

## CARBON REMOVAL RESEARCH AGREEMENT

	Research & development funding overview
<b>Description</b>	Stripe, Inc. (" <b>Stripe</b> "), for itself as a member of Frontier, will fund Carboniferous, Inc. ("Carboniferous") to support research into the durability, measurement methodology, and safety of biomass sinking into anoxic basins. <a href="#">The project is detailed in full here.</a>
<b>Type</b>	Biomass sinking
<b>R&amp;D grant amount</b>	\$250,00
<b>Estimated research start &amp; completion</b>	Q4 2023 - Q1 2025
<b>R&amp;D Description</b>	<p>Grant to accelerate Carboniferous' rigorous scientific research and experimentation to demonstrate the durability, environmental safety, and measurability of carbon dioxide removal (CDR) via terrestrial biomass sinking, in collaboration with their academic institutions and broader network of scientific collaborators. Specifically, Frontier will support the following experimentation:</p> <ul style="list-style-type: none"> <li>• To sharpen the field's understanding of the efficacy of anoxic basins for biomass preservation, Carboniferous will conduct field tests in Orca Basin using benthic landers and lab incubation experiments as well as refine mixing and biogeochemical models with site-specific data, to determine the functional stability and breakdown rate of sunk biomass.</li> <li>• To further understanding of the impact of biomass sinking in ocean ecosystems, Carboniferous will conduct field tests and monitoring to assess impacts to surface ocean biogeochemistry and methane production and potential for release from the water column (though sinking in oxygen-free environments is expected to minimize impacts given the lack of active micro- and macro-fauna).</li> <li>• Throughout this research, Carboniferous will deliver 10 tons of carbon removal to Frontier to test and refine their biomass sinking mechanism and methodology for measuring removals.</li> </ul> <p>Carboniferous will share an experimental report alongside a scientific manuscript with research results.</p>

<b>Interim milestones &amp; payment schedule</b>	We anticipate these steps will be important markers of progress toward delivering on the scope above.		
	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:		
	<b>Payment (USD)</b>	<b>Milestone</b>	<b>Estimated date</b>
	\$250,000	Upon execution of the agreement	August 2023
		Sampling processes and measurement equipment in place. Conduct first of three visits to Orca basin to land and retrieve biomass samples in anoxic basin.	Q1 2024
		Provide interim report with preliminary data and analysis from biomass decomposition and environmental impact research. Secure EPA research permit approval for 500+ tonnes of material. Conduct second of three visits to Orca Basin.	Q2 2024
		Submit final scientific deliverables. Notify Frontier of first ton removed from experiments. Conduct final visit to Orca Basin.	Q4 2024

Pre-conditions for future purchase	
<b>Description</b>	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 purchase agreement. These criteria summarize what would make us excited about the further trajectory of this project.

	<p>However, at our discretion, we may be willing to engage in this conversation earlier - especially if it would meaningfully advance your progress.</p>
<b>General</b>	<ul style="list-style-type: none"> <li>• Submission of the research deliverables</li> <li>• Demonstrate delivery of 10 tons of carbon removal 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>
<b>Project-specific</b>	<ul style="list-style-type: none"> <li>• Provide compelling evidence that deployment does not cause additional ecosystem damage based on experimental data and analysis. Demonstrate technical ability to actively manage and mitigate impacts of deployments based on ongoing ecosystem monitoring.</li> <li>• Secure permit or provide a clear path to securing a permit for larger, commercial deployments.</li> <li>• Provide peer reviewed, validated measurement methodology confirming ability to accurately quantify carbon removal from biomass sinking.</li> </ul>