Vesta is turning shorelines into carbon-removing powerhouses

Vesta protects coastlines and amplifies the ocean's natural ability to absorb CO_2 . Vesta adds a carbon-removing mineral, olivine, to sand at shorelines, where it reacts with seawater to simultaneously reduce acidity and increase its capacity to durably remove CO_2 . By mimicking and vastly accelerating Earth's natural rock weathering process, Vesta's "Coastal Carbon Capture" is an ideal solution to help the shoreline-protection industry and ocean-based communities become more climate resilient.

Together with Elemental, Vesta has embarked on its second U.S. project open sourcing its science to ensure the industry learns and grows alongside the adoption of this nature-based solution, and working closely with the local community to shape the adoption of this technology.



"For climate solutions to really scale, we know that both climate and community have to win. That's why we've embedded this principle into our DNA since the very beginning"

Vesta President and Co-Founder Kelly Erhart



🔒 Status Quo

60M tons

of sand deployed each year to restore and protect beaches in the U.S., a largely untapped opportunity to sequester CO_2 from the atmosphere.²⁴

Progress Unlocked

500 tons

of CO₂ to be removed from the atmosphere by Vesta's project site in South Hampton, NY (equivalent to more than a million miles driven by the average gas-powered vehicle).²⁵

14x

increase in scale from Vesta's first pilot to its second pilot, being deployed in partnership with Elemental in 2024.







Elemental Excelerator