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February 17, 2022

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Attn: Ms. Hilary Jane Powell, Clerk of the Committee

**Re: Study of the proposal for a greenhouse gas emissions cap on the oil and gas sector**

**INTRODUCTION AND OVERVIEW**

I am pleased to submit this brief to the Standing Committee on Natural Resources (the Committee) for its study of the government's proposal for a greenhouse gas (GHG) emissions cap on the oil and gas sector. My name is Martin Olszynski and I am an Associate Professor at the University of Calgary Faculty of Law, where my current research agenda includes climate change law and policy. I hold a B.Sc. (Biology) and LL.B. from the University of Saskatchewan, an LL.M. from the University of California at Berkeley, and am currently pursuing a PhD in resource management from the University of British Columbia. For more on my background, research interests, and publication record, see <https://law.ucalgary.ca/profiles/olszynski>.

My primary focus is the proposed declining GHG cap on Canada's oil and gas sector, which in my view and as further set out below could take the form of a regulation under the *Canadian Environmental Protection Act, 1999*, S.C. 1999, c. 33. Part I sets out the factual context necessary to situate my position: the reality of climate change in Canada; Canada's status as a top ten GHG emitter globally; and the oil and gas sector's share of Canada's GHG emissions. Part II sets out the relevant legal principles, especially constitutional. As will be seen, the Supreme Court of Canada's environmental law jurisprudence is clear that Parliament's criminal law power can provide the constitutional basis for a cap on the oil and gas sector's GHG emissions. Part III briefly discusses the Canadian oil and gas sector's other environmental liabilities.

**PART I: CONTEXT**

It has been over 30 years since governments around the world were first firmly warned about the dangers of anthropogenic climate change.<sup>1</sup> In the ensuing 25 years, climate change was largely

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<sup>1</sup> J. Hansen et al., *Global Climate Changes as Forecast by Goddard Institute for Space Studies Three-Dimensional Model*, 93 J. GEOPHYSICAL RES. 9341 (1988).

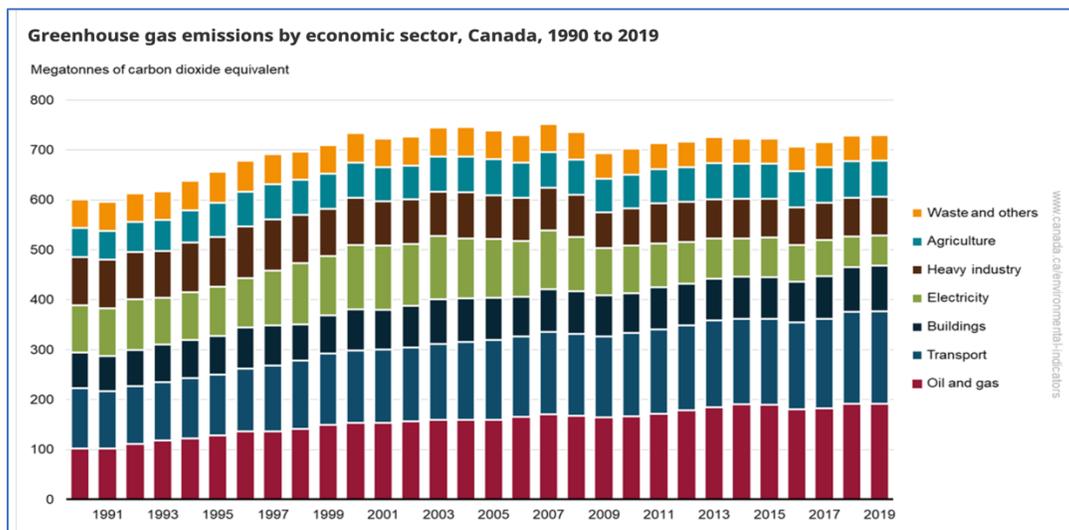
treated as a future threat and consequently, if also predictably, failed to garner the serious attention and policy responses that it required.<sup>2</sup> However, the past few years have made plain that climate change is here, happening now, and affecting us all:

In 2021, we experienced a “heat dome” that [killed at least 600 people in Western Canada](#). Hundreds of wildfires followed, including one that [burned to the ground the town of Lytton, B.C.](#), right after the area shattered Canadian heat records. Extreme rainfall in November in British Columbia then caused [widespread flooding](#) that destroyed homes and businesses, and infrastructure damage that severed ties between coastal B.C. and the rest of Canada.<sup>3</sup>

Of course, the impacts of climate change were not restricted to British Columbia this year. Our prairies faced a [historic drought](#). Meanwhile, [floods devastated Europe](#) and the [U.S. east coast](#).

