Policy Support to Assist with Alaska Specific CCS Projects

Alaska Regional Decarbonization Workshop



Presented by Haley Paine, Deputy Director Division of Oil & Gas Alaska Department of Natural Resources May 8, 2024







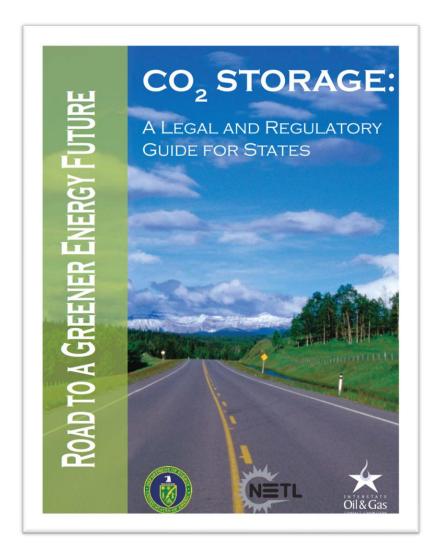


Model Framework



Guiding Principles:

- **1. Seamless** "cradle to grave"
- 2. Simple avoid overregulation for the exotic need
- 3. Flexible and Responsive "One size will not fit all"
- 4. Doable time sensitive
- 5. Positive Public Presentation "Nothing will be achieved by regarding CO₂ geologic storage as a regulatory protection solution to a waste problem."



Resource Management Framework



IOGCC Resource Management Framework

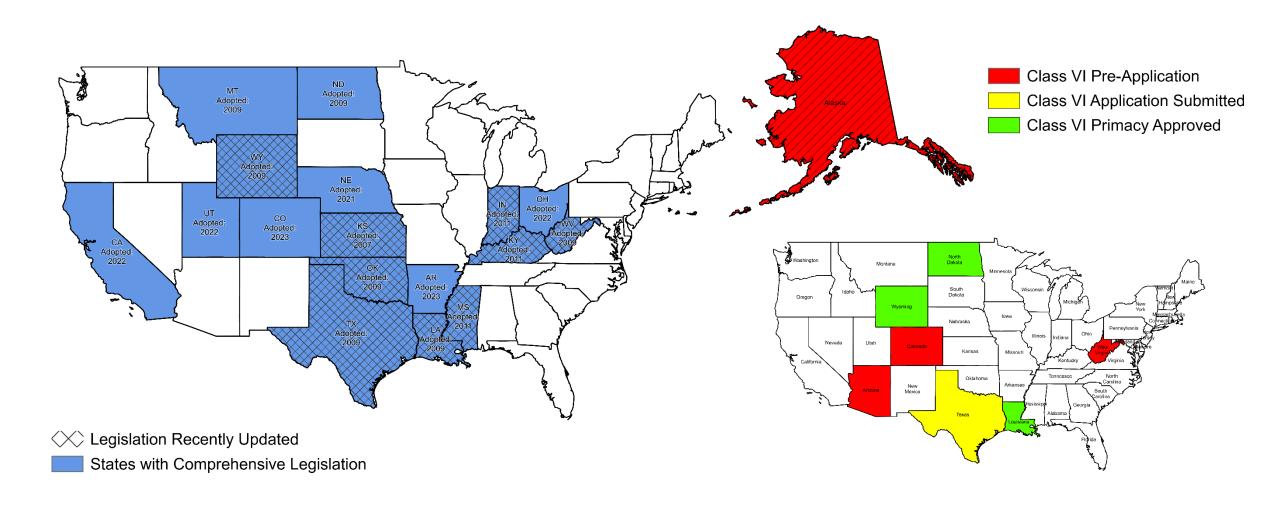
- 1. It is in the public interest to promote geologic storage of CO2
- 2. Pore space is a finite resource that needs to be managed and regulated as such

Article VIII Alaska Constitution

 It is the policy of the State to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest.

CCUS LEGISLATION





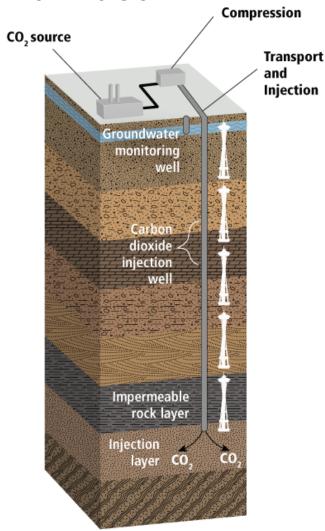
Two Core Purposes of HB 50





Make Alaska's subsurface resources available for maximum use

- Enables the Department of Natural Resources (DNR) to lease state lands for geologic storage of carbon dioxide and issue right-of-way leases for carbon dioxide transportation pipelines
- Empowers the Alaska Oil and Gas Conservation
 Commission (AOGCC) to regulate the geologic storage of
 carbon dioxide on all lands in the state, including
 protection of correlative rights



