

Carbon Management Legislation and Opportunities Wasilla Chamber of Commerce



Presented by John Boyle, Commissioner-designee
Alaska Department of Natural Resources
April 20, 2023



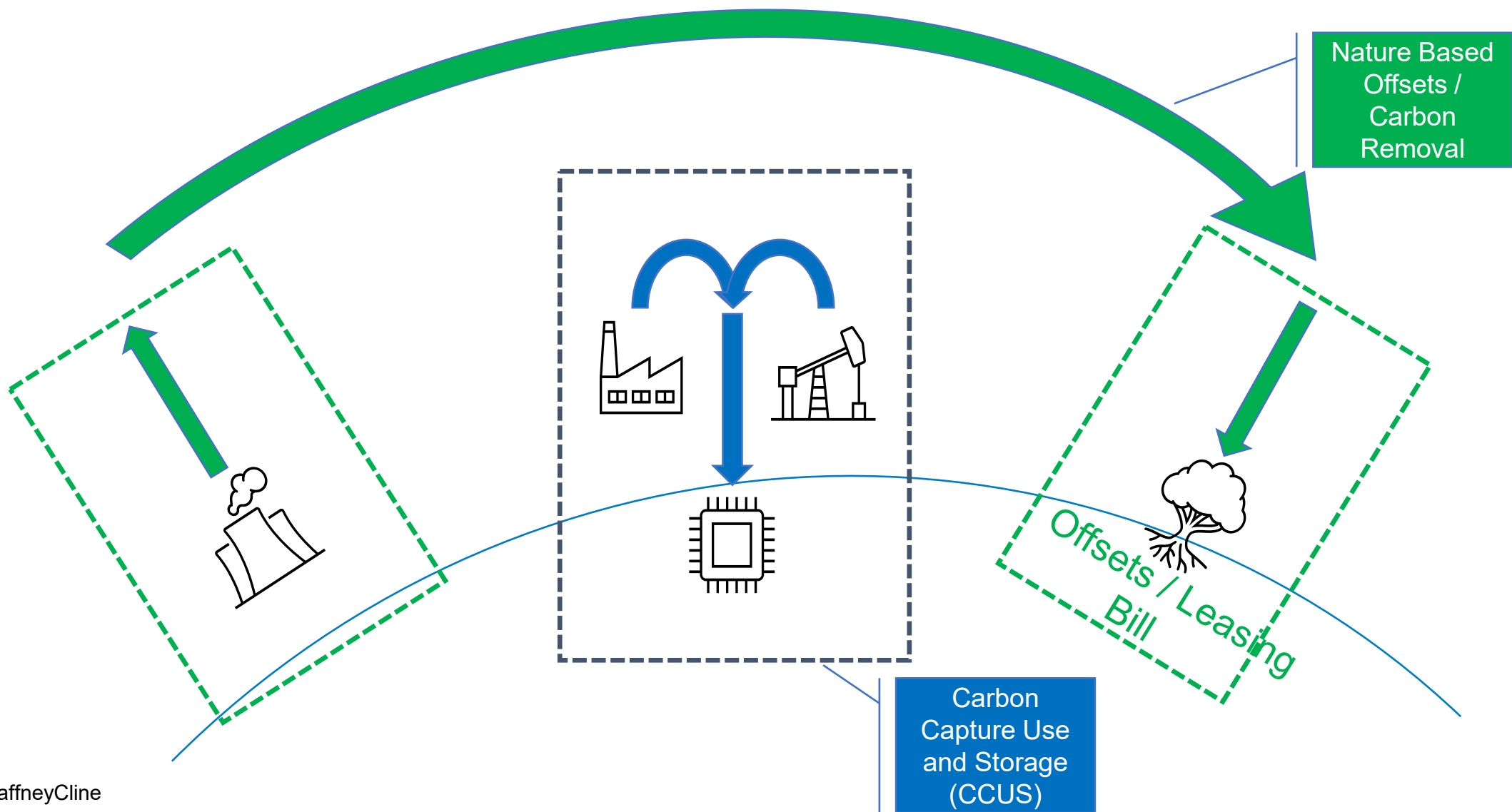


- **What Carbon Management is**
- **What Carbon Management isn't**
- **Carbon Offsets**
- **Carbon Capture, Utilization, and Storage**
- **Why is Carbon Management good for Alaska?**



What is Carbon Management?

