

PRESIDENTIAL TASK FORCE TO EXAMINE DIVESTMENT

FINAL REPORT TO THE BARNARD COLLEGE BOARD OF TRUSTEES COMMITTEE ON INVESTMENTS December 7, 2016



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EXECUTIVE SUMMARY

BACKGROUND

Barnard's Board of Trustees established the Presidential Task Force to Examine Divestment at its meeting on December 9, 2015, as a result of an effective year-long student campaign from the group Divest Barnard to convince Barnard's administration and Board to consider divesting its endowment from fossil fuel companies.

The goal of the Task Force is to enable the Investment Committee and, subsequently, the Board of Trustees, to make an informed decision about whether to seek divestment from companies that extract, process, distribute, and sell fossil fuels. President Spar charged the Task Force "to work collaboratively with a cross-section of the Barnard community to assess the financial implications of divestment; to understand Barnard's ethical responsibilities as a good global citizen in dealing with the impact of climate change; and to make a determination about the compatibility of these priorities."

Over the course of nine months, the Task Force weighed the financial and fiduciary responsibilities of the Board to grow the value of Barnard's endowment and the moral and ethical issues surrounding Barnard's responsibility to do its part to address the climate change issue.



KEY FINDINGS

In assessing the issues, the Task Force arrived at the following conclusions:

- Climate change, caused largely by the combustion of fossil fuels, adversely affects the environment and society, exacerbating inequality in the developing world. The Task Force agrees that climate change presents a real threat to the environment and Barnard, as a good global citizen, needs to do its part to mitigate its impact.
- The Task Force believes that Barnard should pursue a robust climate action plan within its own community, including from individual members. Reducing the demand for fossil fuels on campus and advancing research, education and engagement on this issue are critical ways in which Barnard can foster sustainability and environmental responsibility.

- The Task Force agrees that fossil fuel divestment may not have a direct impact on the financial condition of fossil fuel companies but can represent a symbolic act that, along with other voices, might ultimately pressure governments and fossil fuel companies to modify their behaviors and make responsible decisions to mitigate the impact of climate change.
- A decision to divest must be balanced with the need to protect and grow the endowment. The Task Force recognizes that a robust endowment is a critical component of Barnard's financial health and the Board should take no action that would undermine its growth.
- The Task Force acknowledges that it is not possible to accurately predict what financial impact divestment will have on the endowment. But, the Task Force agrees that a decision by the Board to divest could present some risk that the Investment Committee will have to work to manage with Barnard's Outsourced Chief Investment Office (OCIO).
- The Task Force believes that there should be a very high threshold for the Board to consider divesting investments from a particular industry and that climate change meets this threshold. Any future issue must be discussed on its merits and must meet this very high threshold.
- Therefore, a decision on fossil fuels should not be viewed as a precedent for other issues in the future.
- Accordingly, the Task Force believes that Barnard's endowment needs to be flexible enough to react to changing priorities that could influence where and how the endowment is invested. The Investment Committee should consider flexibility as a key attribute of any OCIO firm engaged by the College.

RECOMMENDATIONS

DIVESTMENT

The Task Force recommends that the Board commit to a good faith effort to divest the endowment from any investments in fossil fuel companies that deny climate science or otherwise seek to thwart efforts to mitigate the impact of climate change and bring these investments to as close to zero as possible. The Task Force recommends that the Committee on Investments work with Barnard's OCIO to assess the efficacy of this approach and regularly report to the Committee. To assist the OCIO in its work, the Task Force recommends that the Committee on Investments establish a working group of students, faculty, staff, and trustees to (1) develop a definition of climate denial that the Committee can use in discussions with an OCIO and (2) work with the OCIO on a process to vet fossil fuel companies (using the top 200 fossil fuel companies as a starting point) against the criteria as candidates for possible divestment. The Task Force also recommends that the Board divest from companies that mine coal and tar sands and work with Barnard's OCIO to ensure that its endowment gets as close to zero exposure (no greater than >0.01% of the endowment) to these types of fossil fuels as soon as possible.

In arriving at these recommendations, the Task Force considered five investment options:

Option 1: Maintaining the status quo. Barnard would make no changes to its current investment strategy;

Option 2: Making an investment in a fund focused on alternative energy. This option would signal of Barnard's support for carbon free alternatives;

Option 3: Divesting from companies that mine coal and tar sands. Under this approach, Barnard would work with its OCIO to ensure that its endowment gets as close to zero exposure (no greater than >0.01% of the endowment) to these types of fossil fuels as soon as possible. This option would also recommend an investment in a sustainability fund focused on alternative energy.

Recommended

Option 4: Divest from companies that deny climate science. This option would divest from coal and tar sands and would also divest from all companies that actively deny climate science. Barnard would work with its OCIO to implement this commitment in such a manner to protect the returns of the endowment.

Option 5: Full divestment. Under this option, Barnard would commit to reducing the endowment's exposure to fossil fuels to as close to zero as possible over the next 5 years and would work with its OCIO to implement this commitment in such a manner to protect financial returns of the endowment.

The Task Force settled on Option 4 for a number of reasons. Investing in companies that actively distort climate science findings, deceive the public, or block efforts to accelerate a transition to a cleaner economy constitute an affront to Barnard's mission as an academic institution. As stated in a recent report by the Union of Concerned Scientists (UCS), "All companies operate with a social license, and companies that fail to act responsibly can lose the public trust."1 By urging divestment from these firms, Option 4 would align Barnard's investments with its core mission, centered as it is on academic freedom and scientific integrity. Moreover, by distinguishing among fossil fuel producers and selectively screening out those whose practices most clearly obstruct the adoption of evidence-based policies, Option 4 would allow the College to reward companies transitioning to a cleaner economy and create incentives for the poorest performers to change their ways. Selective divestment would also allow Barnard to carve a new and distinctive path of engagement, reflecting the College's independence of thought and its willingness to innovate. Our strategy could serve as a template for those institutions still grappling with this decision, and perhaps induce those who have previously made different decisions to reconsider.

The Task Force did not make this recommendation without a clear-eyed view of the difficulties we face in its implementation; there remain serious questions about how such an approach could be put into practice. Defining climate-denying behaviors and continually monitoring the industry are key challenges. In this regard, the Task Force developed possible criteria against which to screen fossil fuel companies based on the work of the Union of Concerned Scientists (UCS) in its *Climate Accountability Scorecard: Ranking Major Fossil Fuel Companies on Climate Deception, Disclosure, and Action* (http://www.ucsusa.org/global-warming/fight-misinformation/climate-accountability-scorecard-ranking-major-fossil-fuel-companies#.WCNb5lUrKUk). In our discussions on definitions, we also considered Columbia University's Advisory Committee on Socially Responsible Investing's (ACSRI) "stand up for science"

¹ http://www.ucsusa.org/global-warming/fight-misinformation/climate-deception-dossiers-fossil-fuel-industry-memos#.WDGxftUrKUk

approach² to judge companies on whether they deny or affirm climate science. The Task Force decided to use the UCS criteria as a starting point. These criteria include the extent to which a company (1) renounces disinformation on climate science and policy, (2) plans for a world free from carbon pollution, (3) supports fair and effective climate policies, and (4) fully discloses climate risks. Section 5 discusses these criteria in more detail. While Option 4 will be difficult, the Task Force agrees that the value of making a good faith commitment to divest from these companies outweighs any implementation challenges we face.

