

U of T Community Response to the Report of the Fossil Fuel Divestment Committee

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1 | Introduction

Over the past four years, the University of Toronto (U of T) community has dedicated a great deal of effort to considering the wisdom of fossil fuel divestment as well as the university's appropriate response to the challenge of climate change.^{1,2} In September 2013, Toronto350.org first submitted a petition [the "Brief"]³ calling for fossil fuel divestment by the university; an updated version was submitted in April 2015.⁴ In November 2014, President Gertler established an *ad hoc* Advisory Committee on Divestment from Fossil Fuels [the "Committee"] to consider the petition and how the university should respond to climate change in general.⁵ In June 2015, the Committee issued a call for submissions to the U of T community.⁶ In April 2015, organizers from Toronto350.org presented to the Committee.⁷

*Toronto350.org, UofT350.org, and the other supporters of fossil fuel divestment at U of T are grateful to the Committee for their substantial application of effort, academic rigour, and open-mindedness. We are also grateful for effort and goodwill of President Meric Gertler and the Office of the President in considering this proposal.

¹Those new to the subject may benefit from: Howard, *A beginner's guide to fossil fuel divestment*.

²See also: §1 "Executive summary" Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 1-7.

³Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment*.

⁴Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*.

⁵Gertler, *Presidential Advisory Committee on Divestment from Fossil Fuels*.

⁶Karney, *Presidential Advisory Committee on Divestment from Fossil Fuels — Consultation Notice and Call for Submissions*.

⁷Donato-Wooder et al., *Why U of T should divest from fossil fuels*.

In December 2015, the Committee issued their unanimous recommendations to President Gertler [the “Report”].⁸ The Committee accepted the main argument of the Brief: that the activities of the fossil fuel industry constitute social injury, and that U of T ought to divest from some fossil fuel industry investments in response. Specifically, the Report recommends that investments be screened on the basis of three criteria:

Non-conventional or aggressive extraction “Firms that derive more than 10% of their revenue from non-conventional or aggressive extraction. (We include in this category fossil fuels firms engaged in aggressive exploration or investing in non-conventional or aggressive extraction.) We leave it to the University to define fully what counts as ‘non-conventional or aggressive extraction’. However, the Committee would highlight open-pit mining of natural bitumen in Canada, Arctic extraction or exploration, and thermal coal mining in Canada and the United States as examples.”⁹

Disinformation “Firms that knowingly disseminate disinformation concerning climate change science or firms that deliberately distort science or public policy more generally in an effort to thwart or delay changes in behaviour or regulation.”¹⁰

Coal “Firms that derive more than 10% of their revenue from coal extraction for power generation or Canadian and American power generation firms that derive more than 10% of their revenue from coal-fired plants.”¹¹

The Report includes numerous notable statements and recommendations, some of which we would particularly like to support and some of which may benefit from further refinement.

As members of the U of T community, the authors and endorsers of this Response call on President Gertler to implement the recommendations of the Committee with urgency and determination commensurate with the scale and pace of climate change. As described below, we suggest more detailed specification of some recommendations, such as those involving non-conventional extraction and partnerships with industry. We also propose additional exclusion criteria for investments, each of which is justified in light of what has been demonstrated about social injury from the fossil fuel industry and the principles which should guide U of T’s response. To adequately respond to the social injury from the fossil fuel industry documented in the Brief,

⁸Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*.

⁹*Ibid.*, p. 4–5.

¹⁰*Ibid.*, p. 4.

¹¹*Ibid.*, p. 4.

U of T should go somewhat beyond the Committee’s recommendations and also divest from firms with high break even costs or large fossil fuel reserves (as part of defining “aggressive extraction”) as well as those that fail to adhere to the principle of free, prior, and informed consent from Indigenous communities.

2 | Implementing the Report

The Report includes many far-thinking and praiseworthy features, some of which deserve special note. These include the recommendation for rapid, large-scale divestment; the oversight and monitoring processes; the rejection of shareholder activism; the endorsement for intergenerational justice as an important consideration; and the endorsement for the 2 °C and 1.5 °C warming limits from the Paris Agreement.

2.1 Particularly praiseworthy aspects of the Report

2.1.1 Recommends rapid, large-scale divestment

The Report calls for broad and rapid divestment. It clarifies that the “Funds” under consideration include all of U of T’s major assets: “Together, the University funds and the Pension funds are referred to throughout as the “Funds””.¹² The Report also calls for divestment from direct stock holdings to be immediate.¹³

This recommendation makes sense in light of the urgency of combatting climate change and the ongoing poor financial performance of the fossil fuel sector. For instance, Arch Coal — listed by the Committee as a “clear example” of a company U of T should divest from — declared bankruptcy less than a month after the Report was released.¹⁴ In January 2016, Moody’s identified 120 energy companies including Shell and Total as at risk of rating downgrades.¹⁵ In the same month, Chevron reported its first quarterly loss since 2002, ExxonMobil’s annual profit fell by half, and BP experienced its largest ever loss of \$5.2 billion.¹⁶ BP unexpectedly lost \$6.5 billion in 2015.¹⁷ Viren Doshi, PricewaterhouseCoopers’s strategy oil and gas leader, has advised that: “Momentum to replace fossil fuels with cleaner energy sources is building, and oil and gas companies need to consider their futures in this context”.¹⁸ Standard & Poor’s downgraded Chevron and Shell

¹²Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 13.

¹³Ibid., p. 4.

¹⁴Miller, *Arch Coal Files for Bankruptcy: Company seeks to cut \$4.5 billion in debt*.

¹⁵Adams, Wilson, and Vandeveld, *Moody’s puts 175 energy and mining companies on downgrade watch*.

¹⁶The Economist, *The World This Week, February 6th – 12th*.

¹⁷The Economist, *In the dark ages: Supermajors suffer from self-inflicted wounds as well as falling oil prices*.

¹⁸Cuff, *Oil and gas industry should prepare for low-carbon energy transition, warns PwC*.

and is reviewing BP and ExxonMobil.¹⁹ In February 2016, Moody's reduced the credit rating of Canadian Oil Sands Ltd., Cenovus Energy Inc., and Encana Corp. to 'junk' status.²⁰²¹

The Committee was clear in its agreement with the strong financial case for fossil fuel divestment, concluding that "investing in such companies [is not] in the long-term best financial interest of the beneficiaries of the Funds or the University".²² The Report also describes consultations with University of Toronto Asset Management Corporation (UTAM) in which the investment body accepted that it is not the case that "fossil fuels companies uniquely satisfied the University's fiduciary responsibilities".²³²⁴

2.1.2 Oversight and monitoring processes

The Report recommends important oversight processes for monitoring the implementation of fossil fuel divestment at U of T:

The Committee recommends that UTAM provide the President with an annual report on its efforts to comply with the President's directions, should he choose to accept any of the Committee's recommendations.²⁵

...

[T]he Committee recommends that the University determine a method to evaluate whether a given company's actions blatantly disregard the 1.5-degree threshold and divest from direct holdings in any companies identified as acting in this manner. The Committee also recommends that the University conduct this evaluation annually and publish both its methodology and its results in an annual report.²⁶

Implementing these oversight processes will be valuable both within U of T and for institutional investors generally. They will allow the U of T community to understand how these divestment decisions are being

¹⁹The Economist, *In the dark ages: Supermajors suffer from self-inflicted wounds as well as falling oil prices.*

²⁰Dawson, *Moody's Cuts Canadian Oil Sands' Rating to Junk Status.*

²¹Lewis, *Moody's downgrades of Cenovus and Encana stoke worries in oil patch.*

²²Karney et al., *Report of the President's Advisory Committee on Divestment from Fossil Fuels*, p. 5.

²³*Ibid.*, p. 19.

²⁴For further comment on the compatibility of fossil fuel divestment with fiduciary duty, see: Henry, Graham, Joanna Dowdell, and Milan Ilnyckj on behalf of Toronto350.org, *Letter to Presidential Advisory Committee on Divestment from Fossil Fuels Chair Bryan Karney*, p. 2-6.

²⁵Karney et al., *Report of the President's Advisory Committee on Divestment from Fossil Fuels*, p. 5.

²⁶*Ibid.*, p. 8-9.

implemented, while providing useful guidance to other institutions which are considering mechanisms for fossil fuel divestment, increasing the value of the precedent set by U of T.

2.1.3 Rejects shareholder activism

Unlike some other institutions which have considered fossil fuel divestment, the Committee was clear that ‘shareholder activism’ does not constitute an adequate response to the social injury from the fossil fuel industry:

Some commentators argue that divestment would entail reduced industry engagement from the lost opportunity for shareholder activism. There is some evidence to support this. However, the Committee believes there are also reasons to be sceptical, particularly with respect to firms engaged in fossil fuels extraction.²⁷

As discussed in the Brief, there are strong reasons to believe that divestment is a more effective means of responding to the challenge of climate change than attempted shareholder activism within the fossil fuel industry.²⁸ In particular, it is implausible to argue that shareholder activism can convince a corporation to cease involvement in its primary line of business. By clearly rejecting shareholder activism as an adequate alternative to divestment, the Report sets an important precedent which is relevant to other institutions considering fossil fuel divestment.

2.1.4 Endorses intergenerational justice as an important consideration

The Committee noted the relevance of intergenerational justice to the question of fossil fuel divestment, identifying that the effects of climate change “will disproportionately fall on students and generations of future students and children around the world”.²⁹ The energy decisions made by governments, firms, and individuals in the coming years and decades will affect the composition of the atmosphere and the magnitude of climate change for centuries to come. Investors that are committed to avoiding social injury must increasingly consider these intergenerational impacts when developing their policies. The frequent failure of

²⁷ Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 12.

²⁸ See: §6.2 “Isn’t shareholder activism a better option?” Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 133–4.

²⁹ Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 2.

democratic political systems to properly protect the right of future generations to an intact world also bolsters the case for action on the part of universities and other non-governmental actors.³⁰³¹

Work published in 2016 in *Nature Climate Change* emphasized the almost eternally long-lasting consequences of today's choices regarding fossil fuels. The authors argue that focusing only on the next century obscures the true duration of effects which must be considered across "the next ten millennia, over which time the projected impacts of anthropogenic climate change will grow and persist".³²³³³⁴ They also note how: "policy decisions made in the next few years to decades will have profound impacts on global climate, ecosystems and human societies — not just for this century, but for the next ten millennia and beyond".³⁵ In particular, this feature of climate change must be borne in mind when considering the pace at which we ought to take action. The extremely long duration of the social injury created by climate change should be used to interpret what a "a well-defined and responsible timeline" for taking action should be, particularly given how long the process of considering fossil fuel divestment has run for.³⁶

2.1.5 Endorses the 2 °C and 1.5 °C warming limits from the Paris Agreement

The Committee also repeatedly emphasized the importance of controlling the total amount of warming which is allowed, citing the 2 °C and 1.5 °C targets included in the Paris Agreement.³⁷ There is a direct contradiction between the size of the fossil fuel reserves held by corporations and the total allowable carbon budget for all future human emissions. The larger a corporation's fossil fuel reserves, the more social injury it threatens to impose; at the same time, firms with the largest reserves face the largest financial risk from further government action to control greenhouse gas pollution. While the Committee's emphasis on a global carbon budget is essential to note, the screening criteria proposed in the Report do not specifically address this issue.

U of T should take note of two other features of what was negotiated by governments in Paris. First, they

³⁰See, for instance: Gardiner, *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*.

³¹Simpson, Jaccard, and Rivers, *Hot Air: Meeting Canada's Climate Change Challenge*.

³²Clark et al., "Consequences of twenty-first-century policy for multi-millennial climate and sea-level change", p. 1.

³³See also: Revkin, *Oxford's Halley Professor on How the Climate Challenge Could Derail a Brilliant Human Destiny*.

³⁴See also: Inman, "Carbon is forever".

³⁵Clark et al., "Consequences of twenty-first-century policy for multi-millennial climate and sea-level change", p. 1.

³⁶Karney et al., *Report of the President's Advisory Committee on Divestment from Fossil Fuels*, p. 4.

³⁷Signatories to the United Nations Framework Convention on Climate Change, *Paris Agreement under the United Nations Framework Convention on Climate Change*, p. 22.

agreed on “the need for global emissions to peak as soon as possible, recognising that this will take longer for developing countries”.³⁸ This is starkly at odds with any proposals for further fossil fuel development in Canada, especially given our extremely high *per capita* level of greenhouse gas pollution and our disproportionately large contribution to historical emissions. The governments in Paris also agreed to “undertake rapid reductions thereafter in accordance with the best available science”.³⁹ Achieving such rapid reductions is incompatible with investing in firms which continue to expand their (already largely unburnable) reserves. Rapid reductions are also incompatible with major new infrastructure investments which will serve to perpetuate fossil fuel dependence in Canada and globally, such as export pipelines for the bitumen sands.

2.2 Recommendations which could be usefully expanded or refined

There are also some ways in which U of T should go beyond the contents of the Report, both in terms of defining aspects of the Committee’s recommendations more specifically and in terms of adding cost-, reserve- and consent-based criteria for screening investments.

2.2.1 Publishing valuable research

The Report notes that: “the Committee conducted a review of the literature relevant to issues concerning fossil fuel divestment and undertook a thorough assessment of divestment decisions taken at peer universities and other institutions around the world”.⁴⁰ These documents would be of considerable value for other institutions which are considering fossil fuel divestment. We urge the committee to release them publicly.

2.2.2 Supporting the transition away from fossil fuels

U of T can play an important role in accelerating the global transition away from fossil fuel dependence. The university can research climate-safe forms of electricity generation, including improved renewable sources of energy. It can also contribute to the development of energy storage and demand management technology, as well as improved energy efficiency. In particular, U of T could aid the development of technologies that allow for the repurposing of existing fossil fuel infrastructure, technologies, and capabilities. For instance, drilling expertise can be re-applied to the development of engineered geothermal systems which are

³⁸European Commission, *Climate Action: Paris Agreement*.

