

# Divest McGill

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## THE SOCIAL INJURY CAUSED BY THE EXPLOITATION OF THE TAR SANDS AND FOSSIL FUELS

By Divest McGill<sup>1</sup>

### Summary

The students, alumni, faculty, and staff of McGill University have made clear their strong desire to see responsible investment practices. We call on the University to divest its holdings in companies involved in the tar sands and other fossil fuel production, and financial institutions that give loans to those companies.

The tar sands of Northern Alberta pollute the air and rivers, causing irreparable damage to the land and to its First Nations communities.

*Companies which extract natural resources without adequate environmental consideration are undermining the stability of the very systems which we, and all life on Earth, depend upon for survival.*

-Kristen Perry

Global climate change threatens Canadians and peoples the world over. Entire neighbourhoods of cities like Vancouver, New York, and New Orleans could be underwater due to sea level rise, and polar communities already face extraordinary levels of warming that threatens their infrastructure. Cities like Montreal and Toronto will face more extreme weather events, including

snow storms and heat waves, and the continued burning of fossil fuels—in particular oil from the tar sands—will make runaway warming unavoidable.

The fossil fuel companies considered in this brief actively engage in misinformation campaigns to discredit the rigorous scientific consensus that threatens their continued profits.

Financial institutions provide the capital to make large-scale projects like the tar sands feasible.

It is clear that urgent action is needed to counter the threat of global climate change. The McGill community has spoken, and we call on the Board of Governors to make the right choice for

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<sup>1</sup> All box quotes come from community members who signed the petitions.

the planet, and the right choice for McGill. We call on McGill University to divest from the fossil fuels industry.

## The Tar Sands: A Local and Global Concern

The tar sands are huge deposits of bitumen—a mix of clay, water, sand and oil—that is turned into oil through complex and energy-intensive processes that cause widespread environmental damage. Small particles of sand are coated with heavy oil, with a thin layer of water separating the two. The sand and water must be separated from the oil, producing four tons of sand for every barrel of oil extracted. Another three barrels of water must be removed from the river for each barrel of oil. The *2010 Survey of Energy Resources* describes the reserves: <sup>2</sup>

Natural bitumen and extra-heavy oil are characterised by high viscosity, high density (low API gravity), and high concentrations of nitrogen, oxygen, sulphur, and heavy metals. These characteristics result in higher costs for extraction, transportation, and refining than are incurred with conventional oil.

The largest deposits of tar sands in the world are in Canada. Unlike drilling for oil deposits and pumping oil from the ground, the tar sands typically require huge mining projects to access the bitumen and refine it into oil.

In Alberta, the excavation of the tar sands pollutes the Athabasca River and fills the air with toxins. The tar sands are found mainly under Canada's Boreal forest,<sup>3</sup> requiring the forest to be clear-cut to allow the excavation of the bitumen. The ecosystems of the North face irreversible damage, and the companies' promises of rehabilitation and reclamation remain unfulfilled. In 2008, only 0.2% of the land disturbed by tar sands mining was designated reclaimed, and even there the "complex of forests and low-lying wetlands has been transformed into a dry, hilly upland with new trails for human use."<sup>3</sup> The spokesperson of Syncrude, the company that owns the reclaimed land, proudly said, "If people aren't looking closely, it blends into the natural landscape."<sup>4</sup> Over 65,000 hectares of forest have been lost already, with little hope of recovery. <sup>5</sup>

*Fossil fuel production itself, including in Canada, is associated with negative social impacts in the communities nearby, such as higher than average rates of homelessness, substance abuse, and divorce in Fort McMurray, close to the Alberta tar sands. Not to mention that nearby indigenous communities are no longer able to use their traditional territory as it has been taken over by development, and are seeing increased rates of illnesses such as cancer, which may be due to their downstream location from the project.*

-Robin Reid-Fraser

<sup>2</sup> World Energy Council. "2010 Survey of Energy Resources" (London: World Energy Council, 2010) 123. <<[http://www.worldenergy.org/documents/ser\\_2010\\_report\\_1.pdf](http://www.worldenergy.org/documents/ser_2010_report_1.pdf)>>.

<sup>3</sup> Sierra Club Canada. "Tar sands and the Boreal Forest". <<<http://www.sierraclub.ca/en/tar-sands/publications/tar-sands-boreal-forest>>>.

The environmental, social and health costs of the tar sands in Canada are tremendous and multilayered.

In any discussion of climate change, the tar sands are of the utmost importance. Every barrel of bitumen produced from the tar sands emits three times as much greenhouse gas as conventional oil.<sup>6</sup> In total, the tar sands are expected to emit 108 million tons of GHGs annually by 2020, about one fifth of Canada's entire carbon footprint.<sup>7</sup> Already, this project emits more carbon

*As a leading educational and research institution in Canada, McGill has a particular responsibility to promote the development and use of environmentally sound energy alternatives, and to respect the land rights of indigenous peoples in Quebec.*

-Elise Juzda Smith

than all of Canada's cars, at a rate of 40 million tons per year.<sup>8</sup> Because of the tar sands, Canada's emissions have grown more since 1990 than those of any other G8 nation—a total increase of 24.1% between 1990 and 2008—and Canada has one of the world's highest per capita carbon footprints.<sup>9</sup> Former climate scientist James Hansen wrote in the New York Times that, "If Canada proceeds [with this development], and we do nothing, it

will be game over for the climate."<sup>10</sup> The tar sands are a project with extraordinary global impacts that threaten runaway climate change.