> For Barnard, what speaks most directly to our mission is the link between the behavior of fossil fuel companies in their approach to climate change and the cause of academic freedom.

The Task Force seriously considered Option 5 but agreed that its coverage is too broad and that it lacks the science-based differentiation and connection to Barnard's academic mission presented in Option 4. The Task Force believes it is the responsibility of governments to change laws and regulations in order to account for the immense potential costs of fossil fuel combustion. Option 4 furthers the cause of bringing about these changes, while Option 5 may hinder it by painting all companies with the same broad brush. Moreover, a blanket ban on an entire industry would raise questions of academic and scientific bias; Barnard-based research relating to fossil fuels could be questioned because it is supported by an institution that has taken a stand against the sector as a whole.

SUSTAINABILITY

The Task Force agreed that reducing Barnard's carbon footprint is an essential part of a broader climate action plan. Barnard has a unique opportunity and special responsibility to pilot innovative programs and set audacious goals that can serve as a model for campuses around the country. While Barnard already has a robust, if unsung, sustainability program overseen by the Tripartite Committee on Sustainability, the Task Force agreed that Barnard can do more. The Task Force proposes that Barnard:

- Issue a clear and public sustainability mission and value statement;
- Develop a climate action plan with clear, time-bound and measurable goals

in the areas of energy, consumption and waste, campus environment, and curricula and research;

- Launch a campus-wide process of community engagement to set and achieve measureable goals, generate community buy-in, and foster a campus culture of sustainability; and
- Create the personnel and budgetary structure necessary to achieve our goals to include:
 - Creating a position of Sustainability Dean or Officer, charged to work with student, faculty, and staff representatives on the Tripartite Committee, and with our neighbors in the community and at Columbia;
 - Working with functional departments on campus to appoint a sustainability representative to participate in identifying and implementing specific goals for each department; and
 - Allocating 5-10% of the Campus Services Repair and Rehabilitation (R&R) budget for sustainability initiatives, with priorities determined by the Tripartite Committee.

SUMMARY OF THE DIVESTMENT DEBATE

Clearly, Barnard cannot solve the daunting problem of climate change alone but, as a global citizen and global academic leader, the College is obligated to do its part. Some, such as the student group Divest Barnard, which convinced the Board of Trustees to seriously review the issue of divestment, argue that we have a moral imperative to act. While that is true in great part, the issues are complicated, engaging such questions as:

- How can we ensure that our endowment is aligned with our mission?
- Will divestment have any impact on the behavior of fossil fuel companies or governments to act to mitigate the impacts of climate change? and
- Will divestment impact the value of our endowment in the future, and if so, how?

The Task Force reviewed how the divestment debate has unfolded over the past few years. The arguments surrounding this issue are complex, nuanced, and sometimes contradictory, and those institutions who have gone before us have justified their decisions for different reasons. It is important to note that most institutions of higher education that have considered the divestment question have chosen not to divest.

Proponents of divestment argue that because of the detrimental impact of climate change on society we have a moral imperative to act. Since Barnard both uses fossil fuels and profits from investments in fossil fuel companies, we are contributing to the problem. Given this, we should work to align our investments with our mission if we place a high value on academic integrity. Scholars should have the freedom to teach and communicate ideas including those that are inconvenient to external political groups or to authorities without being targeted for repression, job loss or imprisonment. Shedding investments from companies that have worked to deny climate science would certainly align our endowment with our approach to science. But there are counter-arguments. Many institutions have argued that endowments should not be used to make political statements and view divestment as actually undermining a commitment to academic freedom; Harvard notes, for example, that inserting politics into the endowment presents risks to the "independence of the academic enterprise."³

One question that pervades the debate over divestment is whether it will have any impact at all in changing the behavior of fossil fuel companies. Because divestment entails a transfer of ownership in the secondary market for securities, it will not have an impact on the financial condition of fossil fuel companies—there will be a buyer for the assets that we sell. Some argue that fossil fuel companies are large investors in alternative energies, so punishing them by divesting will be counterproductive. That said, one cannot have it both ways: if divestment will have no impact on the financial condition of fossil fuel companies, it can't at the same time inhibit these companies from developing alternative sources of energy.

Proponents of divestment recognize that divestment will not have a direct impact on the financial condition of fossil fuel companies, but note that it has symbolic power and the "chorus" of institutions who divest will ultimately influence governmental and private sector behavior. One observer argued that public action by influential organizations can create "immediate waves"⁴ within the broader movement, and an Oxford University study points to the pressure the global divestment movement can place on governments to take action to mitigate climate change by stigmatizing the industry.⁵ But some schools argue that divestment is not worth pursuing precisely because they believe it would be a purely symbolic, and thus hollow, act with no practical impact.

Among the critical questions facing the Board is whether divestment will have a financial impact on Barnard's endowment. The Task Force concluded that there is no way to accurately predict whether divestment will impact the endowment. Some argue that excluding fossil fuel investments will hurt returns given that the energy sector is a consistent part of the overall market. Others assert that investments in fossil fuels are risky given that oil and gas reserves will likely become "stranded" when governments begin to limit extraction to mitigate climate change impacts. Not surprisingly those colleges and universities that predicted that divestment would hurt the value of their endowment chose not to divest. Those institutions that expressed concerns that continued investment in fossil fuels is risky were more inclined to pursue divestment.

SOCIAL IMPACT

As part of its work, the Task Force considered the overall context in which Barnard faces the issues of fossil fuel divestment and climate action. These are certainly not the first political or social issues that the College has faced. Indeed, Barnard, like other educational institutions, confronted such challenges as divestment from South African apartheid in the 1980s, from tobacco in the 1990s, Darfur in the 2000s, and, most recently, private prisons and fossil fuels. The College has also faced other social issues, including the admittance of transgender students at Barnard, which rose to a Board level decision. What is clear is that through time, educational institutions, including Barnard, have responded inconsistently to political and social challenges. For example, many schools that chose to protest apartheid by divesting from

³http://www.harvard.edu/president/news/2013/fossil-fuel-divestment-statement

 $[\]label{eq:linear} {}^{4} \mbox{http://www.danielapfel.com/wp-content/uploads/2016/03/Exploring-Divestment-as-a-Strategy-for-Change.pdf}$

⁵ http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/SAP-divestment-report-final.pdf

companies invested in South Africa are today reluctant to divest from fossil fuels.

Decisions on how and when to act may have more to do with the scale and complexity of the problem. South Africa represented a clear violation of human rights, tobacco presented a public health issue, and the business model of private prisons is based on increasing incarceration rates. While all of these issues can be viewed as morally questionable, climate change and the role fossil fuels currently play in society are more complex issues than others we have faced.