³⁹*Ibid.*

⁴⁰Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 22.

capable of producing zero-carbon energy and heat anywhere in the world.⁴¹ In some cases fossil fuel power stations can be converted to run on sustainably-produced biomass.⁴² Methane-powered equipment can be operated with methane captured from landfills and composting facilities, reducing the climatic impact of those emissions.⁴³

U of T could also support people with fossil fuel expertise who wish to retrain to help build a sustainable global energy system. This assistance could take the form of scholarship programs, specially designed retraining curricula, and other forms of academic and financial support. U of T faculties that teach fossil fuel related expertise today may wish to consider what sort of curricula and programs of study will best prepare their students for the world which is emerging. Assisting individuals and communities who are working to overcome fossil fuel dependence will likely be important for building political support for the transition and for overcoming opposition from jurisdictions which have traditionally been major fossil fuel producers or users. Such assistance is also an important form of social support and solidarity.

U of T can also contribute to this transition through decisions made on its own campuses, including energy efficiency upgrades for buildings and vehicles, the deployment of new energy efficient technologies like geothermal heating and cooling, and the promotion of sustainable practices in all areas of university operations.

See also: [Reinvestment](#)

2.2.3 Defining “non-conventional or aggressive extraction”

The Report recommends divestment from “[f]irms that derive more than 10% of their revenue from non-conventional or aggressive extraction”, with “non-conventional or aggressive extraction” to be defined by the university.⁴⁴ Other major institutions have pursued a targeted divestment strategy based on method of extraction only insofar as some divested specifically from companies involved in the extraction of coal and/or oil sands bitumen. Stanford University divested from companies whose principal business is coal mining in 2014, citing the fact that “coal is one of the most carbon-intensive methods of energy generation”.⁴⁵ The

⁴¹See: “Geothermal” Mackay, *Sustainable Energy — Without the Hot Air*.

⁴²For example, Ontario’s Atikokan Generating Station has been retooled to run on biomass instead of coal. Ontario Power Generation, *Atikokan Station Biomass Conversion Project*.

⁴³See, for instance: Augenstein, “The greenhouse effect and US landfill methane”.

⁴⁴Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 3–4.

⁴⁵Stanford News, *Stanford to divest from coal companies*.

University of Maine also divested from coal companies, in 2015.⁴⁶ San Francisco State University and the University of California included companies engaging in oil sands extraction, in addition to coal, in their targeted divestments.^{47,48} In 2014, the Rockefeller Brothers Fund (seeded with Standard Oil money) stated that its “immediate focus” was coal and oil sands when it announced the decision to divest.⁴⁹

The Report highlights open-pit bitumen mining and coal mining as examples of non-conventional extraction, along with Arctic extraction or exploration, but leaves further definition open. Should U of T choose to screen investments based on a more general definition of non-conventional extraction, it would be the first university to do so.⁵⁰ Thankfully, there is a body of knowledge on this subject that will aid the university in developing this definition. Modern-day fossil fuels can be classified along a technology spectrum according to their ease of extraction and processing.⁵¹ Below we recommend some metrics which may help illuminate this spectrum and aid in formulating a definition that is socially, economically, and environmentally equitable.

The physical state of the hydrocarbons: Much of the work in defining whether oil is conventional or non-conventional has to do with understanding the physical state of the hydrocarbons in their original location — that is, whether they are solid or liquid in their original, undisturbed state.

The International Energy Agency (IEA) defines conventional oil as “a mixture of hydrocarbons that exist in liquid phase under normal surface conditions” including crude oil, natural gas liquids, and condensates.⁵² Conversely, non-conventional oils are defined less strictly — but typically include oils obtained by non-traditional production techniques due to a more viscous natural state. Nonconventional oils cannot be recovered through pumping in their natural state. Instead, they require additional processing through mining or thermal / solvent-based extraction. The IEA classifies unconventional oil as including kerogen shale (also known as oil shale); oil sands production in all forms, including *in situ* extraction; light tight oil; oil derived from coal-to-liquids and gas-to-liquids processes; and synthetic oil from biomass.^{53 54} The IEA defines

⁴⁶Reuters, *University of Maine Board votes to divest from coal*.

⁴⁷Reuters, *University of California sells \$200 mln holdings in coal, oil sands firms*.

⁴⁸Henn, *San Francisco State University Divests from Coal and Tar Sands!*

⁴⁹Rockefeller Brothers Fund, *Divestment Statement*.

⁵⁰If the Committee hadn’t proposed coal divestment as an independent screening criterion, it would have been important to consider non-conventional forms of coal extraction like mountaintop removal mining as well.

⁵¹See: Gordon, *Understanding Unconventional Oil*.

⁵²Ladislav, Leed, and Walton, *New Energy, New Geopolitics: Balancing Stability and Leverage*, p. 47.

⁵³International Energy Agency, *Resources to Reserves 2013*, p. 29.

⁵⁴Since bitumen sands extracted by *in situ* processes have higher per-barrel emissions than those arising from surface mining, both techniques should have been listed as unconventional and suitable grounds for divestment by the Committee.

unconventional gas as tight gas; shale gas; coal-bed methane; and methane hydrates.⁵⁵

Statistics Canada's North American Industry Classification System defines non-conventional oil extraction in the following way:

This Canadian industry comprises establishments primarily engaged in producing crude oil from surface shales or tar sands or from reservoirs in which the hydrocarbons are semisolids and conventional production methods are not possible.⁵⁶

Statistics Canada offers the following fossil fuel extraction types as examples of unconventional extraction: bitumen production by mining and *in situ* extraction, natural gas production from surface shale or tar sands, and petroleum production from shale or sand.

The Carnegie Endowment for International Peace, a world renowned international affairs think tank, suggests the following broad definition of unconventional oil:

The U.S. Department of Energy divides unconventional oil into four types: heavy oil, extra heavy oil, bitumen, and oil shale. Some analysts also include gas-to-liquids (GTL) processes for converting natural gas to oil and coal-to-liquids (CTL) processes for converting coal to oil in the unconventional oil category. These unconventional oil-processing techniques broaden the feedstock of unconventional oils to include unconventional natural gas, such as tight gas, shale gas, coal-bed methane, and methane hydrates.⁵⁷

The same report highlights how — though it may not be evident to end-users — the transition of fossil fuel feedstocks from conventionally extracted fuels to non-conventional fuels carries with it significant social and environmental effects: “That gasoline, diesel, and jet fuel will likely remain unchanged at the pump will obscure the fact that oils are transforming upstream, with unintended societal consequences — from increased climate forcing and groundwater contamination to forest destruction and impacts on indigenous cultures”.⁵⁸

Collectively, the above definitions include all production from Canada's bitumen sands, all hydraulically fractured ('fracked') oil and gas, and coalbed methane. All of these fossil fuel sources also rely on technologies which have been developed since the late 1990s, a time when it was already clear that exploiting all the

⁵⁵International Energy Agency, *Resources to Reserves 2013*, p. 30.

⁵⁶Statistics Canada, *North American Industry Classification System (NAICS) Canada 2012*.

⁵⁷See: Gordon, *Understanding Unconventional Oil*, p. 6.

⁵⁸*Ibid.*, p. 1.

world's existing reserves would lead to an unacceptable degree of climate change. What's more, these new technologies have substantially raised per-barrel capital costs. Harry Brekelmans, head of technology at Royal Dutch Shell, has said that capital costs per barrel quadrupled from 1996 to 2014.⁵⁹

In defining non-conventional extraction for the purpose of divestment, we recommend that U of T define conventional methods as those which extract “a mixture of hydrocarbons that exist in liquid phase under normal surface conditions” including crude oil, natural gas liquids, and condensates.⁶⁰ Non-conventional extraction would therefore include, but not necessarily be limited to: oil shale; bitumen sands in all forms, including open-pit mining and *in situ* extraction; heavy and extra heavy oil; light tight oil; oil derived from coal-to-liquids and gas-to-liquids processes; tight gas; shale gas; coalbed methane; and methane hydrates.

“Aggressiveness” and the global carbon budget: While the above definitions of non-conventional extraction cover many companies that blatantly disregard the 1.5 °C threshold, it does not cover all firms that do so. This is demonstrated by the Committee's inclusion of “aggressive” extraction as an additional criterion for divestment. There is much overlap between non-conventional and aggressive extraction but they are not perfect mirrors of one another. It is crucial then for the university to divest from companies that derive greater than 10% of their revenue from either non-conventional or aggressive extraction.

“Aggressive” is a more challenging term to define, since it does not represent a typical quantitative or qualitative description of fossil fuel extraction. In the context of the divestment recommendation, “aggressive” appears to be rooted in consequences associated with mode of extraction rather than in technology choice. The Committee references the climate crisis in numerous places within the text and expressly references a global temperature limit of 1.5 °C as a critical lens through which the university should examine its investments. As such, “aggressive” extraction can be usefully defined as fossil fuel production that frustrates Canada and the world's ability to achieve emissions reductions goals outlined in the Paris Agreement. The agreement aims to limit global temperature increase to “well below 2 degrees Celsius above pre-industrial levels” and encourages all countries to “pursue efforts to limit temperature increase to 1.5 degrees Celsius”.⁶¹

Within this context, Canada's “fair share” can be defined, at a minimum, as near total cuts to the country's

⁵⁹The Economist, *In the dark ages: Supermajors suffer from self-inflicted wounds as well as falling oil prices*.

⁶⁰Ladislav, Leed, and Walton, *New Energy, New Geopolitics: Balancing Stability and Leverage*, p. 47.

⁶¹Signatories to the United Nations Framework Convention on Climate Change, *Paris Agreement under the United Nations Framework Convention on Climate Change*, p. 2.

carbon pollution during the next 35 years.⁶²⁶³ Therefore, firms screened out by the aggressiveness criterion ought to be those whose actions are “irreconcilable with achieving internationally agreed goals”.⁶⁴ In seeking to define exactly what is irreconcilable with achieving internationally agreed goals, the university should look to two different measures: assessment of cost curves for companies’ extraction projects and how companies’ carbon reserves and long-term planning relate to a 1.5–2 °C carbon budget.

The Carbon Tracker Initiative (CTI) has constructed a “carbon cost curve” for the oil industry, relating costs not only to levels of oil production but to the emissions that would result from producing and using this oil.⁶⁵ Using the Grantham Research Institute’s estimate of the 2013–2050 carbon budget compatible with a 2 °C scenario and taking into consideration oil’s approximate share of total emissions, the budget for oil is 360 billion tonnes (gigatonnes) of CO₂.⁶⁶ On CTI’s curve this corresponds to a \$60 break even oil price (BEOP). Thus, they identify all extraction projects requiring a \$60–80 BEOP as being at risk in a low-oil demand situation brought about by action to keep global warming below 2 °C, and projects requiring \$80 or more as being clearly incompatible with a 2 °C carbon budget. Further, this report identifies the companies with the highest levels of capital expenditure on projects in this risky range. HSBC Global Research has also calculated global cost curves for coal.⁶⁷ Such data should be highly informative in deciding which companies breach the “aggressive extraction” criteria.

The BEOP provides one concrete measure through which aggressive forms of extraction can be identified. U of T should therefore divest from fossil fuel corporations whose projects have a high BEOP, specifically:

- **Firms whose extraction projects require a BEOP over US\$80 (using constant 2016 dollars)**

This is likely to exclude bitumen sands development, deep water offshore extraction, arctic exploitation, and the development of other reserves that have not been widely exploited historically.⁶⁸ This restriction is a necessary response to Earth’s finite remaining carbon budget.

⁶²Bataille, Sawyer, and Melton, *Pathways to Deep Decarbonization in Canada*.

⁶³Canada’s disproportionate contribution to historical and present-day emissions is also discussed in: Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 28.

⁶⁴Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 3.

⁶⁵Carbon Tracker Initiative, *Carbon supply cost curves: Evaluating financial risk to oil capital expenditures*.

⁶⁶*Ibid.*, p. 9.

⁶⁷HSBC Global Research, *Coal and Carbon — Stranded Assets: Assessing the Risk*, p. 9.

⁶⁸The Report specifically mentions “aggressive exploration”, which should be taken to include arctic and deep water exploration, as well as protected spaces like Ecuador’s Yasuni National Park or the U.S. Arctic National Wildlife Refuge. Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 3.

The cost curve measure will effectively cover some, but not all, companies that pursue aggressive extraction and consequently disregard the 1.5 °C limit. This measure will fail to capture those companies with large reserves of traditional oil and gas who, in the face of a necessary carbon budget, still aim to extract and burn their complete reserves. The Committee noted this carbon budget and its implications in their Report:

[T]he Committee notes that were we to burn all of the planet’s current proved fossil fuel reserves, we would grossly exceed our carbon dioxide budget — in some estimates, by 300 per cent — and eclipse the 1.5-degree threshold...To observe the 1.5- degree threshold, we cannot burn all of our fossil fuels reserves. In fact, according to the recent article in *Nature*, even with advances in carbon capture and storage, “globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2 °C”.

Researchers also argue for regional limits to extraction. For example, one respected study concludes that, “open-pit mining of natural bitumen in Canada [must drop] to negligible levels after 2020 ...85% of [Canada’s] 48 billion barrels of bitumen reserves thus remain unburnable if the 2°C limit is not to be exceeded”...Similarly, Jakob and Hilaire, 2015 write: “all Arctic resources should be classi[fi]ed as unburnable.”⁶⁹

While this recognition is welcome, in order for it to be effectively addressed in the university’s response to climate change, this issue should be incorporated into the definition of aggressive extraction. For context, one estimate of a global carbon budget with an 80% chance of keeping warming to below 2 °C is 565 gigatonnes of carbon.⁷⁰ The Intergovernmental Panel on Climate Change’s (IPCC) 2014 synthesis report estimated that a carbon budget starting in 2011 and offering a 66% chance of keeping below the 1.5 °C threshold would be limited to 400 gigatonnes.⁷¹ Cumulative emissions since 2011 would likely have reduced this budget by roughly a third as of 2016. This compares with proven global fossil fuel reserves of approximately 2,795 gigatonnes. A global carbon budget compatible with 1.5 °C would therefore be restricted to less than 15% of all known fossil fuel reserves.

⁶⁹Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 8.

⁷⁰McKibben, *Global Warming’s Terrifying New Math*.

⁷¹Intergovernmental Panel on Climate Change, *Climate Change 2014 Synthesis Report*, p. 64.

In order to respond, first, to the climate risk and potential social injury embodied by large reserves of coal, oil, and gas and, second, to the financial risk associated with further restrictions on greenhouse gas pollution, U of T should divest from corporation with large fossil fuel reserves, specifically:

- **Firms that would suffer a loss worth at least 10% of their total value if a global carbon budget compatible with limiting warming to 1.5 °C is adopted**

Together, analyses based on cost curves and the size of reserves will allow U of T to determine which corporations to divest from on the basis of aggressive extraction in blatant violation of the 1.5 °C limit.