The tar sands also have dangerous localized impacts near where they are mined. First Nations communities in the tar sands area report unusually high levels of rare cancers and autoimmune diseases, and fish that live downstream of the development are often malformed and inedible.<sup>11</sup> The high concentration of development in one watershed results in correspondingly

<sup>4</sup> Hildebrand, Joyce. "Reclamation Illusions in Oil Sands Country: Lack of Legislation, Financial Preparedness, Undermine reclamation Efforts." The Parkland Institute. Spring / Summer 2008. <<[http://parklandinstitute.ca/post/story/reclamation\\_illusions\\_in\\_oil\\_sands\\_country/](http://parklandinstitute.ca/post/story/reclamation_illusions_in_oil_sands_country/)>>.

<sup>5</sup> Timoney, Kevin P. and Peter Lee. "Does the Alberta Tar Sands Industry Pollute? The Scientific Evidence" (The Open Conservation Biology Journal, 2009, 3) 65-81. <<<http://cahr.uvic.ca/nearbc/documents/2009/Alberta-Tar-Sands-Industry-Pollute.pdf>>>.

<sup>6</sup> Nikiforuk, Andrew. Tar sands: Dirty Oil and the Future of a Continent. (Vancouver: Greystone, 2010) 3.

<sup>7</sup> Schindler, David. "Tar sands Need Solid Science" (Nature 468, 25 Nov 2010) 499-501. <<<http://www.nature.com/nature/journal/v468/n7323/full/468499a.html>>>.

<sup>8</sup> Greenpeace. "Tar sands: Learn About". <<<http://www.greenpeace.org/canada/en/campaigns/Energy/tarsands/Learn-about/>>>.

<sup>9</sup> United Nations Framework Convention on Climate Change. "Report of the individual review of the annual submission of Canada submitted in 2010" 21 April 2011. <<<http://unfccc.int/resource/docs/2011/arr/can.pdf>>>.

<sup>10</sup> Hansen, James. "Game Over for the Climate" (New York Times, 9 May 2012). <<[http://www.nytimes.com/2012/05/10/opinion/game-over-for-the-climate.html?\\_r=2&emc=eta1](http://www.nytimes.com/2012/05/10/opinion/game-over-for-the-climate.html?_r=2&emc=eta1)>>.

<sup>11</sup> Schindler, David. "Tar sands Need Solid Science" (Nature 468, 25 Nov 2010) 499-501. <<<http://www.nature.com/nature/journal/v468/n7323/full/468499a.html>>>.

high levels of contaminants and heavy metals, and the ecosystem is less able to flush them out of the region. Indeed, a 2009 study found a two to threefold increase in summer mercury levels in the river below the tar sands, along with large increases in polycyclic aromatic hydrocarbons, potent atmospheric pollutants and carcinogens. Similar contaminants were present in snow and ice.<sup>12</sup>

Much of the excess water from the production process ends up in huge tailing ponds, which kill birds that land in them and “are suspected of seeping chemicals into groundwater.”<sup>13</sup> These tailing ponds contain over 720 million cubic meters of water, covering over 130 million square kilometers of land. In the forty years of development, not a single tailing pond has been cleaned enough to be designated as reclaimed.<sup>14</sup> Environmental groups have presented strong evidence of tailing pond leakage, and oil companies have recognized the existence of the problem.<sup>15</sup> In total as many as 166 million birds could be lost over the next 30 to 50 years due to habitat loss and tailing ponds.<sup>16</sup> Furthermore, the economic benefits promised to native communities up north have not necessarily materialized, and the development comes at a tremendous human cost. The Pembina Institute highlights the serious health concerns,<sup>17</sup> including,

- A 30% increase in cancers in Fort Chipewyan compared with expected rates over the last 12 years.
- A three-fold increase in leukemias and lymphomas.
- A seven-fold increase in bile duct cancers.
- Other cancers, such as soft tissue sarcomas and lung cancers in women, were also elevated.

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<sup>12</sup> Liberal Report from the Study of the Standing Committee on Environment and Sustainable Development on the Impact of Oil Sands Development on Canada’s Freshwater. “The Hidden Dimension: Water and the Oil Sands” 15-17. <<[http://francisscarpaleggia.liberal.ca/files/2010/08/The-Hidden-Dimension\\_Water-and-the-Oil-Sands.pdf](http://francisscarpaleggia.liberal.ca/files/2010/08/The-Hidden-Dimension_Water-and-the-Oil-Sands.pdf)>>.

<sup>13</sup> Schindler, David. “Tar sands Need Solid Science” (Nature 468, 25 Nov 2010) 499-501. <<<http://www.nature.com/nature/journal/v468/n7323/full/468499a.html>>>.

<sup>14</sup> New Democratic Report on the Standing Committee Review of the Impacts of Oil Sands Developments on Water Resources. “Missing in Action: The Federal Government and the Protection of Water in the Oil Sands” 13. <<[http://www.billsiksay.ca/images/issues/NDP%20Report\\_Missing%20in%20Action\\_The%20Federal%20Government%20and%20protection%20of%20water%20in%20the%20oil%20sands.pdf](http://www.billsiksay.ca/images/issues/NDP%20Report_Missing%20in%20Action_The%20Federal%20Government%20and%20protection%20of%20water%20in%20the%20oil%20sands.pdf)>>.

<sup>15</sup> Liberal Report from the Study of the Standing Committee on Environment and Sustainable Development on the Impact of Oil Sands Development on Canada’s Freshwater. “The Hidden Dimension: Water and the Oil Sands” 15. <<[http://francisscarpaleggia.liberal.ca/files/2010/08/The-Hidden-Dimension\\_Water-and-the-Oil-Sands.pdf](http://francisscarpaleggia.liberal.ca/files/2010/08/The-Hidden-Dimension_Water-and-the-Oil-Sands.pdf)>>.

