Frontier

CARBON REMOVAL PURCHASE AGREEMENT

	Purchase overview
Description	Stripe, Inc. (“**Stripe**”) and Shopify (“**Shopify**”), for themselves as members of Frontier, will purchase 400 metric tons of carbon dioxide removal from the first two years of operation from CarbonBlue’s 700 tpy pilot system that uses a calcium looping process to extract CO2 from seawater with brine hydrolysis regeneration. The project is detailed in full here.
Type	Direct Ocean Removal
Purchase amount	$500,000
Service quantity	400 metric tons
Price	$1,250 / 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) 2024 | 100 metric tons 2025 | 300 metric tons
First customer? *(alongside other Frontier buyers)*	Yes
Largest customer? *(Frontier buyers combined)*	Yes
Estimated delivery start & completion	Q3 2024 - 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:

Payment (USD)	**Milestone**	**Estimated date**
$500,000	Upon execution of the agreement	August 2023
$0	Signed agreement with a desalination partner to host 1 kton pilot system. Continuous operations ongoing for 10 tpy R&D facility.	Q4 2023
$0	Permitting and full design of 1kton per year facility complete.	Q1 2024
$0	Storage partnership confirmed.	Q1 2024
$0	Target kinetics of 65% CO2 removed in < 60 seconds for mineralization reactor and energy performance of < 5 GJ/ton CO2 for brine hydrolysis regeneration achieved.	Q1 2024
$0	Plant operation commences. Notify Frontier of first ton successfully removed.	Q3 2024

	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	• Achieve target energy performance for brine hydrolysis regeneration and kinetics for mineralization process. • Demonstrate revised system design minimizes component corrosion from HCl and provide revised TEA that demonstrates path to low costs once alloy amount needed to prevent corrosion is confirmed. • Provide roadmap for future sites that demonstrates path to scale for future commercial facilities. Detail strategy to secure necessary permits for commercial operations. • Secure agreement on waste heat streams to utilise in brine hydrolysis process, or otherwise procure time-matched low-carbon energy to power the process.