On behalf of our millions of members and supporters across the United States, Canada, and globally, I and we are writing to express deep concerns about our governments' support for carbon capture and storage (CCS) technologies. Despite occupying center stage in the "net zero" climate plans trumpeted by the United States, Canada, and other countries at the Leaders' Summit on Climate, in government spending programs and in bills pending before Congress, carbon capture is not a climate solution.

To the contrary, investing in carbon capture delays the needed transition away from fossil fuels and other combustible energy sources, and poses significant new environmental, health, and safety risks, particularly to Black, Brown, and Indigenous communities already overburdened by industrial pollution, dispossession, and the impacts of climate change. Pledges to achieve "net zero" emissions through the use of CCS technologies rely on the flawed premise that we can continue burning fuels indefinitely by capturing some of the carbon emissions and offsetting the rest. As explained below, CCS does not halt the core drivers of the climate crisis — fossil fuel production and consumption — or meaningfully reduce greenhouse gas emissions. Instead, it prolongs reliance on fossil fuels and, perversely, increases oil production through "enhanced oil recovery." CCS is neither economically sound nor feasible at scale. And most alarmingly, it threatens the communities affected by carbon capture infrastructure and the underlying sources of emissions to which the technology is attached.

Simply put, technological carbon capture is a dangerous distraction. We don't need to fix fossil fuels; we need to ditch them. To avoid catastrophic climate change, we need to deploy resources to replace the fossil fuel industry, not prop it up. Directing government support to CCS diverts resources from the most sustainable and job-creating solutions to the climate crisis: phasing out oil, gas, and coal; investing in energy efficiency and non-combustion renewable energy sources; and nurturing forests, wetlands, and other natural landscapes that function as carbon sinks.

The buildout of CCS infrastructure presents serious health, safety, and environmental risks, particularly for marginalized communities, already overburdened by industrial hazards, that are being targeted for CCS. These dangers are systematically overlooked in discussions on carbon capture. Transporting and storing carbon dioxide (CO2) involves a massive network of perilous pipelines connected to underground injection sites, each with their own set of dangers. Pipelines can leak or 2 rupture; compressed CO2 is highly hazardous upon release and can result in the asphyxiation of humans and animals. Underground storage poses additional risks, such as potential leakage, contamination of drinking water, and stimulation of seismic activity. These hazards apply to all the current and proposed variants utilizing CCS technologies, including carbon capture utilization and storage (CCUS), fossil hydrogen with CCS ("blue" or decarbonized hydrogen), bioenergy with CCS (BECCS), coal-bioenergy systems with CCS (CBECCS), waste-to-energy with CCS (WtoE-CCS), and direct air capture (DAC), which depends on CCS or CCUS to manage the captured carbon.

CCS is not consistent with the principles of environmental justice. As the U.S. White House Environmental Justice Advisory Council's Interim Final Recommendations made clear, CCS will not benefit communities. Yet pollution-burdened communities are being targeted for CCS, which brings new risks and threats, ironically in the name of environmental justice. The U.S. Gulf Coast, including the Louisiana petrochemical corridor known as "Cancer Alley," northern plains, and California Central Valley, as well as the provinces of Alberta and Saskatchewan in Canada, are among those areas being targeted for CCS development. Such a buildout would impose new pollution and safety hazards on Black, Brown, and Indigenous communities already suffering the disproportionate and deadly impacts of environmental racism.

Rather than replacing fossil fuels, carbon capture technology prolongs our dependence on them. By design, carbon capture is parasitic on the underlying sources of emissions to which it is attached. Putting carbon capture technology on greenhouse-gas emitting facilities enables those facilities to continue operating, effectively providing those emitters with a license to pollute indefinitely. In practice, CCS at best captures only a fraction of carbon emissions and fails to address other harmful pollution from fuel combustion, such as fine particulate matter (PM2.5), or SOOT, as well as other contaminants from the underlying activities to which CCS was applied. The additional energy required to power the carbon capture process generates even more emissions if supplied by fossil fuels.

