

Nathan Larkin

Ben Henderson

CAS 138T

April 15, 2014

Financial and Social Basis for Fossil Fuel Divestment at Penn State

In a capitalist society, the way that a party spends and invests its money is often more impactful than that party's actions or words. Investments can be viewed as a medium by which respective investors show support for an industry or business and indirectly take part in the activities of said industry or business. This notion can be a troublesome one for parties that invest in industries that produce negative societal consequences. This is especially so in a scenario in which the investing party consists of some of the wealthiest and most influential institutions in the world, and the receiving party is the very industry that fuels the most pressing contemporary challenge to human civilization: global climate change.

In 1988, a group comprised of over one thousand of the world's most esteemed scientists was formed by the United Nations. The purpose of this group, the Intergovernmental Panel on Climate Change, was to assess the Earth's changing climate and the possibility that humans were affecting climate change. The IPCC released its first report, the First Assessment Report, in 1990. The report concluded, with certainty, that, "Emissions as a result of human activity are substantially increasing the atmospheric concentrations of greenhouse gases... These increases will enhance the greenhouse effect, resulting in...additional warming of the Earth's surface (IPCC 1990)." The degree to which the futuristic tone of the warnings

presented in the First Assessment Report sharply contrasts the more immediate tone of the following excerpts, taken from the IPCC's 2014 Fifth Assessment Report, is telling. "Warming of the climate system is unequivocal, human influence on the climate system is clear, and limiting climate change will require substantial and sustained reductions of greenhouse gas emissions... Observed impacts of climate change have already affected agriculture, human health, ecosystems on land and in the oceans, water supplies, and some people's livelihoods (IPCC, 2014 Jan.) (IPCC, 2014 March)." The obvious difference between the conclusions of these two reports is the sense of urgency with which they are presented. In 1990, we were being warned of what *will* happen if stringent climate policies are not implemented; now that such policies have generally not been implemented, we are being told of what *is* happening.

In the 24 years that span between the IPCC's first report and its most recent, the dire effects of anthropogenic climate change have become abundantly clear in the form of extreme weather events, which are often exacerbated or enabled by global warming. The occurrence of the thirteen costliest hurricanes in United States history since the release of the First Assessment Report reveals that hurricanes have grown more severe, a phenomenon that is the result of increased sea levels and higher ocean and air temperatures, all of which are direct byproducts of a warming climate (Blake, 2011) (Sullivan, 2013). The frequency of large wildfires in the United States has also increased substantially, as the average number of acres of land burned per year in the most recent past decade, 7.3 million, is more than double the amount burned per year in the decade preceding the 1990 First Assessment Report,

2.9 million (Wildland Fires, 2014). Despite the dangerous and costly observed effects of climate change, inadequate action has been taken on the part of the world's governments.

Situations in which governments fail to adequately serve their people necessitate direct action on the part of said people. In the case of direct action regarding global climate change, fossil fuel divestment movements have spread rapidly, urging various institutions across the United States to take the fight against climate change into their own hands and remove their investments from the fossil fuel industry. In the United States, numerous cities have divested, and some of the nation's largest religious denominations are encouraging members to divest, but the lion's share of the divestment movement is occurring on college campuses.

Divestment movements exist at over 380 campuses, including Penn State's; however, only eleven colleges and universities have committed to divestment thus far (Commitments, 2014). Because investments in the fossil fuel industry are socially irresponsible and divestment can be a powerful tool for influencing social change and promoting formation of financially sound investment portfolios, Penn State should join the ranks of the eleven U.S. colleges that have already divested and immediately freeze any new investments in fossil fuels and remove its currently held investments from the fossil fuel industry within five years.