2.2.4 Disinformation and the distortion of science and public policy

In the Report, the Committee advised divestment from “[f]irms that knowingly disseminate disinformation concerning climate change science or firms that deliberately distort science or public policy more generally in an effort to thwart or delay changes in behaviour or regulation”.⁷² The Brief documents numerous examples of fossil fuel corporations and industry organizations which have publicized misleading information about climate science and worked to prevent the adoption of policies to curb greenhouse gas pollution.⁷³ U of T should also apply this criterion to firms which misleadingly advocate supposed climate change solutions which cannot actually address the problem, those that have been found to engage in deceptive advertising, and those that have lobbied to block government action on climate change.

Using the criterion of distorting climate science or policy, the Report specifically denounces “ExxonMobil Corp., for its alleged funding of disinformation”.⁷⁴ While ExxonMobil was among the leading funders of disinformation, and received much of the resulting media scandal, several other prominent companies and associations also donate to climate change deniers.⁷⁵⁷⁶⁷⁷ These companies are just as wrong in spirit, if not in scale, as ExxonMobil. Many others are implicated by other aspects of the criterion as well, specifically through distortion of climate change science or efforts to thwart changes in regulation. U of T can identify a

⁷²Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 4.

⁷³See: §3.4 “The business activities of these companies frustrate the enforcement of the rules of domestic and international law intended to protect individuals against deprivation of health, safety, and basic freedoms” Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 62–74.

⁷⁴Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 4.

⁷⁵Farrell, “Network Structure and the Influence of the Climate Change Counter Movement”.

⁷⁶Hall, *Exxon Knew about Climate Change almost 40 years ago*.

⁷⁷Goldenberg, *Exxon knew of climate change in 1981, email says - but it funded deniers for 27 more years*.

number of specific ways in which companies violate this criterion and are therefore appropriate targets for divestment.

An investigation by InsideClimateNews.org, later verified by the Union of Concerned Scientists, first exposed ExxonMobil's intentional climate change denial efforts, undertaken despite decades of knowledge about the causes and consequences of climate change.⁷⁸⁷⁹⁸⁰⁸¹⁸²⁸³⁸⁴⁸⁵⁸⁶ In 1979, Exxon spent over \$1 million to equip a tanker to study how the world's oceans were absorbing CO₂.⁸⁷⁸⁸ In a 1982 corporate primer marked "not to be distributed externally", the company recognized that stopping climate change "would require major reductions in fossil fuel combustion".⁸⁹ Within the company, a 43 page primer on climate change was distributed to executives in November 1982.⁹⁰ Despite their awareness of the problem, Exxon took steps to avoid government action in response:

Exxon helped to found and lead the Global Climate Coalition, an alliance of some of the world's largest companies seeking to halt government efforts to curb fossil fuel emissions. Exxon used the American Petroleum Institute [(API)], right-wing think tanks, campaign contributions and its own lobbying to push a narrative that climate science was too uncertain to necessitate cuts in fossil fuel emissions.⁹¹⁹²

A 1998 API memo claimed that it is "not known for sure whether (a) climate change actually is occurring, or (b) if it is, whether humans really have any influence on it".⁹³ Exxon then ran a series of "Unsettled Science" advertisements in the spring of 2000.⁹⁴ In 2006, the U.K.'s Royal Society sent a letter to Exxon accusing it of being "inaccurate and misleading" in public statements about climate change, and of supporting climate

⁷⁸Banerjee, Song, and Hasemyer, *Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago*.

⁷⁹Banerjee, Song, and Hasemyer, *Exxon Believed Deep Dive Into Climate Research Would Protect Its Business*.

⁸⁰Song, Banerjee, and Hasemyer, *Exxon Confirmed Global Warming Consensus in 1982 with In-House Climate Models*.

⁸¹Banerjee and Song, *Exxon's Business Ambition Collided with Climate Change Under a Distant Sea*.

⁸²Cushman, *Highlighting the Allure of Synfuels, Exxon Played Down the Climate Risks*.

⁸³Hasemyer and Cushman, *Exxon Sowed Doubt About Climate Science for Decades by Stressing Uncertainty*.

⁸⁴Cushman, *Exxon Made Deep Cuts in Climate Research Budget in the 1980s*.

⁸⁵Banerjee, *More Exxon Documents Show How Much It Knew About Climate 35 Years Ago*.

⁸⁶See also: Hall, *Exxon Knew about Climate Change almost 40 years ago*.

⁸⁷Banerjee, Song, and Hasemyer, *Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago*.

⁸⁸Banerjee, Song, and Hasemyer, *Exxon Believed Deep Dive Into Climate Research Would Protect Its Business*.

⁸⁹Exxon Research and Engineering Company, CO₂ "Greenhouse" Effect.

⁹⁰Song, Banerjee, and Hasemyer, *Exxon Confirmed Global Warming Consensus in 1982 with In-House Climate Models*.

⁹¹Banerjee, Song, and Hasemyer, *Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago*.

⁹²See also: Hasemyer and Cushman, *Exxon Sowed Doubt About Climate Science for Decades by Stressing Uncertainty*.

⁹³American Petroleum Institute, *Global Climate Science Communications Action Plan*.

⁹⁴Hasemyer and Cushman, *Exxon Sowed Doubt About Climate Science for Decades by Stressing Uncertainty*.

denial groups.⁹⁵⁹⁶⁹⁷⁹⁸

Exxon has not been alone in developing accurate internal awareness about climate change while communicating disinformation to policy-makers and the public. A more recent investigation by InsideClimate-News.org reveals evidence that the API — along with industry giants such as “Amoco, Phillips, Texaco, Shell, Sunoco, Sohio as well as Standard Oil of California and Gulf Oil, the predecessors to Chevron” — also knew about climate change as early as 1979.⁹⁹ This API-led group promoted disinformation which was influential in the American decision to not ratify the Kyoto Protocol.¹⁰⁰ More recently, the API has given funding to the Heartland Institute, a think-tank with an especially prominent role in generating climate denial information.¹⁰¹¹⁰² The API “represents all aspects of America’s oil and natural gas industry”, therefore all its member companies are complicit in funding disinformation about climate change.¹⁰³¹⁰⁴ In 2016, the Heartland Institute published a report entitled “Why Scientists Disagree about Global Warming” which includes dubious claims about the sensitivity of the climate system to greenhouse gases, unsupported assertions that potential feedback effects in the climate will not materialize, and misrepresentations of the state of modern climate modelling.¹⁰⁵¹⁰⁶

Leaked documents acquired by ThinkProgressGreen and verified by the Associated Press have identified two other companies associated with funding Heartland’s climate denial projects: BBT and Nucor.¹⁰⁷ Though these are not fossil fuel companies, they still meet the criterion of disseminating disinformation about climate science.

Fossil fuel corporations and others also distort climate change policies by making misleading arguments about technologies which cannot plausibly solve the problem. A large part of this distortion concerns the viability of carbon capture and storage (CCS) technology as a large-scale solution to emissions problems. This

⁹⁵Ward, *Letter to Nick Thomas, Director, Corporate Affairs, Esso UK Limited.*

⁹⁶See also: Timmons, *British Science Group Says Exxon Misrepresents Climate Issues.*

⁹⁷Adam, *Royal Society tells Exxon: stop funding climate change denial.*

⁹⁸Banerjee, Song, and Hasemyer, *Exxon’s Own Research Confirmed Fossil Fuels’ Role in Global Warming Decades Ago.*

⁹⁹Banerjee, *Exxon’s Oil Industry Peers Knew About Climate Dangers in the 1970s, Too.*

¹⁰⁰Ibid.

¹⁰¹Sourcewatch.org, *Heartland Institute.*

¹⁰²Heartland Institute, *Center on Climate and Environmental Policy Homepage.*

¹⁰³American Petroleum Institute, *About API.*

¹⁰⁴American Petroleum Institute, *API Member Companies.*

¹⁰⁵Idso, Carter, and Singer, *Why Scientists Disagree about Global Warming.*

¹⁰⁶Abraham, *Fossil fuel funded report denies the expert global warming consensus.*

¹⁰⁷Johnson and Israel, *EXPOSED: The 19 Public Corporations Funding The Climate Denier Think Tank Heartland Institute.*

is addressed in the Brief.¹⁰⁸ The IPCC cautions that “the availability and scale of these and other CDR [Carbon Dioxide Removal] technologies and methods are uncertain and CDR technologies are, to varying degrees, associated with challenges and risks”.¹⁰⁹ Furthermore, an analysis by the Smith School at the University of Oxford claims that “it would be foolhardy for an owner or operator of carbon-intensive assets to assume that NETs [Negative Emissions Technologies] will fundamentally alter the carbon budgets that they may face due to climate policy and regulation”.¹¹⁰ This assessment was based on a 2 °C threshold, so now that world leaders have committed to a 1.5 °C target, reliance on CCS is even more “foolhardy”. Nevertheless, many fossil fuel companies promote CCS as a promising solution and a way to continue business-as-usual operations.

Among the proponents of CCS are Shell and the Canadian Association of Petroleum Producers (CAPP). On its website, Shell Canada promotes its Quest CCS project as a safe and large-scale solution to emissions from its bitumen sands extraction.¹¹¹ Shell states that the Alberta and Canadian governments have given a combined \$860 million to support the Quest project, most of which came in 2009.¹¹²¹¹³ The 2009 federal budget did not allocate any new money to renewable energy, prioritizing CCS instead.¹¹⁴ This shows how public funding is being devoted to the development of a technology that will never operate on an adequate scale to substantially reduce human greenhouse gas emissions, while investment in climate-safe alternatives is being foregone in some cases. CAPP also promotes CCS as a method of “safe, long-term storage” for carbon emissions.¹¹⁵ This stance, while not as nefarious as outright climate change denial, still represents distortion of climate science and is designed to delay regulation of carbon emissions.

CAPP claims to be “the voice of Canada’s upstream oil, oil sands and natural gas industry” and therefore its actions can be deemed to have the support of its producer and associate members.¹¹⁶¹¹⁷¹¹⁸ Since the 1920s, CAPP has used this voice to pressure the government, proudly claiming to be “one of the oldest, largest, and

¹⁰⁸See: §6.15 “Won’t carbon capture and storage (CCS) save us?” Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 152–3.

¹⁰⁹Intergovernmental Panel on Climate Change, *Climate Change 2014 Synthesis Report: Summary for Policy Makers*, p. 23.

¹¹⁰Caldecott, Lomax, and Workman, *Stranded Carbon Assets and Negative Emissions Technologies*, p. 29.

¹¹¹Shell Canada, *Quest Carbon Capture and Storage Project*.

¹¹²*Ibid.*

¹¹³Taylor, *Canada, Alberta Fund Shell’s CCS Project for Oil Sands*.

¹¹⁴Canadian Centre for Policy Alternatives, *Federal Budget 2009: CCPA Analysis*, p. 4.

¹¹⁵Canadian Association of Petroleum Producers, *Carbon Capture and Storage*.

¹¹⁶Canadian Association of Petroleum Producers, *Producer Members*.

¹¹⁷Canadian Association of Petroleum Producers, *Associate Members*.

¹¹⁸On lobbying, see also: Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 63–4.

most influential lobby groups in Canada”.¹¹⁹ CAPP’s lobbying continues to this day, and their registration with the Commissioner of Lobbying lists as subject matter nearly every topic and regulation related to environment and climate.¹²⁰ Not only does CAPP pressure Canadian federal and provincial governments for oil-friendly legislation, it also employs lobbyists in the U.S. to change American policy, such as repealing a military ban on CO₂ intensive fuels like bitumen sands oil.¹²¹¹²² This shows that CAPP is deliberately distorting policy, as the Report criticizes. Through their membership and involvement in CAPP, Canadian oil and natural gas producers are complicit in these activities, while also engaging in direct lobbying in Canada, the U.S., and internationally.

Documents obtained from the Alberta government under a freedom of information request show that CAPP actively lobbies against climate policies that are in line with a 1.5 °C carbon budget. While Alberta’s provincial government was revising its climate policy in 2013, these documents show that CAPP consistently lobbied for policies that were weaker than what the federal government proposed Alberta should do. The policies CAPP advocated for would have only reduced Alberta’s greenhouse gas emissions by 1–2 million tonnes (megatonnes) of CO₂ below the status quo in 2020, meaning they would have grown 180% above 2005 levels.¹²³ CAPP was therefore lobbying to weaken both the Alberta government’s Alberta 40/40 plan and the Harper government’s recommended policies. These recommendations were incompatible with Canada’s obligations under a 2 °C carbon budget, let alone 1.5 °C.

Fossil fuel companies that promote geoengineering¹²⁴ as an alternative response to climate change which does not require the abandonment of fossil fuels may also constitute appropriate targets for exclusion under this criterion. Whether undertaken through the ‘management’ of incoming solar radiation or by actively removing CO₂ from the atmosphere, geoengineering is expected to have significant side effects, which would amount to a new form of social injury imposed on communities and ecosystems around the world.¹²⁵

Beyond advocacy for carbon capture and storage, fossil fuel corporations have undertaken numerous

¹¹⁹Canadian Association of Petroleum Producers, *Our History*.

¹²⁰Office of the Commissioner of Lobbying of Canada, *12-Month Lobbying Summary — In-house Organization: Canadian Association of Petroleum Producers/Association Canadienne des Producteurs Pétroliers / Tim McMillan, President and CEO*.

¹²¹Geman, *Canadian oil industry bolsters DC lobbying presence*.

¹²²Greenpeace, *Who’s holding us back? How carbon-intensive industry is preventing effective climate legislation*.

¹²³Stewart, *Evidence of the Canadian Association of Petroleum Producers lobbying against greenhouse gas regulations*.

