

Northeastern University Social Impact Council

EXPLORING DIVESTMENT FROM THE FOSSIL FUEL INDUSTRY

Recommendations of the Fossil Fuel Divestment Working Group of the Social Impact Council

March 28, 2016

Contents

Executive Summary Introduction The Challenge of Climate Change	2
	3
	4
Exploring Divestment	6
Our Climate Commitment	6
The Campus Conversation On Divestment	6
Divestment from a Financial Perspective	7
Divestment from a Policy Perspective	8
Recommendations Conclusion	10 13
Appendix B: Brief History of DivestNU	19
Appendix C: Divestment at Other Universities - Selected Case Studies	22
Appendix D: Text of Divestment Student Referendum	26
References	28
Additional Works Utilized	34

Executive Summary

A broad coalition of organizations, corporations, governments, and individuals is converging to take on the challenge of building a sustainable future. Northeastern University is among them, as demonstrated through its research enterprise, curricular offerings, and campus energy- and waste-reduction efforts. These accomplishments are unquestionably deserving of recognition. At the same time, a threat as severe as climate change demands that we constantly reevaluate our commitments and ask what more we can do.

We are already seeing the effects of a world warming too quickly: destructive and onceanomalous weather events are increasingly common; conflicts are breaking out over scarce resources; low-lying islands are disappearing into the oceans. Contrary to the warnings of the scientific community, global greenhouse gas emissions continue to rise. The longer we wait for meaningful, coordinated international action on climate change, the more drastic such action must be.

To continue demonstrating proactive leadership, the Fossil Fuel Divestment Working Group of the Social Impact Council recommends that Northeastern places a strategic emphasis on sustainability efforts, building around the efforts already in place. As part of this strategy, the Working Group recommends that the University divest the endowment pool from companies engaged in fossil fuel production. Divestment is a tactic for expediting the transition to clean energy. It has been embraced by universities, municipalities, companies, faith groups, and other institutions collectively managing over \$3.4 trillion. Those organizations cite a variety of reasons for pursuing divestment: a desire to forcefully advocate for endingfossil fuel exploration, a moral imperative to relinquish investments in companies obstructing climate progress, simple financial pragmatism, or some combination of these. Such lines of reasoning are discussed at length in the body of this report.

This report also highlights several additional focus areas for a re-envisioned climate plan. They are, in brief: a commitment to strive towards achieving carbon neutrality by 2050, integrating climate change discussions into more fields of study, and strengthening the climate and sustainability arms of our research enterprise. Emphasis should also be placed on the role the whole University community plays in achieving shared sustainability goals; to this end the administration should seek to facilitate inclusive conversations, enhance transparency and accountability, and promote the campus as a 'living laboratory'. A divestment announcement can be used as the launch point for developing such a plan, and would serve as the moral cornerstone that imparts legitimacy onto all of these connected efforts.

Ultimately, the decision to divest is about reflecting Northeastern's values and mission through its endowment. It is about taking a firm stance against an industry which has stalled progress towards a clean energy future, and about doing all we can to combat climate change. The Working Group encourages the leaders of Northeastern to approach divestment, along with a renewed climate plan, as an opportunity: a way to step beyond the status quo and become a beacon of the bold climate leadership the world needs from higher education institutions.

Introduction

Fossil fuel divestment has been discussed on campus since early 2013, when a student group, DivestNU, formed to promote the issue. In November 2014, following a Student Government referendum on divestment and the SGA's recommendation that the administration further investigate the issue, President Aoun announced the formation of the Social Impact Council (SIC). Charged with providing "a safe venue to discuss and address issues of social impact related to the university's activities and engagement"¹, SIC is comprised of students, faculty, and staff offering diverse perspectives on many different issues.

Early in the process, the Council identified divestment as a topic necessitating evaluation. The Fossil Fuel Divestment Working Group was formed in May 2015, and has since been researching and evaluating this topic. This report is the product of many individual contributions and careful analysis of the many facets of the issue. The discussion presented herein, and the supporting references and appendices, are intended to give readers an understanding of the broad implications of divesting the endowment from the fossil fuel industry. The first section provides an overview of climate change, which frames the remainder of the report. Subsequent sections delve into the financial and policy analyses of divestment, as well as additional steps the University can take with respect to sustainability and climate change.

Following a formal presentation of these recommendations, the Council will vote to adopt or reject the recommendations. The report will then be communicated to the University's Senior Leadership Team. It is the hope of this Working Group that the Senior Leadership Team will issue an official response to the publication of this report and the efforts of the Council in a timely manner. As the first publication of the Social Impact Council, this report and the institutional response it receives will set a precedent for this process and can show how other members of the Northeastern community can put forth and examine other important issues.

The Fossil Fuel Divestment Working Group of the Social Impact Council would like to thank the University leadership for their openness to student input and for providing an official channel through which to effect change. We would also like to thank the chairs of the Social Impact Council, Madeleine Estabrook and Bruce Ronkin, for their support in getting the SIC process established, the other members of the Council, as well as Tyler Hall, Austin Williams, and the members of DivestNU for their contributions throughout the development of this report.

The Challenge of Climate Change

The climate is changing at an unprecedented rate, yet there has been a lack of appropriate mitigation measures among global leaders. The evidence is incontrovertible, and 98% of all scientists today agree that climate change is primarily human-caused². 2015 was the warmest year on record, a full 1.0° C (1.8° F) above pre-industrial levels³. Atmospheric concentrations of carbon dioxide (CO₂) are now over 400 parts per million⁴, a concentration not seen for millions of years. It is expected that global concentrations will climb even higher in 2016⁵, meaning further temperature increases are yet to come.

If global CO₂ emissions continue to increase at 3% per year—the business-as-usual scenario climate models project a global average temperature increase of 4 to 6°C (7.2 to 10.8°F) by the end of the century⁶. Across the country, climate change will make it difficult for important sectors of the American economy to function as usual: by the end of the century, agricultural productivity in the Midwest couldplummet by 70%; by 2050, upwards of \$100 billion worth of coastal property may be lost to rising seas⁷. By 2100, Boston's could see an additional two months of extreme summer temperatures⁸ and 6 feet of sea level rise—enough to put parts of Northeastern's campus underwater during storm surge events⁹.

Climatologists believe that 2°C (3.6°F) is the upper limit for global average temperature increase to avoid catastrophic climate tipping points¹⁰. This number has been central to climate discussions; at the 2015 UN climate negotiations in Paris, world leaders acknowledged the 2°C limit and set a 1.5°C target¹¹. Scientists have quantified the amount of carbon that can be burned before we approach that 2°C limit: 565 gigatons¹². With declared worldwide assets of 2,795 gigatons, this means that 80% of all fossil fuels must remain unburned. It is very likely that we will burn through the 565 gigaton budget within the next 16 years¹³.

Though there is consensus on these limits, actions that have been taken thus far are far from enough to meet them. Energy trends show demand increasing for the next several decades, and, barring an aggressive push towards renewables, this demand will most likely be met with fossil fuels¹⁴. To avoid blowing past the 2°C limit, there must be a rapid transition to a decarbonized, renewable energy economy.

The urgency of the present situation is borne of decades of debate and inaction, orchestrated largely by fossil fuel interests. This industry has mimicked the once-successful model utilized by the tobacco industry, funding denial of the legitimate science that challenges their products. Recent revelations have shown this to be especially true, as some of the largest fossil fuel companies reportedly knew decades ago about the risks their products posed, and subsequently campaigned to obfuscate this knowledge and bury it in fraudulent science ^{15,16,17}.

To this day, the fossil fuel industry operates directly in the American political process by spending millions of dollars annually (\$127 million in 2015 alone¹⁸) on lobbying and promoting politicians who will support their interests, be it through continued industry subsidies (totaling \$72 billion from 2002 - 2008, while the industry has seen \$1 trillion in profits in the last decade^{19,20}) or blocking legislation geared at addressing climate change²¹. The money that has been poured into Congress has effectively halted all meaningful efforts to address climate change.

Leaders of other countries cite the continued inaction of the United States as a deterrent to pursuing their own aggressive climate change mitigation strategies²².

In light of these challenges, there is a serious need for bold action commensurate with the magnitude and urgency of the crisis. The remainder of this report focuses on how Northeastern University can craft an ambitious, holistic policy response to the threat of climate change, centered on divestment from the fossil fuel industry.

Exploring Divestment

Our Climate Commitment

Northeastern has made its commitment to environmental sustainability one of its defining characteristics. We were one of the first schools to sign the American College & University Presidents' Climate Commitment (ACUPCC) and develop a roadmap for achieving institutional carbon emissions reductions. Since signing ACUPCC in 2007, Northeastern has been recognized for its environmental sustainability initiatives by the College Sustainability Report card²³, the GreenMetric Report Card²⁴, and the Princeton Review²⁵.

Northeastern's President, Joseph Aoun, has been notably vocal on the University's commitment in this regard. He once wrote that "universities have an opportunity—and an obligation—to develop solutions to today's grand challenges. This is particularly true with multifaceted problems such as those that threaten the sustainability of our planet"²⁶. He has also stated that Northeastern's commitment to sustainability infuses our mission, serves as a model for others, and has lasting impacts on the world²⁷.

In 2015, the University exceeded its goal to cut carbon emissions by 20% over 2005 levels, instead achieving 26.2% on a square foot basis²⁸. We cut water use by 12%, recycled 35% of waste, composted over 500 tons of food waste, and invested \$7.5 million into various energy efficiency initiatives²⁹. On top of that, Northeastern supports millions of dollars' worth of research in sustainability (\$17.3 million in 2014^{30}) and boasts several on-campus labs focused on climate models, disaster preparedness management, sea level rise projections, and urban coastal sustainability, among others³¹.

The Campus Conversation on Divestment

The fossil fuel divestment movement began in 2010 at Swarthmore College, as students there became concerned about the devastating impacts of nearby mountaintop removal coal mines³². The students began a campaign to remove Swarthmore's investments from companies that perpetuated mountaintop removal practices. Eventually the students' work caught the attention of grassroots climate action network 350.org and inspired similar campaigns across the country³³. Current efforts to mitigate climate change are woefully inadequate³⁴, and draw attention to the need to reframe the climate discussion and challenge the business-as-usual scenario. Proponents of divestment argue that such a reframing necessarily involves discrediting the fossil fuel industry³⁵, which, as detailed earlier, has perniciously stalled mitigation efforts. Divestment has the potential to accomplish this.

