



Expectations for Prepurchase deliveries

Requirements to process and accept carbon removal deliveries for Frontier prepurchases

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Introduction

This document outlines the requirements for delivery of carbon removal for Frontier prepurchases.

The focus of Frontier's prepurchase program is to accelerate the early deployments of promising removal technologies. At the same time, we want to be confident that prepurchases result in the intended carbon removal from the atmosphere, and that companies are on the path to providing what's required to deliver removal confidently at larger scales. As a result, Frontier requests a number of pieces of evidence of net removal and conducts an external scientific review process to determine whether to accept delivery.

Please note: For low-volume prepurchases, we do not require that credits are issued by a third party credit issuer on a registry, while we do for offtake deliveries. A more detailed discussion of requirements for responsible verification of CDR at-scale is available in our <u>Delivery Expectations</u> for Offtakes.

Delivery acceptance process overview

Below is the process we will follow and the information we are looking for to confirm and accept carbon dioxide removal (CDR) as delivered:

- (1) Supplier provides evidence of net carbon removal sequestered to Buyers and Frontier
 - We can flexibly kick off this process as you deliver tons (partial or full deliveries) and have the substantiating data (see below).
- (2) Frontier reviews delivery information
 - For the first delivered tons, Frontier will send the protocol and data (treated as confidential under NDA) to Frontier's external scientific team for review.
 - We may follow-up with questions or requests for additional or missing data; Supplier provides any missing information.
- (3) Buyer accepts or rejects delivery
 - If some or all of a delivery is rejected, Frontier will flag any issues or additional data required before re-review.
- (4) Frontier lists delivered tons on public CDR Delivery Tracker
 - Frontier will regularly update a <u>public dashboard</u> of contracted and delivered tons from the Frontier portfolio as deliveries are reviewed and accepted.

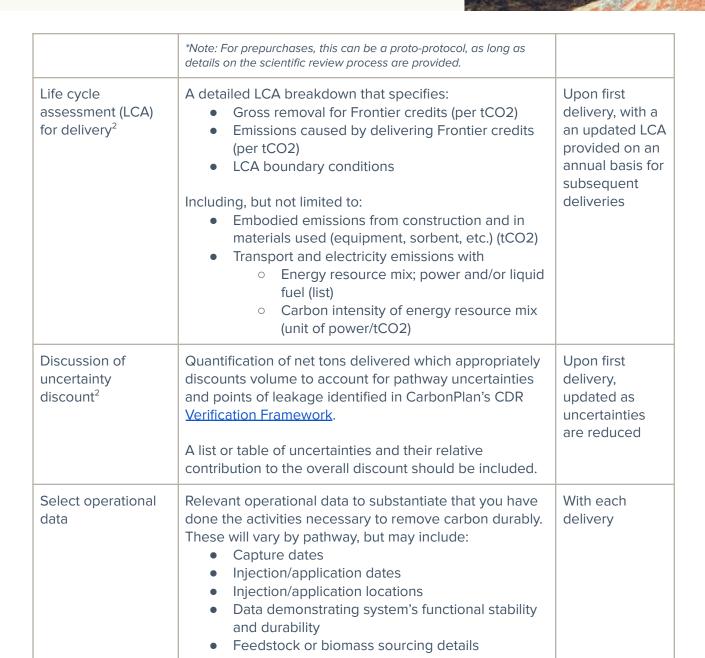


Data requested for prepurchase tons delivered to Frontier buyers

To confidently accept delivery, we expect to receive:

Data	Description	When provided
Carbon removal delivery certificates	Certificate of delivery¹ which includes: Issuer Issue date Protocol issued against Certificate # Recipient Net CO2 delivered Total price per ton (USD) of tons delivered, including the portion of that price specific to MRV	With each delivery
Summary Delivery Report with quantification data	A report providing evidence of the number of net tons of removal delivered per the protocol, with on-the-ground data substantiating net removal claims. A self-produced report is acceptable for prepurchases, though suppliers may also choose to work with a Frontier-qualified credit issuer or other third-party validation and verification body (VVB). Note: It may be strategic to look ahead to Frontier's expectations for offtakes when considering your early VVB partner.	With each delivery
Protocol and/or Project Design Document (PDD)	A copy of the protocol and PDD describing the approach to quantify net carbon removal for the project. Should include: Name of the protocol developer (if external) How the protocol was developed, reviewed and approved The quantification methodology, inclusive of the relevant components for the pathway, which details what data is measured versus modeled, LCA boundaries, monitoring frequency, key assumptions, and treatment of uncertainties Accounting for the discount to net removal (when applicable) associated with the relevant pathway uncertainty components Standard the protocol was validated against and name of VVB conducting the protocol validation, if applicable*	With or prior to first delivery, and an annual summary of protocol changes for subsequent deliveries

¹For prepurchases, we are explicitly **not** requiring use of an independent, Frontier-qualified third party credit issuer, though we do require a 3P reviewed protocol. Note: these verification expectations differ for larger offtakes.



Note: The information above will remain confidential under our NDA.

Note: Ongoing reporting against interim milestones and of other operational data will be requested/collected separately through quarterly meetings and via an annual portfolio survey.

Note on credit issuer and verifier eligibility

We will accept prepurchase deliveries that have not been reviewed by a Frontier-qualified credit issuer, and we do not require an independent registry. However, to build relevant partnerships from the start, we suggest looking ahead to Frontier's <u>Delivery Expectations for Offtakes</u> when considering your early credit issuing partner(s).

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² May be included as part of the PDD.



Reporting format

We ask that you do your best to adhere to a concise, simple format in your reporting that makes it easy for our external reviewers to understand your project and claims.

