance Standard Test



- 1. Installation of a LFG collection system and a new qualifying destruction device at an eligible landfill where landfill gas has never been destroyed prior to the start date.
- 2. Installation of a new qualifying destruction device at an eligible landfill where LFG is currently collected and vented but never destroyed prior to the start date.
- 3. Installation of a new qualifying destruction device at an eligible landfill where LFG was collected and destroyed prior to the start date using:

I. A non-qualifying destruction device (e.g., passive flare); or

II. A destruction device not otherwise eligible (e.g., qualifying device installed prior to the project start date)

4. Installation of a new gas collection system on a physically distinct cell(s) where neither gas collection nor destruction has previous occurred, and connection of this new collection system to an existing LFG destruction system.

Regulatory Compliance



- Must attest that the project is in compliance with all laws applicable to the project activity
 - Appendix A references related regulations in Argentina at the national level and few examples at provincial level
- Required to disclose any and all instances of legal violations material or otherwise caused by the project or project activities
 - "caused" by Project activities if it can be reasonably argued that a violation would not have occurred in the absence of the project activities
- If a violation is caused by project activities, credits will not be issued for the period of the violation
 - Administrative or violations due to "acts of nature" will not impact crediting
 - Re-occurring violations due to intent or negligence may impact crediting

Social and Environmental Safeguards

- Social Safeguards
 - Free, Prior, and Informed Consent (FPIC)
 - Ongoing Notification, Participation, and Documentation
 - Labor and Safety
 - Dispute Resolution
- Environmental Safeguards
 - Air and Water Quality
 - Mitigation of Pollutants

GHG Assessment Boundary





Quantifying GHG Emission Reductions





Project Monitoring



- Must monitor:
 - Flow of LFG delivered to each destruction device
 - Fraction of methane in the LFG delivered to the destruction device
 - Operational status of the destruction device(s)
 - Or presence of safety shut off valve
- Flow data must be corrected for temperature (0°C) and pressure (1atm) either internally or calculated

Instrument QA/QC



- All gas flow meters and continuous analyzers must be:
 - Cleaned and inspected on a regular basis, at a minimum per manufacturer specifications, with activities and results documented by site personnel
 - Field checked for calibration accuracy with percent drift documented at the end of but no more than 2 months prior to the end of the reporting period
 - Calibrated by the manufacturer or a certified calibration service per manufacturer's guidance or every 5 years if not specified by the manufacturer

Provided clarification on the following topics:

- Cleaning and Inspections
- Field Checks
- Calibrations
- Portable instruments
- Scaling Procedures for Meters Outside of the Accuracy Threshold

Reporting Period and Verification Cycle

- Reporting period is a period of time which the project developer quantifies and reports reductions to the reserve
 - Cannot exceed 12 months
- Verification period is a period of time over which reductions are verified
- Initial verification can only cover one reporting period
- There are 3 verification cycle options:
 - 12-month maximum
 - 12-month maximum with desk audit
 - 24-month maximum

Protocol Development Process & Timeline



Objetivo	Fecha
Public Kick-off meeting	November 27, 2024
Statement of Interest Form (Working Group)	December 4, 2024
Working Group formation	December 2024-January 2025
Protocol Draft drawn up by the Reserve's team	January – March 2025
Working Group Meetings and Review	January – March 2025
Public comment period	April 8 - May 8, 2025
Presentation of the protocol to the Reserve Board for approval.	June 4, 2025



NEXT STEPS

Next steps



- For interested stakeholders:
 - Submit comments (Spanish or English) by May 8, 2025 to: mdelgado@climateactionreserve.org
- For the Reserve:
 - Review and respond to comments
 - Finalize protocol based on comments
 - Publish the protocol being presented to the board
 - Present the final protocol to the board for adoption (October 2024)





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THANK YOU!