DivestNU formed in the spring of 2013 with the goal of bringing the University's investments on par with the sustainability commitments being made around campus. Specifically, DivestNU calls on the University to halt any new investments in fossil fuel companies and to divest from all fossil fuel holdings, direct and commingled, over a five-year period. Fossil fuel companies, in this context, are defined as the top 100 public coal companies and the top 100 public oil and gas companies, ranked by the CO_2 emissions potential of their reported reserves³⁶.

In the year following DivestNU's founding, the group fostered student awareness of climate change and divestment, launching a petition and presenting it to President Aoun's office in January 2014. In March of that year, the question of whether divestment from fossil fuels should be evaluated by the University was included on the referendum ballot of the annual Student Government Association (SGA) elections. Of the 3,625 students (about 25% of the undergraduate population, a historic turnout) that voted on the referendum question, 2,664 (75.23%) voted in favor of divestment, 470(13.27%) voted against divestment, and 407(11.49%) abstained³⁷.

Per SGA election regulations, a working group formed to explore divestment and present a "Sense of the Student Body" report to the University's Senior Leadership Team (SLT). This statement was presented to the SLT and in November 2014 President Aoun announced the formation of the Social Impact Council (SIC). SIC took up the issue of divestment and has been working closely with DivestNU since to develop a formal policy recommendation to present to the SLT. This report is the culmination of that collaboration. For a full timeline of DivestNU's activities, see Appendix B.

Divestment from a Financial Perspective

Northeastern's investment managers have a fiduciary duty to avoid any action which would expose the endowment to unnecessary risk. The endowment enables the University to seek ever more ambitious goals and support more students in more meaningful ways. As such, no policy should be undertaken that wouldviolate this principle. As will be discussed in this section, there is ample research and sound analysis to support that fossil fuel divestment does not constitute a breach of fiduciary duty. On the contrary, remaining invested in companies who derive a significant portion of their revenue from coal, oil, and gas production may actually be a more vulnerable position over the long term.

According to the most recent publicly available information, Northeastern's endowment totals \$743 million³⁸. According to a conversation between the University's treasurer, Thomas Nedell, and DivestNU, the endowment's broad exposure to the energy industry (not exclusively fossil fuel companies) is 9%. A report from the University of Oxford estimates that US universities have, on average, 2 - 3% exposure to fossil fuels³⁹. Using the Oxford estimate, around \$15 - 20 million of Northeastern's endowment is likely invested in fossil fuel companies.

It is common for investors to diversify holdings as a hedge against risk. Screening a portfolio to avoid a particular industry limits diversification and therefore, by definition, increases risk. The Aperio Group, an investment management firm, has conducted research to quantify the impact of this additional risk. Over the 25-year study period, a fossil-free portfolio built to track the Russell 3000 index exhibited 0.77% tracking error⁴⁰. On average, index-tracking portfolios achieve 5% tracking error⁴¹. In other terms, the impact of divestment on risk is not statistically different from other investment strategies.

While it is possible to statistically analyze and manage risk, the impact of divestment on returns can only be speculated. The energy market, though volatile, has historically produced reliable

returns, owing to growing demand and technological advancements that have expanded resources⁴². Should this trend continue, divested parties will not benefit along with the industry. However, climate science makes clear that the exploration and exploitation of ever more carbon is unsustainable.

As mentioned earlier, world leaders met in Paris in 2015 and unanimously agreed to limit global warming to 1.5° C above pre-industrial levels⁴³. If political action is taken to curb CO₂ emissions so as to meet that goal, much of fossil fuel companies' assets will become effectively 'stranded' since the companies will not be allowed to extract and burn these carbon resources. The value of a fossil fuel company is derived from the quantity of carbon resources that it has declared in its assets. As such, if these companies are unable to access these resources, then the company is overvalued by the market and their future investment prospects are weak⁴⁴.

Divestment from a Policy Perspective

As of December 2015, over 500 institutions representing \$3.4 trillion in assets have pledged to divest from fossil fuels⁴⁵. Organizations as diverse as the Guardian Media Group, the World Council of Churches, and the Rockefeller Brothers Fund (established by the family whose fortune was amassed through the Standard Oil Company) have all pledged divestment⁴⁶. Over 50 colleges and universities have committed to some level of divestment, and there is a vibrant network of campaigns active on hundreds of campuses worldwide (see Appendix C for a summary of selected school's approaches to climate change and divestment)⁴⁷. The incredible energy of the fossil fuel divestment movement so far has not gone unnoticed. World leaders ranging from UN Secretary General Ban Ki-moon⁴⁸, to former Archbishop of South Africa Desmond Tutu⁴⁹, to President Barack Obama⁵⁰ have called for action on climate change and held up divestment as an impactful way of doing so.

As a highly visible and widely publicized issue, taking a stance on divestment will likely draw significantly more attention than the climate initiatives already underway on campus. The dynamic and competitive world of higher education demands making bold moves to stand out. From a publicity standpoint, divestment therefore presents an opportunity for Northeastern to cement its position as a climate leader. Should Northeastern divest, it would be the first in the school Boston area⁵¹, striking a clear contrast with stalwarts like Harvard and MIT which have rejected divestment^{52,53} (see Appendix C for a discussion of MIT's decision). It would also be among the largest universities to divest so far⁵⁴.

Prospective students are increasingly aware of climate change and value universities that not only share their concern, but have taken decisive action as well. A 2015 survey found that 60% of high school seniors indicated "commitment to environmental issues" as an important factor in making their decisions on where to apply and enroll⁵⁵. Current Northeastern students will view divestment as validation of the 2014 referendum, and exemplary of the positive and productive influence they can have to better their school. For alumni, divestment will be an exciting new example of Northeastern's fearless leadership and commitment to addressing global issues.

Climate change is not an issue that will soon fade from the national or international conversation. By virtue of this fact, fossil fuel divestment has the potential to be a point of pride for Huskies for years to come. In tandem with a redoubled pursuit of energy- and waste-reduction efforts on campus, and bolstered world-class sustainability and climate research, divestment could become a pillar of a new University development initiative focused around our role in tackling the world's most pressing challenge.

Alleged reputational benefits aside, divestment is equally about preserving institutional integrity. As discussed earlier in the 'The Challenge of Climate Change' section, the fossil fuel industry has leveraged their wealth and society's dependence on their products to stymie global efforts to combat climate change. By investing in the fossil fuel industry, Northeastern University is directly, though inadvertently, profiting from this political inaction and its devastating consequences. For many, no amount of energy- or resource-saving measures taken on campus can palliate the moral inconsistency of retaining fossil fuel investments⁵⁶.

On a fundamental level, the endowment's core purpose is to be a growing source of funds the University can use for self-improvement and to ensure a quality education for future students. By investing the endowment soundly today, we ensure those funds remain available for the benefit of future students. Climate change threatens to adversely affect those future students, and is therefore antithetical to this mission. Pursuant to the core purpose of the endowment, exposure to climate-change causing activities ought to be minimized.

As explored above, the financial risk associated with divestment is small enough to be negligible. However, the process of divesting does require additional work from the University's leadership and the fund managers overseeing the endowment. In order for divestment to be worth the effort, there must be a significant upside. That is why the policy perspective is crucial; as both a promotional boon and a requisite move for staying true to the moral underpinning of the University's mission, divestment would be very much worth the effort.

For a more in-depth discussion of concerns commonlyvoiced about fossil fuel divestment, see Appendix A.

Recommendations

Drawing on months of careful investigation and deliberation, the Social Impact Council's Fossil Fuel Divestment Working Group recommends that Northeastern University divest its endowment from the fossil fuel industry. The Working Group further believes that the positive impacts of divestment can be maximized by building it into a holistic plan to redouble the University's approach to sustainability and climate change. The group conducted extensive research on similar plans at other schools and sought input from Northeastern students and faculty to seek out key areas where the University should strive to go above and beyond current efforts. A bold plan, in the group's view, would consist of—but not be limited to—the following objectives:

Divestment

The University should move as quickly as possible to freeze new direct investments in the Carbon Underground 200: the top 100 public coal and top 100 public oil and gas companies, ranked by the CO_2 emissions potential of their reported reserves. Then, over a period of 5 years, University leadership should work with the endowment's financial managers to gradually and responsibly transition all investments, including commingled funds, to alternatives free from holdings of the companies listed in the Carbon Underground 200.

In order for any company on this list to be considered a viable investment once again, divestment campaigners insist it must (a) stop exploring for new hydrocarbons, (b) stop lobbying governments to secure subsidies and a favorable regulatory environment, and (c) pledge to keep 80% of its current reserves underground forever⁵⁷.

Carbon Neutrality

Under the American College and University President's Climate Commitment, Northeastern has already set a goal of cutting our carbon footprint by 80% in 2050 (over 2005 levels, on a square foot basis)⁵⁸. According to the Intergovernmental Panel on Climate Change, such a reduction – on an international scale – corresponds to at best a 66% chance of limiting warming to $2^{\circ}C^{59}$. Considering this, the 80% target must be acknowledged as a minimum, accompanied by the ambition to achieve full carbon neutrality by 2050.

This goal is not out of reach. Big-name corporations like Virgin Group, Unilever, Tiffany & Co., Salesforce, and more have pledged to reach carbon neutrality by $2050^{60,61}$. Peer institutions like Duke and Cornell have set even more ambitious targets; achieving net zero emissions through on-campus measures and carbon offset initiatives by 2024 and 2035, respectively^{62,63}. Carbon neutrality by 2050 is, like divestment, consistent with science, bold but neither unprecedented nor infeasible, and can be widely publicized to benefit Northeastern's image.

