

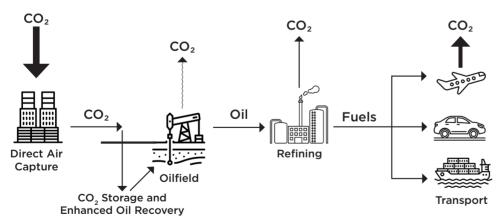
Making oil and gas part of the climate solution.

UCalgary researchers are combining and optimizing technologies to deliver negative emissions from energy production.

Under the Paris Agreement, Canada has committed to reducing its Green House Gas (GHG) emissions by 42% below 2005 level by 2030. Accelerated deployment of existing technologies to reduce emissions — in addition to greater efficiency, renewable energy sources, and other mitigation strategies - is desperately needed along with emerging technologies that **remove CO₂ from the atmosphere**.

Researchers at the University of Calgary are developing a concept that they hope will be the transformative change required to not only meet Canada's targets to reduce GHGs, but surpass them: the development of negative emissions technology using direct air capture.

The Concept



Removing CO_2 from the atmosphere via direct air capture, then storing that CO_2 during oil recovery, could be a strategy to offset direct and indirect emissions from production and fuel use.

Transforming the energy-climate landscape.



4.7 million

barrels of oil produced in Canada per day in 2021

16.7 billion cubic feet

of marketable gas produced in Canada per day in 2018

2 million tonnes of CO₂ captured and stored annually in Canada

Partner with UCalgary to make a global impact on climate change.

UCalgary is committed to collaborations that strengthen our society and the economy. Society urgently needs more options for large-scale, low-cost CO_2 removal from the atmosphere, and our goal is to deliver a rapidly deployable solution. We believe that an optimized integration of direct air capture coupled with CO_2 enhanced oil recovery provides that option for Canada, and for the world.

We are looking for support to:

- Set meaningful research targets through techno-economic and life cycle assessment
- Develop efficient, scalable and cost-effective direct air capture tailored to enhanced oil recovery integration
- Identify CO₂ enhanced oil recovery approaches that allow utilization to be tuned to maximize profits
- Assess policy gaps, barriers, and impacts of uncertainty



The Team

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