<sup>16</sup> Wells, Jeff Ph.D. “Danger in the Nursery: Impact on Birds of Tar sands Oil Development in Canada’s Boreal Forest” (National Resources Defense Council Report, Dec 2008) iv. <<<http://www.nrdc.org/wildlife/borealbirds.pdf>>>.

<sup>17</sup> Droitsch, Danielle and Terra Simieritsch. “Canadian Aboriginal Issues with Oil Sands: A Compilation of Key Issues, Resolutions and Legal Issues” (The Pembina Institute: Sept 2010) 2.

The development of the tar sands threatens communities across Alberta, pollutes the local environment, and contributes to global climate change.

## Climate Change: A Global Threat

According to the Board of Atmospheric Sciences and Climate, the arm within the American National Academies for atmospheric and climate sciences, “The preponderance of the scientific evidence points to human activities—especially the release of CO<sub>2</sub> and other heat-trapping greenhouse gases (GHGs) into the atmosphere—as the most likely cause for most of the global warming that has occurred over the last 50 years or so.”<sup>18</sup>

*I do not want my tuition money to be responsible for the destruction of communities and also the creation of the biggest environmental disaster that we have seen.*

-Zoe Pepper-Cunningham

Scientists agree that the highest safe level of CO<sub>2</sub> at 350 parts per million; human emissions have now pushed the level of CO<sub>2</sub> in the atmosphere to 392 ppm.<sup>19</sup> The rate of increase is at 1.8 ppm annually.<sup>20</sup>

The BASC further advises that, “The faster emissions are reduced, the lower the risks posed by climate change. Delays in reducing emissions could commit the planet to a wide range of adverse impacts . . . [and] the risks associated with doing business as usual are a much greater concern than the risks associated with engaging in strong response efforts”.<sup>21</sup>

Canada, through its international agreements, has made strong commitments to a green future. In the 2010 Cancun agreements of the United Nations Framework Convention on Climate Change, Canada affirmed:<sup>22</sup>

that climate change is one of the greatest challenges of our time . . . [and] that deep cuts in global greenhouse gas emissions are required according to science, and as

<sup>18</sup> Committee on America's Climate Choices, National Resource Council. America's Climate Choices. Washington, D.C.: National Academies Press, 2011. 15.

<sup>19</sup> 350.org. “Science”. 2012. <<<http://www.350.org/en/about/science>>>.

<sup>20</sup> The World Bank. “4° Turn Down the Heat: Why a 4° World Must Be Avoided.” Nov 2012. Potsdam Institute for Climate Impact Research and Climate Analytics. <<[http://climatechange.worldbank.org/sites/default/files/Turn\\_Down\\_the\\_heat\\_Why\\_a\\_4\\_degree\\_centrigrade\\_warmer\\_world\\_must\\_be\\_avoided.pdf](http://climatechange.worldbank.org/sites/default/files/Turn_Down_the_heat_Why_a_4_degree_centrigrade_warmer_world_must_be_avoided.pdf)>>.

<sup>21</sup> Committee on America's Climate Choices, National Resource Council. America's Climate Choices. Washington, D.C.: National Academies Press, 2011. 2.

<sup>22</sup> United Nations. Framework Convention on Climate Change. (United Nations, 1992) 2-3. <<[http://unfccc.int/essential\\_background/convention/background/items/1362.php](http://unfccc.int/essential_background/convention/background/items/1362.php)>>.

documented in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2 °C above preindustrial levels, and that Parties should take urgent action to meet this long-term goal, consistent with science and on the basis of equity.

The scientific consensus “has been endorsed by every National Academy of science of every major country on the planet, every major professional scientific society related to the study of global warming and 98 percent of climate scientists throughout the world,” writes Al Gore.<sup>23</sup> Yet despite Canada’s strong public commitments, the country is pushing forward with developing the tar sands, has barely even slowed the rate of greenhouse gas emissions growth let alone reduced its emissions, and under the current government has pulled out of the Kyoto Protocol.

Climate change raises global average temperatures. Every summer, new temperature records are set across the globe. Much of the South West United States saw unprecedented wildfires and droughts, while regions across the world face extraordinary flooding and storms.

Climate scientists used to say that global warming stacks the dice in favour of more extreme weather: what might have used to be a storm so large that it occurred only once every 1,000 years now might happen every 500, or a 100-year flood might instead happen every 60 years. Now they say that we are adding more dots on the dice: whereas before we might have rolled a 12, now we are rolling 13s and 14s.<sup>23</sup> Many attribute Hurricane Sandy’s strength and destructive power to global warming,<sup>24</sup> and it has raised an understanding across North America that the effects of climate change are already being felt.

Entire neighborhoods of many major cities are threatened by global warming. Vancouver, New York, New Orleans and many other North American cities are so close to sea level that projected sea level increases could put huge swaths underwater.<sup>21</sup> The World Bank projects that even 2° degrees Celsius warming will result in between 0.3 and 0.8 meters by 2100 and 1.5 and 4 meters of sea level rise by 2300, and 4° degrees Celsius would result in an up to 1 meter increase by 2100 and up to 4 meters by 2300, placing huge swaths of the world’s coast underwater.<sup>25</sup>

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<sup>23</sup> Gore, Al. "Climate of Denial: Can the Science and the Truth Withstand the Merchants of Poison?" Rolling Stone Jun 2011 26. <<<http://www.rollingstone.com/politics/news/climate-of-denial-20110622>>>.