There is no question that at current levels GHG emissions are killing people, destroying property, and causing significant economic and environmental harm. And while Canada is certainly not the largest GHG emitter in the world, its GHG emissions are nevertheless significant relative to other countries. Canada is among the top ten GHG-emitting countries in the world – and has the highest GHG emissions per capita.<sup>4</sup> The largest portion of those emissions – roughly 26% – comes from Canada’s oil and gas sector, as the following figures illustrate. Transportation, which is already subject to increasingly stringent standards, is the second largest sector.

**Figure 1: Greenhouse Gas Emissions by Economic Sector (1990-2019)**

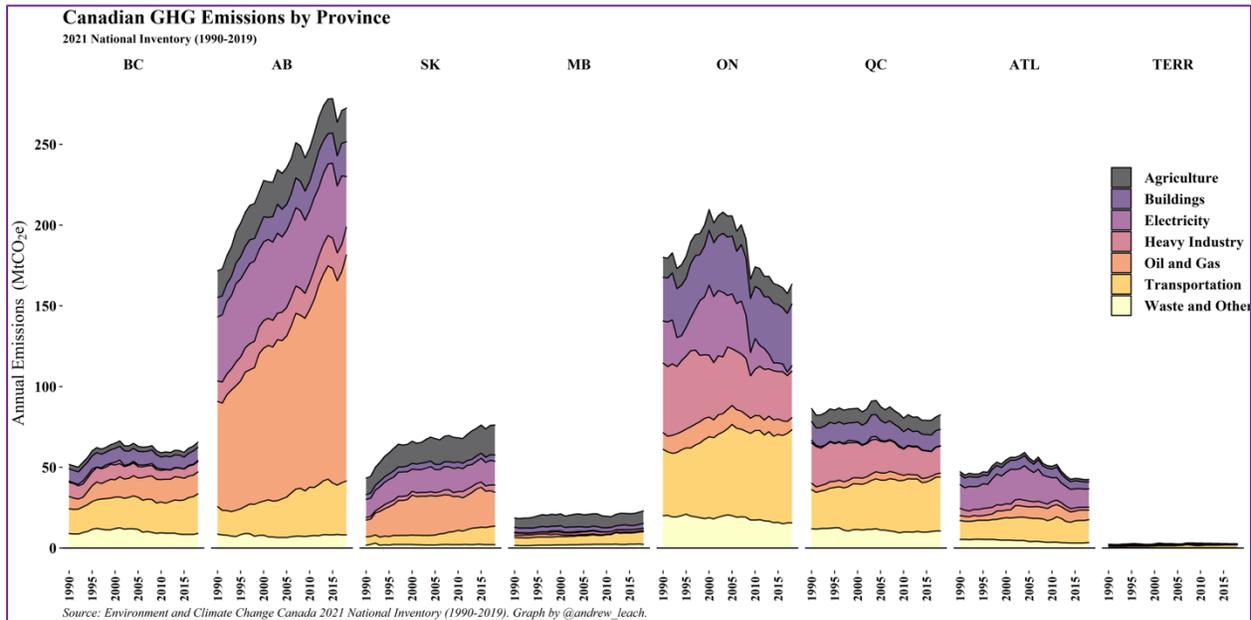


<sup>2</sup> Peter Zimonjic, “Canada’s climate change efforts going from ‘failure to failure,’ says commissioner’s report” CBC News (2021): <https://www.cbc.ca/news/politics/environment-commissioner-report-failure-to-failure-1.6262523>

<sup>3</sup> Kathryn Harrison and Simon Donner, “The climate crisis demands courage not optimism” *The Conversation* January 25, 2022: <https://theconversation.com/the-climate-crisis-demands-courage-not-optimism-175432>

<sup>4</sup> See Brendan Frank, “Why 1.6% Matters” (Ecofiscal Commission: 2018): <https://ecofiscal.ca/2018/05/23/why-1-6-matters/>. This – and other relevant data – can also be obtained at Our World in Data: [https://ourworldindata.org/explorers/co2?facet=none&country=CHN~USA~IND~GBR~OWID\\_WRL~CAN&Gas=CO%E2%82%82&Accounting=Production-based&Fuel=Total&Count=Per+capita](https://ourworldindata.org/explorers/co2?facet=none&country=CHN~USA~IND~GBR~OWID_WRL~CAN&Gas=CO%E2%82%82&Accounting=Production-based&Fuel=Total&Count=Per+capita).