¹²⁴Defined by the Oxford English Dictionary as: “the modification of the global environment or the climate in order to counter or ameliorate climate change”

¹²⁵See: §6.16 “Won’t geoengineering save us?” Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 153–4.

other actions which would justify their exclusion under this criterion. For instance, officials in New York and California are investigating Exxon for lying to the public and to its investors about climate change risk.¹²⁶¹²⁷ Also, in response to the InsideClimateNews investigation, a group of scientists endorsed a proposal from U.S. Senator Sheldon Whitehouse to investigate Exxon under anti-racketeering legislation.¹²⁸ In an article written by an heir to the Rockefeller fortune, Neva Rockefeller Goodwin argues that “Exxon’s valuation is based largely on the immense untapped reserves of oil and gas it owns. And yet if future generations are to inherit a livable world, most of those reserves must stay in the ground”.¹²⁹ The piece also notes the relevance of Exxon’s history of deceiving the public and decision-makers about climate science. It cites Exxon’s history of providing accurate warnings about the likely consequences of climate change to corporate management, while denying those consequences to shareholders and regulators. In February 2016, three U.S. Congresspeople wrote to the U.S. Attorney General asking for an investigation into a possible “conspiracy between Shell, Exxon Mobil and potentially other companies in the fossil fuel industry” intended to deceive the public about climate change while, at the same time, increasing the resilience of their own operations against the climatic changes the companies anticipated.¹³⁰

Fossil fuel companies also have a history of false advertising, in relation to both their contribution to climate change and other environmental problems. As noted in the Brief, the U.K. Advertising Standards Authority has found Shell guilty of false advertising on multiple occasions.¹³¹ In assessing a complaint about the Peabody Energy Corporation, the U.K.’s Advertising Standards Authority ruled that the use of the term “clean coal” is misleading, in part because “this technology [is] not able to prevent CO₂ from being emitted during the use of coal”.¹³² Peabody was ordered not to publish the advertisement any longer, and to avoid implying that their “technologies were emission-free or similar unless they could demonstrate that this was the case”. BP also spent millions advertising itself as “Beyond Petroleum” during the same span as it was stepping back from investments in renewables, and during which it caused major fossil fuel accidents, including the 11 deaths and \$40 billion in damage from the Deepwater Horizon disaster.¹³³

¹²⁶Gillis and Krauss, *Exxon Mobil Investigated for Possible Climate Change Lies by New York Attorney General*.

¹²⁷Schwartz, *California Said to Target Exxon in Climate Inquiry*.

¹²⁸Nuccitelli, *Is the fossil fuel industry, like the tobacco industry, guilty of racketeering?*

¹²⁹Goodwin, *Op-Ed A Rockefeller explains: Why I lost faith in Exxon Mobil, and donated my shares*.

¹³⁰Penn, *Members of Congress call for investigation of Shell over climate change*.

¹³¹Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 23.

¹³²Advertising Standards Authority, *ASA Ruling on Peabody Energy Corporation*.

¹³³Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 73, 143.

Fossil fuel corporations also spread misinformation through deceptive front groups which commonly obscure their financial connections with the industry. For example, the non-profit “Friends of Science” has run billboards in Canada which incorrectly claim that: “The sun is the main driver of climate change. Not you. Not CO₂”.¹³⁴ Talisman Energy donated \$175,000 to the group in 2004.¹³⁵ The Exxon-funded Competitive Enterprise Institute produced a ludicrous series of video advertisements with the tag line: “Carbon dioxide — They call it pollution, we call it life”.¹³⁶¹³⁷ The fossil fuel industry has a further history of funding front groups to masquerade as citizen-led grassroots organizations. This practice breaks the Public Relations Society of America and Canadian Public Relations Society’s ethical codes about the professional obligation to communicate honestly and with integrity to the general public.¹³⁸¹³⁹ The Western States Petroleum Association has recently funded front groups such as the California Drivers’ Alliance and Fed Up At the Pump to buy radio ads and billboards.¹⁴⁰ This has been associated with 15 Democrats changing course and advocating against implementing a transportation fuels carbon cap. The fossil fuel pipeline firm TransCanada also intended to pay front groups to promote the Energy East pipeline and discredit organizations concerned about the pipeline’s environmental impact.¹⁴¹ Most recently, CAPP started a front group called Energy Citizens. This paralleled the creation of a U.S. group called Energy Citizens by the API in 2009.¹⁴² Energy Citizens campaigns for governments to accept pipelines that are incompatible with a 1.5 °C carbon budget, such as Kinder Morgan and Energy East, in addition to advocating for hydraulic fracturing, a practice the Committee’s recommends divesting from.

Fossil fuel corporations have also worked hard to ‘capture’ regulatory bodies charged with monitoring and regulating their environmental performance. This can be seen in the form of government support for proposed pipeline construction, including millions of public dollars spent advertising for approval of the Keystone XL and Northern Gateway pipelines.¹⁴³ In the United States, the Minerals Management Service (MMS)

¹³⁴Vasil, *Ecojustice Calls for Probe into Climate-Change-Denying Ads*.

¹³⁵*Ibid.*

¹³⁶Competitive Enterprise Institute, *We Call it Life*.

¹³⁷Sutherland, *They Call It Pollution. We Call It Life*.

¹³⁸Public Relations Society of America, *Member Code of Ethics*.

¹³⁹Canadian Public Relations Society, *Code of Ethics*.

¹⁴⁰Union of Concerned Scientists, *The Climate Deception Dossiers: Internal Fossil Fuel Industry Memos Reveal Decades of Corporate Disinformation*, p. 13–4.

¹⁴¹Graves, *Edelman TransCanada Leak: Aggressive PR for Keystone Alt*.

¹⁴²Stewart, *Harper Conservatives’ secret tactics to protect oil sands: FOI details*.

¹⁴³Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 73.

was broken up after “MMS staff accepting money and gifts from oil and gas companies” and “an inspector in the agency’s Lake Charles, Louisiana office conducting inspections of a company’s drilling platforms while negotiating a job with that company”.¹⁴⁴¹⁴⁵ Canada’s National Energy Board (NEB) was established in 1959 to be a “knowledgeable partner”, but has more recently become principally funded by four major Canadian pipeline companies (Enbridge, TransCanada, Spectra and Kinder Morgan).¹⁴⁶ In internal documents, the NEB has described limiting public participation in pipeline reviews and “handling protestor disruption” as “successes”.¹⁴⁷ In the context of offshore drilling, the Canadian Senate’s Standing Senate Committee on Energy concluded: “it would be worthwhile exploring in greater detail the structure and role of the offshore petroleum Boards to determine whether there is in fact a material conflict between regulatory roles”.¹⁴⁸

There is also a flow of staff back and forth between Canada’s energy and environment regulators and the fossil fuel industry. In 2015, the Government of Canada appointed Steven Kelly, an industry consultant, to the NEB. Kelly was one of the authors of Kinder Morgan’s application for the proposed Trans-Mountain Pipeline expansion, a project currently under review by the NEB at the time of his appointment.¹⁴⁹ In western Canada, the Port of Metro Vancouver — which regulates the shipment of more than 27 million tonnes of coal annually — has become structured in such a way that 7 of 11 board members are appointed by cabinet upon industry recommendation.¹⁵⁰¹⁵¹¹⁵² In 2013, access to information requests revealed port officials corresponding with the Coal Alliance, an industry association and lobby group, referring to the Coal Alliance’s media interviews and government relations work as “positive progress”. Port officials were also found warning industry firms of expected protest events, and wishing them “good luck” at their open houses.¹⁵³¹⁵⁴

In addition to the fossil fuel industry’s successful distortion of policy, regulation, and public opinion to suit their interests, the fossil fuel industry has effectively secured taxpayer support in the form of various kinds of subsidies. In May 2015, the International Monetary Fund estimated that total global subsidies to fossil

¹⁴⁴Whitehouse, *Whitehouse Slams Corporate Influence at MMS, Proposes Legislation to Defend Integrity of Government*.

¹⁴⁵See also: Nikiforuk, *National Energy Board: Captured Regulator?*

¹⁴⁶See also: *ibid*.

¹⁴⁷Prystupa, *Waterloo woman finds NEB e-mail lauding public’s inability to question pipelines*.

¹⁴⁸Standing Senate Committee on Energy, the Environment and Natural Resources, *Facts do not Justify Banning Canada’s Current Offshore Drilling Operations: A Senate Review in the Wake of BP’s Deepwater Horizon Incident*, p. 33.

¹⁴⁹The Vancouver Sun, *Kinder Morgan consultant appointed to National Energy Board*.

¹⁵⁰Harrison, *Reform needed before expanding coal shipments*.

¹⁵¹Port Metro Vancouver, *Board of Directors*.

¹⁵²Port Metro Vancouver, *Cargo Statistics Report — 2 pager — YTD: Sep 2015 vs Sep 2014*.

¹⁵³Hoekstra, *Port Metro Vancouver hid its sponsorship of coal conference, emails reveal*.

¹⁵⁴Hoekstra, *Port Metro Vancouver’s ‘cosy’ emails with coal industry a problem, critics charge*.

fuel companies amounted to \$5.3 trillion — equivalent to \$10 million per minute.¹⁵⁵ This estimate sought to internalize some of the costs imposed on third parties by the operation of fossil fuel corporations, including through air pollution and extreme weather worsened by climate change. Writing for *The Guardian*, Damian Carrington notes that the total estimated figure exceeds total global governmental spending on health.¹⁵⁶

Several fossil fuel corporations have also released public statements which directly contradict the possibility of constraining warming to 2 °C or 1.5 °C. When pressured by investors to disclose risks related to more stringent climate regulation, Shell stated: “We do not believe that any of our proven reserves will become ‘stranded’”. They also stated that: “We do not see governments taking the steps now that are consistent with the 2 °C scenario”.¹⁵⁷ Exxon has stated that policy changes sufficient to reach these targets are outside “the reasonably-likely-to-occur range of planning assumptions”.¹⁵⁸ William Colton, ExxonMobil’s vice president of corporate strategic planning, has also stated: “All of ExxonMobil’s current hydrocarbon reserves will be needed, along with substantial future industry investments, to address global energy needs”.¹⁵⁹

Another reflection of the fossil fuel industry’s willful blindness about stranded assets concerns new proposed pipelines which would emerge from the bitumen sands of Alberta and Saskatchewan. CAPP and its member companies have been energetic advocates of new pipelines to export diluted bitumen. Analysis based on an Integrated North American Pipeline model, undertaken by Oil Change International (OCI), shows that building pipelines including Keystone XL, the Northern Gateway pipeline, the Kinder Morgan TransMountain pipeline, or Energy East would only be useful in terms of future growth in total bitumen sands production.¹⁶⁰ Their model considers North America’s integrated pipeline infrastructure, as well as the potential for rail transport to be substituted for pipelines, and concludes that new pipelines would facilitate major emission growth in the bitumen sands, while “without new pipelines significant amounts (some 34.6 billion metric tons) of carbon will stay in the ground”.¹⁶¹ New pipeline construction is fundamentally at odds with the policy changes and investment decisions necessary to constrain warming to 2 °C or 1.5 °C.

Oil Change International determined that all existing pipeline export capacity from the bitumen sands

¹⁵⁵Coady et al., *How Large Are Global Energy Subsidies?*

¹⁵⁶Carrington, *Fossil fuels subsidised by \$10m a minute, says IMF*.

¹⁵⁷The Economist, *The elephant in the atmosphere*.

¹⁵⁸*Ibid.*

¹⁵⁹ExxonMobil, *ExxonMobil Releases Reports to Shareholders on Managing Climate Risk*.

¹⁶⁰McKinnon, Muttitt, and Stockman, *Lockdown: The End of Growth in the Tar Sands*.

¹⁶¹*Ibid.*, p. 1.

will be occupied by 2017.¹⁶² By contrast, building any of Keystone XL, the Northern Gateway pipeline, the TransMountain expansion, or Energy East would allow new production capacity to come online past 2020.¹⁶³ If all four proposed pipelines are stopped, OCI projects that enough bitumen will be kept in the ground to prevent emissions of 34.6 gigatonnes of CO₂ equivalent. This is comparable to the emissions of 227 coal-fired power plants running for 40 years.¹⁶⁴

As an important aside, the OCI report also explains why rail transport cannot serve as a cost-effective substitute for pipelines. When they examined the economics of this possibility they found that since the per barrel cost of transport by rail is almost double that of pipelines, most upcoming oil sands expansion projects will not be commercially viable if pipelines are not built. They cite CAPP as saying: “additional pipelines are imperative to make new expansion commercial”.¹⁶⁵ Whether supported by pipelines or rail transport, the prospect of new production in the bitumen sands is fundamentally at odds with Canada’s Paris commitment to reduce emissions to 30% below 2005 levels by 2030.

The Report’s recommendation that Canada “will need strategies to address the boom and bust cycles that have historically tested narrowly focused resource and energy sectors” should be considered in the context set out by OCI.¹⁶⁶ New pipeline construction is not a solution to the current oil price bust and would in fact facilitate the development of new production that worsens Alberta and Canada’s dependence on the fossil fuel industry. Shifting away from fossil fuels as an energy source and export industry will no doubt be difficult, but overcoming our fossil fuel dependence will also free us from the harmful impacts of volatility in oil and gas prices.¹⁶⁷

The Report also implicates companies that distort policy or try to delay regulation. Free trade agreements such as NAFTA often pose a substantial obstacle to environmental regulation by allowing lawsuits such as the 1997 challenge to a Canadian ban on the neurotoxin MMT, a 2009 challenge to Ontario’s feed-in-tariff Program, and a 2012 challenge to Quebec’s ban on hydraulic fracturing (“fracking”).¹⁶⁸ During the negotiations for a new free-trade deal, the Transatlantic Trade and Investment Partnership (TTIP), companies including

¹⁶²McKinnon, Muttitt, and Stockman, *Lockdown: The End of Growth in the Tar Sands*, p. 21.

¹⁶³*Ibid.*, p. 21.

¹⁶⁴*Ibid.*, p. 4.

¹⁶⁵*Ibid.*, p. 26.

¹⁶⁶Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 7.

¹⁶⁷See also: Supporting the transition away from fossil fuels

¹⁶⁸Sinclair and Mertins-Kirkwood, *NAFTA Chapter 11 Investor-State Disputes*.

Shell, BP, Chevron, and GE were having *in camera* meetings with negotiators and getting access to confidential documents.¹⁶⁹ A spokesperson for the European Oil Refiners' Association said that the group wanted "full access to crude oil, and a more developed gas market allowing price equalisation between the EU and US".¹⁷⁰ The involvement of fossil fuel corporations in the negotiations for this deal likely worked to further these hopes, thereby thwarting regulations that would keep U.S. fossil fuels out of the European market. There are concerns that opening up this market will hamper Europe's transition to renewable energy and trigger an increase in North American fossil fuel production.¹⁷¹

U of T's Policy on *Social and Political Issues With Respect to University Divestment* defines "social injury" as: "the injurious impact which the activities of a company are found to have on consumers, employees, or other persons, particularly including activities which violate, or frustrate the enforcement of, rules of domestic or international law intended to protect individuals against deprivation or [sic] health, safety, or basic freedom".¹⁷² The fossil fuel industry has a long and ongoing record of frustrating the enforcement of domestic and international laws. This record should be further investigated and monitored in an ongoing manner as U of T works to make its investment decisions compatible with its values and policies.