<sup>24</sup> Steer, Andrew. "Listening to Hurricane Sandy: Climate Change is Here." The Huffington Post. 3 Nov 2012. <<[http://www.huffingtonpost.com/dr-andrew-steer/climate-change-hurricane-sandy-\\_b\\_2068961.html](http://www.huffingtonpost.com/dr-andrew-steer/climate-change-hurricane-sandy-_b_2068961.html)>>.

<sup>25</sup> The World Bank. "4° Turn Down the Heat: Why a 4° World Must Be Avoided." Nov 2012. Potsdam Institute for Climate Impact Research and Climate Analytics. <<[http://climatechange.worldbank.org/sites/default/files/Turn\\_Down\\_the\\_heat\\_Why\\_a\\_4\\_degree\\_centrigrade\\_warmer\\_world\\_must\\_be\\_avoided.pdf](http://climatechange.worldbank.org/sites/default/files/Turn_Down_the_heat_Why_a_4_degree_centrigrade_warmer_world_must_be_avoided.pdf)>>.

As the temperature rises, we can expect more and more severe impacts. The Intergovernmental Panel of Climate Change, in its 2007 report, discussed some examples of impacts associated with global average temperature change. Appendix 1 reproduces a figure demonstrating some of the impacts of climate change.<sup>26</sup>

In North America, the report continues,<sup>27</sup>

- Warming in western mountains is projected to cause decreased snowpack, more winter flooding and reduced summer flows, exacerbating competition for over-allocated water resources.
- In the early decades of the century, moderate climate change is projected to increase aggregate yields of rain-fed agriculture by 5 to 20%, but with important variability among regions. Major challenges are projected for crops that are near the warm end of their suitable range or which depend on highly utilised water resources.
- Cities that currently experience heat waves are expected to be further challenged by an increased number, intensity and duration of heat waves during the course of the century, with potential for adverse health impacts.
- Coastal communities and habitats will be increasingly stressed by climate change impacts interacting with development and pollution.

*If McGill truly ... has a vision of a sustainable future, they should stop lending capital to businesses whose model is in direct conflict with this vision. There is no such thing as "ethical oil", fossil fuels are in direct moral conflict with humanity and McGill should stop funding its operations by spending away our future.*

-Raphael Dumas

And for Canadians living in polar regions, the

report discusses some projected regional impacts,<sup>28</sup> including

- The main projected biophysical effects are reductions in thickness and extent of glaciers, ice sheets and sea ice, and changes in natural ecosystems with detrimental effects on many organisms including migratory birds, mammals and higher predators.
- For human communities in the Arctic, impacts, particularly those resulting from changing snow and ice conditions, are projected to be mixed.

<sup>21</sup> Gore, Al. "Climate of Denial: Can the Science and the Truth Withstand the Merchants of Poison?" Rolling Stone Jun 2011 26. <<<http://www.rollingstone.com/politics/news/climate-of-denial-20110622>>>.

<sup>26</sup> Intergovernmental Panel on Climate Change. Synthesis Report. New York: 2007. <<[http://www.ipcc.ch/publications\\_and\\_data/ar4/syr/en/spms3.html](http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms3.html)>>.

<sup>27</sup> M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds). Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007. Cambridge: Cambridge University Press, 2007.

<sup>28</sup> M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds). Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007. Cambridge: Cambridge University Press, 2007.

- Detrimental impacts would include those on infrastructure and traditional indigenous ways of life.
- In both polar regions, specific ecosystems and habitats are projected to be vulnerable, as climatic barriers to species invasions are lowered.

It is clear that Canada faces clear and pressing challenges from climate change.

Global warming is also a threat beyond Canada's borders, and many communities across the world have less capacity to adapt and mitigate the impacts.

The World Bank warns that "the distribution of impacts is likely to be inherently unequal and tilted against many of the world's poorest regions," highlighting additional sea-level rise, greater tropic cyclone intensity, and increased aridity and drought pressures. River basins that rely on monsoons, like the Ganges and Nile, and those that rely on seasonal ice melt are particularly vulnerable to widespread drought risk.<sup>29</sup>

*As an institution invested in improving the future through education, McGill has no business helping Canada's energy solutions and environmental policies stay stagnant or regress in areas that hurt the environment.*

-Emily Martin

Similarly, island communities— islands make up one tenth of the world's population—face the most extreme threat from rising sea levels. Entire islands could be submerged as the oceans rise, and entire peoples may have to migrate to new lands. Many communities themselves emphasize that while "[c]limate change related migration is likely to be a reality, it need not be a refugee crisis," but the massive relocation of people combined with the destruction of entire homelands is a serious challenge.<sup>30</sup>

Global instability, on many axes, is predicted. 55,736 people were killed by extreme weather in Russia in 2010, in particular from the wildfires that swept the country. Russia then temporarily banned the export of grain, which caused food price shocks around the world. Natural disasters destabilize the lives of people across the world. The American Security Project describes this trend: "Secure states do not automatically mean secure peoples and climate change is proving that." Climate change and food insecurity, the Project concludes, are international security issues. They "may precipitate large-scale disruption that local public health, law enforcement and

<sup>29</sup> The World Bank. "4° Turn Down the Heat: Why a 4° World Must Be Avoided." Nov 2012. Potsdam Institute for Climate Impact Research and Climate Analytics. <<[http://climatechange.worldbank.org/sites/default/files/Turn\\_Down\\_the\\_heat\\_Why\\_a\\_4\\_degree\\_centrigrade\\_warmer\\_world\\_must\\_be\\_avoided.pdf](http://climatechange.worldbank.org/sites/default/files/Turn_Down_the_heat_Why_a_4_degree_centrigrade_warmer_world_must_be_avoided.pdf)>>.