**Figure 2: Canadian GHG Emissions by Province and Sector (2004-2019)<sup>5</sup>**



## PART II: THE CRIMINAL LAW POWER

As noted above, climate change is no longer some distant threat. Consequently, there is no question that capping such emissions, and requiring their decline over time, is properly the purview of Parliament’s criminal law jurisdiction. As explained by the Supreme Court of Canada in its landmark *R. v. Hydro-Québec* decision,<sup>6</sup> “the stewardship of the environment is a fundamental value of our society and...Parliament may use its criminal law power to underline that value.”<sup>7</sup>

Writing for the majority, Justice LaForest further explained that:

- the power conferred on Parliament by s. 91(27) is “the criminal law in its widest sense”;<sup>8</sup>
- it is “entirely within the discretion of Parliament to determine what evil it wishes by penal prohibition to suppress”;<sup>9</sup>
- it is “also within discretion of Parliament to determine the extent of blameworthiness that it wishes to attach to a criminal prohibition”;<sup>10</sup>
- the use of the criminal law “in no way constitutes an encroachment on provincial legislative power, though it may affect matters falling within the latter’s ambit”;<sup>11</sup>

<sup>5</sup> Graph by University of Alberta Business School Professor Andrew Leach:

[https://leachandrew.github.io/NIR/images/inventory\\_provs.png](https://leachandrew.github.io/NIR/images/inventory_provs.png)

<sup>6</sup> *R. v. Hydro-Québec*, 1997 CanLII 318 (SCC), [1997] 3 SCR 213.

<sup>7</sup> *Ibid.* at para 127.

<sup>8</sup> *Ibid.* at para 119, citing *Attorney-General for Ontario v. Hamilton Street Railway Co.*, [1903 CanLII 121 \(UK JCPC\)](#), [1903] A.C. 524, at pp. 528-29.

<sup>9</sup> *R v. Hydro* at para 119.

<sup>10</sup> *Ibid.* at para 120.

<sup>11</sup> *Ibid.* at para 129.

The first three bullets make plain that Parliament’s criminal law is sufficiently flexible for the purposes of environmental protection, including combatting climate change. Indeed, in *Syncrude v. Canada*, the Federal Court of Appeal upheld the *Renewable Fuels Regulations*, [SOR/2010-189 \(RFRs\)](#), being regulations under *CEPA, 1999*, on this basis: “...it is uncontroverted that GHGs are harmful to both health and the environment and as such, constitute an evil that justifies the exercise of the criminal law power.”<sup>12</sup>

The fourth bullet is perhaps the most important, as there appears to be a misperception that only the provinces may institute a cap on GHG emissions on the basis of either their section 92 (e.g., property and civil rights) and/or 92A legislative powers (over the development of natural resources). The error in this reasoning, however, was identified nearly a century ago:

... if the Federal Parliament, to protect the public health against actual or threatened danger, places restrictions on, and limits the number of preservatives that may be used [here, in the context of food making], it may do so under s. 91(27) of the B.N.A. Act. This is not in essence an interference with property and civil rights. That may follow as an incident but the real purpose (not colourable and not merely to aid what in substance is an encroachment) is to prevent actual, or threatened injury or the likelihood of injury of the most serious kind to all inhabitants of the Dominion.<sup>13</sup>

It is true that the provinces have broad jurisdiction over the development of their natural resources, including rates of production. But this does not deprive the federal government of its criminal law jurisdiction to fight pollution, including GHG emissions. As noted by Justice LaForest:

I would be equally concerned with an interpretation of the Constitution that effectively allocated to the provinces, under general powers such as property and civil rights, control over the environment in a manner that prevented Parliament from exercising the leadership role expected of it by the international community and its role in protecting the basic values of Canadians regarding the environment through the instrumentality of the criminal law power.<sup>14</sup>

To summarize, Parliament’s criminal law power is broad and flexible enough to tackle the evil of climate change, including by instituting a declining cap on GHG emissions from the oil and gas sector. For example, Canada could establish a sectoral cap, auction or allocate allowances to designated emitters within that cap, and then prohibit each designated emitter from emitting GHG emissions beyond the allowances they hold for the relevant year. Bearing in mind the jurisprudence cited above, such a regime could allow for some market-based mechanisms, such as trading (as is the case with the *RFRs*), without losing its criminal law nature.<sup>15</sup> There would also appear to be no problem with prioritizing a given sector or sectors, e.g., on the basis that they represent the

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<sup>12</sup> See *Syncrude Canada Ltd. v. Canada (Attorney General)*, [2016 FCA 160 \(CanLII\)](#) at para 62.