Fostering the Campus Discussion on Climate

Climate change will have far-reaching and long-lasting implications for nearly all industries and aspects of society. A basic understanding of climate science and impacts will be indispensable for the leaders and decision makers of the 21st Century. In an effort to prepare students for the future, climate change should be integrated into more courses. Northeastern offers 163 courses that cover sustainability in some regard⁶⁴, but only 50 of those have a stated focus on climate change and most are in the environmental sciences or the humanities⁶⁵. Students in all majors should have opportunities to learn how climate change is related to their field of study, either through additions to existing courses, additional course offerings, or new interdisciplinary climate programs.

Conversations about environmental sustainability and climate can be extended beyond the classroom as well. During freshman orientation, Northeastern's efforts in this vein—and the role students play—should be stressed. University leadership should also strive to keep the conversation going by including sustainability updates at the annual State of NU address, and developing a web portal to track the university's progress towards its sustainability goals. Such transparency will empower members at all levels of the university to learn from and advance this shared mission.

Additional Support for Research and Other Programs

Northeastern's three research pillars are health, security, and sustainability⁶⁶. Climate change will influence all three in profound ways. Redoubling our efforts to meet the challenge of climate change presents an opportunity to strengthen and promote pertinent research happening on campus. There are several ways to accomplish this, such as:

- Actively seeking and nurturing research aimed at improving our understanding of climate change, evaluating mitigation and adaptation strategies, developing low-emissions technologies and processes for a variety of industries, and advancing renewable energy technology.
- Establishing a fund and grant system to encourage and support students and faculty members working on environmental and climate issues. Funds of this nature have proven successful at schools similar to Northeastern in size, composition, and research interests^{67,68,69}. Different structures of funding would allow students to conduct research projects with professors, volunteer with local nonprofits working on environmental issues, or implement on-campus energy savings programs.

Campus as a Living Laboratory

The cumulative sum of efforts to achieve carbon neutrality, further integrate climate into the academic plan, and support sustainability research should be viewed as a means to promote our school as a 'living laboratory': a place where the practical implications of what is taught in our

classrooms and discovered in our labs are manifested around campus; a place where the members of our community can learn together from the shared experience of implementing and testing new ideas.

In addition to the initiatives already discussed, the University can promote such an atmosphere by building on many initiatives already underway. For example: finding innovative incentives for public transit; increasing the quantity and quality of bike storage options, including indoor and more secure options; and expediting the 2025 goal to "draft a campus resiliency plan that identifies climate change vulnerabilities and proposes adaptations to mitigate risks" ⁷⁰. Considering the particularly harmful impact of industrial agriculture on public health and the environment⁷¹, special attention should be given to ways to shift on-campus dining options towards sustainable and locally-sourced food.

In the spirit of academia and doing everything possible to combat climate change, University leadership should consider the adoption of a pilot-program model to encourage new sustainability initiatives. This way, even the most ambitious ideas can be tested and evaluated on a small-scale before investing more time and resources. Such a program could potentially be funded by the cost savings from other energy- and waste-reduction efforts on campus, similar to the Green Revolving Funds that have been successful at other schools^{72,73,74}.

There are already student efforts and/or faculty expertise focused on these and other initiatives. The process of developing a plan for institutional sustainability must be transparent and inclusive, capitalizing on the work of those groups and experts and allowing students, faculty, alumni, staff, and other members of the community to weigh in on how Northeastern's academics, research interests, co-op and community partners can all better reflect a commitment to tackling climate change.

The March 2014 student referendum and the various outreach and engagement activities of DivestNU have brought significant attention to fossil fuel divestment, and the community response was clear. A divestment announcement can be used as the launch point for a similarly engaging process to create a holistic platform to combat climate change.

Conclusion

The rapid ascent of Northeastern University in recent years has not gone unnoticed. Among academic institutions, Northeastern is admired for its high-quality students, world-class faculty, and innovative learning model. The University's commitment to environmental sustainability furthers its reputation. In order to maintain our competitive edge and advance the University, Northeastern must continue to lead on issues of global consequence. As discussed at length earlier in this report, climate change is a major global threat that demands bold approaches to challenge business-as-usual.

The Fossil Fuel Divestment Working Group of the Social Impact Council hereby formally recommends that Northeastern University pursue divestment from the fossil fuel industry in accordance with the timeline and definition set forth in 'Recommendations'. In light of this industry's pernicious corruption of global efforts to mitigate climate change, divestment is critical for preserving the University's integrity as it pursues other sustainability measures.

The Working Group also acknowledges that divestment is only one of many approaches for Northeastern to demonstrate climate leadership. As such, it is the further recommendation of the Working Group that the University capitalize on a divestment announcement by beginning to develop a more comprehensive and challenging policy for institutional sustainability at all levels. Adopting such a policy will enable the University to draw more attention and resources to sustainability activities already happening on campus, and to support innovative new ideas. The benefits of the policy associated with increased recognition and positive exposure will be second only to the climate benefits.

It is our hope that these initiatives will open an exciting new chapter for Northeastern, one that inspires generations of students to transform the world in a fundamentally more sustainable way, and one that reimagines the role that higher education can play in addressing climate change.

Respectfullysubmitted,

The Social Impact Council Fossil Fuel Divestment Working Group

Mara Scallon *Class of 2016*

Henry Bison *Class of 2018*

Appendix A Addressing Common Concerns about Divestment

It would be hypocritical to divest, since we still rely on coal, oil, and gas to power our campus.

From a moral standpoint, there is a fundamental difference between purchasing energy derived from coal, oil, and gas and investing in fossil fuel companies. The Universitymust purchase energy to continue its mission of education and research, and where that energy comes from is in large part at the mercy of economic and political realities. Investing, by contrast, implies an interest in seeing that particular business grow and succeed. In the case of fossil fuel companies, this means supporting climate change.

The significant role that energy from coal, oil, and gas plays in our lives is undeniable. If the world were to stop burning fossil fuels tomorrow, the consequences would be devastating. Building a global economy dependent on fossil fuel energy happened over many decades, and so too will the transition to renewable energy. Our current dependence on these fuels, however, does not preclude us from advocating for something better. Moreover, if Northeastern pursues an aggressive push for carbon neutrality, this argument becomes a non sequitur.

Divesting from fossil fuel companies will not hurt them financially.

This concern represents a misunderstanding of divestment as a tactic. The goal of divestment is not to directly inflict financial harm on fossil fuel companies; it is to exert enough pressure on the fossil fuel industry to open political opportunities for greater regulation and support of alternative energy sources, and ultimately to limit extraction and leave 80% of carbon reserves in the ground. As evidenced by a recent SEC filing from Peabody Energy Corporation, one of the largest coal companies, the industry is already beginning to feel public pressure⁷⁵.

Divestment has been successful before, against the tobacco industry. Tobacco companies attempted to convince the American public that their products were not as addictive and harmful as the science showed. Divestment campaigns helped stigmatize the industry and educate the public about the true costs of tobacco products⁷⁶.

The endowment should not be used as a political tool.

Divesting from fossil fuels sends a political message, but so does continuing to invest. Now that the divestment movement has been well-established, choosing not to divest may be considered an implicit endorsement of the industry and its successful attempts to block meaningful climate change legislation thus far. This message runs contrary to the environmentally-conscious, globally-minded reputation the University has worked hard to earn.

Divestment from fossil fuels would open the floodgates to more divestment demands.

Student activists have been calling for divestment from fossil fuels since 2013, and have gone through significant legwork to validate and advance their idea through the institutional channels provided to them, both within the SGA and through this Council. A divestment decision will not create any shortcuts to circumvent this vetting process. If more student activists feel empowered to follow this path, such an outcome ought to be viewed favorably. Additionally, the precedent for divestment at Northeastern has already been set; in 1986, Northeastern divested from companies with interests in South Africa to put pressure on the oppressive apartheid regime in that country⁷⁷.

Divestment could threaten some of Northeastern's co-op opportunities.

Co-op is the defining feature of a Northeastern education. The University works hard to maintain relationships with thousands of co-op employers working in many different industries. A comparison of the Carbon Underground 200 list of top coal, oil, and gas companies with the database of co-op employers who hired students in 2013 - 2015 yielded just nine companies⁷⁸. Those companies are: AngloAmerican [coal], BASF SE [oil & gas], Continental Resources [oil & gas], ExxonMobil [oil & gas], Husky Energy [oil & gas], Rio Tinto [coal], Mitsubishi [coal, oil & gas], Sinopec Limited [oil & gas], and Total S.A. [oil & gas].

It is impossible to tell exactly how these companies may react, if at all, to a divestment decision. What is clear is that since Northeastern has co-op relationships with over 3,000 companies⁷⁹, the small number of relationships that could be adversely impacted would in no way pose a threat to the co-op program as a whole. To the contrary, divesting from fossil fuel companies may help Northeastern build more and stronger relationships with clean energy companies, which are poised to become large job creators⁸⁰.

Divestment may deter would-be donors.

It is rational for any university to consider how any policy change will resonate with alumni and donors. These considerations are not unique to the current situation; from corporate reexaminations of relationships of engagement following critical academic output⁸¹ to politically fraught efforts to manage gift allocation⁸² and university functions⁸³, institutions of higher learning are no strangers to the pressures placed upon advancement by donor preferences. The ongoing shift from a "donor culture" to an "investor culture" may further factor into determinations on policy change⁸⁴. Reflecting on divestment from apartheid South Africa, former Oberlin College President James Powell had this to say: "Whenever there's change – abolishing fraternities, going co-ed – there's always the worry the alumni won't like change. We see over and over again that these claims are false – you may take a hit for a year or two, but in the end you're changing with the world."⁸⁵

Universities have a considerable amount of influence over how such changes are perceived. If framed as a logical extension of values and aims already in place—which divestment, as discussed

 $earlier, certainly \, could \, be --- then the \, change \, can \, be \, an \, exciting \, platform \, for \, further \, engagement \, of \, donors.$

Additionally, administrators must weigh the speculative concern that divesting may impact current donor relations against the demonstrable impact that refusing to divest will have. Venues such as the Multi-School Fossil Free Divestment Fund⁸⁶ and DivestNU's Climate Legacy Pledge⁸⁷ encourage would-be donors to either divert or withhold financial support until divestment occurs. Unity College, among the first to divest, has seen an overwhelmingly positive response to the change. According to President Stephen Mulkey, "after [Unity] divested, we started receiving donations online. We've seen an uptick in our inquiries from students. I think that will transform into an improvement in enrollment. That's not why we did it, but it's a fact."⁸⁸ Divestment may turn off some alumni, but the opportunity to engage many more current and future climate-conscious alumni should not be overlooked.

