The Fossil Fuel Industry and the Case for Divestment

Toronto 350.org

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1 Executive summary

This will be filled in once we are reasonably happy with the rest of the brief

2 Climate Change is Settled Science

2.1 From the U of T divestment policy

> *The University's core academic values include freedom of inquiry and open debate. As a general matter, the University does not take positions on social or political issues apart from those directly pertinent to higher education and academic research. Instead, its role is to provide a forum within which issues can be studied carefully and debated vigorously. Given these values, the University will not consider any proposals for restrictions on its investments that require the institution to take sides in matters that are properly the subject of ongoing academic inquiry and debate.*

2.2 It is not properly the subject of ongoing academic debate that

Ideally, for each claim we should cite the best possible accessible source for laypeople as well as the most authoritative possible scientific source

- The 10,000 years of human civilization have taken place during a span of relative climatic stability.[1][2]
- Burning coal, oil, and gas produces known quantities of carbon dioxide (CO2).[3]
- Before the industrial revolution, the concentration of CO2 in the atmosphere was approximately 280 parts per million (ppm).[4][5]
- It has now risen to over 390 ppm, largely because of the burning of fossil fuels.
- At present, the concentration of CO2 in the atmosphere is rising at a rate of approximately 2.0 ppm per year.[6]
- If humanity continues to burn fossil fuels at the present rate, the concentration of CO2 in the atmosphere will rise to well over 550 ppm by 2100.
- Adding carbon dioxide to the atmosphere reduces the amount of energy the Earth radiates into space. This causes the planet to warm.[7]
- Based on evidence from ice cores, we know that doubling the amount of CO2 in the atmosphere causes global temperatures to rise by about 3°C.
- Governments around the world, including the government of Canada, have adopted 2°C as the threshold beyond which climate change should be considered `dangerous'.
- If the world is to avoid crossing the 2°C limit, most of the world's remaining fossil fuels must be kept in the ground.[8]

Mitigating climate change is important for allowing the university to achieve its academic mission. In the event that the world fails to curb greenhouse gas emissions and produces well over 2°C of climate change, substantial damage is expected to be imposed on the global economy. This threatens the growth

[1] This claim is supported by evidence from ice core samples taken in Vostok, Antarctica as well as other proxy measures of climate such as pollen in lake sediments and tree rings.
[2] **Alley2000**.
[3] **CalculationsReferences**.
[4] Evidence for this includes the records of how much fossil fuel has been burned, as well as the changing isotopic ratio of carbon in the atmosphere.
[5] **IPCC4ARdrivers**.
[6] **NOAATrends**.
[7] **IPCC4ARdrivers**.
[8] **IEA2012**.

prospects of the endowment and pension funds of the University of Toronto. It also creates additional geopolitical risks such as agricultural disruption and forced migration.

James Powell, former President of Oberlin, Franklin and Marshall, and Reed College, argues that university trustees have a quasi-legal duty to do all they can about climate change, arguing:

> ``The board is supposed to make sure that the endowment allows for intergenerational equity, that the students who are going to Oberlin in 2075 get as much benefit from it as those there now. B[illegible]ith global warming, you're guaranteeing a diminution of quality of life decades out.''

Taking action to address climate change is not an example of needlessly taking sides in a controversial issue. Rather, it is a matter of taking part in a necessary global transition. If the world fails to constrain the worst impacts of climate change, serious deleterious impacts can be expected for Canada and the University of Toronto.

2.3 The University of Toronto is already taking action on climate change

In response to the settled science of climate change, the university has already taken a number of actions motivated by concern about climate change and a desire to reduce the university's greenhouse gas pollution impact. The university's actions show climate change to be ``directly pertinent to higher education and academic research''.

