

**A Proposal to Divest Mount Holyoke College's  
Endowment from the Fossil Fuel Industry**

Mount Holyoke Climate Justice Coalition

Spring 2017

## Contents

1. Introduction to Mount Holyoke Climate Justice Coalition	3
2. Divestment as a Strategy	3
3. Sustainability at Mount Holyoke	5
4. Climate Change and its Impacts	6
5. Impacts of Climate Change and the Fossil Fuel Industry in Massachusetts	10
6. The Financial Logic of Divestment	11
a. Top 200 Fossil Fuel Companies	11
b. The Carbon Bubble	12
c. Shareholder Advocacy	14
d. Diversification of Mount Holyoke's Portfolio	17
e. Hedge Funds and Mount Holyoke's Endowment	18
7. Reinvestment as a Strategy	18
8. Conclusion	21
9. Works Cited	22
10. Appendix: Top 200 Publicly-Traded Fossil Fuel Companies	26

## Introduction to Mount Holyoke Climate Justice Coalition

We are Mount Holyoke Climate Justice Coalition (CJC), a Mount Holyoke College student-run organization currently aiming at partnering with the Mount Holyoke administration and Board of Trustees to redirect investments away from the fossil fuel industry. CJC urges Mount Holyoke to take the following steps:

1. Immediately freeze further investments in the fossil fuel industry,
2. Divest the approximately 2% of its endowment currently invested in fossil fuel companies within the next five years,
3. Reinvest part of the endowment into environmentally and socially responsible enterprises.

We have had great success with student and faculty support and negotiations with the administration in the last two years. In spring 2014, we organized a successful student referendum in which, of those who voted, 88% of students voted for Mount Holyoke to divest its endowment from the top 200 publicly traded fossil fuel companies. During the May 2016 Faculty Meeting, 92% of faculty voted in support of fossil fuel divestment after a discussion focusing on the effects of divestment on Mount Holyoke College.

## Divestment as a Strategy

Divestment is the withdrawal of investments in business or industries that are not aligned with the investor's moral, social, and environmental standards. Its purpose is to honor the ethical standards of investors, spread awareness of social justice issues, and catalyze change. One institution's divestment alone cannot generate the power needed to influence world leaders, policymakers and other governing groups. CJC, members of the Mount Holyoke community, and

88% of student voters wish to join the growing number of colleges, universities, cities, counties, religious institutions, and foundations committed to divestment from fossil fuels.

In recent history, tobacco, munitions, and South African companies that supported apartheid have been the focus of divestment campaigns. From the 1980's to the mid-1990's, divestment was used as a tool to fight apartheid in South Africa. Religious institutions, universities, cities and private establishments divested a total of approximately \$20 billion from corporations with holdings in South Africa. Along with pressure from political leaders and governments, the divestment movement gave support to political and social change movements within South Africa, helping to share its post-apartheid future. As of this date, thirteen colleges have committed to divestment from fossil fuels. This includes the University of Massachusetts Amherst, Pitzer College, Stanford University, and Dayton University, which has an endowment of \$670 million. Twenty-nine cities have committed to fossil fuel divestment, including San Francisco, Seattle, Providence, Northampton, Amherst, and cities in Australia and the United Kingdom. Many religious institutions and foundations have also committed to divestment from fossil fuels. Pitzer College's commitment to fossil fuel divestment has received positive media attention and generated publicity for the college. The campaign at Pitzer College has led to a "collaborative process" of "mutual respect" between the student organizers and administrators that CJC hopes to achieve as well. Pitzer College's decision to divest is being accompanied by strategies of reinvestment and carbon emission reductions. The administration and the Board of Trustees of Pitzer have concluded that divesting from fossil fuels will not negatively affect Pitzer College's financial return in the long run. They believe that divestment and reinvestment are a comprehensive and holistic approach to taking climate action, and to honoring their commitments to their students and educational mission.

## Sustainability at Mount Holyoke

For years, Mount Holyoke students and administration have shown their commitment to the environment and have made great strides to increase environmental sustainability on campus and in the surrounding community. Several clubs and organizations at Mount Holyoke, including the Eco-Reps, Think Outside the Bottle, Green Living Council, and the Environmental Action Coalition, have organized successful projects and campaigns with the goal of raising awareness about sustainability. CJC, which became an official student organization in 2013, hopes to further Mount Holyoke's long-standing commitment to sustainability by working with the Mount Holyoke administration to join colleges across the country in taking a stand against the fossil fuel industry through divestment.

CJC also recognizes that Mount Holyoke's administration has taken a multitude of commendable actions in terms of sustainability and reducing carbon emissions including ongoing initiatives by the Miller Worley Center, the Campus Sustainability Fund, and the many socially and environmentally responsible changes Facilities Management is incorporating into the operations of our beautiful campus to increase energy efficiency. While these actions clearly indicate Mount Holyoke is taking environmental issues seriously and responding to them, CJC believes that Mount Holyoke can achieve more and respond more robustly to the urgency and magnitude of climate change by divesting its endowment from fossil fuels.

The act of divestment aligns with Mount Holyoke's core values. The college's mission calls for students to use their education to begin lives of "thoughtful, effective, and purposeful engagement in the world." Divesting from fossil fuels is a prime example of students taking action to improve the world around them, and to find hope in a future for which they are being so well-educated by Mount Holyoke.

## Climate Change and its Impacts

Although fossil fuels are, for now, profitable forms of energy, continued extraction and consumption of these resources will continue to aggravate the detrimental effects of climate change on a global scale. Climate scientists have formed a consensus upon 2 degrees Celsius temperature rise as the tipping point that would disrupt the current equilibrium of the climate system and lead to rapid and drastic and rapid changes. As of 2012, the world has a carbon budget of 565 gigatons that can be emitted into the atmosphere in order to remain below the 2 degrees Celsius. The total global proven carbon reserves was calculated to equal 2,795 gigatons of carbon that could potentially be released into the atmosphere. This means that 80% of global proven reserves need to be kept under ground to avoid the tipping point of a 2 degrees Celsius temperature rise, which is actually on the low end of projections as a tipping point.

