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Submission to the Standing Committee on Natural Resources

Regarding Federal Assistance to the Oil and Gas Industry

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Quantifying Canada's Fossil Fuel Subsidies

Environmental Defence tracks federal assistance to the oil and gas industry, also known as fossil fuel subsidies, very closely. In 2020, our research found federal subsidies to be $18 billion. In 2021, the figure was $8.6 billion. Federal subsidies in 2022 so far again amount to over $18 billion dollars. A running list of Federal fossil fuel subsidies can be found on our website (though the website has not been updated at the time of writing to reflect EDC's most recently published figure). These subsidies are the publicly known subsidies, and there may be more that are unknown to the public.

Defining Fossil Fuel Subsidies

There has been ongoing debate on what counts as a subsidy and, in some cases, what counts as an inefficient subsidy. We assert that *all* financial support given to the oil and gas sector should be considered as fossil fuel subsidies and that all fossil fuel subsidies are inherently inefficient.

First, when it comes to the definition of "subsidy" Canada should harmonize with the international community and adopt the WTO's definition of the term "subsidy". According to the WTO a subsidy has three basic elements:

- a financial contribution
- by a government or any public body
- which confers a benefit

In the WTO's definition, a financial contribution includes grants, loans, loan guarantees, and incentives. And the WTO says that the existence of a benefit is to be determined by comparison with the market-place (i.e., on the basis of what the recipient could have received in the market).

So a loan guarantee, for example, that is intended to de-risk private equity would clearly fit this bill. If Canada adopts the WTO's definition, loans and financial support given by Export Development Canada to the oil and gas sector would all be counted as fossil fuel subsidies. Grants, tax credits, and incentives given to the oil and gas sector to reduce emissions would also be counted as a subsidy. They are financial contributions by the government that confer a benefit upon the recipient that would not be granted by the market.

Sources and Recipients of Canada's Fossil Fuel Subsidies, and Canada in Context

Canada's fossil fuel subsidies include monies allocated to support R&D for carbon capture and storage, monies from the Net-zero Accelerator earmarked to reduce emissions at oil and gas companies, and other funds.

Of the 18.4 billion dollars of subsidies in 2022 (so far), Export Development Canada has given out $5.96 billion of those subsidies, according to their figures. And a subsidy of about $12 billion

has been allocated to the TransMountain Pipeline Expansion, $10 billion of which is in the form of a loan guarantee.

Canada is very generous in terms of the extent to which it subsidizes oil and gas. To put it in context, a report from Bloomberg New Energy Finance found that from 2015–2019 the Government of Canada provided $100 billion to the fossil fuel sector. Canada more than doubled fossil-fuel support over 2016-20. According to Bloomberg, this increase and consequent high per-capita total outweighed Canada's progress on moving away from coal power. Globally, Canada provides more public financing to oil and gas than any of the other G20 OECD countries.

All Fossil Fuel Subsidies Are Inefficient

The original G20 commitment describes inefficient fossil fuel subsidies as those that, among other things, "impede investment in clean energy sources and undermine efforts to deal with the threat of climate change."

Given the scarcity of capital, a subsidy to oil and gas companies can well be seen as impeding investments in clean energy sources - or how else can we explain why subsidies for fossil fuels exceed those for clean energy?

And they most certainly undermine efforts to deal with the threat of climate change because they make the construction and expansion of fossil fuel infrastructure viable when it would not otherwise be so, and delay and obfuscate what is actually needed to reduce emissions in Canada and the world, which is phase out fossil fuels. Canada has committed to achieving net-zero emissions by 2050 to do its part in keeping global average temperatures to below 1.5 degrees Celsius, yet it continues to provide financial support to an industry that is by far the leading cause of climate change. The International Energy Agency (IEA), in its recent World Energy Outlook report, clearly states that to achieve a net-zero world we need to phase out all fossil fuels. Continued subsidies towards fossil fuel infrastructure actively works against Canada's climate commitments.

Subsidies for carbon capture and storage are extremely inefficient. The Canadian public has spent $5.8 billion on CCUS since 2000. CCUS projects have vastly underperformed on their commitments to remove emissions. Internationally, in the last 50 years, there are significantly more failed CCUS projects than successful ones. In Canada, these expensive projects capture only 3.5 MT of carbon per year - 0.05 per cent of Canada's greenhouse gas emissions. Furthermore, 70 per cent of the carbon captured is used for enhanced oil recovery - i.e., more oil and gas production. Therefore these public subsidies have likely resulted in more emissions, not less.