<sup>30</sup> Lazrus, Heather. "Sea Change: Island Communities and Climate Change." Annual Review of Anthropology. 28 Jun 2012. <<<http://www.annualreviews.org/doi/pdf/10.1146/annurev-anthro-092611-145730>>>.



emergency response teams cannot contain.”<sup>31</sup> Weak states, the report warns, “may risk failure or increased regional tensions from the inability to cope” with these new stressors and challenges.<sup>32</sup> Regional conflict, disaster relief, and state collapse could be far more likely as warming increases, threatening us all.

Localized environmental destruction also takes place everywhere fossil fuels are extracted from the ground. From mountaintop removal in Appalachia, where entire communities live below tailing ponds that could wash their homes away, to pipeline and oil tanker spills and leaks across the planet, to natural gas extraction techniques that contaminate the groundwater that people drink, the production and extraction of fossil fuels leaves the land scarred and poisoned.

Some of this destruction is legal and some is not. When BP spilled an estimated 172 million barrels of oil into the Gulf after a drilling rig exploded, the company pled guilty to over 12 felony counts.<sup>33</sup> They have so far agreed to \$4.5 billion settlement, which would not cover any civil penalties the United States government might seek under the Clean Water Act and other laws.<sup>34</sup> In contrast, Royal Dutch Shell was able to avoid responsibility through legal settlement. In 1995 a prominent critic of Shell’s activities in the Niger Delta was hanged by the country’s military regime, and the company was then accused of funding paramilitary operations and bribing witnesses in Nigeria. Shell, vigorously denying all guilt, recently paid a \$15.5 million settlement, what the New York Times article calls “a striking sum given that the company has denied any wrongdoing.”<sup>35</sup>

The consequences of fossil fuel use are tremendous, and they impact every person on the planet.

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<sup>31</sup> American Security Project. “Climate Security Report—Part One: Climate Change and Security.” 7-8. American Security Project. 2012. <<<http://americansecurityproject.org/reports/2012/csr-part-one-climate-change-security/>>>.

<sup>32</sup> American Security Project. “Climate Security Report—Part Two: Climate Change and Global Security.” 15. American Security Project. 2012. <<<http://americansecurityproject.org/wp-content/uploads/2012/11/CSR-Part-Two-Climate-Change-and-Global-Security-email.pdf>>>.

<sup>33</sup> CBS/AP. “BP to Pay Record Fine in Gulf Oil Spill; 2 to Face Manslaughter Charges.” CBS: 15 Nov 2012. <<[http://www.cbsnews.com/8301-201\\_162-57550185/bp-to-pay-record-fine-in-gulf-oil-spill-2-to-face-manslaughter-charges/](http://www.cbsnews.com/8301-201_162-57550185/bp-to-pay-record-fine-in-gulf-oil-spill-2-to-face-manslaughter-charges/)>>.

<sup>34</sup> Reuters. “Obama Oil Spill Commission’s Final Report Blames Disaster on Cost-Cutting by BP and Partners.” Telegraph: 5 Jan 2011. <<<http://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/8242557/Obama-oil-spill-commissions-final-report-blames-disaster-on-cost-cutting-by-BP-and-partners.html>>>.

<sup>35</sup> Mouawad, Jad. “Shell to Pay \$15.5 Million to Settle Nigerian Case.” New York Times: 8 Jun 2009. <<<https://www.nytimes.com/2009/06/09/business/global/09shell.html>>>.

## Financial Institutions

The tar sands are the world's largest capital project, and that investment comes directly from financial institutions, endowments, and pension funds. Similarly, deepwater oil rigs, new hydraulic fracturing installations, and mountaintop removal projects require tremendous amounts of startup money, with the necessary funding coming from investors. These financial institutions enable everyday production and consumption of fossil fuels. The participation of financial institutions in the localized and global destruction caused by fossil fuels companies is willful and irresponsible, and they are equally culpable for the damage caused by these practices.

## Undermining Science: The Fossil-Fuel Industry's Anti-Scientific Propaganda

For the past two decades the fossil fuel industry has spent millions of dollars to confuse the public, influence media coverage, and bully scientists.<sup>36</sup> Their money keeps the crisis of climate change out of the political sphere and undermines the influence of science in public discourse.

The strategy of large fossil fuel companies mirrors the strategy of the tobacco industry. In denying an airtight scientific consensus outlining the harms of their industry, fossil fuel companies skillfully created the impression of uncertainty and debate for many decades in the by funding phony science and by using their immense resources to exaggerate doubt and ensure these distortions were in the hands of journalists, politicians, and educators. Their plans are well-documented thanks to a series of leaks and evidence provided from lawsuits.<sup>37</sup>

Many of the fossil fuel companies that McGill invests in were part of the Global Climate Coalition, a group formed to fight greater regulatory involvement, and especially the Kyoto Protocols. GCC internal documents conceded that the science documenting climate change is undeniable, yet the organization externally continued to promote doubt.<sup>38</sup>

When it started to become public that fossil fuel companies were funding phony science, most companies pulled out of the GCC in 2002. Since then, only ExxonMobil has continued to fund

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<sup>36</sup> Drum, Kevin. "Climate Gate." Mother Jones. 30 Nov 2009. <<<http://www.motherjones.com/kevin-drum/2009/11/climategate>>>.