A report by the Potsdam Institute for for Climate Impact Research (PIK) for the World Bank in 2012 concluded that in 2012, the business as usual path would lead to a 6 degrees Celsius increase in temperature by 2060. It is unfathomable to think of the consequences of a 6 degrees Celsius increase in temperature considering that a report released in 2013 by the World Bank titled Turn Down the Heat: Why a 4 degrees Celsius World Must be Avoided predicts massive threats to food security, significant rise in sea-level, acidification of coral reefs, loss of arctic sea ice, extreme heat waves and temperatures, drought and other extremely disruptive impacts.

African nations represented as stakeholders declares in the first session in 2014 for United Nations Environment Assembly to “Keep Africa Safe,” which states that “Africa should also continue calling for the blanket of greenhouse gas in the atmosphere to be returned to well below 300ppm CO<sub>2</sub> eq and warming to be limited to well below 1 degree Celsius” because “a goal of ‘less than 2 degrees Celsius’ is no longer ambitious as accepting it would be condemning

Africa to incineration and to no modern development.” This indicates that while for some parts of the world, climate change impacts may be in the future, for many other parts of the world, especially where vulnerable populations with low resilience and capacity to cope, climate change impacts are already being negatively felt.

In the July 2014 White House report, “The Cost of Delaying Action to Stem Climate Change,” President Obama’s Council of Economic Advisors states:

“The average temperature in the United States during the past decade was 0.8° Celsius (1.5° Fahrenheit) warmer than the 1901-1960 average, and the last decade was the warmest on record both in the United States and globally. Global sea levels are currently rising at approximately 1.25 inches per decade, and the rate of increase appears to be accelerating. Climate change is having different impacts across regions within the United States. In the West, heat waves have become more frequent and more intense, while heavy downpours are increasing throughout the lower 48 States and Alaska, especially in the Midwest and Northeast. The scientific consensus is that these changes, and many others, are largely consequences of anthropogenic emissions of greenhouse gases.”

The increasing frequency and magnitude of extreme weather events including droughts, floods, and hurricanes are occurring at the same time that many other pressures on our planet’s fragile resources are increasing. Increasing volatility, unpredictability and diminishing resources combine to be contributing to increased armed conflict and hostility among nations. The U.S. government considers climate change a serious threat to global security.

Our focus on justice arises from the need to bring attention to the global inequity of the current economic system, and the effects of climate change. The people most vulnerable to climate change, including women, children, and the elderly in developing nations, have contributed least to global carbon emissions. The United Nations has conducted studies that conclude that women are significantly more vulnerable to the impacts of climate change than men. This is partly because most of the world's poor are women and women are more dependent

on natural resources for their livelihoods. Those natural resources are threatened by climate change. Due to political, social, and economic barriers for women in much of the developing world, many women also have lower capacity to cope with climate change when extreme weather events occur. Women face greater threats because they are more likely to engage in activities such as securing water, food and firewood. CJC believes that, as an institution that strives to educate and foster female change-makers, this gender inequity, within the larger global inequity, should and can be effectively addressed by Mount Holyoke College. We believe one step toward righting this inequity is divesting the endowment from fossil fuels.

Our generation will carry the greatest burden of climate change because of actions taken by previous generations. Our generation is expected to tackle the issue of global climate change by providing mitigation and adaptation solutions. Many passionate young people and future leaders are feeling the urgency to mobilize and address climate change. Climate scientists, including the IPCC, have warned that if we do not take action now, it may be too late: the continuation of business-as-usual in burning and consuming fossil fuels will lead global temperatures to exceed an increase of 2° Celsius in average global temperatures, locking humanity into irreversible climate change. The International Energy Agency released a report on the World Energy Outlook in 2011 that states that if we do not make the necessary paradigm shift from carbon energy infrastructure to renewables or alternatives by 2017, our global atmosphere will reach 450 parts per million (ppm) of carbon dioxide, which leads to increasing global temperatures by 2° Celsius. Actions taken by Mount Holyoke College and other academic institutions are shaping the future that young people will inherit.

Climate change has been a reality for decades, and the consequences of inaction are dire. If we want to avoid irreversible ecological damage, we need to do everything within our power, influence and ability to contribute to this transition. There are several arguments against

divestment. One argument is that if an institution does divest, it will have no financial impact since another entity will buy and/or invest in the stocks. CJC's goal with divestment from fossil fuels, as an influential institution of higher education with a global reach, is to make a political statement that will be more financially impactful in the long term because it significantly propels and contributes to the process of stripping the fossil fuel industry of its social license to operate within our society. In the 1990's, Mount Holyoke divested from the tobacco industry. Mount Holyoke took part in stripping the social license of the tobacco industry and because of this action, society is able to more accurately recognize the social cost of tobacco.

Divestment represents an opportunity for Mount Holyoke to be a pioneer and take a meaningful and historic step in creating the kind of vibrant, thriving and healthy future that we all strive for. There are arguments that state it is hypocritical to divest from the fossil fuel industry when human society is currently still dependent on it to function. However, CJC believes that it is counterproductive to invest in fossil fuel companies that are expanding their operations and are incentivized by short-term profit and market mechanisms while Mount Holyoke invests in and promotes renewable energy. The heavily subsidized fossil fuel industry is in competition with renewables on the market. Capital has a significant role in breathing life into an initiative, idea, project, and way of being. If we continue to dedicate financial resources to the fossil fuel industry, we are automatically supporting their operations and future ventures. If Mount Holyoke is to be forward thinking and responsible as an institution, it needs to start thinking about how its endowment can continue to maintain the health and tradition of the institution and be a powerful tool in galvanizing positive social, political and economic changes.

