



Low-Carbon Cement Protocol V1.0

Protocol Summary

Project Definition

For the purpose of this protocol, the GHG reduction project is defined as the production of supplementary cementitious materials (SCMs) or alternative cementitious materials (ACMs) that can replace portland cement (PC). The project results in the avoidance of GHG emissions from PC production. SCMs/ACMs can be processed to display cementitious properties to replace some or all PC clinker in concrete production and/or concrete products.

Ineligible SCM/ACM products:

- Portland Limestone Cement
- Traditional *fresh* coal ash
- Traditional slag cement
- Silica Fume

Example eligible SCM/ACM products:

- *Beneficiated* coal ash
- Raw natural pozzolans
- Calcined clays/shale
- Limestone calcined clay cements

Project Eligibility Requirements

Location: Project must be located within United States, U.S. tribal lands and territories.

Start Date: Defined as the date on which production commences of eligible SCM/ACM as defined in Section 2.2. This protocol is applicable to projects that generate eligible SCM/ACM at greenfield SCM/ACM manufacturing sites or in existing SCM/ACM manufacturing sites that increase capacity, install new technology, or enhance existing technology that results in the production of new types of eligible SCM/ACMs. Project must be submitted to the Reserve for listing no more than 12 months after the project start date.

Crediting Period: The crediting period is 10 years in length and a project may apply for a second crediting period.

Performance Standard Test: To pass the Performance Standard Test, a project SCM/ACM can not be commonly used which is defined as being near zero or less than five percent of the U.S. concrete market. The Reserve developed a list of potentially eligible products known to be additional but novel product may be asked to demonstrate their additionality according to this threshold.

Legal Requirement Test: Project developer attests that there are no legal requirements for production or use of SCM/ACM at their project location(s) and must sign the Attestation of Voluntary Implementation for each verification period.

Regulatory Compliance: Low-Carbon Cement Protocol activities (across all project location(s)) must be in material compliance with all applicable federal, state, and local regulations. Project developer must sign the Attestation of Regulatory Compliance for each verification period.

Reporting and Verification Schedule: A reporting period may not exceed 12 months in length except for the initial reporting period, which may cover up to 24 months, or in cases where the production and distribution cycle runs longer than 12 months. Sub-annual reporting and verification are allowed. Two reporting periods may be verified in one cycle, for a maximum of 24 months of project data.

Other Eligibility Requirements

- Clear ownership of greenhouse gas emission reductions must be established.
- SCM/ACM must meet applicable ASTM standards (or equivalent) to be eligible.
- Must notify the Reserve when using an Environmental Product Declaration (EPD).
- Must seek approval from the Reserve when stacking the Low-Carbon Cement Protocol with another protocol.

Important Note: This is a summary of the protocol. Please read the full protocol for a complete description of project requirements.