2.2.5 Partnerships with the fossil fuel industry

One reason why the Committee recommends divestment is to withdraw the 'social license' from fossil fuel corporations:

The aim of this statement is to educate and contribute to the debate highlighting the industry's 'social licence' — the accommodation, acceptance, or indulgence granted the industry by the public and the government — with the goal of informing public opinion and public policy.¹⁷³

We agree that addressing the urgent challenges posed by climate change calls for the engagement of our community. This can be accomplished in a variety of ways, including the five specific initiatives suggested in the Report.¹⁷⁴ However, if collaborations and partnerships restore the industry's social licence (as identified as an argument for divestment), the benefits to the industry must be unjustified or counterproductive.

¹⁶⁹Neslen, *TTIP talks: EU alleged to have given ExxonMobil access to confidential strategies*.

¹⁷⁰*Ibid.*

¹⁷¹Jeffries, *What is TTIP and why should we be angry about it?*

¹⁷²University of Toronto Governing Council, *Policy on Social and Political Issues With Respect to University Divestment*.

¹⁷³Karney et al., *Report of the President's Advisory Committee on Divestment from Fossil Fuels*, p. 9.

¹⁷⁴*Ibid.*, p. 11–2.

The proposed Collaboration Fund is problematic in two ways. First, increasing financial collaboration with the industry must do more than promote better industrial practices now. In the mid-to-longer term we must move society past fossil fuel dependence. The collaborations (and innovations) that are truly needed will leverage this paradigm shift. Second, industry-supported research and education must be free of bias or suspicion of bias. Good news stories about innovations should not ‘greenwash’ reality.¹⁷⁵ Any taint of bias or greenwashing would only arouse cynicism and tarnish the excellent reputation of the University of Toronto.

As such, we recommend that partnerships with firms whose stocks have been divested by U of T generally not be undertaken, that partnerships not include research on aggressive or non-conventional modes of fossil fuel production, and that particular care be taken to avoid partnerships that will help firms to ‘greenwash’ their unsustainable activities. Partnerships in the area of “renewable energy and climate-friendly technologies” are especially desirable, in part because of how the development of such technologies is undercapitalized when compared with fossil fuel technology.¹⁷⁶

We commend the initiative to set an institutional example on campus sustainability by bringing to bear all of our considerable intellectual and technical resources at U of T. We hope that the Meeting Climate Change Fund and Sustainability Fund initiatives will put adequate funding in place for what is our most direct responsibility — improving our home institution’s sustainability and carbon footprint.¹⁷⁷

2.2.6 Reinvestment

The Report explains that:

A targeted divestment strategy such as the one recommended by the Committee is an example, albeit a small one, of the kind of capital reinvestment the global community will require in order to move away from the network of systems locked into the use of fossil fuels.^{178 179}

The example set by U of T will be most meaningful if funds divested from fossil fuel corporations are reinvested in ways that will support this transition to a low-carbon society. The Brief recommends a variety of

¹⁷⁵“Greenwashing” is defined by the Oxford English Dictionary as: “the creation or propagation of an unfounded or misleading environmentalist image”

¹⁷⁶Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 10.

¹⁷⁷*Ibid.*, p. 11.

¹⁷⁸*Ibid.*, p. 10.

¹⁷⁹It is not clear whether the Meeting Climate Change Fund, Sustainability Fund, and Collaboration Fund discussed on p. 11 are meant to be established using divested funds.

options, including a tri-campus energy efficiency refit where a significant capital contribution and effective prioritization of projects decrease U of T's fossil fuel dependence.¹⁸⁰¹⁸¹ U of T could also invest in new or existing financial instruments designed with climate change in mind. Unlike small retail investors with insufficient assets to encourage the creation of new financial instruments, U of T could help drive the emergence of products like low-fee index tracking funds which exclude the fossil fuel sector. These would then be available to other investors who are sensitive to climate-related risks, or who wish to divest their portfolios from firms involved in imposing social injury.

3 | Additional divestment criteria

In addition to the three divestment criteria recommended in the Report, U of T should sell direct holdings in corporations with high break even oil prices; firms with large fossil fuel reserves; and corporations that fail to achieve free, prior, and informed consent from Indigenous communities or which violate Indigenous title.

3.1 Firms with high break even oil prices or large fossil fuel reserves

As discussed in [Defining “non-conventional or aggressive extraction”](#), U of T should divest from firms whose break even oil price exceeds \$80. U of T should also divest from firms that would suffer a loss worth at least 10% of their total value if a global carbon budget compatible with limiting warming to 1.5 °C is adopted.

3.2 Social injury imposed on Indigenous communities

Toronto350.org is initiating a dialogue with Indigenous peoples that respects their self-determination; provides a space for them to interact as full stakeholders in any conversation and decision surrounding divestment at U of T; and helps us, as an organization, learn how we can best support them. This is motivated in part by our awareness of the impact of the fossil fuel industry on Indigenous communities. We are still in the early stages of this process and do not endeavour to speak on behalf of Indigenous communities, rather we would like to use our unique position as climate justice advocates at a public institution to contribute to the work and collective action of Indigenous peoples across Canada.

¹⁸⁰See: §7.1.2 “Alternatives for divested funds” Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 158–60.

¹⁸¹See also: Henry, Graham, Joanna Dowdell, and Milan Ilnyckyj on behalf of Toronto350.org, *Letter to Presidential Advisory Committee on Divestment from Fossil Fuels Chair Bryan Karney*, p. 20.

As U of T is grappling with how to best implement fossil fuel divestment, it is also becoming increasingly aware of the role it must play in respecting and upholding Indigenous rights. To properly address these two issues, it is essential that the university begin by recognizing its own colonial history. U of T was established and continues to operate on land that has been and is shared by the Anishinaabe, Haudenosaunee, Petun, and Wendat peoples, in addition to other Indigenous nations. U of T operates on land covered by the Dish with One Spoon wampum belt. This agreement between the Anishinaabe, Mississaugas, and Haudenosaunee peoples requires that the university care for the land today, as well as take care of the land for future generations, alongside creatures past and present.¹⁸² If we fail to respond adequately to climate change, we will fail to honour this intention. This provides important context for U of T's engagement with divestment. Divestment is a powerful action that public institutions can implement when addressing climate change and moving towards a more sustainable future. However, these institutions must also acknowledge the peoples who have occupied and protected the land for centuries prior to settler colonialism, and the processes that led to its theft and the exploitation of its resources.

The Brief and other materials presented to the Committee clearly address the social injury inflicted on Indigenous communities by the fossil fuel industry.¹⁸³¹⁸⁴¹⁸⁵ Notably, existing inequalities often make Indigenous communities more vulnerable to the effects of climate change, not to mention the impacts of displacement and of living in proximity to sites of resource extraction. Toronto350.org maintains that this disproportionate impact on Indigenous peoples should be clearly stated by the President as a motivation for divestment. Moreover, the Committee's report fails to acknowledge the social injury caused by extraction and pollution, which also disproportionately impacts Indigenous peoples. In Aamjiwnaang First Nation, high exposure to pollutants from petrochemical refineries has been linked to low male birth rates and various health issues including "miscarriages, chronic headaches, and asthma".¹⁸⁶

Some communities that have experienced continued environmental pollution of their territory include the Lubicon Lake Cree Nation, which has experienced multiple oil spills, and the Athabasca Chipewyan and the Mikisew Cree First Nations, which have both experienced the ongoing pollution of their territories by

¹⁸²Ryerson University, *Land Acknowledgement*.

¹⁸³See: §3.2.8 "Threats to First Nations groups and indigenous cultures". Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 50.

¹⁸⁴Lascaris, *University of Toronto Divestment Lecture*.

¹⁸⁵Donato-Wooder et al., *Why U of T should divest from fossil fuels*.

¹⁸⁶The Canadian Press, *First Nations exposed to pollutants in 'chemical valley'*.

bitumen sands development in northern Alberta. This negligence demonstrates that fossil fuel extraction has direct human health impacts on Indigenous peoples. Further, we must recognize that these practices not only destroy land (and have subsequent impacts on health and wellbeing), but also destroy the traditional food systems that many Indigenous communities depend on for their sustenance and livelihood.¹⁸⁷¹⁸⁸

In some cases, publicly-traded fossil fuel corporations have either engaged directly in human rights abuses committed against Indigenous people or undertaken such abuses in collaboration with governments. For Shell, this has included complicity in the unjust execution of nine Ogoni tribal leaders, including Ken Saro-Wiwa, in Nigeria in 1995.¹⁸⁹

There is strong evidence of ongoing toxic injury continuing to be imposed on Indigenous communities by fossil fuel corporations in Canada.¹⁹⁰ Under the *Alberta Land Stewardship Act*, a panel was assembled in 2015 to assess the Lower Athabasca Regional Plan (LARP). Their report raises troubling questions about violations of free, prior, and informed consent as well as Indigenous title in the development of Canada's bitumen sands.¹⁹¹ The LARP was a regional plan approved by the Government of Alberta based on applications from six provincial First Nations. This plan included a review panel report in 2015, which aimed to make recommendations to the province based on feedback from the participating First Nations demonstrating that they are “directly and adversely affected” by external forces working on and around Indigenous land. Many of the First Nations which applied for LARP recognition noted that land use, health, and the sustainability of traditional lifestyles are at risk from the effects of extractive industries in Alberta, particularly in the energy sector. These communities stated that there have not been enough regulations on these extractive procedures in the areas of “outcomes, thresholds, frameworks or management plans for managing adverse impacts to First Nation lands with their respective Treaty and Aboriginal rights for Traditional Land Use on these Territorial Lands”.¹⁹² These Athabasca First Nations have also argued that unimpeded growth and development of companies operating around Territorial Lands has been allowed to continue without consideration of First Nations consent and impacts. With regards to the Shell Jackpine Mine, the Review Panel found that “Alberta

¹⁸⁷McCarthy and Cryderman, *Oil sands pollutants contaminate traditional First Nations' foods: report*.

¹⁸⁸Amnesty International, *The Lubicon Cree: Ongoing human rights violations*.

¹⁸⁹See: §5.1.1 “Legal offences in Nigeria” Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 121.

¹⁹⁰See also: §3.2.8 “Threats to First Nations groups and indigenous cultures” and §3.4.1 “Canadian domestic law” *ibid.*, p. 50–1, 64.

¹⁹¹Lower Athabasca Regional Plan Review Panel, *Review Panel Report 2015*.

¹⁹²*Ibid.*, p. 184.

has not conducted the necessary health studies”, that the regulatory regime must consider cumulative impacts from multiple projects, and that despite the establishment of new conservation areas some of the significant adverse impacts on wildlife are likely permanent.¹⁹³

The harm caused to these communities from extraction and pollution is made more abhorrent by the fact that many fossil fuel projects have been built on Indigenous land without consent. Social injury has been repeatedly inflicted upon Indigenous communities through failure of the fossil fuel industry to secure free, prior, and informed consent.

The *United Nations Declaration on the Rights of Indigenous Peoples* makes repeated reference to the standard of free, prior, and informed consent. Article 32(2) of the *Declaration* provides that:

States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.¹⁹⁴

This standard has been endorsed by all major Canadian political parties.¹⁹⁵¹⁹⁶¹⁹⁷¹⁹⁸ Addressing the 36th Annual General Assembly of the Assembly of First Nations, Prime Minister Justin Trudeau stated:

When I say that we must complete the unfinished work of Confederation, I mean that Canada needs a renewed, nation-to-nation relationship with Aboriginal communities. A relationship based on recognition, rights, respect, co-operation and partnership. One that is rooted in the principles of the *United Nations Declaration on the Rights of Indigenous Peoples*. One that is guided by the spirit and intent of the original Treaty relationship, and one that respects the decisions of our courts. One that takes us beyond our formal agreements and speaks to how we ought to treat each other – person to person and spirit to spirit. One that remembers that when we conduct

¹⁹³Lower Athabasca Regional Plan Review Panel, *Review Panel Report 2015*, p. 198.

¹⁹⁴Signatories to the United Nations Declaration on the Rights of Indigenous Peoples, *United Nations Declaration on the Rights of Indigenous Peoples*, p. 12.

¹⁹⁵Liberal Party of Canada, *Policy Resolution 133: Priority: Respecting Aboriginal Rights*.

¹⁹⁶Smith, *NDP's Thomas Mulcair promises 'new era' in Canada's relationship with Indigenous peoples*.

¹⁹⁷Indian and Northern Affairs Canada, *Canada's Statement of Support on the United Nations Declaration on the Rights of Indigenous Peoples*.

¹⁹⁸CBC News, *Canada endorses indigenous rights declaration*.

ourselves with dignity, we manifest our respect for the Creator, and for Creation.¹⁹⁹²⁰⁰

The system that U of T implements to divest from fossil fuel corporations should meet the requirements of the *Declaration*.

The importance of endorsing Article 32(2) is exemplified by the consequences of the Canadian NEB's repeated failure to adhere to it. In 2014, Grand Chief Phillip Stewart of the Union of B.C. Indian Chiefs and over 100 people crossed an injunction line, protesting survey work by the pipeline company Kinder Morgan to expand the Trans Mountain pipeline on Burnaby Mountain.²⁰¹ Although they were arrested, all charges were dropped as the company had instructed officials to enforce an injunction line along inaccurate GPS coordinates and officials never received the court's authorization to set up a police enforcement zone.²⁰² The NEB recently approved the reversal of Enbridge's Line 9 pipeline and is being challenged in court by the Chippewas of the Thames First Nation for failing to consult and implement their right to participate in decisions surrounding the use of their land.²⁰³ British Columbia's Supreme Court ruled that the government "has breached the honour of the Crown by failing to consult" with the Gitga'at and other Coastal First Nations on the Enbridge Northern Gateway pipeline.²⁰⁴ These failures by government to honour Indigenous peoples' right to free, prior, and informed consent provide influential institutions, such as U of T, with the opportunity to take leadership in advocating for the importance of Indigenous rights by including this as a criterion for divestment.