Worse still, the majority of captured carbon is used to pump more oil out of the ground, in a practice known as "enhanced oil recovery" (EOR). Almost all existing CCS projects are tied to EOR, whereby CO2 is injected into depleted underground oil reservoirs to boost oil production. EOR is currently the primary market driver for captured CO2; no other markets exist at the scale proposed by many of the technology's proponents. EOR is disastrous for the climate, as it results in more oil extraction and more carbon emissions when that oil is burned. And yet, the public in the United States is currently paying for EOR through the Section 45Q tax credit, of which oil companies are the biggest beneficiaries. In Canada and the U.S., the oil and gas industry is lobbying for a similar tax break.

There is no economic rationale for the massive deployment of CCS. Attaching carbon capture technology to an emitting source makes operating that source both more expensive and more energy intensive. As costs of clean energy like solar and wind plummet, fossil fuel and biomass power plants are becoming less competitive and adding carbon capture just makes them more costly. Even in heavy-emitting industrial sectors such as plastic or petrochemical manufacturing, applying CCS at scale makes little climate or economic sense. The push to deploy CCS in the industrial sector ignores the most important alternative methods for curtailing the vast majority of the sector's emissions, which are available and scalable: replacing fossil fuels with non-carbon emitting renewable energy to supply power and heat, adapting production processes and methods, reducing and ultimately ending production of wasteful and unsustainable materials like disposable PLASTICS (circulating toxically in the blood in ALL warm-blooded

organics!), and reusing materials in manufacturing to reduce the production of virgin material. Investing in CCS infrastructure add-ons to existing facilities locks those facilities and their current energy technologies in place and diverts resources from non-polluting alternatives that are compatible with a safe climate future.

CCS does not, and cannot, remove significant CO2 from the atmosphere. At best, it prevents some carbon emissions from entering the atmosphere. But even there it falls short: CCS projects implemented to date have systematically overpromised and under-delivered on emissions reductions. Advertisements from some fossil fuel companies that compare CCS to a living plant are deeply misleading. Industry claims that BECCS is a negative emissions technology are based on the flawed and scientifically discredited premise that burning biomass is carbon neutral. In fact, burning wood for energy can increase greenhouse gas impacts for decades to centuries compared to fossil fuels.

The promise of "permanent" storage or sequestration of captured carbon is not backed by science or existing regulations. Current U.S. federal regulations, for example, only require storage of CO2 for 50 years to qualify for subsidies. But CO2 lingers in the atmosphere and environment on a geological time scale — for many hundreds or even thousands of years. Considering CO2 injected underground or used in the manufacture of plastics, cement, or other goods to be safely contained in perpetuity is irresponsible at best, as it merely kicks the can down a very short road, to be a burden to the next generation.

Deploying CCS at any nothing but climate-relevant scale, in the short timeframe we have to avert climate catastrophe, without posing substantial risks to communities on the frontlines of the buildout, is a "pipe dream." Despite the billions of taxpayer dollars spent by governments in both the United States and Canada on CCS over the last ten-plus years, the technology has not made a dent in CO2 emissions. Continuing to sink federal funds into a technological carbon capture scheme is choosing to chase a fossil-fueled fantasy rather than deal with the root of the problem. Therefore, we, the undersigned organizations, urge you to:

1.Ensure the environmental justice and human rights impacts and significant safety risks of CCS are front and center in any hearings and policy discussions regarding the technology. Representatives from communities often disproportionately harmed by systemic environmental racism, including Black, Brown and Indigenous communities, and the environmental justice organizations accountable to them, should be invited to testify in all congressional or parliamentary, hearings and formal policy discussions on CCS. All decisions regarding CCS policy must respect and uphold the rights of 4 Indigenous Peoples. 2. Reject proposals to provide, extend, or increase government funding and subsidies for CCS/CCUS and related infrastructure. Rather than funding CO2 pipelines and expensive retrofits to dirty power and industrial plants, public resources should be invested in sustainable infrastructure that serves people, not polluters. From replacing lead pipes to ensure safe drinking water and ensuring access to safe drinking water for all First Nations, to upgrading public transit and accelerating deployment of electric vehicles and non-polluting energy sources, to sustaining natural ecosystems and supporting communities impacted by climate change, there are many areas deserving of government investment that are a "win-win" for people and the planet. CCS is not one of them.

