Frontier

CARBON REMOVAL PURCHASE AGREEMENT

	Purchase overview
Description	Stripe, Inc., (known as "**Stripe**") and Shopify (known as "**Shopify**", together with Stripe), will purchase 285 metric tons of carbon dioxide removal from 1 year of operation for Alithic's first pilot of a solvent-based DAC process producing supplementary cementitious material from silicate feedstocks. The project is detailed in full here.
Type	Direct Air Capture
Purchase amount	$500,000
Service quantity	285 metric tons
Price	$1,750 / metric ton
Estimated delivery schedule	The Original Purchase Amount will be allocated according to the following schedule: **Year** | **Quantity** (Net metric tons of CO_2 removed) 2027 | 285 metric tons
First customer? *(alongside other Frontier buyers)*	Yes
Largest customer? *(Frontier buyers combined)*	Yes
Estimated delivery start & completion	Q1 2027 - Q3 2027
Interim milestones & payment schedule	We anticipate these steps will be important markers of progress toward delivering carbon removal. Subject to Section 2.1 below, Company will provide evidence of the following milestones, and Buyer will pay Company's undisputed, properly submitted invoice(s) within 60 days of receiving them, pursuant to the payment instructions of Company: **Payment** (USD) | **Milestone** | **Estimated date**

$500,000	Upon execution of the agreement	September 2024
$0	Conduct feedstock characterization and quality control; Finalize pilot Feed Study with total installed cost estimate.	Q2 2025
$0	Secure commercial agreements with feedstock supplier and by-product offtaker for initial pilot deployment(s).	Q4 2025
$0	Commence operation of commercial pilot. Demonstrate that carbonated products (e.g., carbonated fly ash) are compatible with prevailing industry standards (e.g., ASTM) and can be used as direct drop-in SCM in the concrete industry. Demonstrate achieving target KPIS (CO2 capture performance test validation, SCM ASTM C 618 standard)	Q4 2026

	$0	Provide interim report with KPIs (energy intensity, co-product quality, reaction kinetics). Notify Frontier of first ton removed.	Q2 2027

	Additional inventory purchase overview
Description	Stripe, Inc. ("**Stripe**") will have the option to purchase an additional 750 metric tons of carbon dioxide removal from 1 year of operation for the project described above in order to help secure additional sales for the Company beyond the Original Carbon Removal Purchase. Stripe will have the right to sell any amount of such additional purchase to a third party.
Additional inventory estimated delivery schedule, price, and quantity	The Additional Inventory will be allocated according to the following schedule:
Payment schedule	Subject to Section 2.2 below, any Additional Purchase Amount will be payable quarterly at the end of each quarter.

Year	Price	Quantity (Net metric tons of CO_2 removed)
2025	$0 / ton	0 metric tons
2026	$0 / ton	0 metric tons
2027	$1000 / ton	750 metric tons

	Pre-conditions for future purchase
Description	Upon Company achieving all of the conditions related to the Original Carbon Removal Purchase below, Buyer, or an affiliate thereof, for itself or in connection with Frontier, may enter into negotiations for a new offtake agreement. These criteria summarize what would make us excited about the further trajectory of this project. However, at our discretion, we may be willing to engage in this

	conversation earlier - especially if it would meaningfully advance your progress.
General	• Delivery of 100% of initial tonnage, with third party measurement, reporting, and verification (MRV) evidence of tons removed. Public reporting of tons delivered, price per ton, and protocol used at time of delivery • Completion of a third-party lifecycle analysis (LCA) to confirm the net tons removed for this project • Updated LCA for future deployments that demonstrate declining future process emissions and improving net negativity • Updated techno-economic analysis (TEA) providing significant evidence that a sub-$100/ton capture cost by the date projected in the application to Frontier is achievable and highlighting key cost sensitivities. Differences between current experimental values and TEA assumptions for $100/ton highlighted, including a plan to narrow the gap between actual and modeled performance is presented • Evidence of ongoing responsible community engagement and efforts to achieve the highest standards of safety, compliance, and local environmental outcomes • Meeting with Frontier and potential site visit upon delivery and achievement of project-specific renewal conditions to answer any questions about the results
Project-specific	• Demonstrate scalability of the approach to 100+Mt scale • Achieve target KPIs on performance and cost • Update FOAK and NOAK projections based on steady-state operational data from pilot project and validation from concrete and other industrial partners. Show a clear cost-down trajectory. • Conduct exploration of global high-quality alkalinity reserves (e.g., fly ashes, slags, mine tailings, ground natural minerals) including sample characterization to assess total approach capacity (compiled into report). • Generate a cost curve for varying grades of alkalinity sources and impacts on CDR cost to inform scale-up, including market report for co-product revenue opportunities as SCM. Share with Frontier.