Inextricably Linked: Climate Policy and the Oil and Gas Sector’s Closure Liabilities

By: Martin Olszynski

Matter Commented On: Study on Emerging Issues Related to the Senate Standing Committee on Energy, Environment and Natural Resources’ Mandate: Climate Change – Canadian Oil & Gas Industry

On February 15, 2024, I appeared before the Senate Standing Committee on Energy, Environment and Natural Resources’ (ENEV) in the context of its study into emerging issues related to its mandate. As has been my practice in the past (see here and here), what follows are my prepared remarks, modified only for formatting purposes and to include hyperlinks to supporting resources where relevant. A recording of the hearing is available here; a hearing transcript should also be available upon translation.

Good morning Senators,

My name is Martin Olszynski, and I am an Associate Professor at the University of Calgary, Faculty of Law, where my research interests include environmental, natural resources, and water law and policy. Most recently, this includes publications with respect to oil and gas liabilities (here and here), and the division of powers with respect to the environment in the wake of the Supreme Court’s recent Reference re Impact Assessment Act, 2023 SCC 23 (CanLII) (here).

The Committee is studying the Canadian oil and gas industry, including its relevance to our country and economy, its record in reducing its carbon footprint, the transition plan to a more sustainable future, the industry’s positioning to respond to risks and world trends, and matters of competitiveness and subsidization.

I will speak to each of these this morning. I want to preface my comments by commending the Committee for undertaking this study: we desperately need an objective, comprehensive, and transparent accounting of this sector’s impacts on Canada – its economy, environment, and people.

It is indisputable that Canada’s economy has benefited from oil and gas activity. Corporate profits, foreign investment, employment levels (both direct and indirect), royalties, and tax revenue are all commonly cited by industry leaders, pundits, and pro-industry politicians – albeit with variations that I submit merit closer scrutiny by this Committee.

In any event, I am here to speak to the other side of the ledger – and GHG emissions and closure liabilities in particular. By “closure liabilities”, I mean the anticipated costs of abandoning,
remediating, and reclaiming oil and gas sites, whether that be wells, pipelines, oil sands mines, or other related facilities.

These are but two issues that fall on the adverse side of the ledger, but they have the benefit of being quantifiable, if somewhat imperfectly. They are also good illustrations of a pervasive theme in the context of extractive industries generally: the privatization of profits, and the socialization of costs. As I’ll explain at the end, climate policy and closure liabilities are also inextricably linked.

Regarding the sector’s carbon footprint. In 2021, oil and gas production accounted for ~28% of Canada’s total GHG emissions, or 189 MT CO$_2$e. Applying the social cost of carbon, a metric used by both Canada and the current U.S. administration to provide an estimate of the global damages associated with one tonne of carbon emitted (in the form of increased droughts, floods, fires, etc.), this amounts to ~ $46 billion in damages.

Moreover, based on the best available data, Canada’s oil sands industry remains one of the most GHG intensive in the world, with average emissions/barrel hovering around 75 kgCO$_2$e – roughly 1/3 above the global average. This, notwithstanding the fact that industry and governments have been promising meaningful emissions reductions for over 15 years.

Beginning in 2018, the current federal government has introduced or announced a series of climate policies, including a price on carbon emissions, a clean electricity regulation, and most recently a cap on GHG emissions from the O&G sector.

This last point is a good segue into the matter of liabilities. Alberta Premier Danielle Smith is strongly opposed to an emissions cap, having recently cited a Conference Board of Canada analysis that suggests that it would result in $130 billion in lost government revenue between 2030 and 2040.

According to current, “official” estimates, however, Alberta’s oil and gas industry has accrued nearly the same amount – $105 billion – in closure liabilities (see here and here). As a reminder, these are the costs to properly clean up wells, pipelines, and oil sands mines. Alberta holds roughly $1.3 billion in security against these liabilities, or just over 1%. Worse still, these numbers are almost certainly a gross underestimate, with leaked internal Alberta Energy Regulator estimates from 2018 suggesting that total liabilities are likely closer to $260 billion dollars – and that this too is a conservative estimate.

And that assumes that these sites are in fact remediable, which is itself far from certain. There is concern about persistent leakage from some wells, which raises the specter of well integrity that may put future CCS projects at risk. As for the oil sands and their growing inventory of tailings, currently at 1.6 trillion liters, the plan appears to be to de-water these to the extent deemed economical, place them at the bottom of mined-out pits, cover them with soil, cover (or cap) the pits with water and hope that their various toxic constituents do not migrate to the surface water above, nor to the groundwater below. The risks to fish and fish habitat, Indigenous peoples in the Lower Athabasca Region, and downstream communities in the Northwest Territories – all matters of federal concern – are plain.
Having recently assessed the relevant liability management regimes closely, I can say with confidence that whatever the ultimate costs, they are currently on a trajectory to fall on Albertan and Canadian taxpayer. Indeed, Canadian taxpayers have already provided $1 billion for well clean-up during COVID, and hundreds of millions more in the form of interest-free loans.

I stated earlier that these liabilities and GHG emissions are inextricably linked. There are at least two aspects to this.

First, while most in industry privately admit that they’ve been kicking the “closure” can down the road for a long time, the reality of climate change and the proliferation of net-zero and other climate policies in other countries means that the road may be shorter than industry and governments expected two decades ago. China’s battery electric vehicle sales were 27% of the market last year (37% if you include plug-in hybrids), while sales of internal combustion engine (ICE) vehicles are increasingly considered to have peaked in 2017 – 7 years ago. In terms of industry positioning to respond to world trends and risks, then, we seem to have less time than we thought to close this $260 billion liability gap in any sort of reasonable way.

Second, that same net-zero imperative is currently sucking up most of the oxygen – and money – in the room. In this post-COVID period of relatively high oil prices, industry appears focused on rewarding shareholders in a bid to reaffirm its profitability, while governments are singularly focused on subsidizing GHG abatement through CCS. Remediation and reclamation efforts, in the form of research and development, appear to have been relegated to a distant third place – or worse. In terms of a transition towards a more sustainable future, then, we are going backwards.

So, we desperately need an objective, transparent, and evidence-based discussion about these and other issues. It is one that we cannot currently get in Alberta, where our government and regulators are, at best, beset by a type of “siege mentality” that prevents them from being critical and forthright with Albertans about the scope and severity of these and other challenges, examples of which I can provide during the question and answer period (see here, here, and here; for the alternative theory of “regulatory capture,” see here).

Thank you for your time this morning. I look forward to answering any questions you may have.