# Pathways CCS project will not offset GHG emissions from a new oil pipeline

**BRIEFING**
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**The emissions from a new oil pipeline would far exceed what the Pathways CCS project can capture. The claims from the Government of Canada and the Premier of Alberta that the Pathways CCS project will "cancel out" pipeline pollution is mathematically impossible and misleading.**

**Context**

The Government of Canada, along with the provincial government of Alberta, have suggested that the proposed Pathways carbon capture and storage (CCS) project would "offset" the greenhouse gas (GHG) emissions of a new million barrel a day oil pipeline. However, the math shows that the CCS project will not come close to offsetting emissions from the oil that would presumably fill the pipeline. The new pipeline will in effect be a carbon bomb with real climate impacts, while communities along the route would face the additional safety and environmental risks of oil and CO2 pipelines and oil tanker traffic.

**Key Findings:**

1. The proposed oil pipeline's emissions will dwarf Pathways CCS capture capacity.

   Using the Canada Energy Regulator's average emissions intensity for oil production (79.3 kg CO2 per barrel) and the expected capacity of a 1 million barrel per day pipeline:

   1,000,000 barrels/day x 365 days x 79.3 kg/barrel = **28.9 MT of CO2/year**

   By contrast, the Pathways CCS project is expected to capture only **10 - 12 MT/year by 2030**.

   Even at full capacity, Pathways CCS would capture less than half of the emissions generated by a new oil pipeline. It is also very unlikely that Pathways CCS would ever achieve that as a vast majority of CCS projects have failed to achieve their capture targets, such as Boundary Dam 3 and Shell's Quest project in Canada.

   The calculation above does not include downstream emissions from burning the oil, which are far larger and can't be captured by Pathways CCS.

2. CCS pipelines create significant health and safety risks for communities

   CO2 pipelines create serious and often under-recognized health and safety risks for communities. CO2 is colourless, odourless and heavier than air, meaning that when a

pipeline ruptures it forms an invisible cloud that settles close to the ground. This can displace oxygen rapidly leading to dizziness, loss of consciousness and asphyxiation. In Mississippi, a CO2 pipeline burst in 2020 which required hundreds of people be evacuated and 45 people to be hospitalized.

3. There is no economic case for expanding oil production

   Recent analysis shows that up to 66% of planned oil and gas investments from 2025-2040 are on track to become stranded assets as global fossil-energy demand declines. The oil and gas industry's asset values are projected to fall massively during the same time period. Government revenues from oil and gas could also drop drastically, leaving communities more exposed to economic instability.

   Building a new oil pipeline in a shrinking global market is not a long-term economic strategy; it is a high-cost, high-risk gamble that offers little benefit to local, regional and national economies. Meanwhile, limiting new oil and gas development could actually help protect the value of Canada's industry by preventing overproduction. These benefits are amplified if Canada can work with other countries to limit global supply.

4. Heavy public subsidies required for both the oil pipeline and Pathways CCS

   Both the Pathways CCS project and a new million barrel a day oil pipeline would need to rely on significant public subsidies, raising major concerns on whether these projects are in the public's interest. Pathways Alliance is seeking billions of dollars in taxpayer funding despite capturing only a small portion of the industry's emissions. Likewise, new oil pipelines increasingly require government backing because private investors see them as too risky in a declining global market. Subsidizing both an oil pipeline and a CCS pipeline would force double the costs on taxpayers, while communities will be forced to shoulder the environmental, safety and long-term liability risks.

5. Each of these projects - the pipeline, tankers & CCUS - would threaten nearby communities

   Each of these projects bring risk and harm to the communities living in the vicinity of the projects and **the bundling of these projects increases the overall impact**. In addition to the risks of a CCUS pipeline, outlined above, more oil sands production means more tailings, and more pollution for downstream communities. The construction of these projects would cause significant environmental impacts. And oil tankers plying the Hecate Strait would also bring massive risks to the coastal ecosystem. This is not a bargain for communities living on the lands and waters near these projects.

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