Turning Carbon Dioxide into Stone Could Remove It from The Atmosphere Permanently

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NOTE: The video from the source link is no longer available

Turning carbon dioxide into stone could remove it from the atmosphere permanently, according to scientists working in Iceland

Even green geothermal power plants like this emit carbon dioxide. But scientists in Iceland say they've found a way to turn the harmful greenhouse gas into rock quickly and permanently. The CarbFix project contains the CO2 in the pores of volcanic basalt deposits up to 500 metres below the earth's surface. SOUNDBITE (English) ASSOCIATE PROFESSOR IN GEOENGINEERING AT THE UNIVERSITY OF SOUTHAMPTON, DR JUERG MATTER, SAYING: "We came up and developed a new injection system that co-injects water with the CO2… dissolved CO2, the fizzy water, entered the formation and started to react because, you know, it was very acidic." The researchers found that the injected solution reacts quickly with porous basalt, locking up to 95 percent of the carbon dioxide into the basalt pores within two years. SOUNDBITE (English) ASSOCIATE PROFESSOR IN GEOENGINEERING AT THE UNIVERSITY OF SOUTHAMPTON, DR JUERG MATTER, SAYING: "Some porosity is connected so that is where our injected fluid flows in the basalt and reacts with the basalt, dissolves calcium magnesium out of the rock and then precipitates carbonate minerals." The mineralisation process occurs naturally above ground – but it takes millions of years. Speeding up the process could make carbon capture an appealing option for big emitters.