

# Intelligence MEMOS



From: John Dillon and Michael Gullo  
To: Department of Finance  
Date: November 10, 2021  
Re: **CANADA NEEDS TO GET SERIOUS ON CARBON CAPTURE**

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COP 26 has challenged all countries to deliver ambitious plans to achieve net zero greenhouse gas emissions by 2050.

In Canada, businesses, public institutions and consumers all have a role. Canada's public and private sectors need to work closely to foster development, commercialization and widespread adoption of the innovative technologies that can ensure continued economic prosperity and environmental excellence at the same time.

Carbon capture, utilization and storage (CCUS) is one of Canada's most promising opportunities. It holds immense potential to reduce emissions globally considering that approximately [40 percent](#) of the world's electricity is still coal-generated. The International Energy Agency has [concluded](#) that "reaching net zero will be virtually impossible without carbon capture utilization and storage." Canada's Industry Strategy Council recently identified CCUS as a source of [exportable expertise](#) that can help position the country as a world leader in clean energy and technology.

The federal government has pledged to develop a comprehensive CCUS strategy and promised a CCUS investment tax credit in its last budget. This tax credit is expected to apply to investments beginning next year, suggesting CCUS will be central to helping Canada meet its ambitious 2030 target (40- to 45-percent reduction in GHG emissions) and net zero aspirations.

Norway and the United States are already moving quickly to facilitate CCUS projects while supporting the long-term competitiveness of their energy industries. These policies can de-risk the substantial investments required to launch CCUS, and leverage the capital, networks and energy industry knowledge to realize emerging growth opportunities.

Now is the time for Canada to do the same.

Context is important:

When it comes to reducing GHGs, Canada has no quick wins. Our electricity sector is already [82 percent](#) emissions free, while our industrial base is internationally regarded for its ability to produce low-to-zero emission products such as aluminum, forest products and cement.

Carbon capture presents the single biggest opportunity to reduce emissions from the energy sector, which is a major source of Canada's [overall emissions](#), while being a significant contributor to the country's [GDP](#) and export revenues.

CCUS can be transformative in the broader effort to expand the value generated through new investments in technology and hydrocarbon-based products such as hydrogen, petrochemicals and plastics.

An investment tax credit can be key to unlocking the full potential of CCUS in Canada:

- A substantive tax credit will be required to offset the significant upfront capital costs inherent in such projects. An ITC comparable to those available elsewhere – such as the [45Q](#) tax credit in the United States and the incentives offered by [Norway](#) and the [Netherlands](#) – is necessary to mobilize the projects that can help Canada meet its ambitions. A higher tax credit for projects that permanently remove carbon dioxide can also support Canada's status as a climate leader and adopter of breakthrough technology.
- The ITC should be broad and applicable to capital investments across the CCUS value chain: engineering and design; installation of capture technology; construction of transport infrastructure; CO<sub>2</sub> injection into geological formations; and CO<sub>2</sub> utilization (such as in the production of cement or steel.)
- Any ITC needs to work in conjunction with other federal and provincial policies to support capital costs and create downstream revenues. Eligible projects should be permitted to earn credits under other federal GHG programs and their provincial equivalents.
- Clear policy pathways for utilization can also help create a marketplace for CO<sub>2</sub> generated by CCUS projects in Canada. In particular, enhanced oil recovery projects, in which captured CO<sub>2</sub> is injected into mature oil wells to improve flow, should be eligible. These projects can reduce the emissions profile of a barrel of oil by more than 35 percent and have been the primary motivation for US initiatives because they can generate greater return on investment.

A fully refundable tax credit would enable companies with varying levels of tax liability – including pre-profit start-ups – to participate in CCUS projects. Establishing a predictable revenue stream allows companies to attract the capital they need to finance projects.

As other nations fast-track their CCUS strategies, Canada needs to ensure that its ITC is competitive and capable of attracting the capital necessary to deploy CCUS at scale. The US success – more than [60 percent](#) of existing, and half of all planned global CO<sub>2</sub> capture capacity – is no accident. Rather, it is the result of longstanding policy incentives and a highly supportive investment environment.

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