3. Prohibit the use of 45Q tax credits in the U.S. or other national subsidies in the U.S. or Canada for enhanced oil recovery. Federal funds deployed to address the climate crisis and accelerate the transition to a non-polluting energy future must not be used to produce more of the oil and gas that are choking our planet. Using government funds to give handouts to polluters is bad enough; doing it in the name of 'climate action' adds insult to injury.

4. Investigate how existing U.S. and Canadian subsidies for CCS technologies have been used to date and close loopholes in tax policy that allow polluters to claim the credits without demonstrating compliance with monitoring, reporting, and verification requirements. The U.S. Treasury's Inspector General for Tax Administration, for example, found that fossil fuel companies improperly claimed nearly \$900 million in tax credits under 45Q. No further support for CCS technologies should be approved at all, let alone while questions loom over the use of funds to date.

5. Reject national energy strategies that rely on or anticipate CCS. Current legislative proposals, including proposals for a national Clean Electricity Standard in the United States and Canada's hydrogen strategy, are designed to promote or accelerate the deployment of CCS. National strategies should focus on eliminating the use of fossil fuels and other combustible sources in our energy system, not simply reducing their emissions intensity.

Conclusion: Carbon capture schemes are unnecessary, ineffective, exceptionally risky, and at odds with a just energy transition and the principles of environmental justice. We ask that you reject federal funding for CCS technologies, immediately end subsidies for enhanced oil recovery, and instead prioritize investments in safe and sustainable climate solutions and equitable and just transitioning of workers and communities to a fossil-free, clean energy economy.

Signed,

John Sonin, Douglas

#### 350.org

Ben & Jerry's

- Catholic Divestment Network
- Citizens' Resistance at Fermi 2
- Coalition for a Nuclear Free Great Lakes;
- EcoHealth Network
- **Global Alliance for Incinerator Alternatives**
- GreenFaith; Marine Mammal Project
- Just Transition Alliance
- Network of Spiritual Progressives
- North American Climate, Conservation, and Environment
- Ocean Conservation Research
- Oceanic Preservation Society;
- Oil Change International;
- Reconstructionist Rabbinical Association;
- Sisters of Charity
- **Federation Social**
- **Eco Education Los Angeles**

#### Stand.earth

The Enviro Show

Waterkeeper Alliance.

Dear Representatives:

I am writing today in opposition of HB 50 (CCUS). I gave testimony last week where it was asked that I write in.

# CCUS is not economical:

In Illinois: Archer Daniels Midland, one of the world's largest agribusiness companies, spokeswoman Jackie Anderson said "The total carbon capture and storage work at ADM is valued at \$441 million, of which \$281 million came from the Department of Energy (federal tax Dollars). The project employs 11 people.."

Joining a fiat currency and **hoping** for a carbon Currency once the 45Q tax credit ends, is not economical. In-fact, costing the taxpayers \$281 Million for one attempt at carbon capture also affects the health and safety of all Alaskans.

## **CCUS is Fraudulent:**

We all know that natural resources are vital to Alaskans and as the cost of natural resources increases, it will be at the cost of the citizens health, safety, and property. Carbon Capture projects cost the citizen as the consumer, and as the tax-paying citizen. Of COURSE the corporations would like to use the 45Q tax credit while it is available, because it is an expense to the tax-payer. However, the 45Q tax credit that companies can claim is claimed by 10 main companies and is 90% fraudulent. I would ask that every representative read through the following document as it includes this brief section about the fraud:

"It is still unknown if using captured carbon oxides for EOR results in a net reduction in emissions. Recent papers suggest that most EOR projects using captured CO2 initially have a negative carbon footprint (net emissions reduction) because a high portion of the CO2 pumped underground becomes trapped. But as projects continue, increasingly less CO2 is trapped underground, and the carbon footprint becomes positive (no net emission reduction).12 This raises serious questions about the efficacy of handing out billions of dollars in 45Q credits for carbon captured and used for EOR.