If our society continues to sanction and invest in the fossil fuel industry, we will be sanctioning the carbon economy and dooming ourselves to ever-increasing carbon emissions and catastrophic global climate change. A commitment from Mount Holyoke to divest from fossil

fuels will be an effective and powerful statement that the College understands the historic urgency of our time, and wishes to align its mission and its actions to secure a safe future for its students.. Divestment from fossil fuels will demonstrate Mount Holyoke's high ethical purpose, and leverage its prestige and influence in a way that will lead to transformative action toward a renewable economy.

### Impacts of Climate Change and the Fossil Fuel Industry in Massachusetts

Over the last century, the average temperature in Amherst, Massachusetts, has increased 2° Fahrenheit. Precipitation has increased by up to 20% in many parts of the state. By 2100, temperatures could increase by about 4 degrees in winter and spring and about 5 degrees in summer and fall. The New England Climate Coalition predicts that unchecked climate change will lead to increasing transmission of diseases such as malaria, inundation of cities on the coastline and huge costs in sand replenishment to check sea-level rise.

The effects of burning fossil fuels are being felt worldwide as environmental degradation increases and the impacts of climate change intensify. Energy production from fossil fuels is also affecting communities close to Mount Holyoke. Coal- and oil-burning power plants in Massachusetts cause air pollution, which has numerous health risks. Mercury emissions severely damage the neurological system and cause developmental problems in fetuses and young children. Sulfur dioxide emissions contribute to the creation of soot, which penetrates the lungs and causes asthma. People who live in close vicinity to coal- and oil-burning power plants are at high risk for these health problems. Unfortunately, in Massachusetts as in countless other states and localities, power plants are disproportionately (and not accidentally) located in lower-income communities and communities of color and therefore these communities are most prone to these health problems.

Only 5.4% of communities in Massachusetts are composed of at least 15% people of color. However, this handful of communities contains 18.2% of the state's active power plants and 23.4% of proposed power plants. Additionally, 50.8% of the towns in Massachusetts have a median household income below \$40,000, yet these towns contain 65.5% of the state's active power plants and 63% of proposed power plants. Four of the five dirtiest power plants in Massachusetts are located in "low-income or moderately low-income communities."

According to the Environmental Protection Agency, the town of Holyoke, South Hadley's nearby neighbor, has one of the highest rates of asthma in the state and twice the state average. This community is located in close proximity to the Mount Tom Coal Plant.

## The Financial Logic of Divestment

### *The Top 200 Publicly-Traded Fossil Fuel Companies*

We urge Mount Holyoke to divest its endowment portfolio from the top 200 publicly-traded fossil fuel companies. This list is compiled by the Carbon Tracker Initiative and helps investors determine the companies that are currently contributing most to climate change. Mount Holyoke's investment in these companies exposes its endowment to the risk of "stranded assets." The companies listed are extraction companies and the total reserves represent 27% of proven 200 publicly-traded companies reserves, where only 20% can be burned to maintain a temperature rise below 2° Celsius. The measurement intends to capture the potential carbon emissions these companies would contribute to the atmosphere if these reserves were burnt, which the companies intend to do.

This list is the most widely used in fossil fuel divestment campaigns across the nation. CJC is willing to discuss this list and the metrics Mount Holyoke adopts to measure carbon emissions of an investable company. For example, the scope of carbon emissions measured

could expand beyond direct emissions from “GHG sources owned or controlled by the reporting organization,” which the Carbon Disclosure Project defines as Scope 1 GHG emissions. Scope 2 defines “indirect carbon emissions” as emissions that do not physically fall within companies’ operations. Scope 3 are “downstream emissions” that are indirect emissions not covered by Scope 2. The carbon emissions occur from the company’s activities but not from sources the company owns or controls.

Narrowing down the companies Mount Holyoke targets for divestment as an initial step to take action to mitigate against carbon risk and prevent climate catastrophe with Mount Holyoke’s endowment is a potential option. For example, Brown’s divestment campaign targets the the top 15 dirtiest coal companies. Coal is an industry that is declining in valuation and confidence in its longevity. In 2013, Zack’s Industry Rank placed the coal industry 232 out of 259. Any industry ranked below 169 has a negative outlook. The options stated above are to indicate that there are other ways different institutions have approached the strategy of divestment from fossil fuels.

### *The Carbon Bubble*

The “carbon bubble” refers to the false valuation of unburnable carbon reserves owned as assets by fossil fuel companies and traded on the global market. According to the International Energy Agency, in order to prevent a 2° Celsius increase in global temperatures, which is considered the tipping point into irreversible climate change, two-thirds of current known carbon reserves must remain below ground. This is also supported by the global carbon budget calculated in a report released by the Potsdam Institute. The global carbon budget from 2000-2050 is 866 GtCO<sub>2</sub>. If we subtract this by the first 2 decades of 2000, we are left with a budget of 565 GtCO<sub>2</sub>. Current proven global reserves amount to 2795 GtCO<sub>2</sub> and the current market is pricing carbon with the assumption that known carbon reserves will be burnt and yield

profits as a result. Calculating the math leads to the conclusion that we can only burn 20% of reserves by 2050 to avoid the 2° Celsius tipping point.

This mispricing in the global market is exposing MHC's endowment portfolio to a significant and unnecessary risk, since it is reasonable to assume that, as a society, there is no intention of burning current reserves whilst knowing that that would lead to a guaranteed rise of global temperature by 2° Celsius. The false valuation is also encouraging the continuing trend of further exploration for fossil fuel reserves with the intention to burn them. The way the financial sector currently functions does not account for the inevitable impairment of the worth of carbon reserves in the market; it merely incentivizes actions and investments based on short-term gains.

However, governments, businesses and consumers are taking many actions that are creating a transition to a low-carbon economy. These combined actions will lead to a devaluation of carbon prices and turn carbon reserves into stranded assets. Generation Foundation released a report in October 2013 that explains how carbon-intensive assets are considered risks. Simply stated, they include the causes of increasing the risks of the assets as: 1. Regulation: by various agencies of authority and power, for example the recent EPA ruling restricting carbon pollution by power plants. 2. Market Forces: the increasing popularity and viability of renewable energy technologies is moving capital allocation from fossil fuel combustion. 3. Sociopolitical pressures: Where a political climate constructed by societal attitudes can deprive fossil fuel companies of the ability to operate in the usual ways.

