

CARBON REMOVAL PURCHASE AGREEMENT

	Purchase overview						
Description	Stripe, Inc. (" Stripe ") and Shopify (" Shopify "), for themselves as members of Frontier, will purchase 937 tons of carbon dioxide removal from Planetary’s trial alkalinity additions at three project sites across Canada and the UK.						
Type	Ocean Alkalinity Enhancement						
Purchase amount <i>(contingent on hitting milestones)</i>	\$1,500,000						
Service quantity	937 tons						
Price	\$1,600 / ton CO2						
Estimated delivery schedule	<div>The Purchase Amount will be allocated according to the following schedule:</div> <table><tr><th>Year</th><th>Quantity (Net metric tons removed)</th></tr><tr><td>2023</td><td>110 (site 2)</td></tr><tr><td>2024</td><td>827 (sites 1 ,2, 3)</td></tr></table>	Year	Quantity (Net metric tons removed)	2023	110 (site 2)	2024	827 (sites 1 ,2, 3)
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2023	110 (site 2)						
2024	827 (sites 1 ,2, 3)						
First customer? <i>(alongside other Frontier buyers)</i>	Yes (Shopify first customer in 2020)						
Largest customer? <i>(Frontier buyers combined)</i>	Yes						
Estimated delivery start & completion	July 2023 - July 2024 Note: Delivery date will vary depending on alkalinity addition and equilibration timing.						
Interim milestones & payment schedule	<div>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:</div> <table><tr><th>Payment (USD)</th><th>Milestone</th><th>Estimated date</th></tr><tr><td>\$500K</td><td>Execution of the agreement</td><td>Summer 2023</td></tr></table>	Payment (USD)	Milestone	Estimated date	\$500K	Execution of the agreement	Summer 2023
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\$500K	Execution of the agreement	Summer 2023					

\$0	Site two community consultation and input plan sent to Frontier; community engagement efforts underway (June 2023) Alkalinity addition at first project site and set up of modular dosing and monitoring system 2.0 to enable frequent measurement and monitoring. Notify Buyers of first ton successfully removed.	September 2023
\$500K	Placement of initial alkalinity order that provides lower cost per CO2 tonne for trial addition at second project site	Summer 2023
\$0	Alkalinity addition and installation of monitoring system complete with coastal outfall partner at second project site	September 2023
\$0	Submit interim report containing data from initial field trials that demonstrates validation of drawdown rates in field Community consultation and input plan sent to Frontier and community engagement efforts underway for third site	December 2023
\$0	Submit interim report on ecosystem research with Dalhousie and NSERC summarizing findings on ecosystem interactions from early deployments Provide interim report on the field trial results from alkalinity additions at site one.	April 2024
\$500K	A second alkalinity addition trial is underway at at least two project sites. Alkalinity addition and monitoring at third project site. Delivery accepted for 2023 tons.	July 2024

Pre-conditions for future purchase	
Description	<p>Upon Company achieving all of the conditions below, Stripe, Shopify, or an affiliate thereof, for itself or in connection with Frontier, may enter into negotiations for a new offtake agreement.</p> <p>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.</p>
General	<ul style="list-style-type: none"> 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. Note: no credits will be generated from Hayle as long as the Local Enforcement Position dictates that credits are only for research and not for attribution of corporate emissions.

	<ul style="list-style-type: none"> • 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 LCA for the current system includes evidence of reduced carbon intensity associated with sourcing alkalinity. • 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 presented. Updated TEA for the current system includes evidence of significantly reduced alkalinity costs, as substantiated by a supplier agreement. • 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	<ul style="list-style-type: none"> • Provide independently, scientifically reviewed, validated alkalinity addition model based on field trials that demonstrates the ability to successfully operate the modular dosing and monitoring system to accurately and precisely quantify carbon removal at the field scale. Submit data from initial trials to improve field's understanding and quantification of carbon removal through ocean alkalinity enhancement. • Evidence from ongoing ecosystem monitoring and research with Dalhousie University and NSERC reported to Frontier. Report will highlight any ecosystem impacts resulting from the OAE experimental data or models, if observed. If there are observed ecosystem impacts, the report will include mitigation strategies, and deployment plans will be updated to incorporate research learnings on interactions with oceanic primary production. • Secure strategic partnerships with coastal outfall infrastructure for larger scale deployments at suitable sites with renewable energy and alkalinity access.