



PUBLIC COMMENT

Embedded Carbon Removal Feasibility Study

Assessing the Potential of Sectoral Integrations

Public Comment

To move our sectoral integrations work forward efficiently and effectively, CRSI is conducting a zero-order feasibility study across integration opportunities. Your feedback is invaluable to our progress!

Please submit all comments via the [feedback form](#) 

Project Materials

1. [Matrix of integrations](#). This matrix (general sector x CDR pathway) is a visual representation of possible integrations and their maturity. Integrations for which we have completed a scorecard are colored blue and hyperlinked to the relevant sheet.
2. [Scorecard template](#). This sheet is a blank, general template that served as a blueprint for the scorecards. For more information regarding the metrics, please see the notes in the cells.
3. [Integration-specific scorecards](#). We have completed 16 integration-specific scorecards and presented them in separate sheets.

Please direct any clarifying questions or general inquiries regarding CRSI to:
lucia@carbonremovalstandards.org and/or cara@cdr2030.earth.

We thank you in advance for your contribution.

Motivation and background

We are projected to need ever larger amounts of carbon removal to stay within the Paris Agreement's boundaries and prevent the worst harms of warming. There is consensus that deployment at scale will largely be driven by policy. While necessary, the policy and accountability mechanisms that dominate the discourse — compliance markets and related carbon-pricing schemes like fuel standards and border adjustments — [are not sufficient](#) to close the gap.

To achieve a climate-relevant scale, carbon removal can and should be both physically and regulatorily integrated across sectors of our society. This approach will generate additional tons of carbon removal, beyond what is feasible through public and private compliance-grade credit purchasing, by leveraging a broader range of policy mechanisms.

As a contribution toward catalyzing and coordinating efforts to integrate carbon removal, CRSI has developed the following frameworks and tools:

- [Find-Match-Measure](#): A framework to find carbon removal flows inside existing industries, match these removal solutions with the right policy support tools, and measure the resulting carbon to prove impact.
- [Sectoral Integrations Map \(SIM\)](#): A map of (our current understanding of) the ways CDR fits into different sectors, and includes the associated commercial, research, and policy activity for each integration.
- [Projects Database](#): An illustrative (but not exhaustive) list of commercial CDR activity embedded inside existing large-scale industries.
- [Research and Analysis Database](#): A collection of literature exploring carbon removal integrations.

Project description and status

Carbon removal pathways leverage chemical and biological processes that utilize materials or feedstocks, many of which are ubiquitous, including rocks, water, biomass, and certain industrial wastes. Because of this, these processes overlap with commonplace societal activities, creating a large opportunity set to do carbon removal within existing activities. We refer to a carbon removal integration as the possibility for carbon removal to be incorporated into existing processes, activities, and/or infrastructure:

$$\text{integration} = \text{carbon removal pathway} \times \text{sector} \times \text{context}$$

Our ongoing and future work involves deep exploration into specific sectoral integrations (e.g., [enhanced weathering on working lands](#), [abiotic mCDR in coastal resilience](#)). To move this forward efficiently and effectively, CRSI is conducting a zero-order feasibility study across integration opportunities.

The first phase of this analysis consisted of developing a methodological framework that could be implemented across integrations. This framework was designed to be general enough to apply across contexts, yet detailed enough to compare across specific metrics. It should be noted that this framework is limited by the availability of detailed data in the public domain and by the novel nature and low technological maturity of some carbon removal pathways. Metrics included in the framework, both quantitative and qualitative, are meant to provide assessments of the size of the sector and carbon removal opportunity, as well as identify potential synergies such as operational co-benefits, the production of co-benefits, improved economics, or environmental impacts. They are also meant to provide an overview of the existing policy and regulatory environment and the potential to leverage these governance frameworks to incentivize the carbon removal integration.

For each metric, a numerical rating between 1 (low) and 5 (high) is assigned, roughly indicating the size of the opportunity, the potential for adoption, or the capacity to overcome any obstacles and constraints. Each metric rating is assigned according to a unique set of predetermined thresholds that is used consistently across integrations.

The second phase of this analysis involved applying the methodology to a set of 16 representative integrations. Data and information for each parameter were sourced from industry or nonprofit reports and analyses, academic articles, company websites, and other citable public sources of information. Numerical ratings were given based on public information available, along with both a rationale for the rating and a certainty level describing the level of confidence we have in the rating given. These ratings are by nature subjective; efforts were made to base them as much as possible on citable values in the literature, to remain consistent across integrations, and to err on the conservative side in cases for which it was difficult to distinguish between two rating levels.

Given that integrations inherently involve broad knowledge and stakeholder bases, our work can be strengthened through community feedback. In June and July 2026, we are opening up the first iteration of our feasibility study to public comment. We welcome all feedback, especially regarding the *types of information* we collect and the *specific results we present for each integration* represented. [Thank you!](#)