<sup>37</sup> New York Times. "Advisers to Industry Group Weigh In on Warning." 2007. <<<http://documents.nytimes.com/global-climate-coalition-aiam-climate-change-primer#p=1>>>.

<sup>38</sup> Revkin, Andrew C. "Industry Ignored Its Scientists on Climate." 23 Apr. 2009. New York Times. <<<http://www.nytimes.com/2009/04/24/science/earth/24deny.html?pagewanted=1&r=0>>>.

climate denial. The company has spent \$23 million dollars over the past decade funding academics and journalists to publish their opinions on the matter.<sup>39</sup> They also offered thousands of dollars to any scientist willing to write briefs contradicting the findings of the Intergovernmental Panel on Climate Change, the international authority on climate change.<sup>40</sup>

Shareholder action against them in 2006 and 2007 along with a large public outcry<sup>41</sup> caused Exxon-Mobil to stop funding the most egregious deniers, yet they continue funding another few dozen such groups.<sup>42 43</sup>

Because the other fossil fuel companies feared public backlash, their continued involvement in undermining public understanding of the scientific consensus around climate change and its causes is more subtle. They continue to be members and funders of unabashed denial groups such as the American Petroleum Institute and the United States Chamber of Commerce.<sup>44 45</sup>

These activities have successfully stymied collective action to solve this problem. Politicians have made little headway in passing policy to curb emissions, and large tax breaks and subsidies for fossil fuel extraction remain.

*Let's be better than we are today. Please divest from the Tar sands and from Plan Nord; these are not ways to the future we want to see.*

-Emily Coffey

## Identifying the Investments

**M**cGill University's investments in fossil fuels make up a relatively small portion of the endowment fund, but the global impact of those companies the University invests in is

<sup>39</sup> Union of Concerned Scientists. "Smoke, Mirrors and Hot Air: How ExxonMobil Uses Big Tobacco to Manufacture Uncertainty on Climate Science." Jan 2007. Cambridge: Union of Concerned Scientists. <<[http://www.ucsusa.org/assets/documents/global\\_warming/exxon\\_report.pdf](http://www.ucsusa.org/assets/documents/global_warming/exxon_report.pdf)>>.

<sup>40</sup> Sample, Ian. "Scientists Offered Cash to Dispute Climate Study." 2 Feb 2007. The Guardian. <<<http://www.guardian.co.uk/environment/2007/feb/02/frontpagenews.climatechange>>>.

<sup>41</sup> Expose Exxon. "Change ExxonMobil from the Inside." <<<http://www.exxposeexxon.com/action/shareholder-activism.html>>>.

<sup>42</sup> Sheppard, Kate. "Exxon Still Sponsoring Deniers." 10 Feb 2010. Mother Jones. <<<http://www.motherjones.com/blue-marble/2010/02/climate-denial-still-brought-you-exxonmobil>>>.

<sup>43</sup> Owen, Jonathan and Paul Bignell. "Think-tanks Take Oil Money and Use It to Fund Climate Deniers: ExxonMobil Cash Supporting Concerted Campaign to Undermine Case for Man-Made Warming." 7 Feb 2010. The Independent. <<<http://www.independent.co.uk/environment/climate-change/thinktanks-take-oil-money-and-use-it-to-fund-climate-deniers-1891747.html>>>.

<sup>44</sup> American Petroleum Institute. "API Member Companies." <<<http://www.api.org/globalitems/globalheaderpages/membership/api-member-companies.aspx>>>.

<sup>45</sup> ExxonSecrets. "Maps." Greenpeace. <<<http://www.exxonsecrets.org/maps.php>>>.

extraordinary. The December 2011 report on the Publicly Traded Equity Holdings of the University<sup>46</sup> is the most recent data available, and all discussion of the composition of McGill's investments comes from that list.

To identify specific corporations two lists were used. The first, from the Rainforest Action Network,<sup>47</sup> lists companies involved in the Canadian tar sands; the second, from the Carbon Tracker Initiative,<sup>48</sup> has a list of the top 100 companies with the largest estimated carbon reserves in coal, and a list of the top 100 companies with reserves in oil and gas.

McGill invests in 645 publicly traded corporations. 14 are involved in the tar sands, while 35 number among the worlds largest fossil fuel corporations. In total, these two lists identify 37 unique companies that McGill profits from, 5.7% of the University's unique holdings. The number of shares in each is not publicly available at this time, and McGill has refused to release further information despite Access to Information requests filed under the *Act respecting access to documents held by public bodies AND the protection of personal information*.

The full list of companies identified, along with their carbon reserves if available, can be found in Appendix 2.

*By participating in the exploitation of the Canadian environment and its peoples, McGill is making decisions for all of us.*

-Vanessa Deverell

It should be made clear that this is an incomplete list of the fossil fuel companies that McGill invests in. Only the largest and dirtiest fossil fuel companies are represented on these lists, and the school's endowment fund includes other smaller corporations. All 200 publicly traded fossil fuel companies are included in the scope of our request for divestment.

Of the 35 companies identified by the CTI, many are cross-listed on all three lists, meaning they have some of the largest reserves of carbon in coal, and in oil and gas, and they invest in the dirtiest form of oil production on the planet. The CTI also expressed its concern that Canadian accounting practices artificially lower the size of unconventional oil reserve size estimation, since

<sup>46</sup> McGillLeaked. "2011/12 Publicly Traded Equity Holdings." <<<http://mcgillileaked.wordpress.com/2012/10/16/201112-publicly-traded-equity-holdings/>>>.

