



Credit: Orjan Ellingvag, Alamy.

Climeworks Expansion Could Lead to Tribal Opportunities

By Mark Fogarty

Tribes looking to get involved with large-scale carbon removal plants may find upcoming opportunities as the firm that has built the now-functioning Orca plant in Iceland is mounting a big expansion into the United States.

Switzerland-based Climeworks says it will hire more than 100 employees in the United States to follow up on recent legislative action in the U.S. to speed up the pace of climate control, including carbon removal.

Eventually, “thousands” of people could be hired, the firm says.

Climeworks has applied to participate in three planned Direct Air Capture (DAC) Hubs as part of a U.S. Department of Energy DAC program. The firm notes the hubs are proposed to be in Louisiana, California, and the Northern Great Plains – each with a pathway towards megaton capacity by 2030.

The firm notes it has racked up 120,000 hours of expertise in the field. Besides the big DAC plants—a second is now underway—it is poised to create audited carbon offset credits for its clients.

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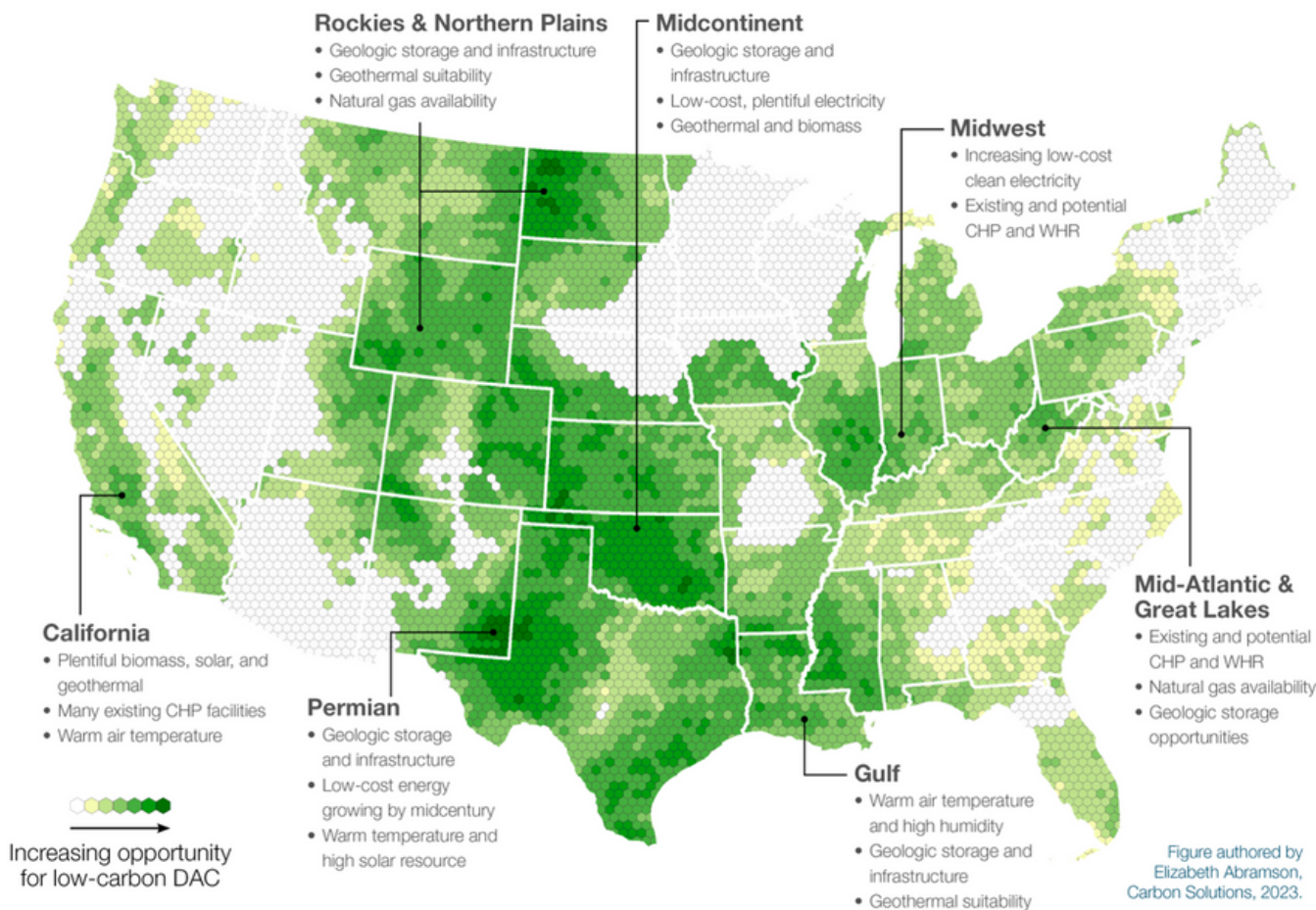
Says Christoph Beuttler, Chief Climate Policy Officer at Climeworks, “The U.S. is now at the forefront of this, with legislation such as the Bipartisan Infrastructure Law. The effects have become visible: DAC companies, energy providers and storage experts can now work together to form regional DAC Hubs, ready to bring direct air capture to the next level.