- No more than five separate files that include all data requested in the table above, e.g.:
 - Delivery certificate
 - Summary delivery report report (no more than 5 pages)
 - Protocol or Project Design Document
 - Supplemental or raw data
- Include necessary information within the documents themselves, and limit the use of hyperlinks to other documentation except where necessary (e.g., scientific references) or if the linked information is truly supplemental and not necessary for the verification of your claims
- Email all documents in a single ZIP folder

Renewal requirements for eligible suppliers

For suppliers who have delivered all contracted tonnage and are eligible to be considered for a renewal purchase, we ask that, in addition to the above, you provide a summary report outlining:

- A narrative description of Company's progress and challenges to completing the Project, and why this is the right time for a follow-on purchase.
- A description of future plans demonstrating a decline in future process emissions, improved net-negativity, and cost improvements
- Evidence of ongoing responsible community engagement and efforts to achieve the highest standards of safety, compliance, and local environmental outcomes
- Evidence of the achievement of any contract-specific renewal milestones



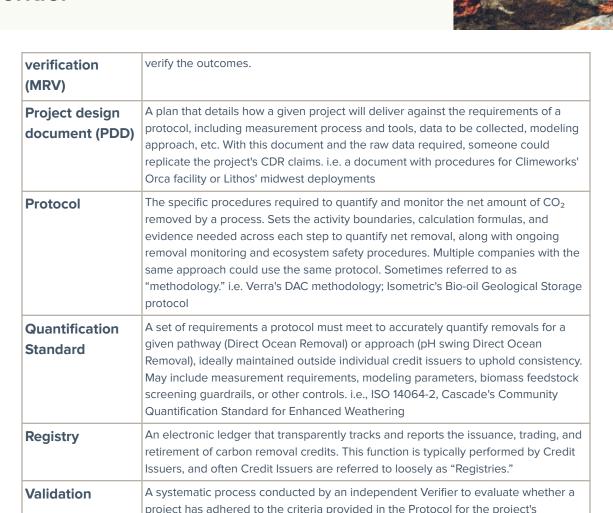
Appendix

Delivery expectations for Prepurchases vs Offtakes

Element	Prepurchase requirement	Offtake requirement
Standard	n/a	Credits must be issued against a program Standard with one of Frontier's qualified credit issuers
Protocol	A proto-protocol is acceptable	Approved protocol validated by a VVB & approved by Frontier is required
Project Design Document (PDD)	PDD required	PDD validated by a VVB is required
Validation & verification body (VVB)	Use an independent, third party verifier, ideally accredited (preferred) Conduct internal review and reporting and engage scientific community for input (acceptable)	Use an accredited, independent, third party validation and verification body confirmed by one of Frontier's qualified credit issuers
Credit issuance & registry listing	Credits are publicly listed by Frontier, or by supplier if issuing high volumes to multiple buyers. No independent registry required	Credits are issued by a third-party registry that meets Frontier buyers' needs and is confirmed by Frontier

Definitions

Term	Definition
Carbon credit	An economic unit representing one net metric tonne of carbon dioxide that has been avoided or removed from the atmosphere.
Credit Issuer or credit issuing program	An organization that establishes and operates a program with guidelines to generate and issue carbon credits. Issues credits against protocols compliant with their program rules ("Standard") and maintains a public ledger of issuances and retirements in-house or through a 3rd party. Note: Sometimes referred to loosely as "registries."
Monitoring, reporting and	Multi-step process of accounting for all the emissions, energy use, environmental and public health impacts associated with a carbon removal project to determine its net climate impact and then reporting these results to an accredited third party to



Delivery expectation Q&A

Verification

Verifier

What level of measurement reporting and transparency is Frontier looking for?

a prerequisite for CDR crediting.

Verification Body, or VVB.

Transparency around both what is known and where uncertainties remain can build broader community trust in CDR claims. For all purchases facilitated by Frontier, we expect transparent communication of protocols, data reflecting a company's execution against that protocol, and reporting to the market of tons delivered.

approach and the Credit Issuer's Standard. Project validation occurs up front, and is

The process of evaluating and assuring the claims of net removal and other key outcomes (financial additionality, safety) against the requirements in the project Protocol and PDD, using data and information collected from the project.

A third-party entity with the expertise and experience to determine if a project meets the requirements in the Credit Issuer's Standard (validation) and to perform the verification functions required by the Protocol. May be called a Validation &

. ∴ Frontier



What type of long-term durability monitoring does Frontier require?

We expect projects to actively monitor project deployments (storage systems, mineral amendment applications to land, etc.) until "functional stability," a concept from landfill management, is reached. This is the point at which the system no longer poses serious reversal risk and doesn't require any active control systems for continued storage.

For permanent carbon removal projects, we expect protocols to address durability by 1) developing monitoring processes and data requirements to track reversals or storage leakage, and 2) identify an appropriate threshold and what must be observed in order to confidentiality assess that "functional stability" has been reached and monitoring can be discontinued. This point will vary based on the nature of the deployment (i.e., the stability timeline for basalt mineralization vs geologic storage of supercritical CO2 vs biomass burial looks different).

How should protocols evolve as new information comes out? Will Frontier revise past vintages?

We ask that projects adopt conservative protocols that appropriately discount delivered volume based on uncertainties. In the case that significant learnings come to light that imply less carbon removal was completed than credits delivered (e.g., scientific consensus determines that geologic storage leakage is 10x our previous assumption), it is up to each Frontier buyer's discretion whether they write off that carbon removal purchase and re-buy if the credit was retired. We would not retroactively claw back payments from companies.

We also ask that protocols be updated periodically: frequently enough to reflect the best available science, but not so quickly that it makes operationalizing the protocol impossible, recognizing that companies need time to set up the appropriate quantification (sensors, lysimeters, modeling, etc.) and reporting infrastructure.