



DATE: January 26, 2023 (Version 2)

Carbon Management Bill Package FAQs

Frequently Asked Questions

What does it mean to manage carbon?

Carbon management focuses on capturing, transporting, and/or storing carbon dioxide that would otherwise contribute to greenhouse gas emissions. Through a variety of current and evolving technologies, the management of carbon in Alaska can include capturing carbon during industrial processes, injecting carbon deep underground into geologic formations, using carbon to increase oil and gas well output, selling carbon "offsets" based on deferring harvest of trees or through new forest growth, or developing commercial kelp farms on submerged lands.

What is needed for Alaska to monetize carbon?

The State of Alaska needs clear statutory and regulatory structures to best capitalize on the carbon markets, so Governor Mike Dunleavy will be introducing a package of carbon management legislation in the early days of the upcoming session to address this need. Above all, Alaska's statutory and regulatory structure must be flexible to allow for maximum returns from this emerging market.

Is this happening today?

Yes, projects around the world are looking at managing and sequestering carbon in all of these ways, and markets, incentives, regulatory requirements, and technology are all driving growth in carbon management. A number of these projects are already in operation, and many more are under development.

A number of Alaska Native corporations have been capitalizing on these markets for years since qualifying for California's carbon cap-and-trade program. As of 2019, the carbon offsets registered in Alaska were [worth \\$370 million](#) and were the biggest forestry participants in the California system (as reported publicly).

What kinds of carbon sequestration is the State of Alaska is exploring?

The State is proposing legislation for maximum flexibility to participate in this evolving industry. Under this legislation, the Department of Natural Resources would be authorized to promote and provide two main categories of carbon management:

1. Geologic sequestration – where concentrated carbon is captured, compressed, injected and stored in deep underground geologic formations. Also typically referred to as carbon capture, utilization, and storage or "CCUS". Same note on AOGCC
2. Biologic sequestration – where the accumulation of carbon in trees, soils, kelps, or other natural processes can be promoted or encouraged. These projects could occur both on state lands and potentially in state waters off of our coasts.

What are carbon offsets?

Carbon offsets are a reduction in GHG emissions or an increase in carbon storage that is used to compensate for emissions that occur elsewhere. An accrediting body like industry-leading [The Gold Standard](#) sets and verifies carbon standards for voluntary offsets and sequestration, so the carbon offsets may be sold on the commercial market. The [Climate Action Reserve](#) and American [Climate Registry](#) maintain listings of projects around the world that are managed to generate carbon offsets and credits.

What is CCUS? Carbon Capture, Utilization, and Storage (CCUS) projects capture CO₂ from point sources, industrial processes, or the atmosphere and inject the CO₂ into underground geologic formations to sequester the carbon rather than emit it into the atmosphere. CO₂ may be injected for sequestration or used for beneficial use such as enhanced oil recovery (EOR).

Why Should Alaska Address CCUS Now? Industry interest in CCUS projects is driven by government financing and incentives. Alaska's participation could bring in new industrial activity to the State, provide new revenues through leasing State lands for CCUS, and raise the positive profile of existing oil and gas operations. CO₂ injection for EOR may increase oil production, potentially increasing State oil revenues and industrial development.

Can We Do CCUS in Alaska? Yes. Alaska has important competitive advantages for the development of a CCUS industry. The State owns the pore space used for storage under State lands, which allows leasing of large contiguous storage sites. Large storage resources have been identified in both the Cook Inlet & North Slope, co-located with existing infrastructure, making development easier.

What Do We Need to Do? Alaska needs enabling legislation to authorize CCUS leasing, assume CO₂ injection well oversight authority from the Federal government, and set ground rules for CCUS projects. Omnibus legislation also signals to industry and the Department of Energy that Alaska is serious about supporting its development.

How Did We Propose to Do This? Fifteen other states have passed CCUS enabling legislation. The language for these bills was largely drawn on recommendations by the Interstate Oil and Gas Conservation Commission to address the primary three components: access to the pore space, primacy for Class VI injection wells, and long-term liability. Analyzing the contexts of these bills, the CCUS team pulled out the best practices and policy choices and workshopped these through stakeholders at a University of Alaska sponsored one-day policy symposium to produce a whitepaper on recommendations. Together with the Department of Law, these recommendations were vetted for constitutionality and developed into a bill that was modeled on existing statewide programs wherever possible.

How much geologic carbon sequestration is available in Alaska?

The Cook Inlet basin represents the largest carbon sequestration resource on the U.S. West Coast with an estimated 43 gigatons of storage potential in deep unmineable coal seams, with even more in saline aquifers and depleted reservoirs that would likely give Cook Inlet alone the ability to store 50 gigatons. For perspective, that represents 50 years of carbon emissions from the entire nation of Japan. With the potential for sequestration on the North Slope, and in other areas of the state, Alaska has vast amounts of basins deep underground that may be appropriate for sequestering carbon.