Policies and infrastructure decisions justified with reference to climate change

The university has adopt[illegible]n Environmental Protection Policy

Academic programming

In 2005, the university established a new Centre for Global Change Science (CGCS), which has since conducted exemplary research into climate change effects, as well as a wide array of public lectures focused around climate-related themes. The CGCS has hosted a number of talks as part of its Distinguished Lecture Series including:[9]

- Successes and Challenges for Biodiversity Science: Distribution Responses to Climate Change --- James Clark, Duke University, September 18, 2012
- High Altitude Climate Change: The Survival Struggle of our Earth's Alpine Glaciers --- Andrew Bush, University of Alberta, October 16, 2012
- Assessing Vegetation Responses and Feedbacks to Climate Change --- John Gamon, University of Alberta, November 6, 2012
- Cumulative Carbon Emissions and the Climate Mitigation Challenge --- Damon Matthews, McGill University, February 5, 2013; and
- Trees to Tailpipes: Natural and Anthropogenic Influences on Global Atmospheric Composition --- Colette Heald Massachusetts Inst. of Technology, March 5, 2013.

The university also offers courses on climate-change-related themes, including:

- Applied Climate Change
- Gaining Practical Skills for Climate Change Adaptation (UTSC Summer Institute 2013)
- Climate Change Law (LAW269H1S); and
- Climate Change and Human Health (CEM 406).

Climate change is certainly an area of active scholarly research, but that research does not question the fundamental connection between burning fossil fuel and warming the planet. Nor does it challenge the argument that climate change is likely to cause a great deal of social injury and human suffering. Rather, the academic work being conducted on climate change at U of T reinforces the case for divestment.

[9] See: *http://www.cgcs.utoronto.ca/Series/Lecture_Series.htm*

3 The activities of fossil fuel companies are socially injurious, and this social injury cannot be reasonably remedied through shareholder voice

We may want to come up with a snappier title for this section

Since this whole section is largely about law, we need to (a) be completely clear and correct in what we say about the contents and interpretation of these laws (b) make completely defensible claims about the impacts of climate change and fossil fuel extraction generally (c) make sure to run this by some lawyers and people familiar with the U of T administration before we submit it

3.1 From the U of T divestment policy

> *Social injury is 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 health, safety, or basic freedoms*

3.2 Social injury

The burning of a large portion of the world's reserves of fossil fuels would inflict great social injury through:

1. The impact of climate change on agriculture
2. The inundation of coastal areas
3. Storms, droughts, other extreme weather
4. The spread of tropical disease
5. Ecosystem collapse
6. Threats to First Nations groups and indigenous cultures
7. Threats to the infrastructure of cities, including Toronto
8. The threat of abrupt and non-linear adverse climate impacts, arising from positive feedback effects and important thresholds in the climate system

3.3 The harm caused is inherent to the primary business of fossil fuel companies

The harms from fossil fuel extraction and burning arise directly and inescapably from the core business activities of fossil fuel companies. As a result, shareholder voice is not an effective strategy for mitigating these harms. The value of these companies reflects the assumption that these reserves will be extracted and burned. The University of Toronto's investments in these companies increase the amount of harm that will arise as a result of climate change.

Divestment is the only way for the University of Toronto to avoid contributing financially to the fossil fuel industry, and by extension, to the socially injurious impacts delineated above. Besides divestment, another approach to socially responsible investment is to try to alter a firm’s behavior by applying pressure through shareholder voice. However, the harmful activities (extracting and selling fossil fuels) are inherent to the primary business of fossil fuels companies in which the university is invested.

For example, Shell Canada lists its business activities as follows: ``Shell Canada's Upstream businesses explore for and extract natural gas, and market and trade natural gas and power. Our Downstream business refines, supplies, trades and ships crude oil worldwide and manufactures and markets a range

of products, including fuels, lubricants, bitumen and liquified petroleum gas (LPG) for home, transport and industrial use." ExxonMobil describes its upstream and downstream activities similarly.

Given the centrality of oil and natural gas extraction, as well as the refinement and sale of these resources to the business models of these companies, shareholder voice would not be an effective method to address social injury since the companies could not abandon the socially injurious activity without dissolving their existing business models. Moreover, the market value of these companies reflects an assumption that their reserves will be extracted and burned. Therefore, it would be unreasonable for the University of Toronto to expect to be able to alter the socially injurious activities of these companies while holding onto its investments in the fossil fuel industry. Thus, divestment is the only appropriate response for the University of Toronto to adopt in order to dissolve any financial complicity in the fossil fuels industry's socially injurious activities.

