

Abstract for Geoconvention

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At Carbfix, we change CO₂ to stone by imitating and accelerating natural processes, providing a permanent and safe carbon storage solution. This carbon mineralization process is where CO₂ is dissolved in water – a sparkling water of sorts – and is then injected into reactive rock formations to form permanent carbonate minerals. Basaltic rocks are fractured and porous that the injected carbonated water percolates through the formations. This method has been monitored and verified that over 95% of the injected CO₂ was mineralized in just 2 years.

In Iceland, there are multiple Carbfix projects ongoing from testing the use of seawater to upscaling commercial operations. The technology can be used in varied environments including a) working on on-site capture and storage, b) transporting CO₂ to hubs, and c) direct air capture and storage. The potential for applying CO₂ mineral storage in basalts around the globe is enormous, far greater than ever needed for climate action.