Further undermining the credit's net effect on emissions is insufficient reporting on the amount of carbon being pumped underground. In April 2020, the Treasury Department's Inspector General for Tax Administration (TIGTA) found that 10 taxpayers claimed over \$1 billion in 45Q tax credits from 2010 to 2019, roughly 99 percent of total credits claimed. Of the total \$1 billion claimed, credits worth \$894 million did not comply with Environmental Protection Agency (EPA) requirements for reporting on sequestered carbon. 13 The companies had insufficiently documented whether the carbon for which they were claiming credits remained underground. The IRS has reported on their examination of 68% of these cases and has disallowed 59% of the noncompliant credits, worth approximately \$531 million. No further update has been released since April 2020"

https://www.taxpayer.net/wp-content/uploads/2023/02/Carbon-Capture-and-Sequestration-Credit-45Q-Issue-Brief Feb2023.pdf

## Alaska Deserves Better:

Alaska is an amazing and beautiful place. We participate in good practices to be great stewards of this land that we all cherish. By joining into the World Economic Forum (WEF) ESG agenda, and submitting to corporations trying to "virtue signal" at the expense of every Alaskan is unacceptable.

I have spent countless hours learning everything I can about CCUS and the "carbon market" because I have children in my life, who deserve a better, sustainable, and free future. Implementing poor policy at their expense is robbing every future Alaskan of the ability to affordable energy based in the Constitutional Republic that we all value.

I urge you to Kill this bill. Allow time for accurate fiscal notes that aren't just presented and manipulated to show numbers that will please you. The fact that there is no possible projection

of revenue, but there is speculation that it will magically start covering expenses in 2026, should cause you enough alarm to table this bill until accurate numbers can be presented.

Would you manage your own house the same way that this fiscal note is asking you to manage this state?

Sincerely,

Lydía Rose Shumaker

Lydia Rose Shumaker

Wasilla, AK

## **References:**

ADM: <u>Despite hundreds of millions in tax dollars</u>, ADM's carbon capture program still hasn't met promised goals - Investigate Midwest

TCS: <u>Hot Air and High Costs: The Carbon Capture and Sequestration 45Q Credit - Taxpayers for Common</u> <u>Sense</u>

WT: <u>Carbon sequestration tax credit is flawed climate solution, subsidizes corporate fraud - Washington</u> <u>Times</u>

Virtue Signal: "the public expression of opinions or sentiments intended to demonstrate one's good character or social conscience or the moral correctness of one's position on a particular issue"

Committee Members,

I oppose this legislation. It has been stated numerous times that the biggest incentive to this is the 45Q tax credit.

According to Taxpayers for Common Sense:

- The Treasury Department's inspector general for tax administration found that only 10 entities claimed over \$1 billion in 45Q tax credits from 2010 to 2019, that is roughly 99 percent of total credits claimed

- Out of the 12 commercial carbon capture projects in the United States as of 2020, only one project sequesters captured carbon

- No reporting has been made public on the amount of carbon being pumped into the ground. The 45Q program is in noncompliance with reporting standards

- Of the \$1 billion claimed, nearly 90% did not comply with Environmental Protection Agency reporting requirements.

- They concluded that the tax credit is "still an unproven climate solution, commercially unviable and mired in its history of tax fraud."

- \$30.6 billion is the latest estimate on this credit, and this doesn't even include the inflation reduction act expansion.

How do Alaskans benefit from creating framework to facilitate this proven fraud in our state? How does this affect asset retirement obligations? We do not need to print more money to allow for a concept with a demonstrated 90% fraud rate. If it was such a great idea it would stand on its own two feet rather than be forced through subsidy borne by the consumers.

Remove this legislation from the ledger completely.

Carbon-Capture-and-Sequestration-Credit-45Q-Issue-Brief\_Feb2023.pdf (taxpayer.net)

<u>Carbon sequestration tax credit is flawed climate solution, subsidizes corporate fraud - Washington</u> <u>Times</u>

Thank you. Kassie Andrews