

Point: Carbon Capture Is a Distraction We Cannot Afford

Thesis

Ineffective, dangerous carbon capture initiatives distract from more effective means of combatting carbon emissions and climate change.

Talking Points

- Carbon capture processes are ineffective in reducing overall emissions.
- The development and use of carbon capture infrastructure introduces health and safety risks into the surrounding communities.
- The Canadian government's support of carbon capture initiatives diverts resources from safer, less costly, and more effective means of reducing carbon emissions.

Summary

For researchers, environmental organizations, and members of the public skeptical of large-scale efforts to implement carbon capture technology in Canada, a primary concern is that carbon capture processes have little efficacy in reducing overall emissions and could ultimately harm, rather than help, vital emissions-reduction efforts. Those who make that argument call attention to data such as that presented in a 2022 report by the international human rights organization Global Witness, which focused on the oil and gas company Shell's Alberta-based Quest CCS facility and that facility's efforts to capture carbon dioxide emitted from hydrogen-production processes carried out at the company's Scotford Upgrader. As noted in the report, Global Witness found that the Quest facility produced 12.5 million tons of greenhouse gases, including carbon dioxide, between 2015 and 2019. Over the course of that period, 4.8 million tons of the greenhouse gases emitted were captured, while 7.7 million tons were not. As such, the Quest facility ultimately emitted 2.9 million more tons of greenhouse gases than it captured. The Global Witness report further noted that the facility succeeded in capturing only 39 per cent of total greenhouse gas emissions and 48 per cent of carbon emissions and thus failed to operate on the level promised by industry leaders and proponents of carbon capture, who widely claimed that such facilities could capture as much as 90 per cent of the carbon emissions produced.

Critics of carbon capture technology also argue that the building and use of the necessary infrastructure expose surrounding communities to several health and safety risks. About five hundred scientists and climate activists stressed that point in a 2022 joint letter sent to Deputy Prime Minister Chrystia Freeland, noting that "the buildout of CCUS infrastructure would require an enormous system of pipelines to transport the carbon" and that the use of such infrastructure "presents serious health, safety, and environmental risks, particularly for marginalized frontline communities, which are already overburdened by industrial hazards." The letter specifically cited the example of a 2020 incident in the United States in which a carbon dioxide pipeline ruptured and spread the gas throughout a small town, forcing more than forty people to be hospitalized. Because of such risks, the letter's authors and other critics of carbon capture argue that the Canadian government should refrain from subsidizing such projects through tax credits and should ensure that frontline communities, including Indigenous communities, be consulted on proposed pipeline projects.

In addition to making such arguments, opponents of the widespread adoption of carbon capture argue that the Canadian government's focus on and financial support of carbon capture supports continued fossil fuel use and actively diverts resources from safer, less costly, and more effective means of reducing carbon emissions, such as renewable energy sources. Speaking to John Woodside for the *National Observer* in 2022, Christina Hoicka of the University of Victoria summarized that point, explaining that investing heavily in carbon capture technology "means we have less resources and less attention to focus on technologies and innovations that will allow us to move away from fossil fuel use." Hoicka also noted that investments "prolonging fossil fuel use" facilitate the continued operation of polluting industrial facilities, a reality that she and other critics identify as counter to Canada's overall climate goals.

Ponder This

- The author has presented the fundamental positions for this perspective in the debate. Outline the strengths and weaknesses of each perspective.
- If asked to begin forming an argument for this position, what sources would you need to build your case? What fundamental information do you need? What opinion leaders in this debate would you look to in solidifying your argument?

- What are the weakest aspects of the position outlined by the author? How might those weaker arguments help you prepare a counter argument?
- What additional Talking Points could you add to support this position?

Bibliography

Hoicka, Christina E., et al. "Letter from Scientists, Academics, and Energy System Modellers: Prevent Proposed CCUS Investment Tax Credit from Becoming a Fossil Fuel Subsidy." *York University*, 19 Jan. 2022, cehoicka.lab.yorku.ca/files/2022/01/Letter-from-Academics-re-CCUS-tax-investment-credit_January-2022-4.pdf?x98920. Accessed 14 Feb. 2022.

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