The renewed appreciation for the legal importance of Indigenous title is especially timely given the recommendations from the Truth and Reconciliation Commission's (TRC) reports.²⁰⁵ ²⁰⁶ U of T is grappling with its role in reconciling the impacts of colonialism. Part of U of T's role should include acknowledging and fighting against modern manifestations of colonialism, such as extractive operations on Indigenous land undertaken without consent. Cutting ties with fossil fuel companies that violate that consent can be real first step for U of T.

The calls to action issued by the TRC include several items related to Indigenous consent for resource

¹⁹⁹Trudeau, *Remarks by Justin Trudeau at the Assembly of First Nations 36th Annual General Assembly*.

²⁰⁰See also: Smith, *Canada will implement UN Declaration on Rights of Indigenous Peoples, Carolyn Bennett says*.

²⁰¹Prystupa and Uechi, *RCMP responds with respect as Grand Chief arrested on Burnaby Mountain*.

²⁰²Moreau, *Judge dismisses all civil contempt charges against Burnaby Mountain protesters*.

²⁰³Mehta, *Ontario first nation heads to Supreme Court over Enbridge's Line 9*.

²⁰⁴CBC News, *B.C. government failed to properly consult First Nations on Northern Gateway pipeline, court rules*.

²⁰⁵Truth and Reconciliation Commission of Canada, *Honouring the Truth, Reconciling for the Future*.

²⁰⁶All of the TRC's reports are accessible at: <http://nctr.ca/reports.php>

development and Canada's legal framework:

45. We call upon the Government of Canada, on behalf of all Canadians, to jointly develop with Aboriginal peoples a Royal Proclamation of Reconciliation to be issued by the Crown. The proclamation would build on the Royal Proclamation of 1763 and the Treaty of Niagara of 1764, and reaffirm the nation-to-nation relationship between Aboriginal peoples and the Crown. The proclamation would include, but not be limited to, the following commitments:

- i. Repudiate concepts used to justify European sovereignty over Indigenous lands and peoples such as the Doctrine of Discovery and *terra nullius*.
- ii. Adopt and implement the *United Nations Declaration on the Rights of Indigenous Peoples* as the framework for reconciliation.
- iii. Renew or establish Treaty relationships based on principles of mutual recognition, mutual respect, and shared responsibility for maintaining those relationships into the future.
- iv. Reconcile Aboriginal and Crown constitutional and legal orders to ensure that Aboriginal peoples are full partners in Confederation, including the recognition and integration of Indigenous laws and legal traditions in negotiation and implementation processes involving Treaties, land claims, and other constructive agreements.

...

47. We call upon federal, provincial, territorial, and municipal governments to repudiate concepts used to justify European sovereignty over Indigenous peoples and lands, such as the Doctrine of Discovery and *terra nullius*, and to reform those laws, government policies, and litigation strategies that continue to rely on such concepts.²⁰⁷

...

92. We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources. This would include, but not be limited to, the following:

²⁰⁷ Truth and Reconciliation Commission of Canada, p. 4–5.

- i. Commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects.
- ii. Ensure that Aboriginal peoples have equitable access to jobs, training, and education opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects.²⁰⁸

These recommendations come at a time of growing acceptance — both in Canada and internationally — that resource development undertaken without the consent of Indigenous communities is an invalid practice. Since the fossil fuel industry has been an especially serious violator of this requirement, inclusion of a screening criterion for investments based on respect for free, prior, and informed consent is fully compatible with the objectives established in the Report.

Some commenters and politicians have questioned the desirability of giving Indigenous communities a ‘veto’ over economic development.²⁰⁹²¹⁰ For instance, on the subject of pipelines they have argued that extractive industries elsewhere should have the right to force them through, on the basis of the argument that the fossil fuel producers have the right to ship and market their products regardless of the wishes of people in the way. One compelling response to this line of argument can be found in *The Comeback*, a recent book by John Ralston Saul. He contrasts the short-term ‘extract and move on’ mentality embodied in corporate practice with the value of putting decision-making in the hands of “people who want to live there and want their children and grand-children to live there”.²¹¹²¹² In addition to the clear requirement in Canadian and international law to respect Indigenous rights, there is also a positive governance case that empowering Indigenous communities will lead to better long-term outcomes.

Toronto350.org is currently consulting with various Indigenous people and First Nations to discuss the intersections of fossil fuel divestment and the upholding of Indigenous rights, as well as possibilities for how the two may be implemented simultaneously at U of T. President Gertler has stated that there is a strong possibility that Toronto350.org can collaborate with the U of T committee that is currently being formed to address

²⁰⁸Truth and Reconciliation Commission of Canada, p. 10.

²⁰⁹See, for instance: Calgary Herald Editorial Board, *Editorial: Pipelines must flow*.

²¹⁰Muise, *Trudeau should step into Energy East debate: Ambrose*.

²¹¹Saul, *The Comeback*, p. 27.

²¹²See also: McCarthy, *First Nations groups slam Liberal reforms to pipeline reviews*.

the implications of the TRC report. Should this committee be interested in collaboration, Toronto350.org would encourage the President to task the committee with the creation of a comprehensive criterion of divestment that includes divesting from companies that inflict social injury on Indigenous communities in the ways previously discussed. Given that creating this criterion will require extensive consultation, it would not be completed by the President's March 31st deadline for releasing his decision on fossil fuel divestment. In the interim, Toronto350.org strongly recommends that the President publicly announce that the goals of the university's committee on Truth and Reconciliation include fossil fuel divestment, and include the extractivist, colonial practices of the fossil fuel industry on Indigenous land and the disproportionate impacts of climate change on Indigenous communities as important motivations for divestment. We would encourage the President to initiate the process of divestment on these grounds and to include space for a criterion on Indigenous social injury, particularly as it relates to free, prior, and informed consent, within his decision to divest from fossil fuels in March. This would avoid any need to undertake another process of compiling a new brief, assembling a new *ad hoc* committee, etc.

4 | U of T leadership and the divestment precedent

Many features of the Committee's analysis should be carefully noted by fossil fuel divestment campaigns elsewhere and by institutional investors which are evaluating them. In particular, their conclusion that "investing in such companies [is not] in the long-term best financial interest of the beneficiaries of the Funds or the University" should be noted by other institutions.²¹³ The Committee is clear in saying that "[i]nvesting in firms whose actions increase the likelihood of these profoundly negative financial implications [from climate change] is plainly not in the long-term best financial interest of either the beneficiaries of the Funds or the University itself".²¹⁴ The conclusion that divestment is compatible with fiduciary duty — and the broad review of literature and precedent that were undertaken to support the development of the Committee's recommendations — are also notable.²¹⁵

The Report includes an incisive description of the collective action problem the world faces in responding to climate change and to the vital role that leadership can play in mitigating it:

²¹³Karney et al., *Report of the President's Advisory Committee on Divestment from Fossil Fuels*, p. 5.

²¹⁴*Ibid.*, p. 19.

²¹⁵See: [Publishing valuable research](#)

Collective action, undertaken as a result of leadership, regulation, or incentive, is one means of changing this kind of ultimately counter-productive, self-interested behaviour. In democratic societies, it falls to leaders — institutions or individuals — to persuade governments to implement these regulations or incentives and to persuade the public both to accept and to demand such policies.²¹⁶

The Committee also explains:

A targeted divestment strategy such as the one recommended by the Committee is an example, albeit a small one, of the kind of capital reinvestment the global community will require in order to move away from the network of systems locked into the use of fossil fuels. Indeed, more than simply setting an example, through a targeted divestment action, the University of Toronto would be taking a step towards normalizing a different idea for how society should be organized. In this regard, a divestment campaign is a collective effort to alter what is considered an appropriate and profitable set of priorities for society and, by extension, what are appropriate decisions regarding investments, behaviour, and public policy. The notion of helping society reimagine how it is organized is entirely consistent with the University’s mission as an institution of advanced research and higher education.²¹⁷

Both of these arguments bolster the case for prompt and highly visible action, including fossil fuel divestment.

The Report doesn’t display the same foresight in arguing that “fossil fuels will remain an irreplaceable component of modern infrastructure at least for the foreseeable future”.²¹⁸ As their point about reimagining society demonstrates, we can and must foresee a future where we overcome fossil fuel dependence. Otherwise, we will surely commit ourselves to warming dramatically beyond the limits agreed at Paris and almost universally regarded by scientists as dangerous to cross.²¹⁹ The fossil fuel industry works hard to position itself and its products as indispensable — at least until some miraculous future technology emerges. In reality, no foreseeable technology can reconcile business-as-usual fossil fuel production and use with maintaining a

²¹⁶Karney et al., *Report of the President’s Advisory Committee on Divestment from Fossil Fuels*, p. 9.

²¹⁷*Ibid.*, p. 10.

²¹⁸*Ibid.*, p. 7.

²¹⁹See: §2.2 “It is not properly the subject of ongoing academic debate that” Toronto350.org, *The Fossil Fuel Industry and the Case for Divestment: Update*, p. 12–8.

stable climate. U of T, along with the wider investment community, can and must foresee the replacement of fossil fuels. To do otherwise is to contribute to worsening planetary catastrophe.

The time for substantial action on climate change is propitious. Keeping total warming below 2 °C or 1.5 °C requires the rapid and complete implementation of the leadership actions recommended by the Committee. By implementing the Report's three screening criteria for divestment along with the three recommended in this Response, U of T can assert its values and provide essential guidance to institutional investors elsewhere. When U of T students in fifty or one hundred years reflect on their institution's response to climate change, they will remember these prudent and meaningful actions as an important step in the global turn toward climate-safe forms of energy and international and intergenerational climate justice.

5 | Authors

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6 | Endorsements

This Response has been prepared in consultation with U of T faculty, staff, students, and alumni, as well as outside experts. The following individuals and organizations endorse the Community Response and call on President Gertler to implement its recommendations alongside those of the Committee:

- Arts and Science Student Union
- Association of Part-Time Undergraduate Students
- Equity Studies Students' Union
- Juxtaposition Global Health Magazine
- LGBTOUT
- Native Students Association
- Trinity College Environmental Society
- University of Toronto Faculty Association
- University of Toronto Food Policy Council
- University of Toronto Graduate Students' Union
- University of Toronto Mississauga Students' Union
- University of Toronto Scarborough Students' Union
- University of Toronto Students' Union
- John Bemrose (Professor, Creative Expression and Society at Victoria College, University of Toronto St. George)
- Leigh Brownhill (Sessional Lecturer, Women and Gender Studies Institute, University of Toronto St. George)
- Mark Czarnecki (Victoria University, 1967)
- Ihor Ilnyckyj (Alumnus — Applied Science and Engineering and Architecture and Landscape, 1995)
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- Peter Martin (Professor, Canadian Institute for Theoretical Astrophysics)
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- Anne MacKinnon Plaunt (Vic 6T7)
- Tom Plaunt (Vic 6T7)
- David Powell (Undergraduate Student Coordinator and Placement Coordinator, School of the Environment, University of Toronto St. George)
- Scott Prudham (Professor, University of Toronto; President, University of Toronto Faculty Association)
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- Ulrich G. Wortmann (Associate Professor, Department of Earth Sciences, University of Toronto St. George)
- Brian Young (Alumnus — UC, Classics, 1968)

Over the four year course of this campaign, a large number of individuals and organizations at U of T have endorsed fossil fuel divestment in one way or another. In order to submit the Brief, we needed to collect 300 attestations from faculty, staff, students, and alumni, each saying that they had read the Brief and agreed with it.²²⁰ Numerous petitions have been circulated in support of the campaign, which has also been formally endorsed by the University of Toronto Faculty Association, the University of Toronto Students' Union, the University of Toronto Graduate Students' Union, numerous student clubs, and many notable alumni.²²¹²²²²²³²²⁴ An open letter from 213 faculty members and 14 librarians has also urged U of T to divest.²²⁵ The campaign was also endorsed by 54 members of the Dalla Lana School of Public Health, as well as 65 members of the Massey College community.²²⁶²²⁷ Eight other professors wrote to President Gertler in January 2016 with suggestions about how to implement fossil fuel divestment.²²⁸

²²⁰See: University of Toronto Governing Council, *Procedures for Responding to Social and Political Issues with Respect to University Divestment*.

²²¹Prudham, *Letter to President Meric Gertler*.

²²²Toronto350.org, *Divestment Supporters*.

²²³Suzuki, *Letter to President Meric Gertler*.

²²⁴Deutsch, *Letter to President Meric Gertler*.

²²⁵U of T Faculty for Divestment, *U of T Faculty for Divestment*.

²²⁶Cole and Chen, *Letter to President Meric Gertler*.

²²⁷Members of the Massey College community, *Letter to President Meric Gertler*.

²²⁸Harvey et al., *Letter to President Gertler*.