Carbon Management - simplified



What Governor Dunleavy's Carbon Management legislation is not



- **New taxes on industry or Alaskans**
- **Emissions limits**
- **A “cap and trade” system**
- **Locking up land**

ALASKA DEPARTMENT OF NATURAL RESOURCES
Carbon Offset Opportunity Evaluation
August 2022 Report

1. Haines/SE Alaska

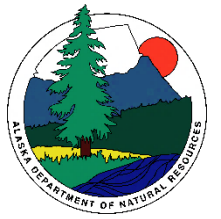
The Haines/SE State Forests contain some of the highest per-acre carbon levels in this analysis at 141 standing live trees per acre (t/ac). These lands are highly accessible, and operability is evidenced by the many past and planned harvests. Due to their size and proximity, combining these two management areas into a single carbon project is recommended. The Haines State Forest is used for multiple purposes, so it is recommended to constrain the project to those acres deemed accessible and operable in the Inventory Report (those acres managed by Haines State Forest). These areas also appear to be good candidates for near-term pre-commercial thinning, which may be advantageous when developing an aggressive yet justifiable baseline harvesting scenario. Note that some of these “inoperable” areas are included in the Haines/SE Project Map (Figure 3) as shapefiles were not available for all units, but the acres were constrained in the analysis.

Figure 3: Map of Haines/SE Carbon Project Area

Source: Anew, 2022

According to management plans/inventory reports for these two areas, they could combine for approximately 76,900 acres of forested project area, with the potential to produce 1,384,000

anew
anewclimate.com | 12



Carbon Offset Program (SB 48 / HB 49)