A third party, not Northeastern's administrators, is responsible for managing the endowment.

Northeastern, like many other institutions, uses a third-party asset management firm to oversee the endowment⁸⁹. That is not to say, however, that Northeastern does not have any input on where the endowment is or is not invested. Should fossil fuel divestment be pursued, Northeastern would inform the fund managers of the new policy and work with them to make the appropriate changes. The growing prevalence of divestment means that more and more firms are willing to help their clients make the switch to fossil-free portfolios⁹⁰.

If fossil fuel companies do fall in value, our endowment managers will get out in time to avoid losing money.

Most investors today understand that climate change will bring dramatic changes to the economy, be it through decreased economic productivity, real estate flooded by rising seas, or a tax on carbon. Some may attempt to anticipate the exact moment when the fossil fuel industry begins to devalue so that they can sell their holdings and make a large profit for their clients. In reality, this hubristic thinking is high-risk and was partially responsible for the 2008 financial crisis⁹¹. Even if this strategy were successful, it would run contrary to Northeastern's image as a forward-thinking leader in sustainability.

Many fossil fuel companies also fund renewable energy research and development.

Fossil fuel companies have very large research and development budgets, but the vast majority goes to developing technologies to locate and exploit new carbon resources. In 2012, only a handful of the major oil and gas companies spent more than 2% of total expenditures on renewable investments, and this percentage has fallen even further since then⁹². Exxon Mobil, for instance, earned \$45 billion in profits in 2012 but spent a paltry \$188 million on renewable energy investments, less than they spent on advertising (\$250 million for 2010-2012)⁹³. The top

200 publicly listed fossil fuel companies spent \$674 billion in 2013 finding, developing, and extracting new fossil fuel resources⁹⁴. This huge investment dwarfs the amount spent developing renewable technologies. In fact, companies such as BP, ExxonMobil, Royal Dutch Shell, and Chevron have been quietly but steadily selling off renewable energy holdings, cancelling planned renewable projects, and ceasing investments in this sector altogether⁹⁵.

Fossil fuel companies have proven themselves very skilled at finding, processing, transporting, and selling hydrocarbon resources to the world. It is not readily apparent that these same companies will be as adept in the renewable energy economy. Owing to this and the massive losses coal, oil, and gas companies will incur if their carbon assets become stranded, we cannot rely on fossil fuel companies to drive investments and innovation in renewable energy ⁹⁶.

It should be up to the shareholders to influence the trajectory of these companies.

Shareholder activism refers to an effort led by one or many shareholders of a company to effect some kind of change within that company. It generally focuses on improving a company's performance and profits, but can also seek to change business practices deemed unethical. It's not an uncommon practice, with more than 300 such campaigns running in 2014⁹⁷.

In some cases, shareholders have challenged fossil fuel companies to put forth plans to deal with climate change⁹⁸. However, shareholder activism is a fundamentally inadequate strategy in this situation; the problem is not with a single part of these companies' business plans, such as unfair labor practices. It is that the entirety of the plan is incompatible with a stable climate. Furthermore, Northeastern's current investment strategy does not allow us to practice shareholder activism since we generally do not directly own a company's stocks⁹⁹.

Carbon-intensive industries are equally responsible for climate change.

Industries like iron and steel making, cement production, industrial agriculture, and commercial aviation are sizeable contributors to CO_2 or other greenhouse gas (GHG) emissions¹⁰⁰. Based on supply and demand, such carbon-intensive industries are indeed responsible for driving climate change. When Norway's \$850 billion Government Pension Fund Global announced divestment from coal, two cement producers were among the companies dropped due to high GHG emissions¹⁰¹. Others have taken the opposite approach: Stanford University divested only from coal for energy generation, thus permitting coal use for other purposes, such as steel production¹⁰².

While GHG-intensive companies no doubt must strive to reduce emissions, the Working Group does not advocate for divestment as a means to achieve this. Unlike companies specializing in coal, oil, and gas production—for which carbon is both a means and an end—GHG-intensive companies rely on fossil fuels solely as a means to achieve ends that are largely beneficial for society. Divestment from fossil fuels can help spur the transition to a low-carbon economy and create incentives for GHG-intensive industries to adapt their business models accordingly.

The majority of the world's fossil fuels are held by state-owned companies that are not publicly traded.

Some of the largest oil producers in the world are actually sovereign governments, including Venezuela, Saudi Arabia, Iran, and Iraq¹⁰³. In 2014, those four countries held 20%, 18%, 11%, and 10% of the world's proven crude oil reserves¹⁰⁴. In fact, private companies hold only 17% of the carbon in all fossil fuel reserves¹⁰⁵. While divestment cannot directly impact the remaining 83%, state-owned companies are nevertheless still vulnerable to aggressive international efforts to curb greenhouse gas emissions—efforts that can be brought about in part by successful divestment campaigns.

It is also worth noting that, in general, state-controlled reserves are easily recoverable. Private enterprise, on the other hand, has expanded its reach to highly risky and highly polluting hydrocarbons, such as the Canadian tar sands, in order to remain profitable ¹⁰⁶. It is especially important that these sources remain in the ground.

Divestment will adversely affect Northeastern's endowment.

See 'Divestment from a Financial Perspective'.

Appendix B Brief History of DivestNU

2012

Nov 14: Renowned author and climate activist Bill McKibben speaks at NU as part of the Humanities Center's Artist and Practitioner in Residence Program.

2013

Jan: Students begin divestment campaign, DivestNU.

Apr 3: DivestNU member Tyler Hall presents case for divestment at NU's Open Classroom series "Climate Change. Challenges. Solutions."

Apr: DivestNU delivers letter asking President Aoun and the Board of Trustees to demonstrate leadership and divest the endowment from fossil fuels.

Apr 28: Michael Armini, Senior VP of External Affairs, responds to letter delivery. Cites need to maximize endowment returns and NU's demonstrated commitment to sustainability.

Oct 22: DivestNU members attend the State of NU address and discuss divestment with Michael Armini in-person following the event.

Dec 8: DivestNU participates in city-wide campus divestment action at Harvard.

2014

Jan 17: Students hand-deliver letter to President Aoun asking him to meet with DivestNU representatives to discuss divestment. Accompanied by signatures of 500 students who endorsed the letter.

Feb 27: First meeting between DivestNU and the NU administration held. Discussed the global divestment movement and administrative concerns.

Mar 20: Huntington News publishes letter to the editor from DivestNU member Austin Williams titled "NU Needs to Divest to be Consistent with Principles."

Mar 24 - 30: Student Government Association elections, voting open for divestment referendum (see Appendix D). Referendum required 750 signatures to get on ballot. DivestNU collected 1500 signatures to ratify this question.

Mar 26: DivestNU members Mara Scallon and Austin Williams hosted by the NU College Republicans for a panel designed to explore divestment.

Mar 27: Two articles about divestment published in the Huntington News: "Divestment would be an unnecessary burden on NU", by Patrick O'Neil, expressed concerns about validity of the divestment argument and the need for taking such action; "Editorial: Divest addresses critical issue", by the Editorial Board, commended the DivestNU campaign for working to effect change.

Mar 31: DivestNU meets with Michael Armini hours before the results of the referendum were released. Discussed the growth of the DivestNU campaign, expected referendum results, growth of global divestment campaigns.

Mar 31: Referendum results released – 3,625 students voted (about 25% of the population), 2,664 (75.23%) in favor of divestment, 470 (13.27%) against, and 407 (11.49%) abstaining. First time in 9 years the voting period did not require extension to reach requisite number of votes.

Apr 16: DivestNU hand-delivers letter to President Aoun's office asking for administration to respond to referendum.

Oct 10: DivestNU meets with several members of the administration: Michael Armini, Ralph Martin (Senior Counsel), Thomas Nedell (Treasurer), and Laura Wankel (Student Affairs). Discussed referendum results, the endowment. Meeting included a brief visit from President Aoun.

Oct 20: SGA voted unanimously to accept and endorse the final report and recommendation of the Fossil-Fuel Divestment Ad-Hoc Committee. Recommendation was for administration to "establish an infrastructure with which it can formally and publicly review issues concerning social responsibility", tentatively called the Committee for Social Impact and Responsibility.

Nov 3: DivestNU meets with Michael Armini and Thomas Nedell to discuss the endowment.

Nov 6: Huntington News published a letter from student Roy Apostle titled "Fossil Fuel Divestment Futile." Stated that NU divestment will not financially harm the industry.

Nov 13: Huntington News published a letter from student Tyler Hall titled "Fossil Fuel Divestment is Not Just About the Money." Clarified DivestNU's goal of driving larger-scale political and economic change, rather than inflicting short-term financial harm.

Nov 19: At the State of NU address, President Aoun announced the formation of the Social Impact Council, designed in response to the report prepared by the SGA's Fossil Fuel Divestment Ad-Hoc Committee).

Dec 16: President Aoun names Madeleine Estabrook (Senior Vice President of Student Affairs; replaced Laura Wankel in 2014) and Bruce Ronkin (Vice Provost for Undergraduate Education) as chairs of the Social Impact Council. Nominations for faculty, administrative, and student participants were solicited.

2015

Feb 13: Acceptance emails for Social Impact Council sent to participants.

Feb 26: First meeting of the Social Impact Council. Established the purpose of the Council and evaluated potential issues to address.

Apr 3: DivestNU meets with Madeleine Estabrook to express concerns about the progress of the Social Impact Council, and ask that the administration acknowledge the divestment referendum in a message to the entire student-body.

Apr 8: Second meeting of the Social Impact Council and formation of the Fossil Fuel Divestment Working Group chaired by Mara Scallon.

Apr 14: In an email to all students, Madeleine Estabrook announces that fossil fuel divestment is being taken up by the Social Impact Council.

