



CLIMATE
ACTION
RESERVE

U.S. Livestock Protocol V4.0

Protocol Summary

Project Definition

The installation of a biogas control system (BCS) that captures and destroys methane (CH₄) gas from manure treatment and/or storage facilities on livestock operations.

The protocol accepts a wide range of technologies, including:

- ⌘ Centralized digesters
- ⌘ Co-digestion of organic waste (greenhouse gas [GHG] benefits not quantified for non-manure waste streams)
- ⌘ Methane destruction onsite (enclosed flare, open flare, electricity generation, thermal energy production)
- ⌘ Methane destruction offsite (direct use via pipeline)
- ⌘ Methane destroyed as fuel for vehicles (onsite or offsite)
- ⌘ Biogas destruction in fuel cells

Project Eligibility Requirements

Location: Project must be within the U.S., its territories, or on U.S. tribal lands.

Start Date: Project developer can choose start date within six months from date at which manure is first loaded into the BCS, allowing for an initial start-up period. Project must be submitted within six months of becoming operational, i.e. when BCS begins producing and destroying methane after start-up period.

Performance Standard: Installation of one of the technologies accepted in the protocol.

Legal Requirement Test: During the first crediting period, project developer must sign the Attestation of Voluntary Implementation once at the project's first verification. During the second crediting period, project developer must sign the Attestation of Voluntary Implementation each reporting period, and no more CRTs will be generated from the date a project becomes legally required.

Regulatory Compliance: Project must be in compliance with all federal, state, and local laws or regulations. Project developer must sign the Attestation of Regulatory Compliance for each verification period.

Baseline:

- ⌘ Baseline represents "business as usual" or what would have occurred without the BCS installation; assumes continuation of current practices
- ⌘ Calculated monthly for each year of the project
- ⌘ Greenfield projects (implemented at sites less than two years old with no previous manure management infrastructure) must use standardized baseline management assumptions (see Table B.10 in protocol)

Crediting Period: Project is eligible to receive credits for 10 years from start date. Project may apply for a second 10-year crediting period.

Reporting and Verification Schedule:

- ⌘ Option 1: 12-month maximum verification period (with option for sub-annual verification)
- ⌘ Option 2: 12-month verification period with desktop verification as appropriate
- ⌘ Option 3: 24-month maximum verification period

Project Exclusions

- ⌘ Any GHG reductions from other activities and changes in operations not associated with installation of a BCS
- ⌘ Any greenfield sites in geographic locations where anaerobic lagoons are not common practice
- ⌘ N₂O sources within the GHG Assessment Boundary
- ⌘ Biogenic CO₂ associated with the BCS
- ⌘ Displacement of fossil fuel consumption associated with production of electric power for the grid or injection of gas to a pipeline