Investment manager Litterman has also claimed that it is very possible, due to the increasing fear and understanding of the implications and widespread impacts of climate change, that national and international policy will lead to a rational pricing of carbon to which market mechanisms will not immediately respond and adjust. The stranded assets will underperform, leading to a lower return on investments. The risk of investing in volatile carbon-intensive

industries and the potential for the carbon price to quickly devalue is also supported by the observations established by the Carbon Tracker Initiative identifying a time lag in the exploitation of an asset. It takes 5-10 years to explore and fully develop reserves. Yet the data that leads to current pricing in the market assumes exploitation of these reserves. Divestment from fossil fuels is an effective action to protect MHC's endowment from exposure to the increasing risk of the carbon bubble, which has been valued recently at \$28 trillion dollars.

### *Shareholder Advocacy*

Investors are seriously considering the investment strategy of divestment and its impacts. One may ask: if the goal is to affect the way fossil fuel companies operate, why not engage in shareholder advocacy rather than divesting, which would terminate the relationship that allows our institution to influence the fossil fuel companies we are trying to affect? This is a question we have considered carefully and to which we respond as follows.

While we recognize that shareholder advocacy can at times offer at the possibility of engaging the companies in which we invest, in the extreme circumstances we now find ourselves, we do not believe that "shareholder advocacy," that simply asking companies to consider the risks of climate change, is an adequate response to the very dire realities we face. We strongly believe that shareholder advocacy is not a viable alternative to divestment.

The SEC defines a "meaningful stake" in a company that allows for the shareholder to file shareholder resolutions and proxy vote as \$2,000 worth of shares. It is estimated by Cambridge Associates that MHC's endowment currently has \$16 million indirectly invested in the top 200 publicly traded fossil fuel companies. If MHC is intending to engage with the companies, a plausible course of action is maintaining \$2,000 worth of shares while divesting \$15.98 million from the MHC endowment.

While shareholder advocacy coupled with divestment is another possible approach, we believe that full divestment is a much more effective strategy for multiple reasons. Since the MHC endowment is indirectly invested in fossil fuels through funds and other vehicles, it would be difficult to maintain only \$2,000 worth of shares invested in these companies. Another reason is that shareholder advocacy loses its efficacy when the shareholder's intention is to change the fundamental business model of a company, rather than aspects of its operations and practices. For example, there is a profound difference between engaging with Coca Cola in an effort to persuade them to use biodegradable packaging, and asking ExxonMobil to stop burning fossil fuels. Although many big energy companies have invested in renewable technology, renewables are usually a very small percentage of their revenue and do not represent a true commitment to the development of a renewable energy economy. Continued investments in fossil fuels, which indicate that investors have faith in the current valuation of carbon stocks, encourages further high-cost exploration projects for carbon reserves in increasingly environmentally sensitive and difficult regions for extraction. In 2012, the top 200 publicly traded gas, oil and coal companies allocated \$674 billion for further exploration. ExxonMobil alone spends \$100 million per day on exploration for new carbon reserves.

#### *Financial Impact of Divestment on Mount Holyoke's Endowment Portfolio*

Investors and fiduciaries frequently express concern about the possibility that fossil fuel divestment could increase exposure to other risks, increase tracking errors and result in a loss of return. CJC deeply respects and prioritizes the health of MHC's endowment, which provides numerous benefits and is crucial in MHC's institutional health and ability, for example, to provide financial aid for students.

An effective strategy to divest MHC's endowment from the top 200 publicly traded companies will not lead to increasing exposure to other risks or tracking errors, and will not lead

to a loss of return. Impax Asset Management, an investment management firm, has conducted historical analysis in which fossil fuel-free indexes were compared to the the global benchmark over seven years and actually show positive return. Impax's study also concluded that the effects of excluding the fossil fuel sector and substituting it with renewable energy and energy efficiency led to limited tracking error and healthy returns.

In one portfolio construction, Impax excluded fossil fuel energy stocks from the MSCI World Index, and concluded that over the past 7 years, there would have been 0.5% annual impact on positive returns and a 1.6% increase of tracking error, which is modest when considering that the average expected tracking error for active institutional investors is 5%.

MSCI and Aperio Group have also conducted analysis that supports this observation. MSCI removed 247 companies that own fossil fuel reserves from its All-Country World Index Investable Market. The back-testing index outperformed by an annualized 1.2% with a tracking error of 1.9%. Aperio Group drew comparisons between the Russell 3000 stock index to a fossil-free portfolio imitating the Russell 3000. The fossil-free portfolio yielded a 0.5978% tracking error. This made the portfolio 0.0101% riskier. The return penalty was .0034%, less than half of a basis point. This observation concludes that excluding the fossil fuel industry in its entirety while comparing it to a standard benchmark actually had an insignificant impact on the portfolio's risk.

UNEP Finance Initiative and Mercer have also conducted research and analysis and concluded that employing environmental and social screens as an investment strategy for endowments does not inherently lead to a loss in return. Two analyses that compared a fossil fuel-free portfolio to standard indices show insignificant difference in performance. One paper by UNEP Finance Initiative and Mercer compared a fully- and partially-divested portfolio to the S&P 500 and also found no significant difference.

CJC recognizes that MHC's investment policy expects an average return rate of 5% for MHC's endowment. We understand the importance of devising a divestment strategy that maintains this expected return rate without falling outside the range of 4.5%-5.5%.

#### *Diversification of Mount Holyoke's Portfolio*

CJC also recognizes the potentially influential role Mount Holyoke's current indirect investments in the top 200 publicly traded companies has in diversifying the current MHC portfolio and balancing measurable volatility and risk of various investments. The practice of portfolio diversification spans decades and is informed by the "rational market theory." However, there has been research to indicate that there are other investments that can mirror the role of fossil fuel investments in MHC endowment's portfolio. Bloomberg recently released a white paper on New Energy Finance that finds other major sectors that could offer similar attributes to fossil fuel investments including information technology, real estate investment trusts and other sectors.