Apr 15: Award-winner journalist and activist Naomi Klein speaks on campus as part of the University Scholars Program's Leadership, Research, and Innovation speaker series. Klein lauded the divestment campaign and called for radical action to address the climate crisis.

Apr 29: Third meeting of the Social Impact Council. Draft of the charter presented to the group but not ratified due to a lack of a majority.

Oct 20: DivestNU meets with Madeleine Estabrook in hopes of reviving the SIC process.

Oct 22: Huntington News published a letter by senior Mara Scallon titled "NU needs to divest from fossil fuel industry," urging other seniors to pledge not to donate until divestment occurs.

Oct 28: DivestNU stages a peaceful protest outside of the State of NU, sought to compel SIC to resume meetings.

Nov 2: Fourth meeting of the Social Impact Council.

Nov 9: Fifth meeting of the Social Impact Council.

Nov 16: Sixth meeting of the Social Impact Council.

Dec 2: DivestNU stages a peaceful protest outside of an event where Edward Galante, Northeastern Trustee and former Senior VP of ExxonMobil, is speaking. Aimed to bring attention to Northeastern's ties with the fossil fuel company, which has been accused of lying to the public about climate change ¹⁰⁷.

2016

Feb 29: Seventh meeting of the Social Impact Council. Draft results from the Fossil Fuel Divestment Working Group presented to the Council.

Appendix C Divestment at other Universities – Selected Case Studies

Pitzer College

Location: Claremont, CA Student Population: 1,000 Endowment: \$125 million

In the spring of 2013, students met with the President and Treasurer of Pitzer College to discuss fossil fuel divestment. The students submitted two reports to the Pitzer Trustee Investment Committee. One articulated the economic implications of divestment,¹⁰⁸ while the other outlined the moral argument¹⁰⁹. In October 2013, the Board of Trustees formed a Climate Change Working Group, consisting of 3 Board members, 3 students, 2 faculty, and 2 staff, to examine and develop a general climate action plan for Pitzer, which could include but was not limited to divestment.

On April 12, 2014, Pitzer unveiled an Integrated Fossil Fuel Divestment Climate Action Model. In it, Pitzer committed to: divest from fossil fuels by the end of 2014; develop an environmental, social, and governance policy to guide endowment investment decisions; create a 'Sustainability Fund' within the endowment dedicated to environmentally responsible investments; reduce the College's carbon footprint by 25% by 2016; and establish a 'Campus Sustainability Taskforce' to bolster on-campus measures to promote sustainability.

In September 2014, the Chair of Pitzer College's Board of Trustees' Investment Committee, Donald Gould, gave a presentation at MIT titled, "Pitzer College - A Case Study in Fossil Fuel Divestment"¹¹⁰. In it, he emphasized the role of policy change in enabling divestment, the importance of involving all constituencies, and the benefit of divestment as part of a larger plan for improving institutional sustainability. The Pitzer Board, according to Gould, concluded that it had a fiduciary duty to divest rather than hold onto fossil fuel investments. He also cited that there is little evidence to support concerns that divestment negatively impacts risk or returns, and acknowledged that, when it comes to climate change, Universities have an obligation to use every tool at their disposal, including the endowment, to effect change.

Syracuse University

Location: Syracuse, NY Student Population: 21,500 Endowment: \$1.18 billion

In late 2012, Syracuse students formed DivestSU. The group quickly mobilized and hosted a series of events on campus intended to publicize their demand that Syracuse University divest from the fossil fuel industry¹¹¹. Students with DivestSU cited the University's 2013 adoption of its Socially Responsible Investment Policy to justify their divestment ask; the students had lobbied for the adoption of this policy. In November 2014, DivestSU conducted an 18-day sit-in at the Chancellor's office that drew significant attention. In February 2015, Syracuse officials continued meeting with representatives of DivestSU.

On April 1, 2015, Syracuse University announced that it would divest from directholdings in the fossil fuel industry and instruct its external fund managers to do the same. The University further announced it would seek to leverage the endowment to support solar energy, biofuels, and recycling. Administrators framed these commitments as an extension of those made under ACUPCC and the Climate Action Plan they developed in 2009.

On December 1, 2015, the State University of New York College of Environmental Science and Forestry (SUNY ESF) announced that it would divest as well, becoming the first SUNY school to do so. It is likely that the success of the DivestSU campaign bolstered efforts to divest SUNY ESF. The administration of Syracuse University continues to work with members of DivestSU, the Board of Trustees, and the University's financial advisers to implement divestment¹¹².

Massachusetts Institute of Technology

Location: Cambridge, MA Student Population: 11,000 Endowment: \$13.5 billion

Fossil Free MIT (FFMIT) launched in 2012 and hosted a series of events on campus to promote divestment, including movie screenings, workshops, and educational panels. Amidst these events, FFMIT was also collecting signatures on a divestment petition to be presented to the administration. In December 2013, the petition was delivered to the President and administration, accompanied by 2,000 signatures. In response, the administration created the MIT Climate Change Conversation Committee. Over the course of 9 months, this Committee hosted various events and met with many different members of the MIT community to seek input about how the Institute could best address climate change¹¹³.

The Committee's report was published on June 15, 2015. It called on MIT to adopt a strong climate action plan¹¹⁴ that included partial divestment, creating a web resource for climate change issues, making climate seminars available to politicians and corporate executives, implementing an internal MIT system of carbon pricing, improving carbon efficiency on campus, advancing climate change mitigation and adaptation practices, and making climate-related coursework required for undergraduates. The Committee also encouraged MIT to play a more active role in accelerating climate solutions by: declaring climate change the focus of a major new capital campaign; creating a Climate Institute to connect and augment existing research activities; enhance support for climate change research; develop new investment strategies; and lead higher education partnerships on climate change. The Committee's report was endorsed by the Cambridge City Council¹¹⁵ and dozens of climate scientists and advocates¹¹⁶.

On October 21, 2015, MIT's President Reif released a "Plan for Action on Climate Change", which focused on five areas: advancing climate science; supporting low- and zero-carbon energy; new climate, energy, and environment academic programs; sharing knowledge with the community at large; and reducing campus greenhouse gas emissions¹¹⁷. The plan rejected divestment, reasoning that "serious action to confront climate change demands intense collaboration across the research community, industry and government; divestment would thwart [MIT's] ability to collaborate and to convene opposing parties and inspire united action"¹¹⁸.

The day following the release, FFMIT launched a historic sit-in, arguing that President Reif's plan was "insufficient" and "business as usual repackaged"¹¹⁹. Students, faculty, and alumni alike were offended that MIT dismissed the recommendations of the presidentially established committee, and the administration's faith in industry engagement—a tactic that has failed to produce meaningful progress. Further, members of FFMIT pointed out that even the emissions targets set in the report were weak and incompatible with a 2°C target. The sit-in lasted for 116 days and received extensive press coverage¹²⁰. On March 3, 2016, FFMIT reached an agreement with administrators, with provisions that MIT "become carbon-neutral as soon as possible, establish a climate action advisory committee, and hold a forum about ethical questions related to climate change"¹²¹. Despite having reached this agreement, the dialogue between Fossil Free MIT and the administration continues.

University of Glasgow

Location: Glasgow, Scotland, UK Student Population: 24,000 Endowment: £128 million (121 million)¹²²

The Glasgow University Climate Society (GUCS) was formed in late 2012, and began a student petition to demonstrate support for fossil fuel divestment¹²³. The campaign hosted events and actions on campus and quickly grew to several hundred students.

GUCS won the support of the Student Representative Council (student government), which enabled students to present divestment to the University Court (the school's decision-making body). After their proposal was brought forth, a working group was formed to examine divestment and share its conclusions with the Court. GUCS prepared a report detailing the implications of divesting and presented this report to the working group. The working group within the Court recommended divestment, citing the campaign's moral arguments as the deciding factor¹²⁴.

In October 2014, the University officially announced it would divest from the fossil fuel industry, becoming the first University in Europe to do so. As of March 2015, the administration of the University was still working to implement divestment¹²⁵. There have been no further updates since then, but students continue to actively support divestment¹²⁶.

Appendix D Text of Divestment Student Referendum

March, 2014

Short title: Given the crisis of global climate change, do you believe that Northeastern University should relinquish its investments in the fossil fuel industry?

Introductory clauses: WHEREAS: Since 1895, average global temperatures have risen by more than 1.5 degrees Fahrenheit, and 80% of this increase has occurred since 1980; and,

WHEREAS: This rapid temperature increase has exacerbated weather extremes including heat waves, drought, flooding, and sea level rise; and,

WHEREAS: The industrial extraction and combustion of fossil fuels is the number one source of greenhouse gas (GHG) emissions, specifically carbon dioxide (CO2), and is therefore the greatest contributor to anthropogenic climate change; and,

WHEREAS: While human beings can only burn 565 more gigatons of CO2 to stay below 2 °C of warming—the threshold for the most catastrophic warming impacts—fossil fuel companies hold more than 2,795 gigatons of CO2 in their reserves; and,

WHEREAS: International efforts to cut carbon emissions threaten to significantly devalue investments in the fossil fuel industry and negatively impact portfolios containing such positions; and,

WHEREAS: All investments in fossil fuels contribute to fundamentally unsustainable practices, which threaten the social and environmental wellbeing of all societies; and,

WHEREAS: Fossil fuel companies have actively opposed the transition to a low-carbon economy through the dissemination of misinformation and the manipulation of the political system; and,

WHEREAS: The voluntary acquisition of financial stocks and holdings represents implicit support of a company and its industry and it is within the right of any stockholder to sell and purchase shares for reasons that lie outside mere financial self-interest; and,

WHEREAS: Divestment will remove both financial and symbolic support from the fossil fuel industry; and,

WHEREAS: Northeastern has received recognition for current efforts to promote sustainability, and has been cited as "America's Greenest College" by the Green Metric Ranking of World Universities; and,

WHEREAS: Northeastern President Joseph E. Aoun has stated, "Environmental sustainability is an issue of local, national, and global significance. The consequences of inaction would be shared

by all humanity. Therefore, all individuals and institutions share responsibility for taking action to create a sustainable environment. The leadership of Northeastern University is fully committed to this effort."; and,

WHEREAS: Embarking on the path towards divestment from the fossil fuel industry would be fully consistent with Northeastern's current record of commitment towards sustainability and would cement its place as a global leader in this area;

Operative clauses:

That it is the Sense of the Student Body that Northeastern University, in keeping with its commitment to leadership in sustainability, should undertake divestment from the fossil fuel industry, and as such the Undergraduate Student Body calls upon the Northeastern University administration to take the following actions regarding the General Endowment Pool:

1. Instruct asset managers to stop any new investment in fossil fuel companies; and

2. Take appropriate steps to ensure that, within 5 years, none of its directly held or commingled assets include holdings in fossil fuel public equities and corporate bonds; and

3. Release quarterly updates, both detailing progress made towards full divestment and providing information on the holdings of the endowment pool and of index funds within the GEP.