FINANCIAL IMPLICATIONS FOR THE ENDOWMENT

The Task Force analyzed the key question of whether divestment will have a detrimental financial impact on Barnard's endowment, and we found that this is not possible to predict. We looked at five potential investment scenarios, both with and without fossil fuels. Using the average returns over the past ten years (2007-2016) for different indices, we projected these returns ten years into the future to gauge possible impacts on our endowment value. The details of our analysis can be found in section 4. For the five scenarios, the following investment return projections were used over a ten-year period from July 1, 2016 to June 30, 2026:

Scenario	Ten Year return as of 6/30/16	Annual change in spending vs status quo (Dollars in millions)
Status Quo-Total Assets	\$ -	
S&P 500 Excluding Energy Index	7.7%	+.6
S&P 500 Index	7.4%	+.4
MSCI ACWI Index	4.8%	-1.8
Status Quo–Global Equity Only	5.5%	-1.2

Based on the varied results of the projections, the Task Force concluded that it could not predict the future financial impact of fossil fuel divestment. Any change in the components of the College's endowment may have a financial risk on the endowment's performance but that risk cannot be quantified.

While fossil fuel divestment may limit the tools that an investment manager has at their disposal, the risk of that limitation cannot be fully measured. As a result, we believe that active management is critical to take advantage of opportunities available to the College.



SECTION 1 INTRODUCTION AND BACKGROUND

INTRODUCTION

At its meeting on December 9, 2015, Barnard College's Board of Trustees ("The Board") voted to establish the Presidential Task Force to Examine Divestment ("The Task Force").⁶ The Board acted on the recommendation of its Committee on Investments ("the Committee") that had earlier discussed the issue of fossil fuel divestment with students representing the group Divest Barnard. The establishment of the Task Force reflects the desire of both students and the Board to have the Barnard community carefully consider the issues to enable the Board to make an informed decision, as charged in the Task Force charter.⁷ The Task Force is a testament to effective student activism and the students' willingness to engage Barnard's senior administration and the Board on a critical issue.

⁶See Appendix 1 for the text of the Board Resolution.

⁷ See Appendix 2 for the Charter and Appendix 3 for the Task Force's work plan.

The Divest Barnard representatives made a compelling case to the Committee that the Board should thoughtfully consider divesting the College's endowment from fossil fuels. The students argued that climate change, caused by the extraction and use of fossil fuels, negatively impacts the environment and exacerbates disparities in air quality, water accessibility, and levels of poverty in the developing world, with women at the greatest risk. Knowing that a portion of Barnard's endowment is invested in fossil fuel companies, Divest Barnard sought to convince the Committee that Barnard College has a responsibility to align its investments with its mission.

The students' presentation to the Committee that December was the culmination of a 14 month-long campaign to convince the Barnard community to confront the issue of climate change and to forge Barnard's role mitigating its impacts. Beginning in the spring of 2015, the Chair of the Board, President Spar, senior administrators, the Chair of the Board's Committee on Investments, and select Trustees met with the students to discuss the issue. All agreed that the issue was worthy of review and that the students should be permitted to address the Committee directly. Among their requests, Divest Barnard asked the Committee to establish the Task Force and to promise that the Board would eventually vote on whether or not to divest from fossil fuels.

The Task Force, comprised of Trustees, faculty, students, and staff, met for the first time on February 16, 2016 and adopted a charter to guide its work. Broadly speaking, the purpose of the Task Force is to "enable the Committee on Investments and, subsequently, the Board of Trustees, to make an *informed decision* on whether to seek divestment from companies that extract, process, distribute, and sell fossil fuels (emphasis added)." The issue of fossil fuel divestment is a complicated one, worthy of careful study. It requires consideration of both the financial and fiduciary responsibilities of the Board to steward the College's endowment and the ethical concerns surrounding the College's investments in fossil fuels. The Task Force set out to tackle these issues in order to guide the action of the Board.

OVERVIEW OF BARNARD'S ENDOWMENT

Like all institutions of higher education, Barnard's endowment is a critical source of funding for both current and future operations. The endowment consists of nearly 900 individual funds established for a variety of purposes and sourced from donor and Board of Trustee-designated funds. These individual funds are pooled and invested as a single endowment. The endowment is currently managed by Investure, LLC and is invested in a consortium with Investure's 13 other clients.

The College's objective for its endowment is to invest its assets in a prudent manner to achieve a long-term rate of return sufficient to fund a portion of its operating budget (on an annual basis) and to maintain the endowment's purchasing power by increasing its market value equal to or above inflation. The College uses a diversified investment approach incorporating multiple asset classes, strategies, and managers.

On an annual basis, the College draws funds from the endowment to cover approximately 7% of its operating budget. These drawn funds are known as the "annual endowment spending." Annual endowment spending is set at 5% of the rolling three-year average of the endowment's market value as of December 31st. In fiscal year 2016, the annual endowment spending for the College's operating budget was \$12.8 million. Funds from the endowment are designated for specific purposes, with the vast majority used to fund endowed faculty chairs, faculty research, student internships, and financial aid.

Investure functions as a consortium whereby Barnard's endowment is pooled with those of the other clients providing access to top investment managers, investment opportunities, and custodial structures. Because of this structure, Barnard does not directly manage its endowment portfolio. Rather, we rely on Investure to identify and evaluate investment opportunities, make investments, and choose investment managers on our behalf. Barnard's Board of Trustees has mandated Investure to balance risk while achieving the highest possible returns in accordance with Barnard's investment objectives. While Investure does not directly invest Barnard's endowment in fossil fuel companies, it does invest with managers via limited partnership funds who, in turn, may invest in fossil fuels as part of an overall portfolio. Given that the energy sector represents 6% - 7% of the largest financial indexes, many investment managers seek investments in fossil fuel companies largely to maintain portfolio diversity and manage portfolio risk. As of June 30, 2016, Barnard's exposure to fossil fuel investments represented nearly 7% of its total endowment portfolio. For this calculation, fossil fuel investments are defined as investments in the "Carbon Underground 200" which are defined as "the 200 largest public coal, oil, and gas companies based on estimates of the potential CO₂ emissions of their reported reserves."8

WHAT IS CLIMATE CHANGE AND WHY IS IT IMPORTANT?

Climate change is caused primarily by an exacerbation of the greenhouse effect whereby gases, such as carbon dioxide (CO_2) and methane, absorb and trap heat within the earth's atmosphere. The greenhouse effect, running its natural course, makes the earth habitable, compared to the moon, for example, which has no atmosphere. However, excessive CO_2 emissions from human activities, generated largely from the burning of fossil fuels, deforestation, and land use are increasing global temperatures impacting such things as weather, sea levels, and food and water security. There is a global scientific consensus, codified most recently in the 2015 Paris Agreement⁹ that nations must work together to limit warming temperatures to well below 2°C. To achieve this goal, countries will have to limit CO_2 emissions by foregoing extracting fossil fuels, as well as invest in negative emissions through reforestation, carbon capture, and sequestration. These goals will be impossible to meet without major carbon reduction from the world's two largest carbon emitting countries, the United States and China.