<sup>13</sup> *R v. Hydro-Quebec* at para 129, citing *Standard Sausage Co. v. Lee*, [1933 CanLII 282 \(BC CA\)](#), [1933] 4 D.L.R. 501 (B.C.C.A.), at pp. 506-7.

<sup>14</sup> *R v. Hydro* at para 154.

<sup>15</sup> For a more detailed discussion of all of these issues, see Nathalie Chalifour, “Canadian Climate Federalism: Parliament’s Ample Constitutional Authority to Legislate GHG Emissions through Regulations, a National Cap and Trade Program, or a National Carbon Tax” (2016) 36 N.J.C.L. 331, available at SSRN: <https://ssrn.com/abstract=2775370> or <http://dx.doi.org/10.2139/ssrn.2775370>

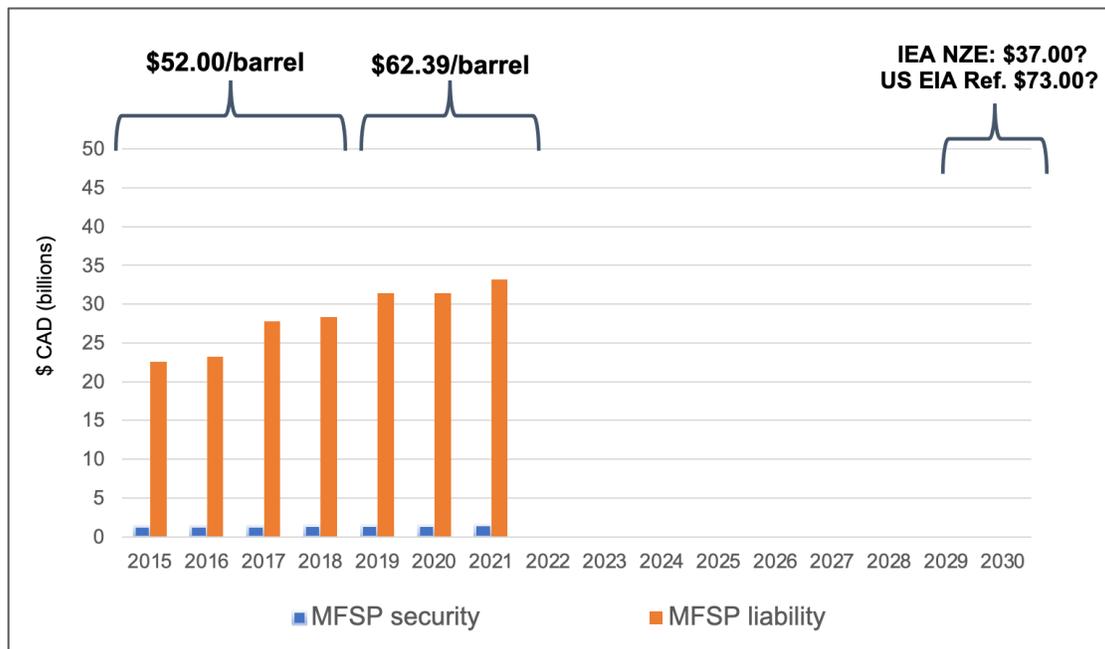
highest proportion of emissions. This can be considered analogous to the Priority Substance List (PSL) mechanism for toxic substances already in place under *CEPA, 1999*.<sup>16</sup>

### PART III: TAX CREDITS FOR CARBON CAPTURE AND SEQUESTRATION (CCS)

In this part I share some important information about the Canadian oil and gas sector’s other environmental challenges. Just as federal government financial support for inactive and orphan well remediation justified recent federal scrutiny of those efforts by the Parliamentary Budget Officer,<sup>17</sup> in my view the looming environmental liabilities associated with oil sands mining should give the members of this Committee cause for pause with respect to federal support for carbon capture and sequestration.