7 | Bibliography

References

- Abraham, John. *Fossil fuel funded report denies the expert global warming consensus*. 2016. URL: <http://www.theguardian.com/environment/climate-consensus-97-per-cent/2016/feb/22/fossil-fuel-funded-report-denies-the-expert-global-warming-consensus>.
- Adam, David. *Royal Society tells Exxon: stop funding climate change denial*. 2006. URL: <http://www.theguardian.com/environment/2006/sep/20/oilandpetrol.business>.
- Adams, Christopher, James Wilson, and Mark Vandavelde. *Moody's puts 175 energy and mining companies on downgrade watch*. 2016. URL: <http://www.ft.com/intl/cms/s/0/bfa6f25a-c0ea-11e5-9fdb-87b8d15baec2.html>.
- Advertising Standards Authority. *ASA Ruling on Peabody Energy Corporation*. 2014. URL: https://www.asa.org.uk/rulings/adjudications/2014/8/peabody-energy-corporation/shp_adj_266168.aspx.
- American Petroleum Institute. *About API*. 2015. URL: <http://www.api.org/GlobalItems/GlobalHeaderPages/About-API>.
- *API Member Companies*. 2016. URL: <http://www.api.org/GlobalItems/GlobalHeaderPages/Membership/API-Member-Companies>.
- *Global Climate Science Communications Action Plan*. 1998. URL: <http://www.euronet.nl/users/ewesker/ew@shell/API-prop.html>.
- Amnesty International. *The Lubicon Cree: Ongoing human rights violations*. 2012. URL: <http://www.amnesty.ca/our-work/issues/indigenous-peoples/the-lubicon-cree-ongoing-human-rights-violations>.
- Augenstein, Don. “The greenhouse effect and US landfill methane”. In: *Global Environmental Change* 2.4 (1992), pp. 311–328. URL: https://www.researchgate.net/publication/222637220_The_greenhouse_effect_and_US_landfill_methane.
- Banerjee, Neela. *Exxon's Oil Industry Peers Knew About Climate Dangers in the 1970s, Too*. 2015. URL: <http://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco>.
- *More Exxon Documents Show How Much It Knew About Climate 35 Years Ago*. 2015. URL: <http://insideclimatenews.org/news/01122015/documents-exxons-early-co2-position-senior-executives-engage-and-warming-forecast>.
- Banerjee, Neela and Lina Song. *Exxon's Business Ambition Collided with Climate Change Under a Distant Sea*. 2015. URL: <http://insideclimatenews.org/news/08102015/Exxons-Business-Ambition-Collided-with-Climate-Change-Under-a-Distant-Sea>.
- Banerjee, Neela, Lisa Song, and David Hasemyer. *Exxon Believed Deep Dive Into Climate Research Would Protect Its Business*. 2015. URL: <http://insideclimatenews.org/news/16092015/exxon-believed-deep-dive-into-climate-research-would-protect-its-business>.
- *Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago*. 2015. URL: <http://insideclimatenews.org/news/15092015/Exxons-own-research-confirmed-fossil-fuels-role-in-global-warming>.
- Bataille, Chris, David Sawyer, and Noel Melton. *Pathways to Deep Decarbonization in Canada*. 2015. URL: http://deepdecarbonization.org/wp-content/uploads/2015/09/DDPP_CAN.pdf.

- Caldecott, Ben, Guy Lomax, and Mark Workman. *Stranded Carbon Assets and Negative Emissions Technologies*. 2015. URL: <http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/Stranded%20Carbon%20Assets%20and%20NETs%20-%2006.02.15.pdf>.
- Calgary Herald Editorial Board. *Editorial: Pipelines must flow*. 2015. URL: <http://calgaryherald.com/opinion/editorials/editorial-pipelines-must-flow>.
- Canadian Association of Petroleum Producers. *Associate Members*. 2016. URL: <http://www.capp.ca/about-us/membership/associate-members>.
- *Carbon Capture and Storage*. 2015. URL: <http://www.capp.ca/responsible-development/air-and-climate/carbon-capture-and-storage>.
- *Our History*. 2015. URL: <http://www.capp.ca/about-us/our-history>.
- *Producer Members*. 2016. URL: <http://www.capp.ca/about-us/membership/producer-members>.
- Canadian Centre for Policy Alternatives. *Federal Budget 2009: CCPA Analysis*. 2009. URL: https://www.policyalternatives.ca/sites/default/files/uploads/publications/National_Office_Pubs/2009/Budget_Analysis.pdf.
- Canadian Public Relations Society. *Code of Ethics*. 2009. URL: http://www.cprs.ca/aboutus/code_ethic.aspx.
- Carbon Tracker Initiative. *Carbon supply cost curves: Evaluating financial risk to oil capital expenditures*. 2014. URL: <http://www.carbontracker.org/wp-content/uploads/2014/09/CTI-Oil-Report-Oil-May-2014-13-05.pdf>.
- Carrington, Damian. *Fossil fuels subsidised by \$10m a minute, says IMF*. 2015. URL: <http://www.theguardian.com/environment/2015/may/18/fossil-fuel-companies-getting-10m-a-minute-in-subsidies-says-imf>.
- CBC News. *B.C. government failed to properly consult First Nations on Northern Gateway pipeline, court rules*. 2016. URL: <http://www.cbc.ca/news/canada/british-columbia/bc-enbridge-ruling-coastal-first-nations-1.3402536>.
- *Canada endorses indigenous rights declaration*. 2010. URL: <http://www.cbc.ca/news/canada/canada-endorses-indigenous-rights-declaration-1.964779>.
- Clark, Peter U et al. “Consequences of twenty-first-century policy for multi-millennial climate and sea-level change”. In: *Nature Climate Change* (2016). URL: <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2923.html>.
- Coady, David, Ian W.H. Parry, Louis Sears, and Baoping Shang. *How Large Are Global Energy Subsidies?* 2015. URL: <https://www.imf.org/external/pubs/cat/longres.aspx?sk=42940.0>.
- Cole, Donald C. and Shirley Chen. *Letter to President Meric Gertler*. 2015. URL: http://www.UofTFacultyDivest.com/files/DLSPHDivestmentSubmissionLetter_2015Sept22.pdf.
- Competitive Enterprise Institute. *We Call it Life*. 2006. URL: https://www.youtube.com/watch?v=R5D_WeWXioU.
- Cuff, Madeleine. *Oil and gas industry should prepare for low-carbon energy transition, warns PwC*. 2016. URL: <http://www.businessgreen.com/bg/news/2447072/oil-and-gas-industry-should-prepare-for-low-carbon-energy-transition-warns-pwc>.
- Cushman, John H. *Exxon Made Deep Cuts in Climate Research Budget in the 1980s*. 2015. URL: <http://insideclimatenews.org/news/25112015/exxon-deep-cuts-climate-change-research-budget-1980s-global-warming>.
- *Highlighting the Allure of Synfuels, Exxon Played Down the Climate Risks*. 2015. URL: <http://insideclimatenews.org/news/08102015/highlighting-allure-synfuels-exxon-played-down-climate-risks>.

- Dawson, Chester. *Moody's Cuts Canadian Oil Sands' Rating to Junk Status*. 2016. URL: <http://www.wsj.com/articles/moodys-cuts-canadian-oil-sands-rating-to-junk-status-1455315055>.
- Deutsch, Judith. *Letter to President Meric Gertler*. 2014. URL: <https://d3n8a8pro7vhm.cloudfront.net/to350/pages/63/attachments/original/1418092927/judith-deutsch-divestment.pdf?1418092927>.
- Donato-Wooder, Ben, Milan Ilnyckyj, Katie Krelove, and Ariel Martz-Oberlander. *Why U of T should divest from fossil fuels*. 2015. URL: <http://uoftfacultydivest.com/files/divest-u-of-t.pdf>.
- European Commission. *Climate Action: Paris Agreement*. 2016. URL: http://ec.europa.eu/clima/policies/international/negotiations/paris/index_en.htm.
- Exxon Research and Engineering Company. *CO₂ "Greenhouse" Effect*. 1982. URL: <http://insideclimatenews.org/sites/default/files/documents/1982%20Exxon%20Primer%20on%20CO2%20Greenhouse%20Effect.pdf>.
- ExxonMobil. *ExxonMobil Releases Reports to Shareholders on Managing Climate Risk*. 2014. URL: <http://news.exxonmobil.com/press-release/exxonmobil-releases-reports-shareholders-managing-climate-risk>.
- Farrell, Justin. "Network Structure and the Influence of the Climate Change Counter Movement". In: *Nature Climate Change* (2015). URL: <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2875.html>.
- Gardiner, Stephen M. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*. Oxford: Oxford University Press, 2011.
- Geman, Ben. *Canadian oil industry bolsters DC lobbying presence*. 2011. URL: <http://thehill.com/policy/energy-environment/171999-canadian-oil-industry-bolsters-dc-lobbying-presence>.
- Gertler, Meric. *Presidential Advisory Committee on Divestment from Fossil Fuels*. 2014. URL: http://www.provost.utoronto.ca/public/PDADC/2014_to_2015/Presidential_Advisory_Committee_on_Divestment_from_Fossil_Fuels.htm.
- Gillis, Justin and Clifford Krauss. *Exxon Mobil Investigated for Possible Climate Change Lies by New York Attorney General*. 2015. URL: <http://www.nytimes.com/2015/11/06/science/exxon-mobil-under-investigation-in-new-york-over-climate-statements.html>.
- Goldenberg, Suzanne. *Exxon knew of climate change in 1981, email says - but it funded deniers for 27 more years*. 2015. URL: <http://www.theguardian.com/environment/2015/jul/08/exxon-climate-change-1981-climate-denier-funding>.
- Goodwin, Neva Rockefeller. *Op-Ed A Rockefeller explains: Why I lost faith in Exxon Mobil, and donated my shares*. 2016. URL: <http://www.latimes.com/opinion/op-ed/la-oe-rockefeller-goodwin-oil-stock-global-warming-20160215-story.html>.
- Gordon, Deborah. *Understanding Unconventional Oil*. 2012. URL: http://carnegieendowment.org/files/unconventional_oil.pdf.
- Graves, Lisa. *Edelman TransCanada Leak: Aggressive PR for Keystone Alt*. 2014. URL: <http://www.prwatch.org/news/2014/11/12676/edelman-transcanada-leak-american-style-pr-plan-prepped-keystone-xl-pipeline>.
- Greenpeace. *Who's holding us back? How carbon-intensive industry is preventing effective climate legislation*. 2011. URL: <http://www.greenpeace.org/international/Global/international/publications/climate/2011/391%20-%20WhosHoldingUsBack.pdf>.
- Hall, Shannon. *Exxon Knew about Climate Change almost 40 years ago*. 2015. URL: <http://www.scientificamerican.com/article/exxon-knew-about-climate-change-almost-40-years-ago/>.

- Harrison, Kathryn. *Reform needed before expanding coal shipments*. 2013. URL: <http://www.vancouversun.com/business/2035/Reform+needed+before+expanding+coal+shipments/8517546/story.html>.
- Harvey, Danny et al. *Letter to President Gertler*. 2016. URL: <http://www.sindark.com/350/Faculty-Response-to-FF-Divestment-26Jan2016.docx>.
- Hasemyer, David and John H. Cushman. *Exxon Sowed Doubt About Climate Science for Decades by Stressing Uncertainty*. 2015. URL: <http://insideclimatenews.org/news/22102015/Exxon-Sowed-Doubt-about-Climate-Science-for-Decades-by-Stressing-Uncertainty>.
- Heartland Institute. *Center on Climate and Environmental Policy Homepage*. 2016. URL: <https://www.heartland.org/issues/environment>.
- Henn, Jamie. *San Francisco State University Divests from Coal and Tar Sands!* 2013. URL: <http://gofossilfree.org/san-francisco-state-university-divests-from-coal-and-tar-sands/>.
- Henry, Graham, Joanna Dowdell, and Milan Ilnyckyj on behalf of Toronto350.org. *Letter to Presidential Advisory Committee on Divestment from Fossil Fuels Chair Bryan Karney*. 2015. URL: <http://www.sindark.com/350/2015-10-28-threequestions-2-2.pdf>.
- Hoekstra, Gordon. *Port Metro Vancouver hid its sponsorship of coal conference, emails reveal*. 2013. URL: <http://www.vancouversun.com/news/Port+Metro+Vancouver+sponsorship+coal+conference+emails+reveal/9110023/story.html>.
- *Port Metro Vancouver’s ‘cosy’ emails with coal industry a problem, critics charge*. 2013. URL: http://www.vancouversun.com/Port+Metro+Vancouver+cosy+emails+with+coal+industry+problem+critics+charge/8949671/story.html?__lsa=feab-3f58.
- Howard, Emma. *A beginner’s guide to fossil fuel divestment*. 2015. URL: <http://www.theguardian.com/environment/2015/jun/23/a-beginners-guide-to-fossil-fuel-divestment>.
- HSBC Global Research. *Coal and Carbon — Stranded Assets: Assessing the Risk*. 2012. URL: <https://www.research.hsbc.com/midas/Res/RDV?p=pdf&key=dXwE9bC8qs&n=333473.PDF>.
- Idso, Craig, Robert M. Carter, and S. Fred Singer. *Why Scientists Disagree about Global Warming*. 2015. URL: https://www.heartland.org/sites/default/files/12-04-15_why_scientists_disagree.pdf.
- Indian and Northern Affairs Canada. *Canada’s Statement of Support on the United Nations Declaration on the Rights of Indigenous Peoples*. 2010. URL: <http://www.aadnc-aandc.gc.ca/eng/1309374239861/1309374546142>.
- Inman, Mason. “Carbon is forever”. In: *Nature reports climate change* (2008), pp. 156–158. URL: <http://www.nature.com/climate/2008/0812/full/climate.2008.122.html>.
- Intergovernmental Panel on Climate Change. *Climate Change 2014 Synthesis Report*. 2014. URL: http://ar5-syr.ipcc.ch/ipcc/ipcc/resources/pdf/IPCC_SynthesisReport.pdf.
- *Climate Change 2014 Synthesis Report: Summary for Policy Makers*. 2014. URL: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf.
- International Energy Agency. *Resources to Reserves 2013*. 2013. URL: <https://www.iea.org/publications/freepublications/publication/Resources2013.pdf>.
- Jeffries, Stuart. *What is TTIP and why should we be angry about it?* 2015. URL: http://www.theguardian.com/business/2015/aug/03/ttip-what-why-angry-transatlantic-trade-investment-partnership-guide?CMP=Share_iOSApp_Other.
- Johnson, Brad and Josh Israel. *EXPOSED: The 19 Public Corporations Funding The Climate Denier Think Tank Heartland Institute*. 2012. URL: <http://thinkprogress.org/climate/2012/02/17/428111/exposed-the-19-public-corporations-funding-the-climate-denier-think-tank-heartland-institute/>.
- Karney, Bryan. *Presidential Advisory Committee on Divestment from Fossil Fuels — Consultation Notice and Call for Submissions*. 2015. URL: http://www.provost.utoronto.ca/public/pdadc/2014_to_2015/97.htm.