SOCIETAL IMPACTS OF CLIMATE CHANGE: Climate change has significant implications for society. The World Economic Forum listed climate change as a top global risk in 2016 and expressed concern that global increases in temperatures will mean higher risk of coastal and inland flooding, storm damage, stress on infrastructure, heat waves, multi-decade droughts, widespread food shortages,

⁸ Definition from "The Carbon Underground 2015 Edition" (February, 2015)

⁹ The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C.

The science behind climate change

In the natural carbon cycle, an equal amount of CO_2 is both emitted into the atmosphere (i.e. through decomposition, respiration) and absorbed by carbon sinks (i.e. plants, oceans) so that a balance is maintained. However, since the Industrial Revolution, greater amounts of CO_2 have been emitted to the atmosphere while, at the same time, human activity has diminished carbon sinks. This has hindered the earth's natural ability to regulate carbon levels and has contributed to warming global temperatures.

Industrialized and industrializing nations are emitting CO_2 at increasing rates, with the U.S., China and the EU accounting for over 50% of global emissions.¹⁰ For the past 10,000 years, atmospheric CO_2 concentrations have remained stable at about 280ppm¹¹ (parts per million). The current concentration of CO_2 in the atmosphere is 405ppm¹² and is increasing at a rate of 2ppm per year. CO_2 accounts for nearly 80% of greenhouse gas emissions today and CO_2 emissions have increased by close to 90% since 1970.¹³

The immediate environmental impacts of climate change include rising global temperatures and sea levels, melting of polar ice sheets, increasing intensity of tropical storms, and ocean acidification. Warming may trigger "positive feedback loops," like permafrost thaw, whereby CO_2 and methane gas previously trapped in the permafrost are released into the atmosphere, triggering more warming and thus more melting. Many changes to environmental systems, including ocean warming, glacier melt, and permafrost thaw, will take centuries to millennia to reverse. As noted by Gary Yohe, a participant in drafting the 2014 International Panel on Climate Change report, "It's not too late, but the longer you wait, the more expensive it gets."¹⁴

species extinction, higher risk of civil conflict, and increased poverty.¹⁵ The U.S. Department of Defense classified climate change as a top national security threat in 2015,¹⁶ and according to the 2015 White House National Security Strategy, "Climate change is an urgent and growing threat to our national security, contributing to increased natural disasters, refugee flows, and conflicts over basic resources like food and water."¹⁷

¹⁰https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data

¹¹ http://earthobservatory.nasa.gov/Features/CarbonCycle/page4.php

¹² ppm is the abbreviation of parts per million. i.e., in one million pounds of air there are 405 pounds of CO₂ gas.

¹³ https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data

¹⁴ https://www.washingtonpost.com/national/health-science/effects-of-climate-change-irreversibleun-panel-warns-in-report/2014/11/01/2d49aeec-6142-11e4-8b9e-2ccdac31a031_story.html

¹⁵ http://www3.weforum.org/docs/Media/TheGlobalRisksReport2016.pdf

¹⁶ http://archive.defense.gov/pubs/150724-congressional-report-on-national-implications-of-climatechange.pdf?source=govdelivery

¹⁷ https://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf

Global warming is of particular concern to populations that are already at risk. Communities with limited access to resources will face increased resource scarcity, drought, and famine. In areas where climate change exacerbates poverty, social upheaval, and political instability, women are particularly vulnerable. This is particularly relevant to Barnard, as an internationally recognized women's college. According to the U.S. Treasury Secretary, "the connection between gender and poverty remains, with women making up 70% of the one billion people who live in poverty worldwide."¹⁸ A report by UN Women finds "women are more vulnerable to the effects of climate change than men—primarily as they constitute the majority of the world's poor and are more dependent for their livelihood on natural resources that are threatened by climate change."¹⁹

Ordinarily, when the actions of some individuals result in uncompensated environmental damages to others, it falls to governments to alter the incentives to engage in such activities. This may be in the form of a regulation, such as restrictions on the presence of lead in gasoline or arsenic in drinking water, or it may be in the form of financial incentives, such as the requirement to purchase permits for sulfur dioxide emissions under the Clean Air Act Amendments of 1990. Unlike lead and sulfur dioxide, however, greenhouse gases are global pollutants whose impacts are felt independent of the location of the source. As a result, local regulation or taxation of such emissions will not reduce local damages, and lack of emission production will not result in climate protection—all humans are exposed to the threat regardless of their proportional contribution to the problem.

THE GLOBAL RESPONSE TO CLIMATE CHANGE: Reducing climate change requires international action. There have been attempts to coordinate an international governmental response to climate change beginning with the formation of the United Nations Framework Convention on Climate Change (UNFCCC), which was signed during negotiations in Rio de Janeiro in 1992. UNFCCC signatories have subsequently held meetings at annual Conferences of the Parties (COP) which have produced treaties such as the Kyoto Protocol (1997) and most recently the Paris Agreement at COP 21 (2015). Parties to the various COP agreements have agreed to "[Hold] the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change."²⁰ The United States did not ratify the Kyoto Protocol; President Obama ratified the Paris Agreement in September, 2016²¹ but it is unclear how the new Administration will treat the Paris Agreement.

On November 4, 2016, the Paris Agreement officially entered into force. As of this writing, 105 signatories representing 75% of global emissions ratified the agreement.²² As international consensus grows around the necessity to enforce a 2°C upper-limit of warming, government-implemented emissions restrictions may strengthen. Some have taken action already. For example, Norway has adopted legislation to create binding greenhouse gas emission targets for 2020, 2030, and 2050, and to set a series

¹⁸ https://www.treasury.gov/press-center/press-releases/Pages/jl1901.aspx

¹⁹ http://www.uncclearn.org/sites/default/files/inventory/unwomen704.pdf

²⁰ http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf

²¹ https://www.whitehouse.gov/blog/2016/09/03/president-obama-united-states-formally-enters-paris-agreement

²² http://www.wri.org/faqs-about-how-paris-agreement-enters-force

of carbon budgets for the government.²³ Several Pacific Island nations are in the process of negotiating a treaty to ban fossil fuels and "bind signatories to targets for renewable energy" for their national security, and to comply with the Paris COP21 agreement.²⁴ So far, though, governments, including the United States, have taken limited actions to control extraction or consumption of fossil fuels.

THE GLOBAL DIVESTMENT MOVEMENT

ORIGINS OF THE GLOBAL DIVESTMENT MOVEMENT: The Fossil Fuel Divestment campaign began in the United States in 2010 at Swarthmore College. It was launched in response to West Virginian coal miners' request that students at Swarthmore mobilize their college's resources to build awareness of the devastation caused by mountaintop removal. The Fossil Fuel Divestment campaign became national in 2012 with environmental scholar Bill McKibben's seminal article in *Rolling Stone*, "Global Warming's Terrifying New Math."²⁵ McKibben argued that a global Fossil Fuel Divestment campaign was needed to put pressure on policymakers to take urgent action on climate change mitigation after decades of failed environmental lobbying strategies around the world.

