CHE Collaborative for Health & Environment

Webinar Highlights

Carbon Capture & Storage: A dangerous distraction

Carbon capture and storage (CCS) is a process designed to collect carbon dioxide generated by high-emission activities, such as coal or gas power production or plastics manufacturing, and transport it for industrial use or underground storage. While CCS has gained traction as a possible climate solution, there are concerns about its effectiveness and long-term impacts.

The speakers in this CHE Alaska webinar explained how carbon capture and storage is a false climate solution that prolongs our reliance on fossil fuels and enables industry to continue polluting.

Adrienne Blatchford and **Panganga Pungowiyi** of the Indigenous Environmental Network explained how CCS continues a legacy of extractive harm in Alaska and beyond. **Marlee Goska**, attorney at the Center for Biological Diversity, explained the legal, environmental, and policy challenges of CCS implementation and how communities are organizing to stop it.

Featured Speakers: Aakaluk Adrienne Blatchford, an advocate for social and ecological justice for over 10 years through many leadership roles and titles; Marlee Goska, Alaska Staff Attorney at the Center for Biological Diversity; and Panganga Pungowiyi, an Indigenous mother from Sivungaq who has been involved in many grassroots efforts seeking justice for Indigenous Peoples, speaking July 16, 2025.

This fact sheet has been created by CHE based on information presented in a CHE Alaska webinar. This webinar was cosponsored by the Science and Environmental Health Network. Selected quotes in bold are from the webinar speaker(s). For the full set of resources provided by the webinar presenters, see the webinar page, where you'll also find associated Slides & Resources.

The Problem

Before discussing the many problems with CCS, Pungowiyi noted that many members of Indigenous communities are reluctant to get pulled into a debate on the pros and cons of CCS, because that debate often skips past the larger issues of the collective rights of

Indigenous Peoples. Before engaging on whether or not CCS is a harmful technology, it is important to understand that the CCS industry in Alaska is infringing on Indigenous sovereignty and the right to informed, free consent.

The process of carbon capture discussed in the webinar – collecting carbon from high-emission activities – is different from direct air capture, which pulls greenhouse gases directly from the atmosphere. Direct air capture was not discussed.

CCS is an energy-intensive process. It requires infrastructure such as pipelines and underground storage sites. CCS projects so far have caused *an increase in carbon emissions*.

Ninety-five percent of the captured carbon in the United States has been used for "enhanced oil recovery," which is a process where the captured CO2 is injected into nearly depleted oil and gas wells to flush out the remaining oil and gas. The incentive for this lies in carbon credits that the company receives (such as the 45Q tax credit). The injected CO2 gives the company carbon credits, allowing them to claim that they're reducing their carbon emissions even as they continue extracting fossil fuels. This leads to more, not fewer, total carbon emissions. These wells are called Class II wells. CCS is being used to make polluting energy sources, such as coal-fired power plants, appear more climate friendly.

A newer technology, developed in the last few decades, uses "Class VI" wells. For Class VI wells, the CO2 is injected underground for geological sequestration, where it will supposedly remain for thousands of years. Class VI wells deal with a much larger quantity of CO2. With more CO2 being pumped into the ground, these wells carry some increased risks.

Goska highlighted some of the public health risks from CCS, particularly for communities located near the CCS facilities and pipelines. The pipelines carry highly pressurized CO2 at very low temperatures. When CO2 comes into contact with moisture, it produces carbonic acid, which is highly corrosive. CO2 from a ruptured pipeline would expand into a ground-hugging, asphyxiating cloud of CO2. CO2 pipelines are susceptible to "zipper fractures" that can run down a significant length of pipe, releasing immense amounts of CO2. In 2020, a CO2 pipeline in Satartia, MS, ruptured. The resulting mass poisoning sent 45 people to the hospital.

Another concern is what happens to the CO2 once it's pumped underground, where there can be a strong risk of groundwater contamination. The first Class VI well in the U.S. is in Illinois. It was intended to be a model well, to demonstrate the practicality and safety of CCS. In 2024, the well had to shut down after the well corroded and CO2 leaked into an unauthorized area. If a CO2 plume reaches groundwater, it will form carbonic acid. Carbonic acid is

destructive to waterways; it acidifies water and soil, negatively impacting plant and animal life in and around watersheds.