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

The socially injurious activities of fossil fuel companies frustrate the enforcement of rules of domestic and international law intended to protect individuals against deprivation of health, safety and basic freedoms.

First, these activities undermine the *Canadian Charter of Rights and Freedoms*. Section 7 states ``the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice." Since life and security of the person depend on a healthy environment, implicit in this statement is the right to a healthy environment. As outlined in [LINK TO SECTION 3A ABOVE], the activities of companies in the fossil fuels industry undermine the right to life by depriving people of the benefits of a healthy environment.

In addition, numerous pieces of Canadian environmental legislation explicitly recognize and seek to protect the right to a healthful environment. The *Ontario Environmental Bill of Rights* (1993) recognizes the ``inherent value of the natural environment" and states that ``the people of Ontario have the right to a healthful environment" and ``have as a common goal the protection, conservation and restoration of the natural environment for the benefit of present and future generations." The purposes of the act are:

1. to protect, conserve and, where reasonable, restore the integrity of the environment by the means provided in this Act;

2. to provide sustainability of the environment by the means provided in this Act; and

3. to protect the right to a healthful environment by the means provided in this Act. 1993, c. 28, s. 2 (1).

The above purposes include the following:

1. The prevention, reduction and elimination of the use, generation and release of pollutants that are an unreasonable threat to the integrity of the environment.

2. The protection and conservation of biological, ecological and genetic diversity.

3. The protection and conservation of natural resources, including plant life, animal life and ecological systems.

4. The encouragement of the wise management of our natural resources, including plant life, animal life and ecological systems.

5. The identification, protection and conservation of ecologically sensitive areas or processes. 1993, c. 28, s. 2 (2).

The activities of fossil fuel companies frustrate all of the above purposes by contributing to climate change, thereby undermining the right to a healthy environment of the people of Ontario.

Environmental laws for other provinces of Canada recognize and seek to protect the same right to a healthy environment. For example, Part 1, section 6 of the *Yukon Environment Act* states that: ``The people of the Yukon have the right to a healthful natural environment.'' In accordance with this right, the Act seeks to protect the environment of the Yukon by providing an appropriate process to assess the environmental effects of projects and activities in the Yukon or that may have effects in the Yukon. Similarly, the *Northwest Territories Environmental Rights Act* recognizes that ``the people of the Northwest Territories have the right to a healthy environment and a right to protect the integrity, biological diversity and productivity of the ecosystems in the Northwest Territories'' and establishes the means by which individuals can act to protect the environment from harm. By pursuing the extraction of fossil fuels, the companies in question undermine the right to a healthy environment that these acts articulate and protect. Finally, Quebec's *Environmental Quality Act* states that, ``Every person has a right to a healthy environment and to its protection, and to the protection of the living species inhabiting it, to the extent provided for by this Act and the regulations, orders, approvals and authorizations issued under any section of this Act and, as regards odours resulting from agricultural activities, to the extent prescribed by any standard originating from the exercise of the powers provided for in subparagraph 4 of the second paragraph of section 113 of the Act respecting land use planning and development'' (chapter A-19.1).

The activities of the fossil fuels industry in Canada also violate the constitutional and treaty rights of Canada's First Nations. These violations arise both from the specific impact of fossil fuel development projects --- such as the oil sands --- and from the inevitable consequences of burning fossil fuels. Rights that are being violated include the right to consultation and accommodation; the right to waters and land and to fish, hunt and trap; and the aboriginal rights affirmed in Canada's constitution.

Keepers of the Athabasca member Vivienne Beisel explains how the oil sands development has violated Treaty 8 and the Constitution: ``The cumulative impacts of oil sands development has all but destroyed the traditional livelihood of First Nations in northern Athabasca watershed. The law is clear that First Nations must be consulted whenever the province contemplates action that may negatively affect Aboriginal and treaty rights... The province has continued to issue approvals for new developments without obtaining their consent or consulting with First Nations in a meaningful and substantial way. This is in direct breach of Treaty 8 First Nations' treaty-protected Aboriginal rights to livelihood, and thus a violation of s.35(1) of the Constitution'''.