WHAT DOES THE GLOBAL DIVESTMENT MOVEMENT SEEK TO ACHIEVE? The

Fossil Fuel Divestment campaign is the product of a 30-year effort by environmental groups to pressure fossil fuel companies and other polluters to "clean up." The campaign has increased public awareness of the issues of carbon emissions and increased scrutiny of high-emitting industries, and, as with previous divestment campaigns, it is largely seen as a last resort for institutions to push for change where government leadership has failed.

As of June 2016, 36 American colleges and universities have committed to either partial or full fossil fuel divestment,²⁶ and there are active divestment campaigns on over 375 American college campuses. Globally, colleges and universities represent 13% of divested assets; faith-based groups represent 25%, foundations 21%, governmental organizations 19%, pension funds 12%, and non-governmental organizations, for-profits, and other organizations representing 10% of institutional divested assets.²⁷

BARNARD COLLEGE'S DIVESTMENT CAMPAIGN: The fossil fuel divestment campaign at Barnard began in the fall of 2012, when (then named) Barnard Columbia Divest was formed after McKibben campaigned for divestment at several college campuses during his 350.org "Do the Math Tour." In the fall of 2014, Barnard Columbia Divest split into the campus-specific campaigns Divest Barnard and Columbia Divest for Climate Justice. In the fall of 2015, Divest Barnard became a Student Governing Board (SGB)-recognized campus organization and had

²³ http://www.climatechangenews.com/2015/03/25/norway-parliament-approves-new-climatechange-law/

²⁴ https://www.theguardian.com/world/2016/jul/14/pacific-islands-nations-consider-worlds-first-treaty-to-ban-fossil-fuels

²⁵ http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719

²⁶ See Appendix 4 for a list of colleges and universities that have divested from fossil fuels in whole or in part

²⁷ http://gofossilfree.org/commitments/

several meetings with College leadership and with representatives from Investure, LLC culminating in the Divest Barnard presentation to the Board's Committee on Investments in December of 2015. In spring of 2016, a Student Government Association (SGA) referendum was passed with 96% of students voting in favor of divestment.²⁸ As a result, the SGA issued a statement of support for fossil fuel divestment. In 2016, the Barnard Divestment campaign received two awards: the student-nominated Barnard Bold Award for Leadership and an SGA Leadership Award.

²⁸ See Appendix 5 for the Divest Barnard Mission statement, the text of the SGA referendum, and the text of a student petition in favor of fossil fuel divestment.

SECTION 2 FOSSIL FUEL DIVESTMENT: THE DEBATE

Arguments around divestment are both nuanced and contradictory, and the potential financial implications of divestment are often speculative, assumption-based, and unclear. Institutions have based their decisions on what they value most and how they reconcile a desire to be responsive to action on climate change while protecting their endowments. Even among our peer institutions that have chosen not to divest, there is agreement that combating climate change is an imperative.

In our view there are three key questions surrounding fossil fuel divestment:

- What role should an institution's mission play in its investment strategies?
- Can divestment have a material impact on combating climate change?
- Is divestment a risky investment strategy?

What follows is our effort to outline the key arguments around these questions, with some supporting divestment and others arguing against it.

WHAT ROLE SHOULD MISSION PLAY IN AN INSTITUTION'S INVESTMENT STRATEGY?

The relationship between an institution's mission and its investment strategies plays a central role in the divestment debate. Proponents make a case that there is a moral imperative to combat climate change and that institutions should align their investments with their mission and values, however defined. Some institutions are reluctant to use their endowments to make political statements and are worried that divesting from fossil fuel companies is hypocritical when we all rely so heavily on fossil fuel products. Finally, there is a serious concern that fossil fuel divestment will lead to calls to divest from other industries, cannibalizing endowments. But here too, the "slippery slope" argument is not held by all.

MANY ARGUE THAT COMBATING CLIMATE CHANGE IS A MORAL IMPERATIVE: Of all

of the arguments for divestment, moral and ethical considerations seem paramount. The moral center of the divestment campaign is believed by many to be that, as members of society, we all have an ethical responsibility to limit destruction to the planet and its inhabitants. To uphold this ethical responsibility, institutions must take all actions available to them to support climate change mitigation. Investments in fossil fuel companies represent a moral issue that divestment can at least partially address. Even when institutions assume that divesting may have no practical impact on the financial bottom line or behavior of fossil fuel companies, in notable cases the ethical motivation to divest has won out.

The moral argument goes like this: Fossil fuel companies have a financial interest in extracting fossil fuel reserves that would release enough carbon to increase the earth's temperature above the 2°C threshold that the scientific community and world leaders consider safe. Rising global temperatures will have a serious impact on the environment with adverse effects on vulnerable populations, particularly women. While Barnard, like the rest of the world, has benefited from advances in society driven by fossil fuels,

Table 1 at the end of this section summarizes the arguments and counter-arguments in this debate. and is currently a consumer of them, the costs of continued, unfettered use of fossil fuels are becoming too high. Moreover, the argument goes, by investing in fossil fuel companies institutions like Barnard both *support* the industry's destructive practices and *profit* from them.

The moral or ethical argument is echoed by several institutions on both sides of the debate. Union Theological Seminary (UTS) chose to divest in 2014, noting that they have "a moral obligation to no longer profit from the production of fossil fuels."²⁹ Likewise, the University of Mary Washington, which chose to divest in 2016, argues that the "ethical concern at the center of the [global divestment movement] is the ... future habitability of the planet Earth in the face of incontrovertible evidence that greenhouse gas emissions from the use of fossil fuels are escalating climate change."³⁰ Finally, Pitzer College, which divested in 2014, explained that "Climate change is an existential threat, warranting bold and urgent action. The continued exploration for fossil fuel resources is incompatible with progress towards a livable planet..."³¹

Consuming fossil fuels and divesting from fossil fuel companies are not necessarily mutually exclusive acts. The purpose of the global divestment movement is aimed at transitioning to a clean-energy economy.

Even institutions that have chosen not to divest recognize the gravity of the problem and the clear link between fossil fuel combustion and climate change. Amherst College "acknowledges the grave threat posed by climate change, the role in climate change played by human activity, and the responsibility we bear to confront this challenge,"³² and Williams College states that combating climate change is "perhaps the central ethical problem of our time."³³ While these and other institutions chose not to divest, they did respond by undertaking other activities supporting climate action.