Currently, Penn State invests tens of millions of dollars in the fossil fuel industry each and every year. Specifically, between 2012 and 2013, Penn State committed \$100 million to investment firms that deal exclusively in the fossil fuel industry (Endowment, 2012) (Endowment, 2013) (Long-Term Investment, 2013)

(Long-Term Investment, 2014). Investments such as these contribute to the enormous financial influence of the fossil fuel industry in politics and allow it to maintain a stranglehold on political processes. The vast economic presence of the fossil fuel industry coupled with its extreme wealth and spending levels on government lobbying, enables it to affect public policy. In 2013, ExxonMobil, Chevron, Koch Industries, and the American Petroleum Institute, among others, spent \$145 million on government lobbying; that amount is over 10 times greater than the mere \$14 million that was spent by the environmental lobby in the same year (Oil & Gas, 2014) (Environment, 2014). The stark difference between the amount spent by the fossil fuel lobby and the environmental lobby illustrates the degree to which the corruptive influence of the fossil fuel industry impedes the formation of sound environmental policy. This unscrupulous political climate manifests a state of perpetual dominance by the fossil fuel industry. The lack of adequate environmental policy and fossil fuel regulations enables the industry to become ever more profitable; higher profits correlate to higher stock value, which attracts investors, and increased levels of investment accumulate more wealth for the industry, thus allowing it to spend more on lobbying and further strengthen its influence on public policy. It is an unforgiving cycle, and Penn State fortifies it through its socially irresponsible investments year in and year out. Although the evident pollution of political processes that Penn State contributes to through its investments is pernicious, the social and ethical issues surrounding investments in an industry that, through its very nature, perpetuates climate change and all of the

negative consequences of a warming Earth extend far beyond the realm of the American political system.

Climate change is an occurrence that is engendered mainly by the carbon-emitting habits and lifestyles of those living in the world's developed nations—habits and lifestyles that are enabled by the fossil fuel industry. The effects of climate change, such as increased severity of hurricanes, drought, and rising sea levels, however, take their heaviest tolls on undeveloped nations that lack infrastructure sufficient to withstand instances of extreme climatic events—nations that contribute to increased carbon dioxide concentrations in the atmosphere in a very low capacity (Fossil-Fuel Emissions, 2010). Undeveloped nations are not, however, the only group that is being forced to cope with a crisis that they have had virtually no role in causing. Another group of innocent bystanders is being condemned to cope with the consequences of a warmer planet: future generations.

The near-certainty that the effects of climate change will grow more severe in coming years and decades calls into question issues of intergenerational ethics. By playing a role in funding the fossil fuel industry, Penn State contributes to the condemnation of future generations to cope with increased regularity of extreme storms, flooding, drought, food shortages, rising sea levels, and the like. Investments for financial gain in an industry that contributes to the endowment of such a burden upon innocent peoples are unethical and immoral. At best, these investments illustrate ignorance and a lack of foresight; at worst they demonstrate a sense of reckless abandon and carelessness for the well-being of humanity, present and future. On moral and ethical grounds, fossil fuel investments should not have a place

at Penn State or any of America's other great educational institutions. Despite this, many colleges and universities continue to invest in fossil fuels in the hopes of financially increasing their respective endowment funds.

A university endowment is, put simply, a savings account for a school that is used for funding various operations of said institution. Penn State's endowment is the 27th largest among all U.S. colleges; it represents nearly \$3 billion (Top 50 Endowments, 2013). In order to increase the size of the endowment, the funds contained within it are invested in various industries. According to Penn State's Office of Investment Management, "The endowment pool is a commingled fund of endowment assets that is broadly diversified among stocks, bonds, venture capital, private equity, hedge funds, and real estate." Although the Office of Investment Management claims to be "committed to the growth and preservation of the endowment for the future of Penn State," an examination of its actual investment habits indicates the opposite—that short-term payoffs are prioritized above long-term sustainability (Office of Investment Management, 2010). Specifically, the school's investments in the risky fossil fuel industry reveal a preference for quick payoffs and a disregard for Penn State's financial health into the foreseeable future.