Submitted by: Austin Williams February 19, 2014

References

- ¹ St. Martin, G. (2014). State of Northeastern: 'Never been stronger.' Retrieved from http://www.northeastern.edu/news/2014/11/state-of-the-university-2014/
- ² Anderegg, W., Prall, J., Harold, J., & Schneider, S. (2010). Expert credibility in climate change. Proceedings Of The National Academy Of Sciences, 107(27), 12107-12109. <u>http://dx.doi.org/10.1073/pnas.1003187107</u>
- ³ NASA [National Aeronautics and Space Administration]. (2016). NASA, NOAA Analyses Reveal Record-Shattering Global Warm Temperatures in 2015. Retrieved from <u>http://www.nasa.gov/press-release/nasa-noaaanalyses-reveal-record-shattering-global-warm-temperatures-in-2015</u>
- ⁴ NOAA [National Oceanic and Atmospheric Administration]. (2015). Greenhouse gas benchmark reached. Retrieved from http://research.noaa.gov/News/NewsArchive/LatestNews/TabId/684/ArtMID/1768/ArticleID/11153/Gree

http://research.noaa.gov/News/NewsArchive/LatestNews/Tabld/684/ArtMID/1768/ArticleID/11153. nhouse-gas-benchmark-reached-.aspx

- ⁶ Sokolov, A., Stone, P., Forest, C., Prinn, R., Sarofim, M., & Webster, M. et al. (2009). Probabilistic Forecast for Twenty-First-Century Climate Based on Uncertainties in Emissions (Without Policy) and Climate Parameters. Journal Of Climate, 22(19), 5175-5204. <u>http://dx.doi.org/10.1175/2009jcli2863.1</u>
- ⁷ Risky Business Project. (2014). Risky Business: The Economic Risks of Climate Change in the United States. Retrieved from

http://riskybusiness.org/site/assets/uploads/2015/09/RiskyBusiness_Report_WEB_09_08_14.pdf

- ⁸ Risky Business Project, 2014.
- ⁹ The Boston Harbor Association. (2013). Preparing for the Rising Tide. Retrieved from http://www.tbha.org/sites/tbha.org/files/documents/preparing_for_the_rising_tide_final.pdf
- ¹⁰ Hansen, J., Sato, M., Hearty, P., Ruedy, R., Kelley, M., & Masson-Delmotte, V. et al. (2015). Ice Melt, Sea Level Rise and Superstorms: Evidence from Paleoclimate Data, Climate Modeling, and Modern Observations that 2°C Global Warming is Highly Dangerous. New York, NY: Columbia University in the City of New York. Retrieved from http://www.columbia.edu/~jeh1/2015/20150704_IceMelt.pdf
- ¹¹ United Nations. (2015). Adoption of the Paris Agreement. Paris, France. Retrieved from http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf
- ¹² Carbon Tracker Initiative. (2014). Unburnable Carbon Are the world's financial markets carrying a carbon bubble? London, United Kingdom: Carbon Tracker Initiative. Retrieved from <u>http://www.carbontracker.org/wp-content/uploads/2014/09/Unburnable-Carbon-Full-rev2-1.pdf</u>
- ¹³ Longstreth, B. (2013). The Financial Case for Divestment of Fossil Fuel Companies by Endowment Fiduciaries. The Huffington Post. Retrieved from <u>http://www.huffingtonpost.com/bevis-longstreth/the-financial-case-for-di_b_4203910.html</u>
- ¹⁴ International Energy Agency (2015). World Energy Outlook 2015 Factsheet. Paris, France. Retrieved from <u>http://www.worldenergyoutlook.org/media/weowebsite/2015/WEO2015 Factsheets.pdf</u>
- ¹⁵ Goldenberg, S. (2015). Exxon knew of climate change in 1981, email says but it funded deniers for 27 more years. The Guardian. Retrieved from <u>http://www.theguardian.com/environment/2015/jul/08/exxon-climatechange-1981-climate-denier-funding</u>
- ¹⁶ Schwartz, J. (2016). California Said to Target Exxon in Climate Inquiry. The New York Times. Retrieved from http://www.nytimes.com/2016/01/21/science/california-said-to-target-exxon-in-climate-inquiry.html
- ¹⁷ McKibben, B. (2015). What Exxon Knew About Climate Change. The New Yorker. Retrieved from http://www.newyorker.com/news/daily-comment/what-exxon-knew-about-climate-change
- ¹⁸ OpenSecrets.org. (2015). Lobbying Spending: Oil & Gas. Retrieved from http://www.opensecrets.org/lobby/indusclient.php?id=E01&year=2015
- ¹⁹ Taxpayers for Common Sense. (2015). Political Footprint of the Oil and Gas Industry. Washington, D.C.: Taxpayers for Common Sense. Retrieved from <u>http://www.taxpayer.net/library/article/political-footprint-of-the-oil-and-gas-industry-2015</u>
- ²⁰ Sanders, B., & Ellison, K. (2015). End Polluter Welfare Act. Washington, D.C. Retrieved from <u>http://www.sanders.senate.gov/download/endpolluterwelfare/?inline=file</u>

⁵ NASA, 2015.

- ²¹ Smith, P. The Anti-Science Climate Denier Caucus, 114th Congress Edition. Retrieved from http://thinkprogress.org/climate/2015/01/09/3609903/infographic-anti-science-caucus-114th-congress/
- ²² Council on Foreign Relations. (2013). The Global Climate Change Regime: Issue Brief. Retrieved from http://www.cfr.org/climate-change/global-climate-change-regime/p21831
- ²³ GreenReportCard.org. (2011). Northeastern University Green Report Card 2011. Retrieved from http://www.greenreportcard.org/report-card-2011/schools/northeastern-university.html
- ²⁴ International Business Times. (2011). America's Greenest Universities. Retrieved from http://www.ibtimes.com/americas-greenest-universities-253285
- ²⁵ Ritger, C. (2013). Princeton Review names Green Honor Roll. USA Today. Retrieved from <u>http://www.usatoday.com/story/news/nation/2013/04/22/green-honor-roll-princeton-review-earth-day-2013/2103947/</u>
- ²⁶ Aoun, J. (2010a). Sustainability: Turning Awareness Into Action. Northeastern University President Joseph E. Aoun. Retrieved from <u>http://www.northeastern.edu/president/2010/11/15/sustainability-turning-awareness-into-action/</u>
- ²⁷ Aoun, J. (2010b). Sustainable Success. Northeastern University President Joseph E. Aoun. Retrieved from <u>http://www.northeastern.edu/president/2013/01/16/sustainable-success/</u>
- ²⁸ Northeastern University. (2015a). Update on Sustainability, 2005-2025. Retrieved from <u>http://www.northeastern.edu/sustainability/update/2005-2025.pdf</u>
- ²⁹ Northeastern University, 2015a.
- ³⁰ Northeastern University, 2015a.
- ³¹ Northeastern University. (2016). Research: Sustainability. Retrieved from <u>http://www.northeastern.edu/research/about/research-areas/sustainability/</u>
- ³² Swarthmore Mountain Justice. (2015). Our Campaign. Retrieved from <u>http://swatmj.org/ourcampaign/</u>
- ³³ Gills, J. (2012). To Stop Climate Change, Students Aim at College Portfolios. The New York Times. Retrieved from <u>http://www.nytimes.com/2012/12/05/business/energy-environment/to-fight-climate-change-collegestudents-take-aim-at-the-endowment-portfolio.html</u>
- ³⁴ Council on Foreign Relations. (2013). The Global Climate Change Regime: Issue Brief. Retrieved from <u>http://www.cfr.org/climate-change/global-climate-change-regime/p21831</u>
- ³⁵ MacAskill, W. (2015). Does Divestment Work? The New Yorker. Retrieved from <u>http://www.newyorker.com/business/currency/does-divestment-work</u>
- ³⁶ Fossil Free Indexes. (2015). The Carbon Underground 2015. Retrieved from http://fossilfreeindexes.com/research/the-carbon-underground/
- ³⁷ DivestNU Coalition. (2014). Letter to President Joseph E. Aoun. Northeastern University, Boston, MA. Retrieved from <u>http://divestnu.org/wp-content/uploads/2014/10/Aoun-Meeting-Request-April-2014.pdf</u>
- ³⁸ Northeastern University. (2015b). Consolidated Financial Statements June 30, 2015 and 2014. Retrieved from http://www.northeastern.edu/finance/pdfs/2015NortheasternUniversityFinancialStatements.pdf
- ³⁹ Ansar, Atif, et al. (2013). Stranded assets and the fossil fuel divestment campaign: what does divestment mean for the valuation of fossil fuel assets? Smith School of Enterprise and the Environment at the University of Oxfor d. Oxford, UK. Retrieved from <u>http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/SAPdivestment-report-final.pdf</u>
- ⁴⁰Geddes, P., Goldberg, L., Tymoczko, R., & Branch, M. (2015). Building a Carbon-Free Equity Portfolio. Social Science Research Network. <u>http://papers.srn.com/sol3/papers.cfm?abstract_id=2565094</u>

- ⁴² Dale, 2015.
- ⁴³ United Nations, 2015.
- ⁴⁴ Longstreth, 2013.
- ⁴⁵ Bloomberg Business. (2015). Fossil-Fuel Divestment Tops \$3.4 Trillion Mark, Activists Say. Retrieved from <u>http://www.bloomberg.com/news/articles/2015-12-02/fossil-fuel-divestment-tops-3-4-trillion-mark-activists-say</u>
- ⁴⁶ GoFossilFree.org. (2016a). Commitments. Retrieved from <u>http://gofossilfree.org/commitments/</u>
- ⁴⁷ GoFossilFree.org, 2016a.