SOME CONTEND THAT ORGANIZATIONS SHOULD ALIGN THEIR INVESTMENTS

WITH THEIR MISSION: Several institutions see continued investment in fossil fuel companies as inconsistent with their mission and pursued divestment as a tool to

²⁹ https://utsnyc.edu/divestment/

³⁰ http://sustainability.umw.edu/files/2016/03/PCS-Divestment-Report-Small-File.pdf

³¹ http://pitweb.pitzer.edu/divestment-climate-action-model/

³² https://www.amherst.edu/amherst-story/facts/trustees/statements/node/600726

³³ http://committees.williams.edu/files/2015/09/ReportofACSR1.pdf

align them. For example, Stanford's announcement of divestment from coal in 2014 highlighted that "[divesting] is consistent with our institutional values and acknowledges the critical sustainability challenges facing our planet."³⁴ In 2014, the Rockefeller Brothers Fund (RBF) announced it planned to divest from fossil fuels because of its "deep commitment to combating climate change."³⁵ These institutions linked their decision to a broader commitment to climate action which included their investment choices.

The alignment of fossil fuel divestment with mission is not always clear cut. In 2015, Columbia University's Advisory Committee on Socially Responsible Investing (ACSRI) noted that Columbia's decision to divest from private prisons was rooted in concerns that the business prospects of private prisons is dependent on increases in already high levels of incarceration as to be "inconsistent with the University's mission and values," but it stopped short of linking fossil fuel divestment directly to mission largely because the University is a major user of fossil fuels.³⁶

For Barnard, what speaks most directly to our mission is the link between the behavior of fossil fuel companies in their approach to climate change and the cause of academic freedom. According to the American Association of University Professors (AAUP), institutions of higher education exist "for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends on the free search for truth and its free expression."³⁷ When truth-seeking research is challenged or targeted for political reasons or economic self-interest, the ability of academic institutions to fulfill this mandate is undermined.

There is ample evidence that fossil fuel companies have, either directly or through other groups, knowingly misled the public about the facts of climate change, suppressed climate science, or ignored evidence-based reasoning. According to the Union of Concerned Scientists' July 2015 report *The Climate Deception Dossiers*, "for nearly three decades, major fossil fuel companies have knowingly worked to distort climate science findings, deceive the public, and block policies designed to hasten our needed transition to a clean energy economy."³⁸ Robert Proctor of Stanford University points out that "climate deniers have conducted a kind of scavenger hunt for oddities that appear to challenge the overwhelming consensus of climate scientists."³⁹

Columbia's ACSRI explained in its November 17, 2015 response to student demands for divestment that the facts of anthropogenic influence on global climate are denied by important governmental leaders and that fossil fuel companies have "in various ways fostered denial of climate change science" to influence public policy formation. ACSRI sees divesting from identified, science-denying fossil

³⁴ http://news.stanford.edu/pr/2014/pr-divest-coal-trustees-050714.html

³⁵ http://www.rbf.org/about/divestment

³⁶ https://finance.columbia.edu/files/gateway/content/ACSRI/ACSRI%20Tar%20Sands%20 Proposal%208.31.16%20v2.pdf

³⁷ http://aaupuc.org/resources/aaup-core-principles/

³⁸ http://www.ucsusa.org/global-warming/fight-misinformation/climate-deception-dossiers-fossilfuel-industry-memos#.WC22WtUrKUk

³⁹http://www.nytimes.com/2016/11/20/opinion/climate-change-in-trumpsage-of-ignorance.html?rref=collection%2Ftimestopic%2FGlobal%20 Warming&action=click&contentCollection=science®ion=stream&module=stream_ unit&version=latest&contentPlacement=2&pgtype=collection

fuel companies as a means for academic institutions to encourage science-driven debate and decision making.⁴⁰ They draw a link between company behavior, socially responsible investing, and Columbia's social function to "foster research that produces new knowledge to help assure that . . . research guides the important public policy questions of the day."⁴¹ In a March 2016 Statement on University Investment and Sustainability Policy, faculty and researchers at Columbia University's Earth Institute called for the University to "hold no shares in any company, in whatever sector, that directly or through organizations that it supports reject the scientific consensus on climate change."⁴² The contributions of academic institutions and scientific communities will likely assume a greater importance if governmental support for climate science and the goals established in the Paris Agreement erodes.



SOME INSTITUTIONS ARE RELUCTANT TO USE THEIR ENDOWMENTS TO MAKE

POLITICAL STATEMENTS: While educational institutions may agree that preserving academic freedom is paramount, not all agree that divesting is the right way to accomplish this. Some have expressed misgivings about using their endowments to make statements unrelated to their core academic mission and argue that, because divestment is not an academically motivated decision, it would threaten their institution's reputation of academic neutrality.

Carleton College notes that it "has a long history of not taking positions on issues that are not clearly academic and that do not directly pertain to and advance the College's core educational mission,"⁴³ and Harvard worries that conceiving of the endowment "not as

⁴⁰ https://finance.columbia.edu/files/gateway/content/ACSRI%20Response%20to%20CDCJ%20 Petition%20-%20Final%2011.19.15.pdf pp 3-4

⁴¹ https://finance.columbia.edu/files/gateway/content/ACSRI%20Response%20to%20CDCJ%20 Petition%20-%20Final%2011.19.15.pdf

⁴² https://www.scribd.com/doc/301616037/Statement-on-University-Investment-and-Sustainability-Policy

⁴³ https://apps.carleton.edu/governance/cric/assets/Board_Response_to_CRIC_Report.pdf

an economic resource, but as a tool to inject the University into the political process or as a lever to exert economic pressure for social purposes, can entail serious risks to the independence of the academic enterprise."⁴⁴ Similarly Reed College acknowledges its commitment to academic freedom that requires it to limit the "political role of the institution or the enlistment of the institution's name in political causes."⁴⁵

SOME SEE DIVESTMENT AS HYPOCRITICAL BECAUSE WE USE FOSSIL FUELS

EVERY DAY: The moral arguments to combat climate change are tempered by those who argue that it is hypocritical for an institution to divest from fossil fuel companies while it consumes their products. In its statement against divesting, for example, New York University noted that "it seems disingenuous for NYU to, on the one hand, deem the fossil fuel industry morally reprehensible—the clear implication of a decision to divest— while on the other hand continue to regularly and willingly use their products to power and heat our campus and to transport our students and faculty (albeit in ways that are more efficient and less carbon intensive than in the past)."⁴⁶ As with many questions around divestment, there is not universal acceptance of the hypocrisy argument. As Pitzer College trustee Donald Gould argues, "We buy cars for transportation, not as a means to burn fossil fuel! Building the carbon-dependent economy took a long time; so will its dismantling. For Pitzer to bet its endowment on continued profits from fossil fuel producers would be the real hypocrisy."⁴⁷



Consuming fossil fuels and divesting from fossil fuel companies are not necessarily mutually exclusive acts. The global divestment movement is aimed at transitioning to a clean-energy economy, and divesting is one means of using the available economic and reputational leverage that colleges and universities possess to call for a global economic shift. Many have also argued that the best way to support a transition away from fossil fuels is to decrease their own demand for fossil fuels and in fact, when considering divestment, many institutions (whether they choose to divest or not) have also increased efforts to become more sustainable and less reliant on fossil fuels.