- Karney, Bryan et al. *Report of the President's Advisory Committee on Divestment from Fossil Fuels*. 2015. URL: <http://www.president.utoronto.ca/secure-content/uploads/2015/12/Report-of-the-Advisory-Committee-on-Divestment-from-Fossil-Fuels-December-2015.pdf>.
- Ladislav, Sarah O., Maren Leed, and Molly A. Walton. *New Energy, New Geopolitics: Balancing Stability and Leverage*. 2014. URL: https://csis.org/files/publication/140409_Ladislav_NewEnergyNewGeopolitics_WEB.pdf.
- Lascaris, Dimitri. *University of Toronto Divestment Lecture*. 2014. URL: <https://www.youtube.com/watch?v=mWHPvQl6j9w>.
- Lewis, Jeff. *Moody's downgrades of Cenovus and Encana stoke worries in oil patch*. 2016. URL: <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/cenovus-encana-cut-to-junk-by-moodys/article28806259/>.
- Liberal Party of Canada. *Policy Resolution 133: Priority: Respecting Aboriginal Rights*. 2016. URL: <http://www.liberal.ca/policy-resolutions/133-priority-respecting-aboriginal-rights/>.
- Lower Athabasca Regional Plan Review Panel. *Review Panel Report 2015*. 2015. URL: <http://www.sindark.com/350/LARP-Panel-2015.pdf>.
- Mackay, David J.C. *Sustainable Energy — Without the Hot Air*. 2008. URL: http://withouthotair.com/c16/page_96.shtml.
- McCarthy, Shawn. *First Nations groups slam Liberal reforms to pipeline reviews*. 2016. URL: <http://www.theglobeandmail.com/news/politics/first-nations-groups-slam-liberal-reforms-to-pipeline-reviews/article28448048/>.
- McCarthy, Shawn and Kelly Cryderman. *Oil sands pollutants contaminate traditional First Nations' foods: report*. 2014. URL: <http://www.theglobeandmail.com/news/national/oil-sands-pollutants-affect-first-nations-diets-according-to-study/article19484551/>.
- McKibben, Bill. *Global Warming's Terrifying New Math*. 2012. URL: <http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719>.
- McKinnon, Hannah, Greg Muttitt, and Lorne Stockman. *Lockdown: The End of Growth in the Tar Sands*. 2015. URL: http://priceofoil.org/content/uploads/2015/10/Lockdown_Final.pdf.
- Mehta, Diana. *Ontario first nation heads to Supreme Court over Enbridge's Line 9*. 2016. URL: <http://www.theglobeandmail.com/news/national/ontario-first-nation-heads-to-supreme-court-over-enbridges-line-9/article28099494/>.
- Members of the Massey College community. *Letter to President Meric Gertler*. 2015. URL: <http://www.UofTFacultyDivest.com/files/Massey-College-Divestment-Letter-FINAL.pdf>.
- Miller, John W. *Arch Coal Files for Bankruptcy: Company seeks to cut \$4.5 billion in debt*. 2016. URL: <http://www.wsj.com/articles/arch-coal-files-for-bankruptcy-1452500976>.
- Moreau, Jennifer. *Judge dismisses all civil contempt charges against Burnaby Mountain protesters*. 2014. URL: <http://www.burnabynow.com/news/judge-dismisses-all-civil-contempt-charges-against-burnaby-mountain-protesters-1.1624814>.
- Muise, Monique. *Trudeau should step into Energy East debate: Ambrose*. 2016. URL: <http://globalnews.ca/news/2473953/trudeau-should-step-into-energy-east-debate-ambrose/>.
- Neslen, Arthur. *TTIP talks: EU alleged to have given ExxonMobil access to confidential strategies*. 2015. URL: <http://www.theguardian.com/environment/2015/nov/26/ttip-talks-eu-alleged-to-have-given-exxonmobil-access-to-confidential-papers>.
- Nikiforuk, Andrew. *National Energy Board: Captured Regulator?* 2011. URL: <http://thetyee.ca/Opinion/2011/06/17/NEB/>.

- Nuccitelli, Dana. *Is the fossil fuel industry, like the tobacco industry, guilty of racketeering?* 2015. URL: <http://www.theguardian.com/environment/climate-consensus-97-per-cent/2015/sep/29/is-the-fossil-fuel-industry-like-the-tobacco-industry-guilty-of-racketeering>.
- Office of the Commissioner of Lobbying of Canada. *12-Month Lobbying Summary — In-house Organization: Canadian Association of Petroleum Producers/Association Canadienne des Producteurs Pétroliers / Tim McMillan, President and CEO*. 2016. URL: <https://lobbycanada.gc.ca/app/secure/oc/l/lrs/do/clntSmmry?clientOrgCorpNumber=226641&sMdKy=1456039494973>.
- Ontario Power Generation. *Atikokan Station Biomass Conversion Project*. 2014. URL: <http://www.opg.com/generating-power/thermal/stations/atikokan-station/pages/atikokan-station-biomass-conversion-project.aspx>.
- Penn, Ivan. *Members of Congress call for investigation of Shell over climate change*. 2016. URL: <http://www.latimes.com/business/la-fi-congress-shell-climate-change-20160218-story.html>.
- Port Metro Vancouver. *Board of Directors*. 2016. URL: <http://www.portmetrovancover.com/about-us/governance-leadership/board-of-directors/>.
- *Cargo Statistics Report — 2 pager — YTD: Sep 2015 vs Sep 2014*. 2015. URL: <http://www.portmetrovancover.com/wp-content/uploads/2015/11/Cargo-Statistics-%E2%80%93-Year-to-date-September-20151.pdf>.
- Prudham, Scott. *Letter to President Meric Gertler*. 2014. URL: <http://www.uoftfacultydivest.com/files/Gertler-Letter-re-Toronto350.pdf>.
- Prustupa, Mychaylo. *Waterloo woman finds NEB e-mail lauding public's inability to question pipelines*. 2014. URL: <http://www.vancouverobserver.com/news/waterloo-woman-finds-neb-e-mail-lauding-public-s-inability-question-pipelines>.
- Prustupa, Mychaylo and Jenny Uechi. *RCMP responds with respect as Grand Chief arrested on Burnaby Mountain*. 2014. URL: <http://www.vancouverobserver.com/news/grand-chief-stewart-phillip-prepares-arrest-burnaby-mountain>.
- Public Relations Society of America. *Member Code of Ethics*. 2009. URL: <https://www.prsa.org/AboutPRSA/Ethics/CodeEnglish/index.html#.VsyEjpwLWI>.
- Reuters. *University of California sells \$200 mln holdings in coal, oil sands firms*. 2015. URL: <http://www.reuters.com/article/california-divestment-university-idUSL1N11G04220150910>.
- *University of Maine Board votes to divest from coal*. 2015. URL: <http://www.reuters.com/article/maine-university-coal-idUSL1N0V62N320150127>.
- Revkin, Andrew C. *Oxford's Halley Professor on How the Climate Challenge Could Derail a Brilliant Human Destiny*. 2016. URL: <http://dotearth.blogs.nytimes.com/2016/02/15/oxfords-halley-professor-on-how-the-climate-challenge-could-derail-humanitys-destiny/>.
- Rockefeller Brothers Fund. *Divestment Statement*. 2014. URL: <http://www.rbf.org/about/divestment>.
- Ryerson University. *Land Acknowledgement*. 2016. URL: <http://www.ryerson.ca/socialwork/DishwithOneSpoonTerrytory.html>.
- Saul, John Ralston. *The Comeback*. London: Penguin Books, 2014.
- Schwartz, John. *California Said to Target Exxon in Climate Inquiry*. 2016. URL: <http://www.nytimes.com/2016/01/21/science/california-said-to-target-exxon-in-climate-inquiry.html?mabReward=A4&r=0>.
- Shell Canada. *Quest Carbon Capture and Storage Project*. 2015. URL: <http://www.shell.ca/en/aboutshell/our-business-tpkg/upstream/oil-sands/quest.html>.

- Signatories to the United Nations Declaration on the Rights of Indigenous Peoples. *United Nations Declaration on the Rights of Indigenous Peoples*. 2008. URL: http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf.
- Signatories to the United Nations Framework Convention on Climate Change. *Paris Agreement under the United Nations Framework Convention on Climate Change*. 2015. URL: <http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>.
- Simpson, Jeffrey, Mark Jaccard, and Nic Rivers. *Hot Air: Meeting Canada's Climate Change Challenge*. Toronto: McClelland & Stewart, 2011.
- Sinclair, Scott and Hadrian Mertins-Kirkwood. *NAFTA Chapter 11 Investor-State Disputes*. 2015. URL: https://www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2015/01/NAFTA_Chapter11_Investor_State_Disputes_2015.pdf.
- Smith, Joanna. *Canada will implement UN Declaration on Rights of Indigenous Peoples, Carolyn Bennett says*. 2015. URL: <https://www.thestar.com/news/canada/2015/11/12/canada-will-implement-un-declaration-on-rights-of-indigenous-peoples-carolyn-bennett-says.html>.
- *NDP's Thomas Mulcair promises 'new era' in Canada's relationship with Indigenous peoples*. 2015. URL: <https://www.thestar.com/news/canada/2015/10/07/ndps-thomas-mulcair-promises-new-era-in-canadas-relationship-with-indigenous-peoples.html>.
- Song, Lisa, Neela Banerjee, and David Hasemyer. *Exxon Confirmed Global Warming Consensus in 1982 with In-House Climate Models*. 2015. URL: <http://insideclimatenews.org/news/18092015/exxon-confirmed-global-warming-consensus-in-1982-with-in-house-climate-models>.
- Sourcewatch.org. *Heartland Institute*. 2015. URL: http://www.sourcewatch.org/index.php/Heartland_Institute.
- Standing Senate Committee on Energy, the Environment and Natural Resources. *Facts do not Justify Banning Canada's Current Offshore Drilling Operations: A Senate Review in the Wake of BP's Deepwater Horizon Incident*. 2010. URL: <http://www.parl.gc.ca/Content/SEN/Committee/403/energ/rep/rep08aug10-e.pdf>.
- Stanford News. *Stanford to divest from coal companies*. 2014. URL: <https://news.stanford.edu/news/2014/may/divest-coal-trustees-050714.html>.
- Statistics Canada. *North American Industry Classification System (NAICS) Canada 2012*. 2012. URL: <http://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TV=118464&CVD=118471&CPV=211114&CST=01012012&CLV=5&MLV=5>.
- Stewart, Keith. *Evidence of the Canadian Association of Petroleum Producers lobbying against greenhouse gas regulations*. 2013. URL: <http://www.sindark.com/350/FOIP-AB-CAPP-withcovernote-Stewart.pdf>.
- *Harper Conservatives' secret tactics to protect oil sands: FOI details*. 2015. URL: <http://www.nationalobserver.com/2015/05/28/opinion/harper-conservatives-secret-tactics-protect-oil-sands-foi-details>.
- Sutherland, JJ. *They Call It Pollution. We Call It Life*. 2006. URL: <http://www.npr.org/templates/story/story.php?storyId=5425355>.
- Suzuki, David. *Letter to President Meric Gertler*. 2014. URL: <https://d3n8a8pro7vhmx.cloudfront.net/to350/pages/63/attachments/original/1418092814/david-suzuki.pdf?1418092814>.
- Taylor, Phil. *Canada, Alberta Fund Shell's CCS Project for Oil Sands*. 2009. URL: <http://www.nytimes.com/gwire/2009/10/09/09greenwire-canada-alberta-fund-shells-ccs-project-for-oil-85992.html>.
- The Canadian Press. *First Nations exposed to pollutants in 'chemical valley'*. 2013. URL: <http://www.cbc.ca/news/canada/windsor/first-nations-exposed-to-pollutants-in-chemical-valley-1.2438724>.

- The Economist. *In the dark ages: Supermajors suffer from self-inflicted wounds as well as falling oil prices*. 2016. URL: <http://www.economist.com/news/business/21690045-supermajors-suffer-self-inflicted-wounds-well-falling-oil-prices-dark-ages>.
- *The elephant in the atmosphere*. 2014. URL: <http://www.economist.com/news/business/21607838-managers-biggest-oil-firms-clash-investors-over-climate-change-elephant>.
- *The World This Week, February 6th – 12th*. 2016. URL: <http://www.economist.com/news/world-week/21690102-business-week>.
- The Vancouver Sun. *Kinder Morgan consultant appointed to National Energy Board*. 2015. URL: http://www.vancouversun.com/Kinder+Morgan+consultant+appointed+National+Energy+Board/11264696/story.html?__lsa=feab-3f58.
- Timmons, Heather. *British Science Group Says Exxon Misrepresents Climate Issues*. 2006. URL: <http://www.nytimes.com/2006/09/21/business/21green.html>.
- Toronto350.org. *Divestment Supporters*. 2016. URL: http://www.toronto350.org/divestment_supporters.
- *The Fossil Fuel Industry and the Case for Divestment*. 2015. URL: <http://www.uoftfacultydivest.com/files/fossil-fuel-divest.pdf>.
- *The Fossil Fuel Industry and the Case for Divestment: Update*. Toronto: Asquith Press, 2015. URL: <http://www.uoftfacultydivest.com/files/fossil-fuel-divest-new.pdf>.
- Trudeau, Justin. *Remarks by Justin Trudeau at the Assembly of First Nations 36th Annual General Assembly*. 2015. URL: <https://www.liberal.ca/realchange/justin-trudeau-at-the-assembly-of-first-nations-36th-annual-general-assembly/>.
- Truth and Reconciliation Commission of Canada. 2015. URL: http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf.
- *Honouring the Truth, Reconciling for the Future*. 2015. URL: http://nctr.ca/assets/reports/Final%20Reports/Executive_Summary_English_Web.pdf.
- U of T Faculty for Divestment. *U of T Faculty for Divestment*. 2016. URL: <http://www.uoftfacultydivest.com/>.
- Union of Concerned Scientists. *The Climate Deception Dossiers: Internal Fossil Fuel Industry Memos Reveal Decades of Corporate Disinformation*. 2015. URL: <http://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climat-Deception-Dossiers.pdf>.
- University of Toronto Governing Council. *Policy on Social and Political Issues With Respect to University Divestment*. 2008. URL: <http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/Policy/ppmar042008.pdf>.
- *Procedures for Responding to Social and Political Issues with Respect to University Divestment*. 2008. URL: <http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/Policy/ppmar042008.pdf>.
- Vasil, Adria. *Ecojustice Calls for Probe into Climate-Change-Denying Ads*. 2015. URL: <https://nowtoronto.com/news/ecolectic/ecojustice-calls-for-probe-into-climate-change-denying-ads/>.
- Ward, Bob. *Letter to Nick Thomas, Director, Corporate Affairs, Esso UK Limited*. 2006. URL: https://royalsociety.org/~media/Royal_Society_Content/policy/publications/2006/8257.pdf.
- Whitehouse, Sheldon. *Whitehouse Slams Corporate Influence at MMS, Proposes Legislation to Defend Integrity of Government*. 2010. URL: <http://www.whitehouse.senate.gov/news/release/whitehouse-slams-corporate-influence-at-mms-proposes-legislation-to-defend-integrity-of-government>.