While CJC also recognizes that it will not be a fast or easy transition for MHC to divest from the top 200 publicly traded fossil fuel companies, partially due to the seeming lack of alternative reinvestment structures, we believe it can be done and are willing to work with the administration every step of the way to devise an effective strategy that ensures a thriving endowment. The commitment to divestment from fossil fuels by MHC, as a higher education institution that has significant sway and influence, will help to generate the imperative and demand in the current market to provide for these alternatives, which are already being developed and exist. It will also create an imperative for legislative change.

### *Hedge Funds and Mount Holyoke's Endowment*

CJC has also considered Cambridge Associates' recommendation and advisory research note on Divestment from Fossil Fuels, released as a report in June 2014, particularly the consideration of hedge funds and commingled funds in the strategy of divestment from fossil fuels. We are aware that Mount Holyoke does not have direct holdings in the top 200 publicly-traded fossil fuel companies and that Mount Holyoke's investments in these companies are most likely through hedge funds and commingled funds.

Since divestment from commingled funds may incur many transaction costs, CJC is willing for divestment of the Mount Holyoke endowment to occur over 5 years so that a strategy that does not incur additional transaction costs can be designed and adopted.

It may seem difficult for Mount Holyoke's administration to divest from hedge funds. They are traded rapidly and there can seem to be a lack of fossil fuel-free alternatives. However, we believe that if the Mount Holyoke administration decides to commit to divestment, the college has the power and influence to contribute to the development of more alternatives by making the demand to hedge fund and other financial managers for transparency on the hedge funds we are invested in. If these steps are taken, it would make a significant difference and be an important step in Mount Holyoke's divestment from fossil fuels.

### Reinvestment as a Strategy

CJC is aware that the Mount Holyoke administration is potentially inclined towards devising and implementing a proactive investment strategy rather than divesting its endowment from the top 200 publicly traded companies. We believe that divestment is a viable and crucial tactic that can fall under this proactive investment strategy and that reinvestment is an equally important step to achieve the purpose of our campaign.

Reinvestment is a more open-ended request by CJC since there are so many options and approaches to take. However, we would like to see MHC reinvest in the following socially and environmentally responsible ways, while gaining reliably positive returns from the endowment's investments.

The first approach is reinvesting with direct investments in climate solutions such as renewable energy infrastructure and enterprises, climate adaptation projects, energy efficiency, and sustainability businesses in Massachusetts. Clean technology and energy efficiency technology is a rapidly growing sector, with over \$260 billion globally invested in the previous year. MHC's reinvestment in clean energy would help decrease the clean energy investment gap. The World Economic Forum estimates that a \$700 billion dollar investment in technology is needed to avoid rising above the 2 degrees Celsius threshold. Investment in renewable energy can also protect MHC endowment from energy price shocks, which fossil fuels, as a volatile and finite resource, will inevitably experience.

Mount Holyoke can also reinvest in mutual funds that screen out the fossil fuel industry. There are currently many mutual funds that do so, and the number of options are increasing as demand from institutional investors increases. Current investable mutual funds include: Generation Investment Management Climate Solutions Fund II, Generation Investment Management Credit fund, North Sky Clean Tech Fund of Fund, SJF Ventures Fund III and more. There are also investor tools and vehicles that are being developed and made available to assist investors interested in fossil fuel-free investing. A recent and notable initiative is the partnership between Black Rock, FTSE and the Natural Resources Defense Council in the creation of a global index series that excludes companies linked to exploration, ownership or extraction of carbon-based fossil fuel reserves.

A second approach is investing in infrastructure on campus. The Mount Holyoke campus is already a leader in sustainability and energy efficiency in regard to its infrastructure. Mount Holyoke's endowment could provide the financial resources to continue supporting and encouraging these initiatives by establishing a revolving loan fund. This method operates by returning savings from reduced energy costs back into the fund, which often gains a higher return than if invested in a stock.

The Sustainable Endowments Institute has released a report that documents an increase of green revolving funds at universities that simultaneously improve infrastructure and increase renewable energy sources on campus. The report also found, after studying 52 institutions, that the green revolving funds can "significantly outperform average endowment investment returns, while maintaining strong returns over longer periods of time." On-campus infrastructure projects are also a great fundraising opportunity that can add to the initial funds redirected towards green revolving funds.

A third approach that builds on the hard work and dedication of the Student Action Coalition, a student group that established Mount Holyoke's current pilot SRI fund, is community investment. This includes direct reinvestment in the surrounding community. Holyoke would greatly benefit from capital flow into its community through community banks, credit unions, community loans, co ops and other community development financial institutions (CDFIS). The SRI committee has already identified targets for investment including: Acción Springfield, the Institute for Community Economics (ICE), and the Cooperative Fund of New England (CFNE). A successful example they used was CFNE providing startup money to set up El Jardin Bakery. Jobs in the community were created as a result.

Continuing progress on the initiative to invest in the community with reinvestment will help MHC align its mission with its values by using MHC's endowment to purposefully engage

with the world and creative positive change immediately in the community that surrounds the institution itself. Reinvestment in the community will also strengthen and build positive relationships with the community. Nineteen universities have already invested in their communities. After investing in Hartford, Connecticut, Trinity College actually saw an increase to their endowment.

Overall, CJC requests that Mount Holyoke reinvest responsibly by incorporating social, environmental and governance goals in its approach to managing its endowment during a time of the most urgent global challenges. Mount Holyoke has the opportunity and capability to be a leader and pioneer in the inevitable transition towards responsible investment. Doing so will also pave the way for other institutions to abandon business-as-usual, since business-as-usual is clearly not only unsustainable but imminently catastrophic.