⁴⁴ http://www.harvard.edu/president/news/2013/fossil-fuel-divestment-statement

 $^{^{45}\,}http://www.reed.edu/news_center/press_releases/2013-2014/071714_ffrletter.html$

⁴⁶ https://www.nyu.edu/about/leadership-university-administration/board-of-trustees/the-board-of-trustees-response-to-the-university-senate-resolution-on-fossil-fuel-divestment.html

⁴⁷ http://www.mayorsinnovation.org/images/uploads/pdf/Gould.pdf

MANY ARE CONCERNED THAT DIVESTING FROM FOSSIL FUELS WILL LEAD TO A

"SLIPPERY SLOPE": Some caution that fossil fuel divestment will lead to pressure to divest from other sectors deemed problematic by different groups. The possibility of proliferating demands for divestment presents the risk of using endowments to reflect political goals pushed by different groups instead of maximizing the economic benefit to the school. Those who discount the risk of a slippery slope note that climate change is not like any other issue and thus sets a high bar to consider divestment. Pitzer College's Gould noted in an interview with *The Los Angeles Times* that "climate change dwarfs pretty much any other issue we face now."⁴⁸ For the most part, colleges and universities have chosen to pursue divestment for some issues and not others and, while no institution can definitively preclude action on emerging questions in the future, they can treat them individually, setting standards for which issue can rise to the level of consideration in the context of a particular institution's mission.

WILL DIVESTMENT HAVE A MATERIAL IMPACT IN COMBATING CLIMATE CHANGE?

Those who reject divestment argue that selling stocks in fossil fuel companies will have no practical impact on the financial condition of fossil fuel companies or their behavior. Others contend that directly impacting the finances of fossil fuel companies is not the point. They note instead that divestment is a powerful symbolic act that will stigmatize the industry and force governments to take meaningful action on climate change. Currently, however, fossil fuel companies operate legally and stigmatizing them may have limited impact given the fact that economies depend on their *legal* products. Regardless of impact, the efficacy of punishing all fossil fuel companies comes under some scrutiny, with many arguing that some companies may lead the way to a clean energy economy.

MANY INSTITUTIONS ARE CONCERNED THAT DIVESTMENT WILL HAVE NO IMPACT

ON FOSSIL FUEL COMPANIES: Divestment involves a transfer of ownership in the secondary market for securities. Since every sale also involves a purchase, the demand for such securities from other individuals and institutions will determine the extent to which divestment will have an impact on the share price of the affected firms. To a first approximation, the anticipated future earnings of firms determine the price of shares in the secondary market. If divestment does not affect earnings, its impact on the share price will be negligible. That is, even a small decline in price relative to anticipated earnings would make the shares attractive to buyers looking for value, and their demand to buy would prevent significant declines. If the affected companies do not experience any change in the cost of raising capital, then the extent of fossil fuel extraction and sale will also be largely unaffected. This is because the allocation of capital both within and across firms depends on the cost of raising capital relative to the revenues that investments are expected to generate.

These points appear in one form or another in several of the reports from peer institutions. For example, Wesleyan notes that "these companies' profits are derived from selling energy, not stocks, and less than one quarter of all oil in the world is owned by publicly-held companies."⁴⁹ For these same reasons, Wellesley College predicts that the economic impact on targeted companies would be "inconsequential."⁵⁰

⁴⁸ http://www.latimes.com/nation/la-oe-morrison-gould-20141021-column.html

⁴⁹ http://cir.wsa.wesleyan.edu/files/2012/04/CIR-Divestment-Statement-3-26-14-pdf.pdf

⁵⁰ http://www.wellesley.edu/about/president/mytake/divestment#WkZ8z2d7fgsFk18w.97

Some argue that divestment may actually be counterproductive by seeking to impact the financial condition of fossil fuel companies that are potentially lucrative sources of research and development funds for renewable energy, carbon capture, and utilization and storage (CCUS). The only way to limit warming below 2°C, as agreed to in Paris, is to immediately reduce emissions by large scale implementation of alternative energy as well as implementation of a program to capture and sequester CO_2 from the atmosphere. The offshore fossil fuel industry has the capacity for large scale implementation of CCUS. Bryn Mawr College says that "divesting from companies based solely on the amount of fossil fuel reserves they own ignores the extent to which they are investing in alternative energy sources,"⁵¹ while the University of Michigan notes that "most of the same companies that extract or use fossil fuels are also investing heavily in a transition to natural gas or renewables, in response to market forces and regulatory activity."⁵²

> Calculating the financial impact on endowments is more of an art than a science with many institutions using estimates of past performance to indicate future returns.

PROPONENTS ARGUE THAT DIVESTMENT HAS POWERFUL SYMBOLIC VALUE

AND CAN CHANGE BEHAVIOR: Advocates of divestment agree that it will have negligible impact on the financial condition of fossil fuel companies. They argue instead that divestment has powerful symbolic value with the ability to ultimately influence governmental and private sector behavior. Dan Apfel, a divestment analyst, observes that divestment is a public action where prestigious institutions have the ability to "create immediate waves" within a broader movement and keep climate change in the headlines. He goes on to say that "the institutional responses are often more noteworthy to the press and general public than the actions themselves."⁵³ Jeffery Sachs and Lisa Sachs, of Columbia University, wrote that "divestment by leading investors sends a powerful message to the world that climate change is far too dangerous to accept further delays in the transition to a low-carbon future."⁵⁴

⁵¹ http://news.brynmawr.edu/files/2013/08/August_27_2013BMCDivest-1.pdf

⁵² https://president.umich.edu/news-communications/on-the-agenda/addressing-climate-change-asa-powerful-community/

⁵³ http://www.danielapfel.com/wp-content/uploads/2016/03/Exploring-Divestment-as-a-Strategy-for-Change.pdf

⁵⁴ https://www.project-syndicate.org/commentary/fossil-fuels-divestment-renewables-by-jeffrey-dsachs-and-lisa-sachs-2015-01?barrier=true

Oxford University's Smith School of Enterprise and Government recognizes that the divestment campaign has triggered a stigmatization process which "poses the most far-reaching threat to fossil fuel companies and the vast energy value chain."⁵⁵ Oxford argues that the successes of past divestment movements, from tobacco to Darfur, resulted in restrictive legislation that impacted behavior. Divestment can draw attention to the need for government response to the problems created by fossil fuel combustion. Oxford explains that growing expectations of carbon taxes and other government actions against extraction will increase the uncertainty surrounding the future cash flows of fossil fuel companies which will change market norms.

The University of Mary Washington recognizes that the power of its decision to divest is "to signal to the rest of society that we must begin our transition to more sustainable energy sources."⁵⁶ Pitzer argues that "acts of symbolism evolved from a dream to a possibility to a reality to an inevitability. We look back now and say, of course women have the vote, how could it be otherwise? The idea that we can as a planet come up with public policy on energy that helps mitigate the worst effects of climate change — we can't give up hope that we can achieve that. We have a fiduciary duty to do the opposite."⁵⁷

But the power of symbolism is sometimes seen as a negative, indeed, as the very reason not to divest. Pomona College states that divestment "would only have a symbolic impact,"⁵⁸ while the Chair of Bowdoin College's Investment Committee agrees that divestment would "only have a symbolic effect on the fossil fuel industry, which is mature and enjoys significant free cash flow."⁵⁹ Williams College argues that the symbolic act of divestment will have "little likelihood of having a substantive impact on the economic or social forces responsible for climate change, or on the political decisions that are necessary to address it."⁶⁰

IS DIVESTMENT A FINANCIALLY RISKY INVESTMENT STRATEGY?