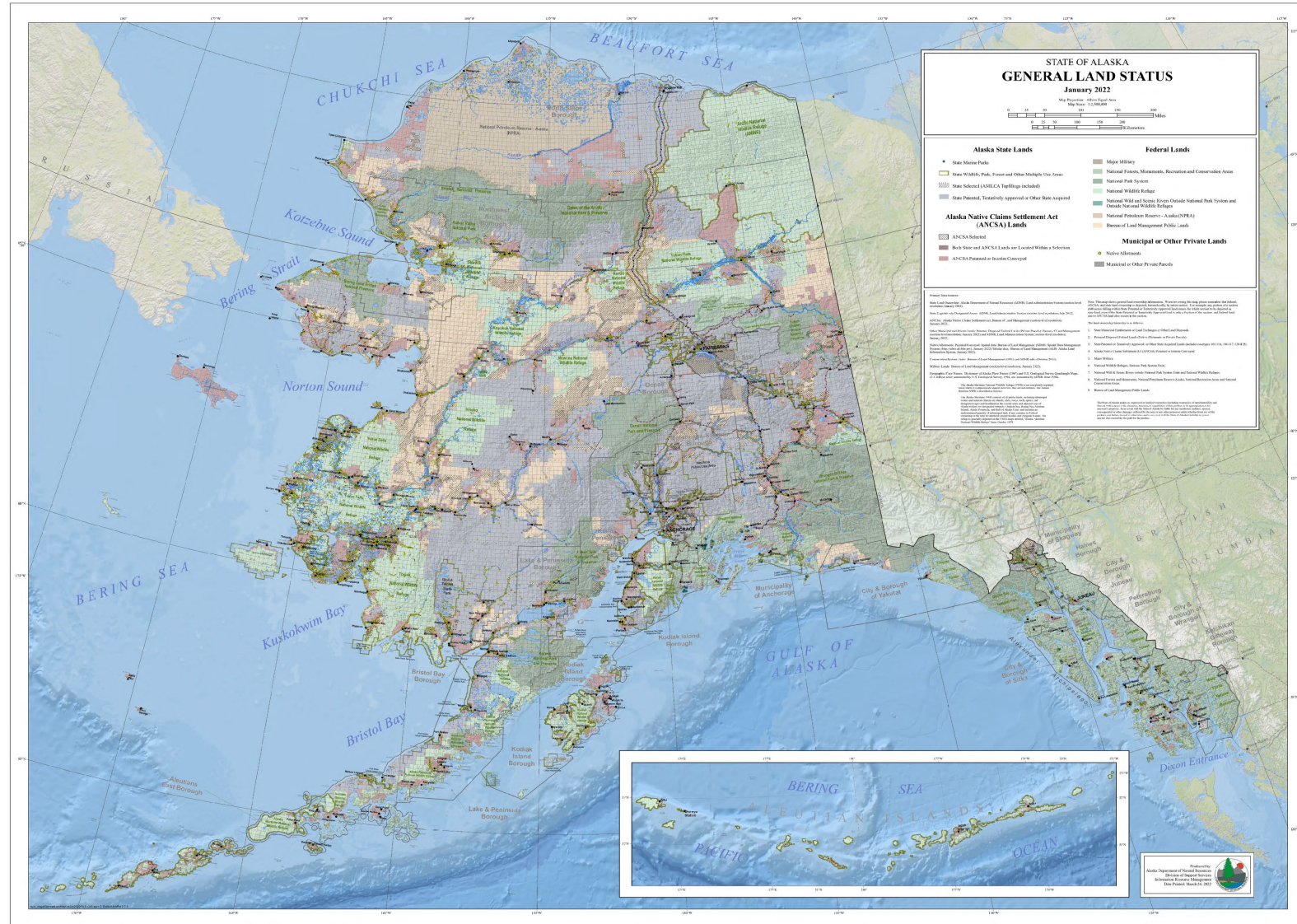
Carbon offsets - opportunities



- Alaska has the resources
 - Forest carbon potential:
 - 100 million acres of uplands
 - Tens of millions of acres of forested State lands
 - Kelp potential:
 - 60 million acres of tide and submerged lands
- New source of State revenue
- Constitutional responsibility for maximum use