There is also the risk that pumping so much CO2 into the ground could cause earthquakes. In addition, in Alaska there is no clear understanding of how the underground CO2 might interact with melting permafrost.

All of these threats are disproportionately imposed on communities already overburdened by industrial pollution, perpetuating environmental injustice. The infrastructure created by the resource extraction industry also brings harm to communities outside of environmental concerns. Work camps, or "man camps," are set up to create the infrastructure. When these camps are created, nearby Indigenous communities experience increased rates of physical and sexual violence, particularly against women, children, and the gender diverse. These camps have been linked to the murder and disappearance of Indigenous women.

The push for CCS is being driven by the fossil fuel industry. CCS gives these companies a social license to claim that they are helping to solve the climate crisis while continuing business-as-usual, in terms of fossil fuel extraction. CCS also provides these companies with tax credits, so that the process is being subsidized by taxpayers. With the recently passed reconciliation bill, over $50 billion dollars have been budgeted to pay for CCS. The speakers stressed that CCS is diverting funds away from true climate solutions, such as renewable energy and energy storage projects.

Goska explained that Alaska is working on an application to assume authority for Class VI wells, which is currently handled by the federal Environmental Protection Agency. This change could lead to looser regulations of Class VI wells in the state. As part of a carbon-sequestration bill, Alaska has begun setting up a legal framework to, in effect, sell the right to pump CO2 underground to private companies. One plan being pushed ahead would allow CO2 from Asia to be shipped to Alaska to be pumped into Cook Inlet oil and gas fields.

Recommendations

The speakers advocated for an Indigenous-led, just transition away from fossil fuels. Any solution needs to start with land stewardship that leads with traditional Indigenous knowledge combined with Western science.

CCS is a distraction, not a solution. Fossil fuel production and consumption is the core driver of the climate crisis. As stated by the Indigenous Environmental Network,

"Avoiding climate catastrophe requires an immediate and dramatic reduction in greenhouse gas emissions that is possible only with a significant investment of public resources in proven mitigation measures, beginning with eliminating fossil fuel use and halting deforestation."

To Find Out More

- Watch the July 16, 2025 webinar: Carbon Capture & Storage: A dangerous distraction
- Read Goska's presentation slides: Carbon Capture & Storage in Alaska
- Visit the webinar co-sponsor, the Science and Environmental Health Network

About the Speakers

Aakaluk Adrienne Blatchford is Iñupiaq and originally from Unalakleet. She currently resides in Fairbanks with her family. Adrienne has been an advocate for social and ecological justice for over 10 years through many leadership roles and titles. She has worked to promote health and wellness through the practice of traditional knowledge and cultural values. Her role as a mother sets the platform for the rest of the work she does in the community as a healer, teacher, advocate, culture bearer, and organizer.

Marlee Goska is the Alaska Staff Attorney at the Center for Biological Diversity, where she works to protect Alaska's wildlife, lands, and oceans. Prior to joining the Center, she was an attorney in the Western Environmental Law Center's wildlands and wildlife program and a subsistence law and policy fellow with the Alaska Federation of Natives. Marlee also worked on climate resilience with remote Alaska Native villages; she holds a J.D. from the University of Michigan Law School and a B.S. from the State University of New York at New Paltz.

Panganga Pungowiyi is an Indigenous mother from Sivungaq, located in the so-called Bering Strait. She has been involved in many grassroots efforts seeking justice for Indigenous Peoples, including efforts to protect lands and water from extractive industry, MMIWG, and DVSA against Indigenous Womxn. Panganga joined the Indigenous Environmental Network as the Climate Geoengineering Organizer in August 2021. Her work is focused on Climate False Solutions, specifically in dangerous and hazardous Climate Geoengineering Projects, including Carbon Dioxide Removal, Carbon Capture and Storage, Carbon Capture Use and Storage, Direct Air Capture, and Bio Energy Carbon Capture and Storage. She continues to gather information about other false solutions technologies, as the overwhelming majority are tested in Indigenous territories without Free, Prior, and Informed Consent.