AGENCY RESPONSIBILITIES IN HB 50





AOGCC – Subsurface Regulator

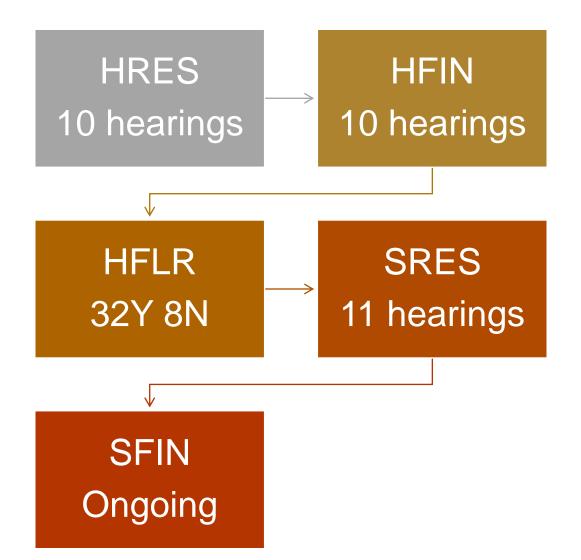
- Issue storage facility permits
 - Safeguard human health and the environment from underground injection
 - Protect other mineral interests and property rights
 - Amalgamate pore space
- Provide public notice and hearings
- Administer penalty provisions
- Determine storage capacity and volumes
- Utilize carbon storage facility administration fund
- Review and issue site completion certifications

DNR – Landowner

- Issue carbon storage exploration licenses & leases and manage:
 - Commercial payments
 - Work commitments and annual reporting
 - Transition and multiple-use management of operations
- Administer carbon storage leasing consistent with existing oil & gas framework
- Regulate CO₂ pipeline leasing
- Administer carbon storage closure trust funds
- Perform long term monitoring and maintenance

LEGISLATION STATUS





Beyond Model Framework

- Alaska specific safety
- Project economics
 - 45Q tax credits
 - Value chain
 - Business models
 - Fair market value
- Public perception

PEER STATE LEASING TERMS



State Body	Statutes & Regulations	Leasing Mechanism	Number of Leases	Commercial Terms	Public Process
Wyoming Office of State Lands and Investments	 No specific carbon storage authorities, held under general land leasing W.S. 36-2-107 & W.S. 36- 5-114 through 117 Chapter 5 	 Special Use Lease – may receive application at any time or issue Request for Proposals 	2 issued2 under negotiation	 No minimums in statute Tiered bonus bid payments \$15 – \$75 per acre Injection charge \$1 per ton Consumer Price Index escalator 	 Applicant must obtain consent of existing surface grazing lessees Director of State Lands brings lease before the Board of Land Commissioners for approval at public meeting
Texas General Land Office	 Texas Health and Safety Code 382 Subchapter K § 382.501 – 382.510 	 Carbon Storage Lease – Requests for Proposals (RFP) on tracts designated in <u>Gulf of Mexico CO2 Site</u> <u>Characterization</u> 	1 issued6 under negotiation	 RFP minimums \$50 per acre bonus bid Rent: \$50 per acre Injection charge: \$4 per acre Portion of additional value 	 General Land Office reviews solicitation responses, negotiates with applicants, and makes recommendation of final lease for approval to School Land Board All offshore tracts
Louisiana Office of Mineral Resources	LA Rev Stat § 30:209(e)	 Operating Agreement – may receive application at any time. Awarded primacy over Class VI wells 	• 6 issued	 No minimums in statute Bonus bids: \$0 – \$425 per acre Rent: \$0-\$60 per acre Injection charge: \$1.50 – \$7.50 45Q escalators 	Louisiana State Mineral and Energy Board holds a public hearing to review and approve lease negotiated by Office of Mineral Resources

ALASKA'S CCUS OPPORTUNITIES





FACT SHEET: Japan Official Visit with State Dinner to the United States

"The United States commits to supporting collaboration with Japanese counterparts to evaluate the potential for cross-border carbon dioxide transport and storage hubs between Alaska and Japan." Japan Official Visit to State Dinner – White House April 10, 2024

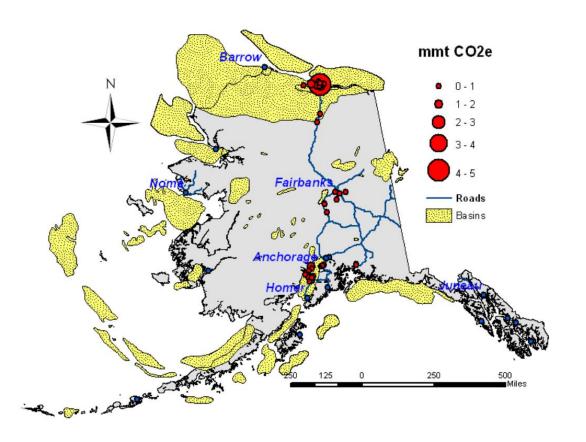
THE WALL STREET JOURNAL.

"HD Hyundai Heavy Industries, the world's largest shipyard, and Greece-based shipowner Capital Product Partners have designed a specialized vessel to carry liquefied CO₂. They envision such ships transporting their cargo to depleted offshore oil-and-gas wells, where it would be pumped in and entombed for permanent storage. Capital Product Partners signed a deal for four such ships, to be delivered in 2025 and 2026, that together cost more than \$300 million." A New Solution for CO2 Emissions: Bury Them at Sea – January 31, 2024 Wall Street Journal



POLICY CONSIDERATIONS FOR ALASKA





Need for affordable and reliable power

Opportunity for international importation

Co-location with oil and gas operations

Unique pore space ownership

Cook Inlet considerations

THANK YOU





Photo: Harvestone's Blue Flint Ethanol Plant, North Dakota – Alaska CCUS Summit December 4, 2023



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