State-owned land





Carbon markets - growth

“The voluntary carbon market: 2022 insights and trends” report by Shell and BGC

2021

Compliance market soared to



The voluntary market reached



~\$850bn in value

~\$2bn in value

2.5x value of 2020

4x value of 2020

~15 GtCO₂ transacted volume

~500 MtCO₂ transacted volume

2022

was a record-breaking year for both compliance and voluntary carbon markets

During which, approximately

166Mt

of carbon emissions were covered by retirements

Voluntary markets expected to be

5x

bigger by 2030

Reaching a market size of

\$10-40 bn in value and **0.5-1.5 GtCO₂** in scale⁴

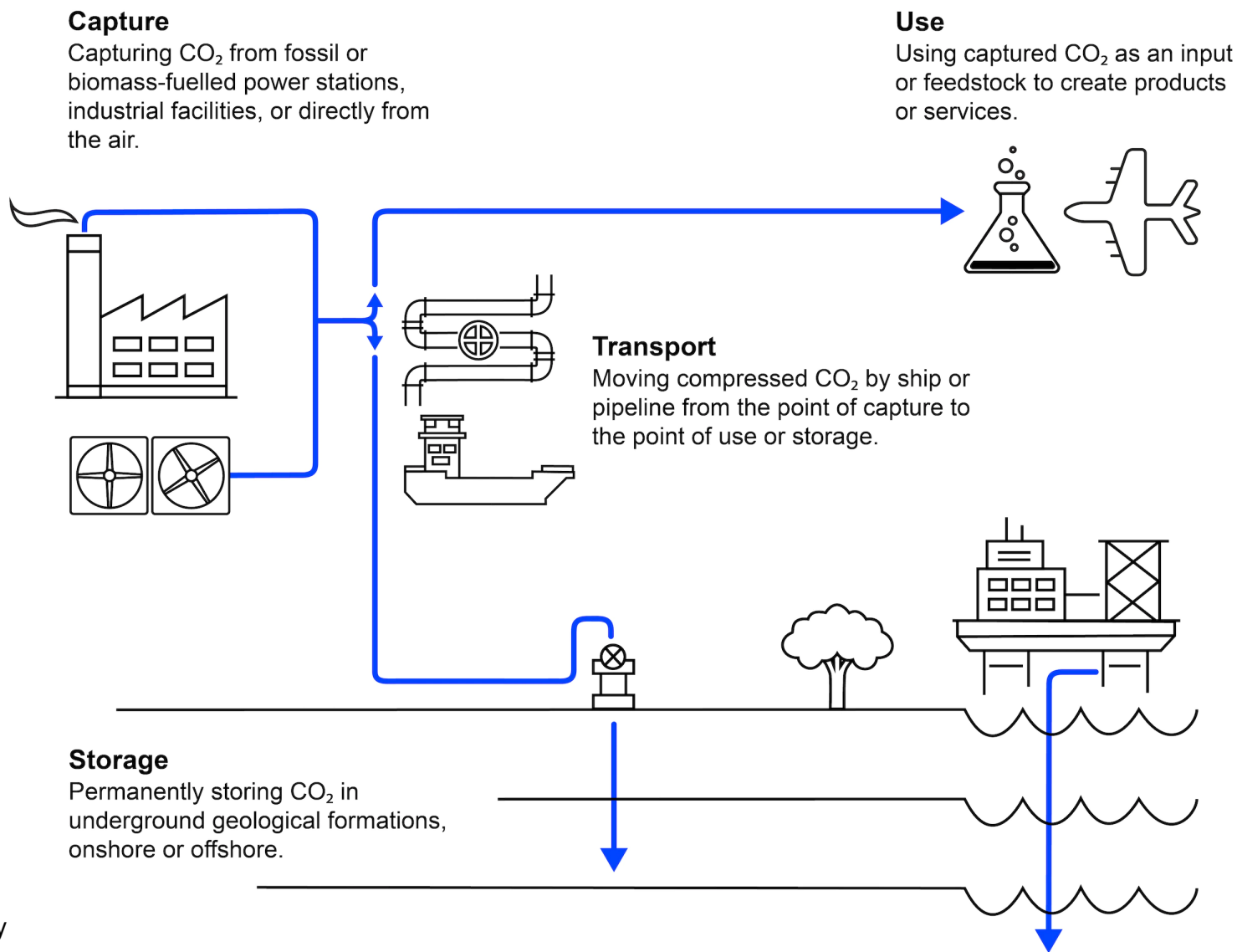
That is comparable to the emissions of the aviation industry, which reached ~1 GtCO₂ in 2019⁵.



Carbon Storage - CCUS (SB 49 / HB 50)