Finally, the activities of the fossil fuels companies in which the University of Toronto is invested frustrate international law. First, Article 3 of the *Universal Declaration of Human Rights* states that ``Everyone has the right to life, liberty and security of person.'' The right to life is a precondition to all other fundamental human rights. As outlined in [LINK TO SECTION 3A OF THIS DOCUMENT], the activities of companies in the fossil fuels industry undermine the right to life by depriving people of the benefits of a healthy environment. In addition, the *Hague Declaration on the Environment* (1989), to which Canada is a signatory, makes the link between the right to life and the harmful change effects of climate change explicit: ``The right to live is the right from which all other rights stem. Guaranteeing this right is the paramount duty of those in charge of all States throughout the world. Today, the very conditions of life on our planet are threatened by the severe attacks to which the earth's atmosphere is subjected.'' In signing onto this Declaration, Canada recognized the reality of the threat to human life posed by climate change and pledged to take measures to address that threat. The University of Toronto's investment in fossil fuels frustrates any efforts Canada has taken or may take in the future to address the problem of climate change by supporting the companies that most significantly contribute to the problem.

The activities of fossil fuel companies are also at odds with the fundamental objective of the *United Nations Framework Convention on Climate Change* (UNFCCC), which was ratified by Canada and which entered into force on 21 March 1994. The UNFCCC affirms the intention of signatories to achieve ``stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system''. Achieving this objective requires that most of the reserves of fossil fuel companies be left unburned underground. It also requires the abandonment of

projects intended to extract unconventional reserves of fossil fuels, through activities including oil and gas drilling in the arctic, exploitation of the oil sands, and extraction of previously inaccessible oil and gas reserves through hydraulic fracturing.

4 Divestment Compatible with the University's Fiduciary Duty

4.1 No Evidence of a Divestment Penalty for Investors

Several studies have attempted to quantify the financial consequences of divestment from the fossil fuel industry or heavy polluters in general. In aggregate, these studies found no signnificant impact on investment risk in predictive models, nor a performance penalty in tests using historical data.

historical UNEP FI meta-analysis finds no evidence of penalty to screened portfolios[10]

risk based aperio group: impact of divestment not found significant risk based modeling sh[illegible] very small differences between screened matching portfolio and index (russel 3000)[11]

4.2 Market Capitalization and Value at Risk

Stated Policy Objectives Incompatible with Valuation of Reserves

Fossil fuels may provide a hedge against other asset classes, but only in scenarios where unconstrained emissions lead to accelerated and possibly catastrophic warming. The international communty is in broad agreement that this must be prevented from happening.

Regulatory Risk not Adequately Priced

As one scenario for the World Energy Outlook in 2012, the International Energy Agency assumes international cooperation to keep CO_2 under 450ppm, which in their model constrains the likelyhood of warming greater than 2˚C to 55%. This is in contrast to their baseline New Policies Scenario, which assumes modest reductions in the rate of emissions increase compared to the third scenario, Current Policies. Regarding the effect this policy environment would have on the price of fossil fuels they estimate,

> Compared with the New Policies Scenario, the global oil price in the 450 Scenario in 2035 is $25/barrel lower and the coal price almost 40% lower. The price for natural gas falls by 23% in Europe and 4% in North America.[12]
>
> For any scenario where emissions are constrained to keep warming under 2˚C, market assumptions regarding the profitability of fossil fuel extraction are necessarily optimistic. Marginal projects will become unprofitable and returns to investors for even the most profitable projects will decline.

Potential for Malinvestment in Capital Intensive, Long Term Projects

> The persistently high price of fuels on the world market in recent years has lead to unprecenented investment on the part of the fossil fuel industry in projects that were previously deemed too marginal to profitably develop. Development of unconventional hydrocarbon reserves such as tar sands, oil shale, offshore drilling in extremely deep water and the arctic, hydraulic fracturing and mountaintop removal coal mining entails extremely high capital investment. Scenarios in which carbon emissions are restricted sufficiently to keep global temperatures from rising more than 2˚C would likely cripple the return on much of this investment.
>
> In anticipating such a scenario, the fossil fuel industry has been pinning its hopes on the development of effective methods of carbon capture and sequestration. Despite tremendous

[10] **UNEPFI2007**.
[11] **Aperio2013**.
[12] **IEA2012**.

investment in this technology on the part of both the private and public sectors, economically feasible sequestration of emissions at scales needed to mitigate climate change remains elusive.

