CARBON REMOVAL PURCHASE AGREEMENT

	Purchase overview					
Description	Stripe, Inc. ("Stripe") and Shopify ("Shopify"), for themselves as members of Frontier, will purchase 317 metric tons of carbon dioxide removal from the first year of operation for EDAC Labs' pilot system that uses electrolysis to create an acid and base that extracts valuable metals from mine tailings while capturing CO2 from the air. The project is detailed in full here.					
Туре	Mineralization					
Purchase amount	\$500,000					
Service quantity	317 metric tons					
Price	\$1,573 / metric ton					
Estimated delivery schedule	The Purchase Amount will be allocated according to the following schedule:					
		Year	Quantity (Net metric tons of CO ₂ removed)			
		2025	317 metric tons			
First customer? (alongside other Frontier buyers)	Yes					
Largest customer? (Frontier buyers combined)	Yes					
Estimated delivery start & completion	Q1 2025 - Q4 2025					
Interim milestones & payment schedule	We anticipate these steps will be important markers of progress toward delivering carbon removal. Subject to Section 2 below, the Purchase Amount will be payable 45 days after Company provides Buyer an invoice and evidence of achieving the following milestones, subject to Buyer's reasonable requirements, and Buyer's acceptance:					

₊: Frontier

Payment (USD)	Milestone	Estimated date
\$500,000	Execution of the agreement	August 2023
	Demonstrate integrated 10kg/day of CO2 capture and separation (CO2 released to air, excludes mineral extraction steps).	Q4 2023
	Demonstrate electrosynthesizer stack capable of 100kg/day of CO2 capture and separation.	Q1 2024
	Demonstrate electrosynthesizer stack capable of 1 ton/day of CO2 capture and separation, with initial target performance of 2.4 MWh electricity required to produce 1 ton of H2SO4 at 3M concentration and 1 ton of NaOH at 1M concentration.	Q2 2024
	Demonstrate integrated 100kg/day of CO2 capture through mineralization (including metal extraction process).	
	Revised environmental justice submitted for approval to Frontier which details how EDAC Labs will work with their mining site partner for responsible deployment.	Q3 2024
	Agreement finalized with mining partner, including details of site access.	
	Demonstrate integrated 1 ton/day of CO2 capture through mineralization (including metal extraction process).	Q4 2024
	Secured permitting approvals for pilot system.	
	Operations commenced for 1 ton/day system. Notify Frontier of first ton removed.	Q1 2025

₊: Frontier

	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 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 ability to secure demand for mineral sales. Submit updated TEA to Frontier regarding the market for Mn and Ni, in terms of expected sale price (\$/kg) and who potential customers or market segments will likely be. Demonstrate system operating at the mining site with an overall electricity requirement of < 2.2 MWh per net ton of CDR. Secure mine site for next system, and provide a roadmap demonstrating high potential sites and partners for future systems at scale 		