Investments in the fossil fuel industry are inherently risky because of the effects of its products on the Earth's climate system. In 2009, world leaders at a United Nations conference agreed to support "the scientific view that increase in global temperature should be below two degrees Celsius" in what has become known as the Copenhagen Accord. In order to reach this goal of limited increase in global temperature, scientists have estimated that the "carbon budget" of the Earth

is roughly 565 gigatons by the year 2050. In other words, in order to avoid causing devastating and irreversible damage to the planet, humans can afford to emit no more than 565 gigatons of carbon dioxide into the atmosphere before midcentury. For perspective, at the current rate of growth of worldwide carbon dioxide emissions, 565 additional gigatons of carbon dioxide, our allotment until 2050, will be emitted in about 15 years. Currently, the fossil fuel industry holds about 2,795 gigatons of carbon dioxide worth of fossil fuels in its known reserves (McKibben, 2012). The extreme difference between amount of currently held reserves and the “carbon budget” is likely to spell financial disaster for the industry due to the likelihood of stranded assets.

In determining their stock prices, fossil fuel companies operate under the assumption that they will utilize the totality of their reserves, despite the scientific consensus that doing so is not physically feasible (Gore, 2013). The likely outcome of companies’ accounting for resources that will never come to fruition is an impending surge of stranded assets—assets that, according to the University of Oxford’s Stranded Assets Programme, “suffer from unanticipated or premature write-offs, downward revaluations, or are converted to liabilities (Ansar, 2013).” This concept is actually not such a complicated one: logic dictates that if the fossil fuel industry is unable to sell as much of its product as it expects to, then its profits will be lower than expected as well. Failure to account for potential stranding of assets results in artificially inflated stock prices that plummet when said assets do, indeed, become stranded. Because investments in the fossil fuel industry rest on the unrealistic assumption of emitting 2,795 gigatons of carbon dioxide, roughly five

times more than is physically permissible, the industry and its fiduciaries are especially susceptible to the financial wreckage brought on by stranded assets (Ansar, 2013). Thus, Penn State would improve its financial security and reduce risk by removing its investments from the fossil fuel industry before the burst of the so-called “carbon bubble” that will occur when fossil fuel assets become stranded. The long-term security that divestment promotes makes it a financially sensible policy for Penn State to implement. However, the goal of fossil fuel divestment is not simply to financially strengthen Penn State and its endowment. Penn State’s financial security is merely a positive side effect of an investment portfolio that is free of fossil fuels, which is, in fact, principally aimed at combatting climate change by hindering the world’s dirtiest industry.

Fossil fuel divestment will not immediately financially bankrupt the fossil fuel industry; for, even the maximum amount of capital that would be withdrawn from the industry via divestment represents only a small pool of funds relative to the total amount of capital held by the fossil fuel industry. Divestment can, however, be very successful at *politically* bankrupting the fossil fuel industry through stigmatization. The potential to politically bankrupt via divestment is evidenced by the successes of a previous campaign, the anti-South African apartheid divestment movement of the 1980s, in which college campuses across the United States removed their holdings of stock of South African based businesses. The anti-apartheid divestment campaign did not rely on financially hindering South African-based businesses. In fact, the financial effects of this movement on such businesses were negligible. Instead, the divestment campaign was able to stigmatize

investments in South African based businesses as “sin stock,” or stocks of companies that are considered socially irresponsible to invest in because of the often unethical and immoral nature of their business. The ability of such stigmatization to pressure and empower governments to act is revealed by the passage of the United States’ Comprehensive Anti-Apartheid Act of 1986, which enacted sanctions against segregated South Africa in the midst of the divestment movement (Ansar, 2013).

The contemporary fossil fuel divestment campaign leans heavily on the example of the anti-apartheid movement. In the case of fossil fuels, Penn State’s high notoriety and societal influence mean that the University’s divestment from fossil fuels would both support the stigmatization of the fossil fuel industry as sin stock and behave as a model for other universities to follow suit, further besmirching the industry. The events of past divestment movements indicate that this stigmatization would lead to the creation of a politically bankrupt and susceptible fossil fuel industry, and it would empower political processes to craft sound environmental policy in spite of the industry and its vast sums of lobbying dollars.

Divestment is a form of direct action that has been historically proven to be effective at provoking relatively rapid social change, and the delicate and increasingly volatile state of the Earth’s climate necessitates immediate action. Penn State’s current holdings of fossil fuel stocks are socially irresponsible. They provide funding to a financially risky industry, which, through its practices, condemns the Earth to climate disaster while simultaneously jeopardizing the University’s financial security in the long-term. By removing its endowment funds from the fossil fuel industry, Penn State would further its rich tradition of leadership and establish

itself as a university that is truly committed to the amelioration of humanity by combatting global climate change.