Fossil Fuel Reserves as Stranded Assets

Given the degree to which proven reserves of carbon exceed allowable emissions for sub-2°C warming, companies with fossil fuel reserves as their largest assets may be substantially overvalued under current market conditions. Stranded assets in the form of unburnable reserves and large liabilities incurred to develop those reserves combine to create a risk not only to equity, but to bondholders as well.

Volatility of Investor Sentiment

Current market capitalization of the fossil fuel industry rests in part on the assumption that the global investor class will continue to see the sector as a reliable investment even as damage from climate change becomes apparent. This assumption has been increasingly challenged from both outside and within the financial industry. Traditionally conservative-minded publications such as the Economist, Business Week and the Financial Times have published articles suggesting the fossil fuel sector is overvalued. Other voices within the financial industry such as investors groups and hedge fund managers have been more unequivocal, with talk of a "carbon bubble" beginning to gain currency with many investors and industry experts.

4.3 Fossil Fuels represent a Risk to the University's Other Investments

Institutional investors, and universities in particular are unique in that they are often expected to plan financially on a timescale far longer than average. On timescales of 50 years or more, the consequences of unconstrained emissions are very likely to overshadow all other financial considerations.

4.4 Attractive Substitutes Exist for Divested Equities

The renewable energy sector has enormous growth potential. Even under current regulatory regimes, the cost of electricity

5 Actions have been taken by the Canadian government and international bodies on this issue

All three levels of Canada's government have taken action in response to the threat of climate change.

5.1 From the U of T divestment policy

> *Responses should be based on the following principles:*
>
> ...
>
> *(iii) actions taken by the Canadian government or other national or international bodies with regard to the particular issue of concern.*

5.2 Federal government

Emission standards for passenger vehicles and light trucks In November 2012, proposed regulations were released for vehicles beginning with the 2017 model year. Average emissions from vehicles in 2025 are expected to be 50% of those sold in 2008.

Heavy duty vehicles In April 2012, the federal government released regulations for heavy duty vehicles beginning with the 2014 model year.

Coal-fired power plants In September 2012, final regulations were introduced to limit emissions from the coal-fired electricity sector.

Renewable fuel requirement As of December 2010, gasoline is required to contain an average of 5% renewable content, with a 2% requirement for diesel fuel.

Carbon capture and storage (CCS) Canada's federal and provincial governments have committed a total of approximately $3 billion in funding for CCS, which could lead to as many as five to six large-scale demonstration projects in Canada.

Agricultural greenhouse gases Canada is contributing $27 million toward the Global Research Alliance on Agricultural Greenhouse Gases, a group created to advance research, technology transfer, and adoption of beneficial management practices to mitigate agricultural greenhouse gases.

5.3 Government of Ontario

Emission reduction targets The Government of Ontario has legislated greenhouse gas emission reduction targets of 6% below 1990 levels by 2014, 15% below by 2020, and 80% below by 2050.

Phasing out coal The Government of Ontario has committed to phasing out coal-fired electricity generation by 2014.

Public transit investments The Ontario government is contributing over $9 billion to the Metrolinx Regional Transportation Plan.

Green Energy Act Ontario's 2009 Green Energy Act created a system of feed-in tariffs to support the deployment of renewable energy options including solar photovoltaic, biogas, biomass, landfill gas, and wind power. It established a right for all renewable energy projects to be connected to the grid, streamlined the approval process for green energy projects, and began the implementation of a `smart' energy grid.

Forest protection Ontario has protected roughly half of the province's boreal forest from mining and forestry, motivated in part by the forest's importance as a carbon sink.

Establishment of a Climate Change Secretariat In 2008, the province created a permanent secretariat to coordinate its *Climate Change Action Plan*.