Climeworks says it will lend its expertise and technology “alongside some of America’s leading CO₂ storage and energy infrastructure organizations and fellow DAC companies to bring large-scale commercial DAC deployments to life in the country.”

Climeworks touts its experience in the DAC field:

- 14 years of technology research and development.
- Six years of project development and deployment experience with the world's first and to date only commercial DAC and storage (DAC+S) plant, “Orca,” operating since 2021 in Iceland and the next one, “Mammoth,” currently under construction.
- Over 120,000 hours of real-world operational experience across various regions and climatic conditions, having put more than 15 DAC projects into operation.





"The Great Plains Institute's *Atlas of Direct Air Capture, Opportunities for Negative Emissions in the United States* examines key factors that impact regional suitability for development of DAC technology and associated infrastructure. Through this analysis, seven regions emerged as prime locations to develop regional DAC hubs, each with a unique set of advantages: California, Rockies & Northern Plains, Permian, Midcontinent, Gulf, Midwest, and Mid-Atlantic & Great Lakes" (Great Plains Institute). Graphic credit: Great Plains Institute.

- Achieving independent third-party validation of Climeworks' and its storage partner Carbfix' DAC+S methodology and implementing it at Orka with ongoing audits and verification processes.
- Growing its customer base to more than 160 companies and signing multi-year carbon removal agreements with U.S.-based multinationals such as Microsoft and BCG.

Alongside its project partners, Climeworks says it has already begun working with community stakeholders in all three potential hub regions as a means of identifying and soliciting feedback from the beginning of

potential project buildout.

Jan Wurzbacher, co-founder and co-CEO of Climeworks, says "On top of the very promising political and commercial environment, the U.S. offers access to renewable energy infrastructure and advanced CO₂ storage sites – something that is essential to realize DAC projects that offer permanent carbon removal. On top of the DAC plant projects which are currently in the planning phase, we will strongly contribute to building up a supply chain, servicing major companies as CDR customers and leveraging the U.S. workforce to help create thousands of green jobs going forward."

In March, Climeworks answered Tribal Carbon Solutions' questions

about the Orka plant, its operations capability, personnel, size and other factors allowing it to pursue carbon removal.

Climework's Orka plant, outside Reykjavik, Iceland, was launched in September 2021 and is working now.

For instance, TCS learned that the plant measures 1700 square meters, which according to an online conversion calculation comes to 18,300 square feet. And the total sequester number for Iceland's rift zone could be as much as 400 gigatons of carbon, also a good size.

You can get a look at it, and a lot of other information, at the video of the plant launching [here](#). If you want to skip the speeches, start at about minute 43.