In Alberta, reclamation liabilities for mines (both coal and oil sands) are ostensibly managed under the Mine Security Financial Program (MFSP).<sup>18</sup> Figure 3 below shows the historical (since the program’s inception in 2015) and current security held and estimated total liability for mines in Alberta (the vast majority of the estimated liability is associated with oil sands mines):

**Figure 3: MFSP Security, Liability and Oil Prices (USD/Barrel)**



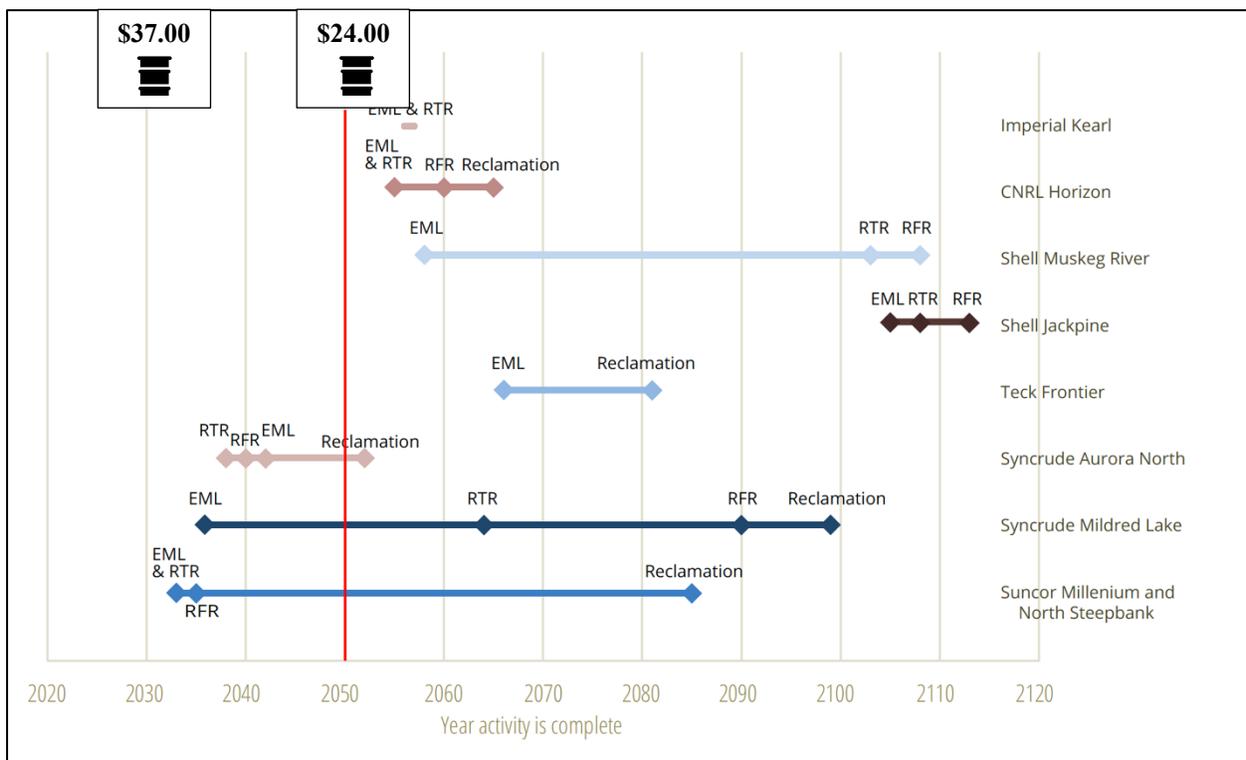
<sup>16</sup> See *CEPA, 1999* sections 73 – 79, describing a regime for identifying and screening substances that may pose a greater risk to human health and the environment for toxicity assessment on a priority basis.

<sup>17</sup> Based on official Alberta Energy Regulator (AER) numbers, “Estimated Cost of Cleaning Canada’s Orphan Oil and Gas Wells” © Office of the Parliamentary Budget Officer, Ottawa, Canada, 2022, online: <https://www.pbo-dpb.gc.ca/en/blog/news/RP-2122-026-S--estimated-cost-cleaning-canada-orphan-oil-gas-wells--cout-estimatif-nettoyage-puits-petrole-gaz-orphelins-canada>

<sup>18</sup> See <https://www.aer.ca/regulating-development/project-closure/liability-management-programs-and-processes/mine-financial-security-program>

What the above figure illustrates is that total estimated liabilities have been growing, currently approaching \$34 billion CAD, while the security held for those liabilities has actually decreased from a very meagre 6% of total estimated liabilities at the program’s inception to 4.6% (\$1.52 billion CAD) in 2021. The question is whether – and how – this liability funding gap will be closed, bearing in mind that the hard work of remediation and reclamation is not expected to begin until after 2030 (Figure 4 below), when global net zero commitments are expected to start impacting global oil prices. In Figure 3, above, I have added the recent four-year average global price of oil (USD/barrel), as well as both the IEA’s estimated 2030 global price pursuant to its net zero pathway<sup>19</sup> and the U.S. EIA’s 2030 Reference case.<sup>20</sup> In Figure 4, below, I show the IEA net zero pathway prices at 2030 and 2050.