## Conclusion

In light of the serious consequences of unmitigated climate change on human society and the biosphere, and the proven risk of fossil fuel investments in today's market, CJC urges Mount Holyoke College to divest from fossil fuels. We call on Mount Holyoke to immediately freeze all new investments in the top 200 publicly traded fossil fuel companies, divest from these companies over the course of five years, and reinvest in socially responsible and sustainable, community-based alternatives. We encourage Mount Holyoke to recognize that these issues of climate change are ones that affect all of our students, and that taking action now will increase the likelihood of a more sustainable future.

## Works Cited

Ansar, Atif. Caldecott, Ben. Tilbury, James. "Stranded Assets and the Fossil Fuel Divestment Campaign: What does Divestment Mean for the Valuation of Fossil Fuel Assets?" *University of Oxford's Smith School of Enterprise and the Environment*, Oct. 2013. Web.  
<http://www.smithschool.ox.ac.uk/research/stranded-assets/SAP-divestment-report-final.pdf>

Baue, William. "Mount Holyoke First US College to Dedicate Fund Exclusively to Community Investment." *Sustainability Investment News*. N.p., 14 June 2005. Web.  
<http://dev.socialfunds.com/news/article.cgi/article1733.htm>

*Beyond Fossil Fuels: The Investment Case for Fossil Fuel Divestment*. Rep. Impax Asset Management, n.d. Web.  
<http://350nyc.files.wordpress.com/2013/08/impax-investment-case-for-fossil-fuel-divestment-us-final-1.pdf>

"Climate Change in New England." *New England Aquarium*. Conservation and Research, 2014. Web.  
[http://www.neaq.org/conservation\\_and\\_research/climate\\_change/climate\\_change\\_in\\_new\\_england.php](http://www.neaq.org/conservation_and_research/climate_change/climate_change_in_new_england.php)

*A Complete Guide to Reinvestment*. N.p.: n.p., n.d. *Climate Challenge*. Responsible Endowments Coalition, 2014. Web.  
<http://climatechallenge.org/sites/wearepowershift.org/files/resources/Reinvestment%20Guide.pdf>

"Dayton Divests." *University of Dayton*. N.p., June 2014. Web.  
[https://udayton.edu/news/articles/2014/06/dayton\\_divests\\_fossil\\_fuels.php](https://udayton.edu/news/articles/2014/06/dayton_divests_fossil_fuels.php)

*Demystifying Responsible Investment Performance: A Review of Key Academic and Broker Research on ESG Factors*. Rep. The Asset Management Working Group of the United Nations Environment Programme Finance Initiative and Mercer, Oct. 2007. Web.  
[http://www.unepfi.org/fileadmin/documents/Demystifying\\_Responsible\\_Investment\\_Performance\\_01.pdf](http://www.unepfi.org/fileadmin/documents/Demystifying_Responsible_Investment_Performance_01.pdf)

"Divestment Commitments." *Fossil Free*. N.p., n.d. Web. <http://gofossilfree.org/commitments/>

Englart, John. "Climate Meltdown: Global Warming Heading Towards 6 Degrees C Warns World Bank." Weblog post. *Climate Citizen*. N.p., 21 Nov. 2012. Web.  
<http://takvera.blogspot.com/2012/11/climate-meltdown-global-warming-heading.html>

Faber, Daniel R. and Eric J. Krieg. "Unequal Exposure to Ecological Hazards: Environmental Injustices in the Commonwealth of Massachusetts." *Environmental Justice*, 277-288, April 2002. Web. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241174/>

Fulton, Mark, and Reid Capalino. "Trillion-Dollar Question: Is Big Oil Over-Investing in High-Cost Projects?" *RenewEconomy*. N.p., 21 May 2014. Web.  
<http://reneweconomy.com.au/2014/trillion-dollar-question-is-big-oil-over-investing-in-high-cost-projects-23448>

Geddes, Patrick. *Do the Investment Math: Building a Carbon-Free Portfolio*. Rep. Aperio Group, 2013. Web.  
[http://www.aperiogroup.com/system/files/documents/building\\_a\\_carbon\\_free\\_portfolio.pdf](http://www.aperiogroup.com/system/files/documents/building_a_carbon_free_portfolio.pdf)

*Greening the Bottom Line: The Trend Towards Green Revolving Funds on Campus*. Rep. A Sustainable Endowments Institute, 2011. Web.  
<http://greenbillion.org/wp-content/uploads/2012/11/Greening-the-Bottom-Line-2012.pdf>

*The Green Investment Report: The Ways and Means to Unlock Private Finance for Green Growth*. Rep. World Economic Forum, 2013. Web.  
<http://www.weforum.org/reports/green-investment-report-ways-and-means-unlock-private-finance-green-growth>

Hartmann, Mitchell. "Nelson Mandela's Legacy Is Economic, Too." *Marketplace World*. N.p., 5 Dec. 2013. Web.  
<http://www.marketplace.org/topics/world/nelson-mandelas-legacy-economic-too>

Longstreth, Bevis. "The Financial Case for Divestment of Fossil Fuel Companies by Endowment Fiduciaries." *Huffington Post*. N.p., 02 Nov. 2013. Web.  
[http://www.huffingtonpost.com/bevis-longstreth/the-financial-case-for-di\\_b\\_4203910.html](http://www.huffingtonpost.com/bevis-longstreth/the-financial-case-for-di_b_4203910.html)

Matthews, Jessica, and Tom Mitchell. *Fossil Fuel Divestment*. Rep. Cambridge Associates, June 2014. Web. <http://www.cambridgeassociates.com/our-insights/research/fossil-fuel-divestment/>

*Mount Holyoke College: Endowment Fund Investment Policy*, 2012. Web. "Fossil Fuel Divestment: a \$5 Trillion Challenge , Bloomberg New Energy Finance," *Bloomberg New Energy Finance*, 25 August. 2014. Web. [http://about.bnef.com/content/uploads/sites/4/2014/08/BNEF\\_DOC\\_2014-08-25-Fossil-Fuel-Divestment.pdf](http://about.bnef.com/content/uploads/sites/4/2014/08/BNEF_DOC_2014-08-25-Fossil-Fuel-Divestment.pdf)

*Statements and Recommendations by Major Groups and Stakeholders to the United Nations Environment Assembly at Its First Session*. Proc. of United Nations Environment Assembly of the United Nations Environment Program, Nairobi. United Nations Environment Program, 16 May 2014. Web.

