## **CARBON REMOVAL PURCHASE AGREEMENT**

	Purchase overview			
Description	Stripe, Inc. (" <b>Stripe</b> "), for itself as a member of Frontier, will purchase 58 metric tons of carbon dioxide removal from the first two years of operation from Vycarb's NY pilot which uses a containerized water processing system and novel sensors for automated alkalinity dosing for enhanced weathering of limestone in oceans. The project is detailed in full here.			
Туре	Ocean Alkalinity Enhancement			
Purchase amount	\$100,000			
Service quantity	58 metric tons			
Price	\$1,700 / metric ton			
Estimated delivery schedule	The P sched		Quantity (Net metric tons  47 metric tons	
First customer? (alongside other Frontier buyers)	Yes			
Largest customer? (Frontier buyers combined)	Yes			
Estimated delivery start & completion	Q2 2024 - Q4 2025			
Interim milestones & payment schedule	The exact path to delivery may vary, but these steps will be important markers of progress toward delivering carbon removal.  Subject to Section 2 below, the Purchase Amount will be payable 45			

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days after Company provides Buyer an invoice and evidence of achieving the following milestones, subject to Buyer's reasonable requirements, and Buyer's acceptance:

Payment (USD)	Milestone	Estimated date
\$100,000	Upon execution of the agreement	August 2023
	Finalize design and complete construction for floating pilot system.	Q1 2024
	Secure NY DEC permit for pilot deployment. Conduct system testing and provide a report that validates the system provides accurate and precise measurement and safe and controlled alkalinity containment, dissolution, and release.	Q3 2024
	Pilot system deployed in New York's East River and continuously operating. Notify Frontier of first ton removed.	Q3 2024
	Provide interim report on system performance in field and design learnings for improved next-generation system.	Q3 2025

	Pre-conditions for future purchase
Description	Upon Company achieving all of the conditions below, Buyer, or an affiliate thereof, for itself or in connection with Frontier, may enter into negotiations for a new purchase 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

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	conversation earlier - especially if it would meaningfully advance your progress.
General	<ul> <li>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</li> <li>Completion of a third-party lifecycle analysis (LCA) to confirm the net tons removed for this project</li> <li>Updated LCA for future deployments that demonstrate declining future process emissions and improving net negativity</li> <li>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</li> <li>Evidence of ongoing responsible community engagement and efforts to achieve the highest standards of safety, compliance, and local environmental outcomes</li> <li>Meeting with Frontier and potential site visit upon delivery and achievement of project-specific renewal conditions to answer any questions about the results</li> </ul>
Project-specific	<ul> <li>Evidence system is able to operate continuously and autonomously and achieve target performance and sufficiently fast dissolution at larger (e.g., 100 ton) scales. Specifically, real-time data reporting shows ongoing water measurement and carbon dioxide removal and storage at a relevant scale, energy intensity &lt; 900 KWh/cycle, reaction kinetics &gt; 30g/second, and alkalinity throughput &gt; 100 tons/year.</li> <li>Optimized productization of the Vycarb system, learning from pilot design, with construction ongoing for higher-tonnage installation.</li> <li>Confirm pipeline of feasible sites for future deployments. For next deployment, secure partnership agreement and necessary water discharge permits, along with community support. Detail a revised business plan for going to market (integrating with coastal infrastructure, partnering with other ocean CDR companies, etc.).</li> <li>Presentation at scientific conference of pilot system research that narrows uncertainties on air sea gas exchange timelines.</li> </ul>

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