⁴¹ Geddes, 2015.

- ⁴⁸ Ki-moon, B. (2014). Synthesis Report Press Conference. Speech, Copenhagen, Denmark. Retrieved from <u>https://www.youtube.com/watch?v=q7tA31Q9cUY&feature=youtu.be</u>
- ⁴⁹ Tutu, D. (2014). We need an apartheid-style boycott to save the planet. The Guardian. Retrieved from <u>http://www.theguardian.com/commentisfree/2014/apr/10/divest-fossil-fuels-climate-change-keystone-xl</u>
- ⁵⁰ Obama, B. (2013). We Need to Act. Speech, Georgetown University, Washington, D.C. Transcript retrieved from <u>http://www.bloomberg.com/news/articles/2013-06-25/-we-need-to-act-transcript-of-obama-s-climate-change-speech</u>
- ⁵¹ GoFossilFree.org, 2016a.
- ⁵² Faust, D. (2013). Fossil Fuel Divestment Statement. Retrieved from http://www.harvard.edu/president/news/2013/fossil-fuel-divestment-statement
- ⁵³ Massachusetts Institute of Technology News Office. (2015). MIT announces five-year plan for action on climate change. Retrieved from <u>http://news.mit.edu/2015/new-climate-change-strategy-1021</u>
- ⁵⁴ GoFossilFree.org, 2016a.
- ⁵⁵ Krier, J., & O'Toole, K. (2015). The Princeton Review 2015 College Hopes & Worries Survey Report. New York, NY: The Princeton Review. Retrieved from
- https://az589735.vo.msecnd.net/pdf/cohowosurvrpt_mar182015.pdf
- ⁵⁶McKibben, B. (2013). The Case for Fossil-Fuel Divestment. Rolling Stone Magazine. Retrieved from http://www.rollingstone.com/politics/news/the-case-for-fossil-fuel-divestment-20130222?page=2
- ⁵⁷ GoFossilFree.org. (2016b). Frequently Asked Questions. Retrieved from <u>http://gofossilfree.org/frequently-asked-questions/</u>
- ⁵⁸Northeastern University, 2015a.
- ⁵⁹ Intergovernmental Panel on Climate Change. (2014). Climate Change 2014 Synthesis Report Summary for Policymakers. Retrieved from http://ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf
- ⁶⁰ The B Team. (2015). Net-Zero Goal Is Needed for the World, and Is Good for Business. Retrieved from http://bteam.org/wp-content/uploads/2015/09/B-Team-Net-Zeroby2050-Press-Release.pdf
- ⁶¹ The B Team. (2015). Five More Companies Now on the Path to Net-Zero. Retrieved from <u>http://bteam.org/announcem.ents/five-more-companies-now-on-the-path-to-net-zero/</u>
- ⁶² Duke University. (2015). Sustainability Strategic Plan: 2015 Progress Report. Retrieved from <u>http://sustainability.duke.edu/2015/</u>
- ⁶³ Skorton, D. (2015). President's commitment to climate neutrality. Retrieved from <u>http://statements.cornell.edu/2015/012915-climate-commitment.cfm</u>
- ⁶⁴ Northeastern University, 2015a.
- ⁶⁵ Northeastern University. (2016c). Course Descriptions. Retrieved from <u>http://www.northeastern.edu/registrar/ref-udc-dscr.pdf</u>
- ⁶⁶ Luzzi, D. (2016). A Message from the Senior Vice Provost for Research. Retrieved from <u>http://www.northeastern.edu/research/about/from-the-senior-vice-provost/</u>
- ⁶⁷ Fesenmaier, K. (2014). Caltech's Green Revolving Fund: Financing Energy Efficiency. Retrieved from https://www.caltech.edu/news/caltechs-green-revolving-fund-financing-energy-efficiency-43576
- ⁶⁸The University of North Carolina at Chapel Hill. (2016). Green Revolving Fund. Retrieved from <u>https://save-</u> energy.unc.edu/RevolvingFunds
- ⁶⁹ Harvard University. (2016a). Green Revolving Fund: Smart Investing for the Future. Retrieved from <u>http://green.harvard.edu/programs/green-revolving-fund</u>
- ⁷⁰ Northeastern University, 2015a.
- ⁷¹ Horrigan, L., Lawrence, R. S., & Walker, P. (2002). How sustainable agriculture can address the environmental and human health harms of industrial agriculture. Environmental Health Perspectives, 110(5), 445–456. Retrieved from <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240832/</u>
- ⁷² University of Maryland. (2015). Campus Sustainability: Sustainability Fund Grants. Retrieved from <u>http://www.sustainability.umd.edu/content/about/fund.php</u>
- ⁷³ Michigan State University. (2016). Be Spartan Green Student Project Fund. Retrieved from <u>http://bespartangreen.msu.edu/student-grants.php</u>
- ⁷⁴ Harvard University. (2016b). Sustainability: Student Grants. Retrieved from <u>http://green.harvard.edu/programs/student-grants</u>

- 30 -

- ⁷⁵United States Securities and Exchange Commission. (2015). Form 10-K: Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Fiscal Year Ended December 31, 2014: Peabody Energy Corporation. Washington, DC: U.S. Securities and Exchange Commission. Retrieved from <u>http://www.sec.gov/Archives/edgar/data/1064728/000106472815000021/btu-20141231x10k.htm#s094BE7301C553BBCD B4FAAFEAB7DF6DB</u>
- ⁷⁶ Union of Concerned Scientists. (2007). Smoke, Mirrors & Hot Air: How ExxonMobil Used Big Tobacco's Tactics to Manufacture Uncertainty on Climate Science. Cambridge, MA: Seth Shulman. Retrieved from <u>http://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/exxon_report.pdf</u>
- ⁷⁷Northeastern University: University Libraries. (2016). 1980s. Retrieved from <u>http://library.northeastern.edu/archives-special-collections/find-collections/northeasternhistory/timeline/1980s</u>
- ⁷⁸ Stein, M. Personal communication with Mara Scallon. (2015).
- ⁷⁹ Stein, M. (2015). Cooperative Education and Career Development Employer Handbook. Boston, MA. Retrieved from <u>http://www.northeastern.edu/coop/wp-content/uploads/2015/05/Co-op-Employer-Handbook-2015.pdf</u>
- ⁸⁰ Burrow, S. (2015). How will climate change affect jobs? World Economic Forum. Retrieved from <u>https://www.weforum.org/agenda/2015/12/how-will-climate-change-affect-jobs/</u>
- ⁸¹ Gold, H. and Schor, E. (2015). Exxon takes aim at Columbia University journalists over climate reports. Politico. Retrieved from <u>http://www/politico.com/blogs/on-media/2015/11/exxonmobil-climate-change-ethics-allegations-columbia-university-216287</u>
- ⁸² Parker, C. (2016). Corporate Firm Discontinues Law Student Funding Amidst Controversy. The Crimson. Retrieved from <u>http://www.thecrimson.com/article/2016/2/18/firm-discontinues-HLS-student-funding/</u>
- ⁸³ Winters, J. (2014). Salaita emails reveal possible donor influence in Wise's decision. The Daily Illini. Retrieved from: <u>http://www.dailyillini.com/article/2014/09/salaita-emails-reveal-possible-donor-influence-in-wisesdecision</u>
- ⁸⁴ MacGillivray, D. (2015). Interview by Cynthia Woolbright: Trends in Advancement. Retrieved from <u>http://www.woolbrightgroup.com/articles/trends-in-advancement/</u>
- ⁸⁵ McKibben, B. 2013.
- ⁸⁶ The Multi-School Divestment Fund. (2016). Retrieved from <u>http://www.divestfund.org/</u>
- ⁸⁷ DivestNU. (2015). Climate Legacy Pledge. Northeastern University, Boston, MA. Retrieved from <u>http://divestnu.org/climatelegacy/</u>
- ⁸⁸ McKibben, B. 2013.
- ⁸⁹ Nedell, T. Personal conversation with Austin Williams. (2014).
- ⁹⁰ Cummings, J. (2013). How to divest fossil fuel investments, and maybe impress the kids. Thomson Reuters. Retrieved from <u>http://www.reuters.com/article/us-fossil-fuel-idUSBRE9780KX20130809</u>
- ⁹¹ The Economist. (2013). Crash Course: the Origins of the Financial Crisis. The Economist. Retrieved from <u>http://www.economist.com/news/schoolsbrief/21584534-effects-financial-crisis-are-still-being-felt-five-years-article</u>
- ⁹² Juhasz, A. (2013). Big Oil's Big Lies About Alternative Energy. Rolling Stone. Retrieved from http://www.rollingstone.com/politics/news/big-oils-big-lies-about-alternative-energy-20130625
- 93 Juhasz, 2013.
- ⁹⁴ Carbon Tracker Initiative. (2013). Unburnable carbon 2013: Wasted capital and stranded assets. London, United Kingdom: Carbon Tracker Initiative. Retrieved from <u>http://www.carbontracker.org/report/wasted-capital-and-stranded-assets/</u>
- ⁹⁵ Macalister, T. (2015). BP dropped green energy projects worth billions to focus on fossil fuels. The Guardian. Retrieved from <u>http://www.theguardian.com/environment/2015/apr/16/bp-dropped-green-energy-projects-worth-billions-to-focus-on-fossil-fuels</u>
- ⁹⁶ Worstall, T. (2015). It's Ridiculous To Expect Shell And BP To Invest In Green Energy. Forbes. Retrieved from <u>http://www.forbes.com/sites/timworstall/2015/01/21/its-ridiculous-to-expect-shell-and-bp-to-invest-in-green-energy/</u>
- ⁹⁷ Strott, E., Carey, C., Greer, B., & Rojas, R. (2015). Shareholder Activism. Pricewaterhouse coopers. Retrieved from <u>https://www.pwc.com/us/en/corporate-governance/publications/assets/pwc-shareholder-activism-full-report.pdf</u>
- ⁹⁸ Ceres. (2015). Shell Climate and Carbon Asset Risk Reporting. Retrieved from <u>http://www.ceres.org/investor-network/resolutions/shell-climate-and-carbon-asset-risk-reporting</u>

⁹⁹ GreenReportCard.org, 2011.