Works Cited

Ansar, A., Caldecott, B., Tilbury, J. (2013). Stranded Assets and the Fossil Fuel Divestment Campaign: What does Divestment Mean for the Valuation of Fossil Fuel Assets? *University of Oxford: Smith School of Enterprise and the Environment*.

Retrieved from <http://www.smithschool.ox.ac.uk/research/stranded-assets/index.html?content=articles>

Blake, E., Landsea, C., & Gibney, E. (2011). The Deadliest, Costliest, and Most Intense United State Tropical Cyclones From 1851 to 2010 (And Other Frequently Requested Hurricane Facts). *National Oceanic and Atmospheric Administration*.

Retrieved from <http://www.nhc.noaa.gov/pdf/nws-nhc-6.pdf>

Commitments. (2014). *350.org*. Retrieved from <http://gofossilfree.org/commitments/>

Endowment and Similar Funds. (2012). *The Pennsylvania State University Office of Investment Management*. Retrieved from <http://www.psu.edu/oim/gallery/botfisca112.pdf>

Endowment and Similar Funds. (2013, March). *The Pennsylvania State University Office of Investment Management*. Retrieved from <http://www.psu.edu/oim/gallery/botcal12.pdf>

Environment. (2014). *Center for Responsive Politics*. Retrieved from <https://www.opensecrets.org/industries/indus.php?cycle=2014&ind=Q11>

Fossil-Fuel CO2 Emissions by Nation. (2010). *United States Department of Energy: Carbon Dioxide Information Analysis Center*. Retrieved from http://cdiac.ornl.gov/tr ends/emis/tre_coun.html

Gore, A., Bloodai, D., (2013). The Coming Carbon Asset Bubble. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/news/articles/SB10001424052702304655104579163663464339836>

IPCC Working Group I. (1990). Policymakers Summary. *IPCC First Assessment Report*. Retrieved from https://www.ipcc.ch/ipccreports/far/wg_I/ipcc_far_wg_I_s mp.pdf

IPCC Working Group I. (2014, January). IPCC Press Release. *IPCC Fifth Assessment Report*. Retrieved from http://www.climatechange2013.org/images/uploads/140130_WGI_AR5_press_release_final.pdf

IPCC Working Group II. (2014, March). IPCC Press Release. *IPCC Fifth Assessment Report*. Retrieved from http://www.ipcc.ch/pdf/ar5/pr_wg2/140330_pr_wgII_spm_ en.pdf

Long-Term Investment Pool and Similar Funds. (2013, September). *The Pennsylvania State University Office of Investment Management*. Retrieved from <http://www.psu.edu/oi m/gallery/botfiscal13.pdf>

Long-Term Investment Pool and Similar Funds. (2014). *The Pennsylvania State University Office of Investment Management*. Retrieved from <http://www.psu.edu/oi m/gallery/botcal13.pdf>

McKibben, B., (2012). Global Warming's Terrifying New Math. *RollingStone*.

Retrieved from <http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719>

Office of Investment Management. (2010). *The Pennsylvania State University Office of Investment Management*. Retrieved from <http://www.psu.edu/oim/index.html>

Oil & Gas. (2014). *Center for Responsive Politics*. Retrieved from

<https://www.opensecrets.org/lobby/indusclient.php?id=E01&year=2013>

Sullivan, K., & Uccellini, L. (2013). Service Assessment: Hurricane/Post-Tropical Cyclone Sandy. *National Oceanic and Atmospheric Administration*. Retrieved from <http://www.nws.noaa.gov/os/assessments/pdfs/Sandy13.pdf>

Top 50 Endowments. (2013). *Boston College*. Retrieved from <http://www.bc.edu/offices/endowment/top50endowments.html>

Total Wildland Fires and Acres. (2014). *National Interagency Fire Center*. Retrieved from http://www.nifc.gov/fireInfo/fireInfo_stats_totalFires.html