Community Go Green Fund The province provided $6 million to 90 community groups in order to help charitable or environmental organizations, youth or cultural associations, educational institutions and Aboriginal communities reduce their carbon footprint.

5.4 City of Toronto

Climate Change Action Plan

The city's Climate Change, Clean Air and Sustainable Energy Action Plan was unanimously adopted by Toronto City Council in July 2007. The city allocated over $1 billion over the next five years to projects to reduce greenhouse gas emissions.**TorontoEnvOff2008**

These commitments included:

- $67 million for the Better Building Partnership and the Sustainable Energy Funds, which are low interest revolving loan funds that support energy conservation and renewable energy
- $136 million for energy retrofits to and installation of renewable energy systems on City owned buildings;
- $24 million for tree planting, in addition to the $40 million a year operating budget for the city's Forestry Unit;
- $36 million to accelerate implementation of the City's Bike Plan;
- $20 million for the Live Green Toronto program which provides support for neighbourhood and community groups in taking action on Climate Change;
- $10 million for continued conversion of traffic signals to LED lights;
- $7 million for the Clean Roads to Clean Air street sweeping initiative;
- $186 million for water efficiency and improved energy efficiency in Toronto Water operations that will achieve an annual avoidance of an estimated 14,000 tonnes of greenhouse gas emissions;
- $21 million for methane gas capture and control at closed and operating landfills;
- $67 million to build anaerobic digestion facilities that will capture biogas from collected Green Bin organic materials and generate enough electricity to power an estimated 1,700 homes;
- $380 million to improve rapid transit services, such as, new light rapid transit lines, rapid transit routes for buses and an improved signalling system that will increase the capacity of the Yonge subway line;
- $400 million for the purchase of electric-hybrid buses; and
- $10 million plus for a range of initiatives including the Green Fleet Transition, the Eco-Roofs and Greenroofs Incentive programs, and support initiatives that promote production and consumption of locally grown food.

These investments are specifically justified with reference to the danger of climate change, with expected impacts on the city including rising mean temperatures, warmer winters, changes in disease vectors, changes in precipitation patterns, increased extreme weather, falling lake and stream levels, and rising sea levels.**TorontoEnvOff2008**

The City of Toronto has also committed to specific greenhouse gas reduction targets, starting with the city's 1990 baseline level of approximately 22 million tonnes per year:**TorontoAQandCC**

- 6 percent by 2012 (1,320,000 tonnes per year)
- 30 percent by 2020 (6,600,000 tonnes per year)
- 80 percent by 2050 (17,600,000 tonnes per year)

Other actions taken by the city include:

Adaptation The city is making efforts to prepare for the impacts of climate change, through programs and policies including Toronto's Heat Alert system and Hot Weather Response Plan, The Wet Weather Flow Master Plan, Green Roof Pilot Incentive Program, Deep Lake Water Cooling (Enwave), Peaksaver and Keep Cool Programs (Toronto Hydro), Green Development Standard, and Better Buildings Partnership.

Great Lakes Climate Change Policy Coordination Along with 10 other cities in the Great Lakes region, Toronto is working to develop an international city-level policy on climate change.

Live Green Toronto This five-year, $20-million dollar program is intended to promote and support actions by residents and community groups to reduce emissions, clean our air and protect our climate.

Landfill gas The City of Toronto collects and burns landfill gases that are emitted at its three largest landfill sites: Keele Valley, Brock West and Beare. The city explains that: ``the process of collecting and incinerating landfill gases is crucial to the goal of combating the emission of greenhouse gases into the atmosphere".**TorontoAQandCC**

Greenhouse Gas and Air Emissions Inventory In 2007, the city completed a combined greenhouse gas and air quality emissions inventory, with information about energy consumption and pollutants within the city.

Concern about oil sands pipelines The Toronto City Council has expressed its desire to review the application of Enbridge to reverse their Line 9 pipeline to carry diluted bitumen from the oil sands. The city may apply to become an intervenor in the National Energy Board process.

Can start with documents from Yasmin

5.5 Actions taken by other national bodies

Governments around the world have also been acting to mitigate the seriousness of climate change. In many cases, they have implemented significantly more ambitious policies than those enacted in Canada to date.