**Figure 4: Timelines for Terrestrial Tailings Reclamation<sup>21</sup> & Oil Price (IEA NZP)**



To make matters worse, it is possible that the MFSP grossly underestimates total liabilities – potentially by a factor of four. In 2018, various Canadian news outlets reported on a private presentation given by the then vice-president of closure and liability for the AER, wherein liabilities associated with oil sands mines were estimated to be as high as **\$130 billion CAD** (out of an estimated total **\$230 billion** that includes conventional oil and gas wells, *in-situ* projects and

<sup>19</sup> See International Energy Agency, “Net Zero Emissions by 2050: A Roadmap for the Global Energy Sector” (2021) at p. 51, available online: <https://www.iea.org/reports/net-zero-by-2050>

<sup>20</sup> See <https://www.eia.gov/todayinenergy/detail.php?id=46656>

<sup>21</sup> This figure is borrowed from Jodi McNeill and Nina Lothian, “Review of Directive 085 Tailings Management Plans” (2017) Pembina Institute Backgrounder, available online: <https://t.co/B4uqQ5OxDK>

intra-provincial pipelines).<sup>22</sup> The AER is reported to have indicated that this presentation provided “a snapshot in time of estimated total liability” and was based on a “worst-case scenario,” but to my knowledge these figures have never been clearly disputed by either the AER or industry. Moreover, comparative research into provincial mine liability regimes across Canada has noted that, under the MFSP, proponent liability estimates do not require supporting documentation and do not take into account the high degree of uncertainty currently associated with proposed reclamation measures.<sup>23</sup>

I recognize that this study is not about oil sands reclamation and remediation liabilities.<sup>24</sup> However, because this Committee and the federal government are currently considering financial support for CCS development and deployment, it is necessary in my view to take stock of the sector’s other significant environmental liabilities and the extent to which they leave federal and provincial taxpayers exposed. Ultimately, the question is whether it is good policy to provide tens of billions of public dollars to an industry that already receives a generous amount of public support<sup>25</sup> and is currently carrying significant unfunded environmental liabilities – and which is about to undergo a significant transition if not disruption. At the very least, Canadians deserve a clear accounting of the costs and benefits here, and more specifically who it costs and who benefits.

Thank you for this opportunity to submit this brief. Please do not hesitate to contact me if you have any questions.

Best regards,

Martin Z. Olszynski

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<sup>22</sup> See e.g. <https://globalnews.ca/news/4617664/cleaning-up-albertas-oilpatch-could-cost-260-billion-regulatory-documents-warn/>

<sup>23</sup> Ecofiscal Commission, “Responsible Risk: How putting a price on environmental risk makes disasters less likely” (July 2018) at pp 38-39, available online: <https://ecofiscal.ca/reports/responsible-risk-putting-price-environmental-risk-makes-disasters-less-likely/>. I note also that the industry is already raising concerns about economic feasibility with respect to future oil sands effluent regulations under the *Fisheries Act*, RSC 1985 C. f-14, currently under development by ECCC: <https://www.cbc.ca/news/business/bakx-oilsands-tailings-release-mining-effluent-regulations-1.6271537>.

<sup>24</sup> I strongly recommend such a study, bearing in mind the direct and potentially significant impacts that future remediation and reclamation efforts will have on federal environmental interests, including fish and fish habitat and transboundary freshwater pollution.

<sup>25</sup> According to recent news reports, “Canadian fossil fuel producers receive more public financial support than any others in the developed world”: see <https://www.cbc.ca/news/science/oil-change-subsidies-1.6228679>. See also Vanessa Corkal, “Federal Fossil Fuel Subsidies in Canada: COVID-19 edition (February 2021) International Institute for Sustainable Development (IISD), available online: <https://www.iisd.org/publications/fossil-fuel-subsidies-canada-covid-19>