*Stranded Assets, Fossilised Revenues*. Rep. Kepler Cheuvreux, 24 Apr. 2014. Web. [http://www.keplercheuvreux.com/pdf/research/EG\\_EG\\_253208.pdf](http://www.keplercheuvreux.com/pdf/research/EG_EG_253208.pdf)

*Stranded Carbon Assets: Why and How Carbon Risks Should Be Incorporated in Investment Analysis*. Rep. Generation Foundation, 30 Oct. 2013. Web. <http://genfound.org/media/pdf-generation-foundation-stranded-carbon-assets-v1.pdf>

Scott, Mike. "Fossil Fuel-Free Index Will Help Investors Manage Climate Risks." *Forbes*. N.p., 01 May 2014. Web. <http://www.forbes.com/sites/mikescott/2014/05/01/fossil-fuel-free-index-will-help-investors-manage-climate-risks/>

*Unburnable Carbon: Are the World's Financial Markets Carrying a Carbon Bubble?* Rep. Carbon Tracker Initiative, Mar. 2012. Web. <http://www.carbontracker.org/site/wp-content/uploads/2014/05/Unburnable-Carbon-Full-rev2-1.pdf>

United States. Executive Office of the President of the United States. *The Cost of Delaying Action to Stem Climate Change*. [Http://www.whitehouse.gov](http://www.whitehouse.gov), July 2014. Web.

Wellner, Cathryn. "Climate Change Irreversible by 2017, Warns IEA." *Care2*. N.p., 10 Nov. 2011. Web. <http://www.care2.com/causes/climate-change-irreversible-by-2017-warns-iea.html>

*Women, Gender Equality and Climate Change*. N.p.: UN WomenWatch, 2009. Web. [http://www.un.org/womenwatch/feature/climate\\_change/downloads/Women\\_and\\_Climate\\_Change\\_Factsheet.pdf](http://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf)

World Bank. *Turn Down the Heat : Why a 4°C Warmer World Must Be Avoided* (2012): n. pag. 2012. Web. [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/12/20/000356161\\_20121220072749/Rendered/PDF/NonAsciiFileName0.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/12/20/000356161_20121220072749/Rendered/PDF/NonAsciiFileName0.pdf)