<sup>47</sup> Rainforest Action Network. "List of Tar sands Companies". <<<http://ran.org/list-tar-sands-companies>>>.

<sup>48</sup> The Carbon Tracker Initiative. "Unburnable Carbon: Are the World's Financial Markets Carrying a Carbon Bubble" Aug 2012. <<<http://www.carbontracker.org/wp-content/uploads/downloads/2012/08/Unburnable-Carbon-Full1.pdf>>>.

“they are only reported under Canadian rules once production is believed to be ‘imminent.’”<sup>49</sup> Thus it is likely that the size of the actual reserves of carbon owned by the 12 firms involved in the tar sands for which an estimation of reserve size is available is significantly larger than expressed.

All told these 35 companies have at least 205.455 gigatonnes of CO<sub>2</sub> locked away beneath the earth. Those known reserves comprise about 7% of the globe’s known carbon reserves but comprise over 36% of our remaining carbon budget for the next 38 years. The Carbon Tracker Initiative estimates that only 886 gigatonnes of CO<sub>2</sub> can be emitted from 2000-2050 if humanity hopes to keep warming below 2 degrees Celsius. With 321 gigatonnes already burned, only 565 gigatonnes remain in our global carbon budget. Thus 80% of the world’s 2795 gigatonne fossil fuel reserves must remain underground.

None of these fossil fuel companies has pledged to keep 80% of their reserves unburned, nor will they as long as it is profitable to continue extracting.

The question then is what to do about this problem. The responsible answer is divestment.

### **Conclusion: Moving Forward**

**T**ime is of the essence for humankind. We need immediate action to keep this planet livable, and McGill University is in a position to act. Climate change threatens our University, our country, and our planet. Given the urgency of climate change, the students, faculty, staff, and alumni of McGill University demand:

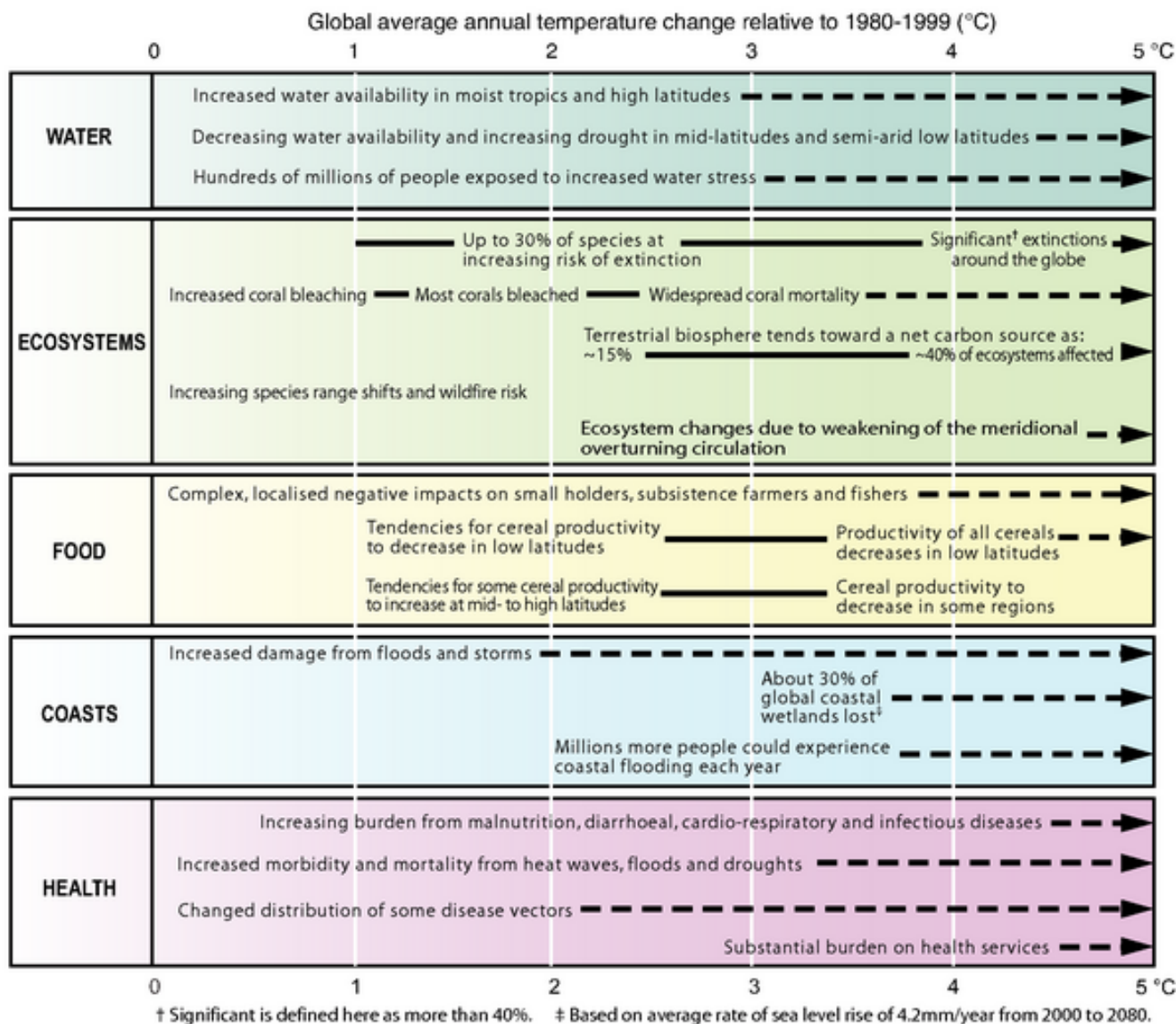
- That the Investment Committee be instructed to immediately dispose, in an orderly and responsible fashion, of the University’s holdings in corporations which develop the Canadian tar sands, transport or refine hydrocarbon from the Canadian tar sands, sell products of the Canadian tar sands, or are otherwise involved in the production, distribution or sale of goods from the Canadian tar sands, as determined by the Committee to Advise on Matters of Social Responsibility.
- That the Investment Committee be instructed to dispose, in an orderly and responsible fashion in no longer than three years, of the University’s holdings in corporations which produce, refine, transport, or sell fossil fuels, as determined by the Committee to Advise on Matters of Social Responsibility.