Carbon capture, utilization, and storage



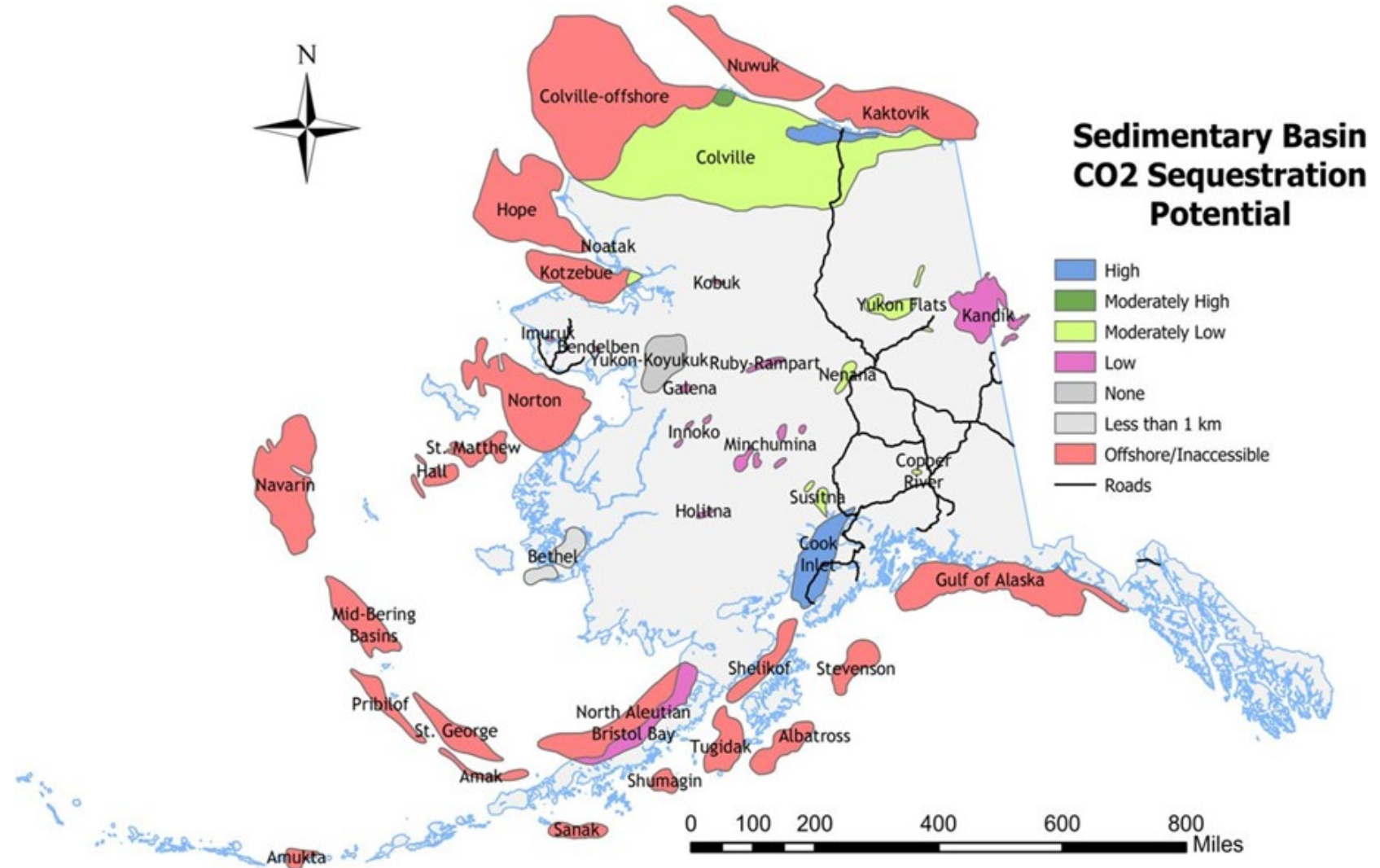


CCUS – where?