## Appendix: Top 200 Publicly-Traded Fossil Fuel Companies

Rank	Coal Companies	Coal Gt CO2	Rank	Oil and Gas Companies	Oil Gt CO2	Gas Gt CO2	Total O&G Gt CO2
1	Coal India	57.722	1	Gazprom	6.248	37.292	43.540
2	Shenhua Group	31.523	2	Rosneft	10.059	1.979	12.039
3	Adani Enterprises	25.883	3	PetroChina	4.884	3.693	8.577
4	Shanxi Coking Company	18.445	4	ExxonMobil	4.143	4.038	8.181
5	BHP Billiton	15.469	5	Lukoil	5.666	1.280	6.946
6	Anglo American	12.985	6	BP	4.203	2.197	6.400
7	Inner Mongolia Yitai Coal	12.223	7	Petrobras	4.676	0.674	5.350
8	Datang Intl. Power	12.206	8	Royal Dutch Shell	2.140	2.332	4.473
9	China National Coal	12.071	9	Chevron	2.545	1.591	4.137
10	Peabody Energy	11.469	10	Total	2.130	1.683	3.813
11	Glencore Xstrata	10.453	11	Novatek	0.387	3.391	3.777
12	Datong Coal Industry	10.281	12	ConocoPhillips	1.661	1.069	2.730
13	Yanzhou Coal Mining	9.799	13	Tatneft	2.622	0.067	2.689
14	Public Power Corp (DEH)	9.339	14	ENI	1.418	1.142	2.561
15	Exaro Resources	8.793	15	ONGC	1.449	0.703	2.152
16	Yangquan Coal Industry	7.299	16	Statoil	1.032	0.928	1.939
17	Mechei	6.739	17	Sinopec	1.204	0.367	1.571
18	Arch Coal	6.530	18	CNOOC	1.155	0.366	1.521
19	Alpha Natural Resources	5.482	19	BG	0.593	0.664	1.257
20	Mitsubishi	4.738	20	Occidental	0.950	0.303	1.253
21	Vale	4.401	21	Apache	0.586	0.461	1.047
22	Rio Tinto	4.338	22	Canadian Natural Resources	0.780	0.200	0.980
23	EVRAZ	4.235	23	Anadarko Petroleum	0.450	0.454	0.904
24	Raspadskaya	4.084	24	BHP Billiton	0.345	0.552	0.897
25	Asian Resource Minerals	3.181	25	Devon Energy	0.379	0.515	0.894
26	UC RUSAL	3.081	26	Chesapeake Energy	0.293	0.596	0.889
27	Neyveli Lignite	3.035	27	Bashneft	0.876	0.000	0.876
28	Pingdingshan Tianan Coal	3.023	28	Inpex	0.393	0.369	0.762
29	Cloud Peak Energy	2.881	29	Ecopetrol	0.580	0.157	0.737
30	Sasol	2.731	30	EOG Resources	0.392	0.258	0.650
31	Severstal	2.726	31	Suncor Energy	0.596	0.041	0.636
32	AGL Energy	2.704	32	Marathon Oil	0.473	0.151	0.624
33	Tata Steel	2.679	33	Hess	0.485	0.125	0.610
34	Teck Resources	2.603	34	Imperial Oil	0.561	0.027	0.587
35	Kubass Fuel	2.504	35	Encana	0.089	0.479	0.568
36	Polyus Gold	2.294	36	Energi Mega Persada	0.020	0.537	0.557
37	Energy Ventures	2.184	37	BASF	0.159	0.294	0.453
38	Whitehaven Coal	2.055	38	Repsol	0.182	0.265	0.446
39	Banpu	2.040	39	OMV	0.260	0.152	0.413
40	RWE	1.943	40	Noble Energy	0.141	0.271	0.412
41	Consol Energy	1.887	41	Woodside Petroleum	0.058	0.334	0.392
42	W H Soul Pattison	1.850	42	Pioneer Natural Resources	0.270	0.120	0.390
43	Resource Generation	1.818	43	Linn Energy	0.218	0.163	0.381
44	Bayan Resources	1.806	44	Genovus Energy	0.309	0.053	0.362
45	Churchill Mining	1.745	45	YPF	0.235	0.121	0.356
46	NTPC	1.740	46	Range Resources	0.090	0.261	0.352
47	Adaro Energy	1.607	47	PTT	0.111	0.228	0.339
48	Nacco Industries	1.557	48	Husky Energy	0.212	0.122	0.334
49	Idemitsu Kosan	1.530	49	EQT	0.001	0.326	0.327
50	Alliance Resource Partners	1.475	50	Continental Resources	0.238	0.073	0.311
51	Huolinhe Opencut Coal Ind	1.387	51	Talisman Energy	0.111	0.199	0.310
52	Coalspur Mines	1.380	52	KazMunaiGas EP	0.298	0.000	0.298
53	Mitsui	1.366	53	JX Holdings	0.271	0.000	0.271
54	Golden Energy Mines	1.354	54	WPX Energy	0.069	0.188	0.258
55	Coal of Africa	1.339	55	Santos	0.033	0.204	0.237
56	Novolipetsk Steel	1.288	56	SK Innovation	0.226	0.000	0.226
57	Wesfarmers	1.094	57	QEP Resources	0.078	0.143	0.220
58	Tata Power	1.062	58	Southwestern Energy	0.000	0.219	0.219
59	Magnitogorsk Iron & Steel	1.046	59	Consol Energy	0.000	0.218	0.218
60	Sherritt International	1.012	60	Cabot Oil & Gas	0.010	0.201	0.212
61	Kazakhmys	0.998	61	SandRidge Energy	0.134	0.077	0.211
62	New World Resources	0.972	62	Newfield Exploration	0.112	0.096	0.207
63	Mongolian Mining	0.903	63	Murphy Oil	0.144	0.062	0.206
64	Itochu	0.878	64	Dragon Oil	0.159	0.044	0.203
65	Westmoreland	0.864	65	Freeport-McMoRan	0.155	0.028	0.183
66	Cockatoo Coal	0.851	66	Maersk Group	0.174	0.000	0.174
67	Shanxi Meijin Energy	0.784	67	Concho Resources	0.116	0.057	0.173
68	Jizhong Energy Resources	0.742	68	Ultra Petroleum	0.008	0.162	0.169
69	Bandanna Energy	0.731	69	Denbury Resources	0.139	0.026	0.166
70	Polo Resources	0.726	70	GDF SUEZ	0.045	0.117	0.162
71	Alliate	0.723	71	MEG Energy	0.155	0.000	0.155
72	CLP Holdings	0.696	72	Whiting Petroleum	0.139	0.012	0.151
73	Aspire Mining	0.670	73	RWE	0.037	0.111	0.148
74	Walter Energy	0.641	74	MOL	0.084	0.061	0.146
75	Aquila Resources	0.627	75	Crescent Point Energy	0.135	0.010	0.145
76	Coal Energy	0.614	76	Polish Oil & Gas	0.036	0.108	0.144
77	China Resources Power	0.567	77	Mitsui	0.048	0.095	0.142
78	Indika Inti	0.485	78	Penn West Petroleum	0.111	0.029	0.140
79	ArceLorMittal	0.464	79	Pacific Rubiales Energy	0.104	0.028	0.132
80	FirstEnergy	0.458	80	Oil India	0.073	0.059	0.132
81	Black Hills Corp	0.431	81	Cimarex Energy	0.062	0.068	0.130
82	Wescoal Holdings	0.430	82	Energen	0.082	0.044	0.126
83	Grupo Mexico	0.420	83	TAQA	0.065	0.055	0.121
84	African Rainbow Minerals	0.379	84	Oil Search	0.028	0.088	0.117
85	Shanxi Coal Intl Energy	0.376	85	ARC Resources	0.044	0.065	0.109
86	Capital Power	0.367	86	Canadian Oil Sands	0.109	0.000	0.109
87	PTT Public	0.359	87	Genel Energy	0.105	0.000	0.105
88	Lanhua	0.338	88	SM Energy	0.057	0.045	0.102
89	Fortune Minerals	0.328	89	Sasol	0.004	0.085	0.089
90	Cardero Resources	0.323	90	National Fuel Gas	0.018	0.071	0.088
91	Zhengzhou Coal Ind & Elec	0.319	91	Tullow Oil	0.080	0.008	0.088
92	Steel Authority of India	0.307	92	Pengrowth Energy	0.051	0.037	0.088
93	Jindal Steel & Power	0.301	93	Xcite Energy	0.084	0.001	0.085
94	Shougang Fushan Resources	0.299	94	Vermilion Energy	0.069	0.013	0.082
95	Jingyuan CE	0.297	95	Peyto E&D	0.009	0.070	0.079
96	Stanmore Coal	0.287	96	Quicksilver Resources	0.017	0.061	0.077
97	Prophecy Coal	0.272	97	Petroceltic International	0.026	0.050	0.077
98	Marubeni	0.265	98	Forest Oil	0.026	0.050	0.076
99	Cliffs Natural Resources	0.247	99	Tourmaline Oil	0.009	0.065	0.074
100	NSSMC	0.237	100	Bonavista Energy	0.027	0.045	0.072