CCUS is touted as a climate solution by the industry because it allows them to continue operating despite overwhelming evidence of the need to phase out fossil fuels. Though there are

no CCUS projects that achieve a capture rate of greater than 50 per cent, which is an issue given that Canada's goal is to get to net-zero emissions. Any mitigation technology that only archives an incremental gain is a waste of resources because it will not achieve the ultimate objective, and will therefore need to be abandoned.

Another issue with CCUS is that, even if you could capture 100 per cent of the emissions from the production of oil and gas, CCUS does nothing to address the emissions released upon combustion of the oil and gas, often referred to as Scope 3 emissions, which account for a vast majority of all emissions.

It should be noted that the IPCC views CCUS as an expensive technology with limited carbon mitigation potential. It may have some application in certain industries such as cement production, but does not have real potential in the oil and gas industry because of the issue with scope 3 emissions, and fugitive emissions from oil and gas production, which are also not addressed through carbon capture.

Rather than attempting to increase capacity in an underperforming and expensive technology, such as CCUS, Canada could gain more from increasing its financial support for clean, renewable energy sources that are proven to work and are aligned with meeting Canada's climate commitments.

The Government of Canada has also recently announced a new fossil fuel subsidy of $300 million for fossil hydrogen, which is also an inefficient subsidy because it undermines efforts to deal with climate change. A peer-reviewed study on the life cycle emissions of "blue hydrogen" found that it is not a clean energy source due to the amount of methane it releases during production. The overall greenhouse gas footprint of fossil hydrogen is 20 per cent greater than burning natural gas or coal for heat and some 60 per cent greater than burning diesel oil for heat. Even if it were possible to sequester 100 per cent of the carbon emissions from the production of hydrogen from natural gas, the release of the methane from the extraction of the gas means that "blue" hydrogen is not a real climate solution.

Furthermore, fossil fuel subsidies are inefficient in Canada as they run directly counter to one of Canada's most prominent climate policies: carbon pricing. Effectively, subsidies for the fossil fuel sector act as a negative price on carbon. Subsidies for clean-up of fossil fuel assets (eg. wells, tailings) also runs counter to the polluter pays principle, which is the foundational concept underpinning carbon pricing.

Investigating Claims of Carbon Neutrality and Carbon Negativity in the Oil and Gas Industry

Some oil and gas companies are claiming to be carbon neutral or even, as with Whitecap Resources, carbon negative. The validity of these claims need to be assessed. For Whitecap, it works as follows:

- Whitecap buys CO2 from other companies, like the coal fired power plant in Saskatchewan, Boundary Dam (which achieved a carbon capture rate of just 37 per cent in 2021).
- Whitecap uses that CO2 for enhanced oil recovery to pump out more oil and gas, which will then be sold and burned.
- Whitecap claims it injects more CO2 from other companies than it creates itself in scope 1 and scope 2 emissions (which it does not seem to capture itself). This arithmetic does not include scope 3 (end use) of Whitecap's product lifecycle, where 70% to 90% of emissions are released.
- If Whitecap is to claim carbon neutrality (or negativity), the companies who send their CO2 to Whitecap cannot also claim the carbon capture in their accounting. For example, the Boundary Dam cannot claim that it has captured the CO2 that Whitecap has bought from them if Whitecap also claims it. That would be double counting, a serious breach in accounting standards.
- If the accounting is done right, the companies Whitecap buys CO2 from have not improved their carbon balance at all, and only Whitecap gets to claim the reduction in emissions, in a very limited sense (scope 1 and 2). This also assumes the carbon is stored properly and permanently, which is unknown.

Canada's Fossil Fuel Sector Is International, and Should Be Treated As Such

Canada promised to phase out international fossil fuel finance a year ago at COP 26. Specifically, the agreement says countries will "end new direct public support for the international unabated fossil fuel energy sector by the end of 2022." Canada should recognize that its fossil fuel sector *is* international. We export nearly 4 million barrels of oil per day. In 2019, emissions from fossil fuels exported by Canada were 954 million tonnes, far greater than all of Canada's domestic emissions, which were 730 million tonnes. Smoothing the way for domestic oil and gas production intended for export should be viewed as support for the international fossil fuel sector.

About Environmental Defence Canada

Environmental Defence Canada is a leading Canadian environmental advocacy organization that works with government, industry and individuals to defend clean water, a safe climate and healthy communities.

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