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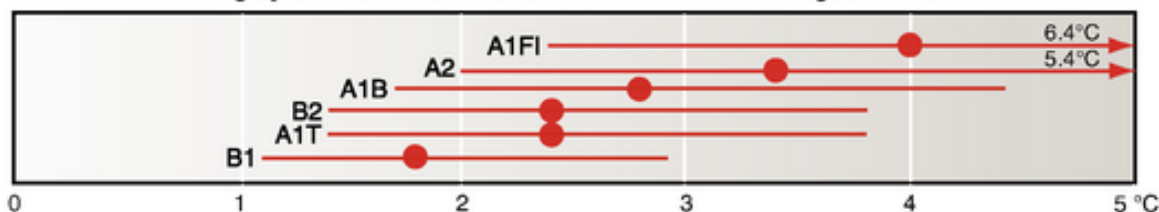
<sup>49</sup> The Carbon Tracker Initiative. “Unburnable Carbon: Are the World’s Financial Markets Carrying a Carbon Bubble” (Aug 2012) 12. <<<http://www.carbontracker.org/wp-content/uploads/downloads/2012/08/Unburnable-Carbon-Full1.pdf>>>.

- That the Investment Committee be instructed to dispose, in an orderly and responsible fashion in no longer than three years, of the University's holdings in financial institutions which have not adopted, as determined by the Committee to Advise on Matters of Social Responsibility, a policy of making no further loans to corporations that produce, refine, transport, or sell fossil fuels.

### Appendix 1: Examples of impacts associated with global average temperature change (Intergovernmental Panel on Climate Change) <sup>50</sup>



Warming by 2090-2099 relative to 1980-1999 for non-mitigation scenarios



<sup>50</sup> Intergovernmental Panel on Climate Change. *Synthesis Report*. New York: <<[http://www.ipcc.ch/publications\\_and\\_data/ar4/syr/en/spms3.html](http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms3.html), 2007>>.

**Appendix 2: McGill University's investments in fossil fuel companies, and the size of their estimated carbon reserves**

THE ESTIMATED CARBON RESERVES OF 35 OF THE FOSSIL FUEL COMPANIES MCGILL INVESTS IN.

Companies	Coal (GtCO <sub>2</sub> )	Oil (GtCO <sub>2</sub> )	Gas (GtCO <sub>2</sub> )	Total (GtCO <sub>2</sub> )
AGL Energy	0.89			0.89
Anglo American	16.75			16.75
ArcelorMittal	0.62			0.62
Baytex Energy Corp *		0.3		0.3
BG Group		2.29	0.48	2.77
BHP Billiton	16.07	1.82	0.2	18.09
Bonavista Energy Corp		0.18	0.03	0.21
BP *		32.68	1.92	34.6
Cairn Energy		0.35		0.35
Canadian Natural Resources *		4.23	0.14	4.37
Cenovus Energy Inc *		1.4	0.006	1.406
Chevron *		20.11	1.11	21.22
Crescent Point Energy Corp.		0.47	0	0.47
EnCana Corp. *		0.24	0.47	0.71



EOG Resources		0.97	0.38	1.35
Exxon Mobil *		38.14	2.89	41.03
GDF Suez S.A.		0.17	0.05	0.22
Inpex Corp		2.44	0.1	2.54
Itochu Corp	0.34			0.34
Mitsubishi Corp	4.31			4.31
Mitsui	1.03			1.03
Nexen *		1.4	0.002	1.402
Oil Search LTD		0.91		0.91
OMV		1.02	0.06	1.08
Repsol YPF S.A.		2.75	0.29	3.04
Rio Tinto	5.23			5.23
Royal Dutch Shell *		14.11	2.09	16.2
RWE AG	1.94			1.94
Santos Limited		0.19	0.17	0.36
Statoil ASA *		2.23	0.25	2.48
Suncor Energy *		3.74	0.007	3.747
Talisman Energy Inc.		1.47	0.19	1.66

Tullow Oil		0.36	0.01	0.37
Wesfarmers	1.86			1.86
Xstrata	11.6			11.6
	Coal	Oil	Gas	Total
Total	60.64	133.97	10.845	205.455

\* Also invests in the tar sands; due to Canadian accounting practices, the estimated carbon reserves for companies that exploit the tar sands are likely higher than the publicly available data.

#### COMPANIES INVOLVED IN THE TAR SANDS\*\*

**Baytex**

**BP**

**Canadian Natural Resources**

**Cenovus Energy**

**Chevron**

**Enbridge**

**Encana**

**Exxon**

Imperial Oil

**Nexen**

**Royal Dutch Shell Company**

**Statoil ASA**

**Suncor Energy**

Transcanada Corps

\*\*An estimate of the size of carbon reserves is available for each company in bold.

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