Geologic Storage Potential: 1600+ Gt

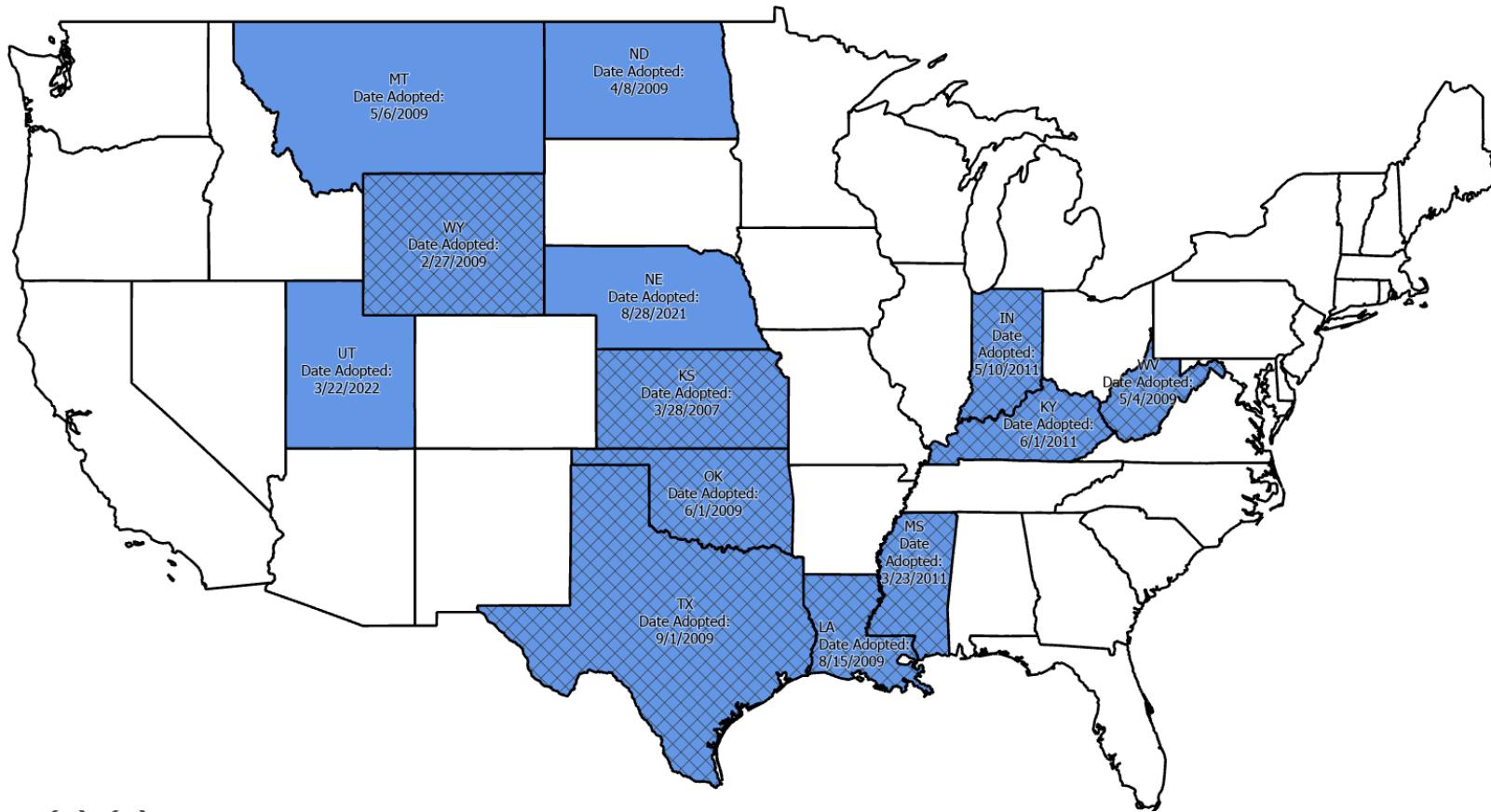
- 2021 Global CO₂ emissions 36.3Gt
- Storage Targets: Depleted Oil & Gas Fields, Saline Aquifers, Unminable Coal Seams


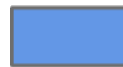
12.4 billions barrels through CO₂ EOR

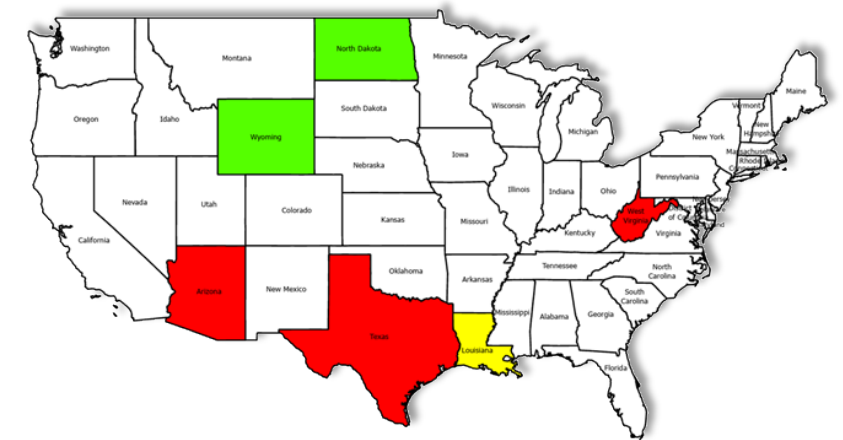







CCUS – where else?



