

# Texas— Carbon removal meets energy leadership

## Carbon Removal Potential In Texas

Texas has long been the backbone of American energy production and is now leading the next wave of innovation through carbon removal. With vast geologic storage, existing infrastructure, and a best-in-class talent pool, the state is primed to become a hub for carbon removal technologies that builds on its energy legacy. Pro-business policies and world-leading direct air capture (DAC) projects are driving job creation, strengthening the state's economy, and advancing U.S. energy security on the global stage.

## How It Works

Texas combines the core ingredients—land, geology, energy, and infrastructure—for unrivaled carbon removal potential. By 2050, it could remove up to 350 million metric tons of carbon dioxide annually using direct air capture — the most of any state<sup>1</sup>. In West Texas, 1PointFive — a subsidiary of Occidental Petroleum — is building STRATOS, the world's largest DAC plant under construction, which will remove 500,000 metric tons of carbon dioxide per year. Texas also leads the nation in renewable energy generation, providing low-cost, low-carbon electricity to power DAC systems. Between the Permian Basin in the west and the Gulf Coast in the east, the state offers up to 2.4 billion metric tons of storage capacity in saline formations<sup>2</sup>. With an existing network of pipelines connecting industrial hubs in the region, Texas is poised to remain at the forefront of the DAC and storage industry for decades to come.

Texas also holds promise for carbon removal pathways that leverage biomass and agriculture. The West and South Central regions could remove 170 million metric tons of carbon dioxide annually by 2050 — the largest biomass

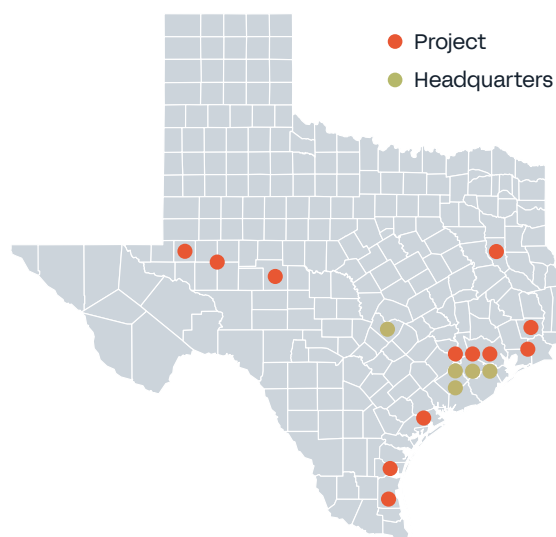
carbon removal potential in the country<sup>3</sup>. Texas's 126 million acres of farmland present opportunities to scale enhanced rock weathering, a method that accelerates natural carbon-storing reactions by spreading crushed rock on fields, offering farmers new revenue streams and helping to manage soil pH.

## How It Benefits Texas

Research shows that expanding carbon removal in Texas would drive economic growth, strengthen America's energy leadership, and create high-paying, in-demand jobs across top sectors like construction and heavy industry, especially in communities that have long supported the nation's energy economy. By 2050, DAC investment and operations could support over 420,000 jobs annually, aligned with the skills of Texas's oil and gas workforce<sup>4</sup>. DAC storage projects could generate \$5 billion annually<sup>5</sup> while increasing tax revenues state-wide<sup>6</sup>.

Texas can use carbon removal to advance the state's 2050 net-zero emissions target while driving economic growth. Public support is strong: 78% of Texans favor building carbon removal projects in the state, with nearly half calling for community input and local benefits like jobs to be prioritized as projects move forward<sup>7</sup>.

## Carbon Removal Companies In Texas



#### CRA MEMBER COMPANIES:



#### WHAT THEY'RE WORKING ON:

- **Austin:** Climeworks, a leading Swiss DAC company, established its U.S. headquarters in 2024 to anchor its growing national presence.
- **Houston:** Vaulted Deep uses deep well injection to turn excess organic waste into permanent carbon removal.

## Key Players & Facts

#### SOUTH TEXAS DAC HUB

The U.S. Department of Energy (DOE) selected Texas to receive \$500 million to explore a Regional DAC Hub at King Ranch in Kleberg County. Led by 1PointFive and using Carbon Engineering's technology, the project could eventually remove emissions equal to the annual electricity use of nearly six million homes<sup>8</sup>. The region could receive an additional \$150 million from DOE to expand South Texas's regional carbon network.

#### CARBONSAFE PROJECTS

DOE's CarbonSAFE Phase III awarded more than \$49 million to two projects focused on developing large-scale carbon storage facilities in Chambers, Liberty, Jefferson, Harris, and Galveston counties. Another \$38 million was awarded to support the safe conversion of a Permian Basin oil and gas field to a dedicated storage site.

#### CARBON REMOVAL BUYERS AND FUNDERS

Major corporations are helping scale Texas's carbon removal industry. Frontier — a \$1 billion advance market commitment backed by Stripe, Shopify, and Alphabet — agreed to

purchase over \$58 million from Vaulted Deep over 3 years<sup>9</sup>. Microsoft and Amazon agreed to purchase a combined 750,000 metric tons from 1PointFive's STRATOS.

## Texas Carbon Removal Policy Landscape

#### State Carbon Removal Policy Work: Class VI Primacy and More

Since 2009, Texas has passed laws to encourage and regulate carbon capture and storage. H.B. 1284 gave the Railroad Commission (RRC) sole jurisdiction over carbon storage wells and directed it to seek Class VI primacy from the EPA. The RCC has since signed a Memorandum of Agreement with the EPA and is waiting for the public comment period and final ruling from the EPA. Primacy would allow Texas to expedite well permits. Additional policy proposals would clarify pore space ownership and limit liability for companies to create a more favorable legal environment for deployment.

#### Federal Carbon Removal Policy Work

Texas is poised to benefit greatly from the 45Q tax credit, with 693 eligible facilities<sup>10</sup>. Rep. Fletcher co-led the RECOUPS Act (H.R. 7896), which added a direct pay option to 45Q once passed in the 2022 Inflation Reduction Act. Sen. Cornyn passed the LEADING Act (S. 1685), creating a DOE program to advance carbon capture for natural gas. In 2019, Rep. Veasey introduced the Fossil Energy Research and Development Act (H.R. 3607), later incorporated into the Energy Act of 2020, which refocused DOE's Fossil Energy office on carbon management and removal. Rep. Gonzalez backed the Infrastructure Investment and Jobs Act, funding DAC hubs. Alongside Reps. Veasey and Fletcher, Reps. Crenshaw and Pfluger have championed carbon capture technologies and pushed for EPA approval of Texas's Class VI primacy application.

1. Rhodium Group, 2023  
2. Regional Carbon Capture Deployment Initiative  
3. Roads to Removal, 2023  
4. Rhodium Group, 2023  
5. Regional Carbon Capture Deployment Initiative

6. Texas Association of Business, 2024  
7. Data for Progress  
8. 1PointFive  
9. Canary Media  
10. Great Plains Institute



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