- ¹⁰⁰ US Environmental Protection Agency. (2016). Draft U.S. Greenhouse Gas Inventory Report: 1990 2014 Executive Summary. Washington, D.C. Retrieved from <u>https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Chapter-Executive-Summary.pdf</u>
- ¹⁰¹ Carrington, D. (2015a). The Guardian. Retrieved from <u>http://www.theguardian.com/environment/2015/feb/05/worlds-biggest-sovereign-wealth-fund-dumps-dozens-of-coal-companies</u>
- ¹⁰² Lapin, L. (2014). Stanford to divest from coal companies. Retrieved from http://news.stanford.edu/news/2014/may/divest-coal-trustees-050714.html
- ¹⁰³ Gunther, M. (2015). Why the Fossil Fuel Divestment Movement May Ultimately Win by Marc Gunther: Yale Environment 360. Yale Environment 360. Retrieved from <u>http://e360.yale.edu/feature/why_the_fossil_fuel_divestment_movement_may_ultimately_win/2898/</u>
- ¹⁰⁴ OPEC.org. (2015). Organization of the Petroleum Exporting Countries. Retrieved from http://www.opec.org/opec_web/en/index.htm
- ¹⁰⁵Carrington, D. (2015b). Carbon reserves held by top fossil fuel companies soar. The Guardian. Retrieved from <u>http://www.theguardian.com/environment/2015/apr/19/carbon-reserves-held-by-top-fossil-fuel-companies-soar</u>
- ¹⁰⁶ Carrington, 2015b.
- ¹⁰⁷ Penn, I. California to investigate whether Exxon Mobil lied about climate-change risks. Los Angeles Times. Retrieved from <u>http://www.latimes.com/business/la-fi-exxon-global-warming-20160120-story.html</u>
- ¹⁰⁸ The Claremont Colleges Divestment Campaign. (2013). Report to the Trustee Investment Committee. Retrieved from <u>https://docs.google.com/document/u/1/d/10NuF4xzU7zEblsRSCPALir2QUy_fVMVSNmiiuFi-</u> G7Q/pub
- ¹⁰⁹ Grady-Benson, J. et al. (2013). Pitzer College: Leadership in Climate Action through Fossil Fuel Divestment. Retrieved from <u>https://docs.google.com/document/d/1OwbeA-dQTzXjJoz-LWHfLlZ1BdGJo1pfSIp-RwCDjjc/pub</u>
- ¹¹⁰ Gould, D. (2013). Pitzer College A Case Study in Fossil Fuel Divestment [PowerPoint slides]. Retrieved from http://www.mayorsinnovation.org/images/uploads/pdf/Gould.pdf
- ¹¹¹ Swann, S. (2015.) Syracuse University announces it will divest from fossil fuels. The Daily Orange. Retrieved from http://dailyorange.com/2015/03/syracuse-university-announces-it-will-divest-from-fossil-fuels/
- ¹¹² Swann, S. (2015). Syracuse University administrators work to continue divestment commitment. Retrieved from <u>http://dailyorange.com/2015/12/syracuse-university-administrators-work-to-continue-divestment-commitment/</u>
- ¹¹³ Zuber, M. (2014). Letter to the community on the MIT Climate Change Conversation. Retrieved from <u>http://news.mit.edu/2014/zuber-letter-climate-change-conversation-0919</u>
- ¹¹⁴ Stocker, R. et al. (2015). Report of the MIT Climate Change Conversation Committee: MIT and the Climate Challenge. Retrieved from <u>http://web.mit.edu/vpr/climate/climatereport.html</u>
- ¹¹⁵ Cambridge City Council. (2015). Resolution 10. Retrieved from <u>http://www.fossilfreemit.org/2015-06-22-</u> cambridge-city-council-backs-mit-divestment/
- ¹¹⁶ Supran, G. (2015). World renowned climate scientists and advocates join calls for MIT to heed its own committee's advice to divest from fossil fuels in open letter. Retrieved from <u>http://www.fossilfreemit.org/wp-</u> <u>content/uploads/2015/09/PRESS-RELEA SE-MIT-Divestment-Open-Letter.pdf</u>
- ¹¹⁷ Reif, L. et al. (2015). A Plan for Action on Climate Change. Retrieved from <u>http://web.mit.edu/climateaction/ClimateChangeStatement-2015Oct21.pdf</u>
- ¹¹⁸ Reif, L. et al. (2015).
- ¹¹⁹ Fossil Free MIT. (2015). Opinion: GUEST COLUMN: MIT's Climate Plan doesn't add up. So we're sitting-in. The Tech. Retrieved from <u>http://tech.mit.edu/V135/N29/fossilfree.html</u>
- ¹²⁰ Fossil Free MIT. (2015). In the News. Retrieved from <u>http://www.mitsitin.org/in-the-news/</u>
- ¹²¹ Krantz, L. (2016). Protesters, MIT administration reach agreement to end sit-in. The Boston Globe. Retrieved from https://www.bostonglobe.com/metro/2016/03/03/protesters-mit-administration-reach-agreement-endsit/BaPT9V8e1R7is4iD1BGj8N/story.html

- ¹²² Brooks, L. (2014). Glasgow becomes first university in Europe to divest from fossil fuels. The Guardian. Retrieved from <u>http://www.theguardian.com/environment/2014/oct/08/glasgow-becomes-first-university-in-europe-todivest-from-fossil-fuels</u>
- ¹²³ Baumert, S. (2014). How we persuaded the University of Glasgow to divest from fossil fuels. Red Pepper Blog. Retrieved from <u>http://www.redpepper.org.uk/how-we-persuaded-the-university-of-glasgow-to-divest-from-fossil-fuels/</u>
- ¹²⁴ University Court of University of Glasgow. (2014). Court: Minute of Meeting held on Wednesday 25 June 2014 in the Senate Room. http://www.gla.ac.uk/media_350018_en.pdf
- ¹²⁵ Mandel, K. (2015). Six Months Later: Glasgow University's Fossil Fuel Divestment Is Only Just Beginning. DeSmog UK. Retrieved from <u>http://www.desmog.uk/2015/03/19/six-months-later-glasgow-university-s-fossil-fuel-divestment-only-just-beginning</u>
- ¹²⁶ Glasgow University Climate Action Society. (2016). Glasgow University Climate Action Society. Facebook. Retrieved from <u>https://www.facebook.com/gucasociety/</u>

Additional Works Utilized

- Brown University's Advisory Committee on Corporate Responsibility in Investment Policies. (2015). ACCRIP Coal. Retrieved from <u>http://www.brown.edu/about/administration/advisory-committee-corporate-responsibility-investment-policies/sites/brown.edu.about.administration.advisory-committee-corporate-responsibility-investment-policies/sites/brown.edu.about.administration.advisory-committee-corporate-responsibility-investment-policies/sites/brown.edu.about.administration.advisory-committee-corporate-responsibility-investment-policies/sites/brown.edu.about.administration.advisory-committee-corporate-responsibility-investment-policies/files/uploads/ACCRIP%20Coal%20Recommendation%20-%20April%202013.pdf</u>
- Carney, M. (2015). Breaking the Tragedy of the Horizon: climate change and financial stability. Speech, London, United Kingdom. Retrieved from http://www.bankofengland.co.uk/publications/Documents/speeches/2015/speech844.pdf
- Exploratory Committee on Fossil Fuel Divestment. (2015). Exploratory Committee on Fossil Fuel Divestment Final Report and Recommendations. Waltham, MA. Retrieved from http://www.brandeis.edu/now/2015/april/pdfs/fossil-fuel-divestment-april-2015.pdf
- Fossil Free MIT. (2014). The Fossil Fuel Industry's Role in Hindering Climate Change Action: Lobbying and Disinformation Against Science and Scientists. Retrieved from <u>http://www.fossilfreemit.org/wp-content/uploads/2014/08/FossilFreeMIT-Lobbying-Disinformation.pdf</u>
- Impax Asset Management. (2015). Beyond Fossil Fuels: The Investment Case for Fossil Fuel Divestment. Retrieved from <u>http://www.impaxam.com/media-centre/white-papers/beyond-fossil-fuels-investment-case-fossil-fuel-divestment</u>
- Karp, A. (2012). The Overwhelming Case for Divestment. Lowell, MA. Retrieved from <u>http://d3n8a8pro7vhmx.cloudfront.net/endowmentethics/pages/39/attachments/original/1382733</u> <u>638/The Argument for Fossil Fuel Divestment.pdf?1382733638</u>
- Lederer, K. (2015). Defunding Climate Change. The New Yorker. Retrieved from http://www.newyorker.com/business/currency/defunding-climate-change
- McGlade, C., & Ekins, P. (2015). The geographical distribution of fossil fuels unused when limiting global warming to 2 °C. Nature, 517(7533), 187-190. <u>http://dx.doi.org/10.1038/nature14016</u>
- Office of the President, Tufts University. (2014). Recommendations of the Tufts Divestment Working Group - Office of the President. Retrieved from <u>http://president.tufts.edu/recommendations-of-the-</u> <u>tufts-divestment-working-group/</u>
- Rubin, R. (2015). Speech at the Climate Leadership Conference. Speech, Washington, D.C. Copy of speech retrieved from <u>http://riskybusiness.org/blog/robert-rubin-climate-leadership-conference-speech</u>
- Steyer, T. (2013). Statement to the Middlebury College Board of Trustees. Speech, Middlebury College, Vermont. Retrieved from <u>http://www.middlebury.edu/media/view/446775/original/steyer_statement.docx</u>