-  Legislation Recently Updated
-  States with Comprehensive Legislation



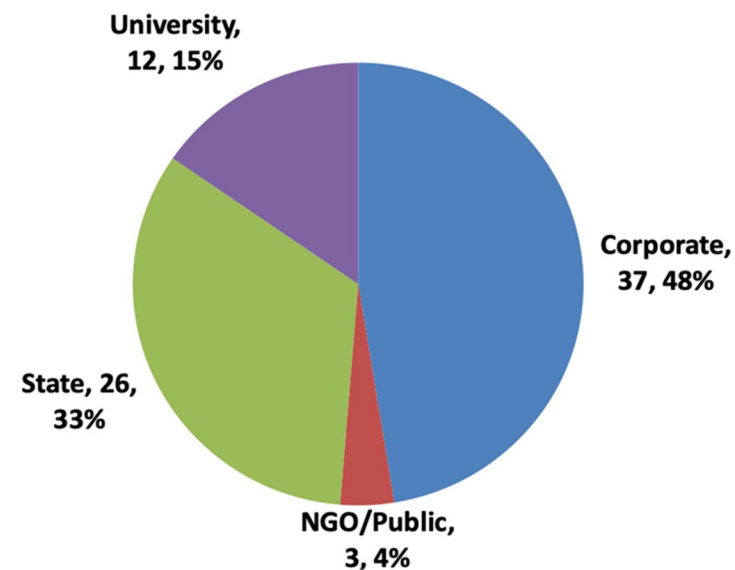
-  Class VI Primacy Approved
-  Class VI Pending Application
-  Class VI Pre-Application



Statewide CCUS workgroup

Workgroup committees

1. Regulatory framework
2. Government engagement and funding opportunities
3. CCUS Roadmap
4. Public outreach and education





Why are the Carbon Management initiatives good for Alaska?

Net zero greenhouse gas (GHG) initiatives of North Slope companies



ConocoPhillips Emissions Reductions Targets and Performance

- Reduce methane intensity by 10% and routine flaring to zero by 2025.
- Reduce Scope 1 and Scope 2 Greenhouse Gas (GHG) intensity by 40–50% (gross operated and net equity) by 2030
- Net zero Scope 1 and Scope 2 emissions by 2050

[Emissions Reduction Targets | ConocoPhillips](#)

ENI's Strategy Against Climate Change

- 35% reduction in net Scope 1, 2, and 3 emissions by 2030
- 55% reduction in net Scope 1, 2, and 3 emissions by 2035
- 80% reduction in net Scope 1, 2, and 3 emissions by 2040
- Net zero Scope 1, 2, and 3 emissions by 2050

[Net Zero al 2050 | Eni](#)

Exxon 2030 Greenhouse Gas (GHG) Emission Reduction Plans:

(Relative to 2016 level and apply to Scope 1 and Scope 2 GHG emissions from operated assets)

- 20–30% reduction in corporate-wide GHG intensity
- 40–50% reduction in upstream GHG intensity
- 70–80% reduction in corporate-wide methane intensity
- 60–70% reduction in corporate-wide flaring intensity

[Advancing climate solutions | ExxonMobil](#)

Hilcorp

"We have to operate to the same high standards as everyone else. We may be private, but we have capital providers, we have partners, we have lots of other people involved in business with us. They're feeling those pressures (i.e. ESG, emissions reductions), and we have to be responsive to those as well." — Greg Lalicker, Hilcorp CEO.

[How America's Biggest Privately Owned Oil Company Takes A Divergent Approach To The Energy Transition \(forbes.com\)](#)

Repsol Path Towards Decarbonization

- 55% reduction in scope 1 and scope 2 emissions in operated assets by 2025
- 30% reduction in scope 1, 2, and 3 net emissions by 2030
- Net zero by 2050

[Net zero emissions by 2050 commitment | Repsol](#)

Santos Path to Net Zero

- 26–30% reduction in scope 1 and scope 2 absolute emissions (from 2020 baseline) by 2030
- Actively work with customers to reduce scope 1 and scope 2 emissions by > 1 million tons of carbon dioxide per year by 2030
- Scope 1 and scope 2 absolute emissions at net zero by 2040.
- **Santos has committed to net-zero emissions (scope 1 and scope 2) for the Pikka Project**

[Santos to be net-zero emissions by 2040 | Santos](#)

[Santos Announces Pikka FID | Santos](#)



Questions?

Thank you!



John Boyle DNR Commissioner-designee