United States

A

B

C

United Kingdom

A

B

C

France

A

B

C

Germany

A

B

C

Japan

A

B

C

China

A

B

C

5.6 Actions taken by international bodies

International efforts to address climate change have often been centred around the United Nations Framework Convention on Climate Change (UNFCCC), though many other international forums and organizations have also made efforts to address the issue.

United Nations Framework Convention on Climate Change (UNFCCC)

- Signed in 1992, came into force in 1994 with 50 ratifications
- Objective: ``stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system"
- This has subsequently come to be understood to mean limiting warming to less than 2°C

Other sub-components of UNFCCC – adaptation funding, etc

Canada has repeatedly endorsed the 2°C limit for warming

- The 2009 Copenhagen Accord - signed by Canada - recognizes ``the scientific view that the increase in global temperature should be below 2 degrees Celsius"
- Other references to the limit
- For the world to reach this goal, fossil fuels need to be phased out aggressively

6 Why start with Royal Dutch Shell?

The preceding sections of this brief show climate change to be the cause of increasing instability and harm to the planet. Consequences of climate change have the potential to reach unprecedented levels of social and environmental damage, unless dramatic changes are put into place immediately.

As outlined, human-driven activities that are direct causes of climate change include the extraction and burning of fossil fuels. Thus, these activities are directly implicated in the harmful consequences of climate change. It follows logically that:

- Investing in the extraction and burning of fossil fuels --- which implies dependence on the fruition and future growth of the industry—and,
- Profiting from the extraction and burning of fossil fuels --- which constitutes financial benefit from harmful activity—are not in accordance with socially or ethically responsible investment practices.

As a first step toward divestment from the fossil fuel industry, we ask that the University of Toronto divest 100% of its holdings from Royal Dutch Shell by the end of 2013. As one of the largest fossil fuel companies in the world, as well as the university's largest single holding, Shell represents an ideal starting point for the university's move to divest from the fossil fuel industry.

In addition to the broader implication of Shell's activities as directly contributing to the harmful affects of climate change, Shell represents an ideal case for divestment due to three main reasons that are related to the internal operations of the company:

1. Shell has repeatedly and willfully carried out actions resulting in social injury, including conduct that has directly conflicted with domestic and international law as a result of their operations in Nigeria and Alberta.
2. Shell currently represents a financial risk to investors, with even greater shareholder uncertainty projected in the medium and long term due to proposed projects that are costly and high-risk.
3. Divestment from Shell will not adversely affect the university's portfolio.

6.1 Shell's ongoing history of social injury

Royal Dutch Shell has been found to repeatedly and willfully cause social injury as a result of activities that:

1. directly conflicted with national and international law,
2. infringed on governmental regulations or on international health and safety or environmental standards.

The following list of legal actions taken against Shell stands as evidence that the company has consistently and knowingly inflicted social harm as a consequence of a number of its global operations.

Legal Offences in Nigeria

Shell has a long history of human rights and environmental abuses in the Niger Delta region, where it has operated since 1958. Currently, Shell is the midst of a number of litigation processes at various stages, as documented in Shell's 2011 Annual Report:

> Shell subsidiaries and associates operating in Nigeria are parties to various environmental and contractual disputes. These disputes are at different stages in litigation, including at the appellate stage, where judgments have been rendered against Shell. If taken at face value, the aggregate amount of these judgments could be seen as material.

Since the publication of the report, Shell has been charged on one count in the case of Niger Delta Farmers vs. Shell (detailed below). The parties are currently in the process of negotiating compensation. The company asserts that individual charges in this particular case will not have a material affect (ref – pg # of Annual Report needed). However, as suggested in the annual report, considerations regarding the full impact of this case on the company cannot be restricted to the individual case alone but must include any potential payouts and related damages that may occur as an outcome of future legal challenges, in addition to possible damages as a result of ongoing cases yet to be settled. Thus, the full financial impact of the companies ``environmental and contractual disputes" in Nigeria is not yet known and could have a material effect on the company (ref – pg # of Annual Report needed).

7 References

The bibliography will go here