A key question for the Board to consider is whether divestment will hurt the financial returns of the endowment. Among institutions that have already considered divestment, those that predicted adverse financial returns did not divest, while those that expressed concerns about the future economic viability of fossil fuel companies chose to divest. A key pivot point is what institutions and financial analysts think of the future of the fossil fuel industry and the possibility of stranded assets—fossil fuel reserves that could be left untapped because of government regulation or legislation curtailing extraction activity. Reports from Citigroup⁶¹, HSBC⁶², Mercer⁶³, and Bloomberg⁶⁴ warn clients of the risk of stranded assets and industry bankruptcies,

⁵⁵ http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/SAP-divestment-reportfinal.pdf

⁵⁶ http://sustainability.umw.edu/files/2016/03/PCS-Divestment-Report-Small-File.pdf

⁵⁷ http://www.latimes.com/nation/la-oe-morrison-gould-20141021-column.html

⁵⁸ https://www.pomona.edu/news/2013/09/25-divestment-decision

⁵⁹ http://bowdoinorient.com/article/11155

⁶⁰ http://president.williams.edu/board-of-trustees/statement-by-the-board-of-trustees-and-presidentadam-f-falk-on-the-colleges-role-in-addressing-climate-change/

⁶¹ Citigroup "Energy Darwinism II: Why a Low Carbon Energy Future Doesn't Have to Cost the Earth" (August, 2015)

⁶² HSBC "Stranded Assets: What Next" (April, 2015)

⁶³ Mercer "Investing in a Time of Climate Change" (April, 2015)

⁶⁴ Bloomberg "New Energy Outlook 2016" (June, 2016)

while others project long-term financial health of the industry. The bottom line is that it's impossible to know for sure whether divestment will have an impact on our endowment. However, it is possible to conceive that the volatility of returns, or the risk level of the portfolio, may be higher relative to the global market indices without exposure to fossil fuel companies.

This section summarizes the arguments in the debate over whether divestment could impact endowment values and sets the scene for Section 4 of this report that discusses the possible financial implications to Barnard's endowment.



SOME SAY THAT DIVESTMENT WILL NEGATIVELY IMPACT FINANCIAL RETURNS FOR COLLEGE ENDOWMENTS, BUT OTHERS THINK INVESTMENTS IN FOSSIL

FUELS ARE RISKY: Trustees of non-profit institutions have a fiduciary role to ensure that endowments maintain its purchasing power into the future. While recognizing that there is a great deal of uncertainty about the effects of divestment on endowment returns, many institutions cite this as a key consideration in choosing not to divest. Members of various campuses' Investment Committees, many of whom are investors themselves, simply disagree on whether divestment will have any impact at all.

Those institutions that predicted adverse financial impacts chose not to divest. According to Harvard, "logic and experience indicate that barring investments in a major, integral sector of the global economy would—especially for a large endowment reliant on sophisticated investment techniques, pooled funds, and broad diversification—come at a substantial economic cost."⁶⁵ Pomona anticipates that divestment would result in a significant "loss of growth in the total endowment, caused mainly by the need to withdraw from the best actively managed commingled funds,"⁶⁶ while Williams also projected a "potentially enormous [cost]...of a magnitude that would, if realized, compromise our ability to achieve our core mission."⁶⁷

By contrast, those who worried that continued investment in fossil fuel companies represent risk were inclined to divest or at least place a heavy screen on managers to factor in climate change considerations when making investments. These institutions accepted uncertainty in future returns arguing that continued investment in fossil fuels, and the potential for stranded assets, represents a greater financial risk to endowments than the status quo. The possibility of stranded assets means that fossil fuel companies may be overvalued, creating a risk of a "carbon bubble," thus making continued investments risky and financially unsafe. In December 2015, the New York State Comptroller's Office argued that "there is no question that climate change is one of the biggest risks facing global investors across multiple sectors."⁶⁸ Yale's Chief Investment Officer, recognizing the potential risk of investing in fossil fuel companies, asked managers to consider the impact of climate change when evaluating investment opportunities.⁶⁹

Calculating the financial impact on endowments is more of an art than a science, with many institutions using estimates of past performance to indicate future returns. Several institutions compared actual returns over a fixed period in the past with what returns would have been had they been invested in "fossil free" funds. A 2015 study⁷⁰ by Bradford Cornell commissioned by the Independent Petroleum Association of America analyzed the potential impact of divestment on the five largest university endowments and found that fossil fuel divestment would cost .23% per year in lost returns over a 50-year timeframe in addition to associated transaction costs (in Barnard's case, .23% on a \$300 million endowment equates to \$690,000 in lost income per year). At the same time, the investment firm Aperio Group studied fossil free indexes and found little to no portfolio risk compared with index funds including fossil fuels.⁷¹

It is reasonable to expect any Board of Trustees will reject divestment if there is a real risk of financial loss, regardless of other considerations. Even institutions that held a more optimistic view of the future, or chose to divest for moral or ethical reasons, generally allowed that portfolios could continue to contain some exposure to fossil fuels; we did not find examples of any Board that walked away from its responsibility to achieve the highest possible returns. The Rockefeller Brothers Fund statement on returns is instructive, noting that they "will adhere to the longstanding mandate of our Board of Trustees that our assets be invested with the goal of achieving financial returns that will enable the foundation to meet its annual philanthropic obligations . . ."⁷²

⁶⁵ http://www.harvard.edu/president/news/2013/fossil-fuel-divestment-statement

⁶⁶ https://www.pomona.edu/news/2013/09/25-divestment-decision

⁶⁷ http://president.williams.edu/board-of-trustees/statement-by-the-board-of-trustees-and-presidentadam-f-falk-on-the-colleges-role-in-addressing-climate-change/

⁶⁸ http://www.osc.state.ny.us/press/releases/dec15/120415.htm

⁶⁹ https://static1.squarespace.com/static/55db7b87e4b0dca22fba2438/t/5759a0c9b6aa60c0ae6ee da0/1465491658321/Endowment+-+Climate+Change+Update+%28Final%29.pdf

⁷⁰ Bradford Cornell "The Divestment Penalty" (August, 2015)

⁷¹ Aperio Group "Building a Carbon-Free Equity Portfolio" (2016)

⁷² http://www.rbf.org/about/mission-aligned-investing

TABLE 1: DIVESTMENT: THE DEBATE SUMMARIZED

what role should mission play in a	n institution's investment strategy?	
Argument	Supporting Argument	Counter Argument
Combating climate change is a moral imperative.	Climate change represents a real threat to the earth and as global citizens we have an ethical responsibility to mitigate its impact.	Few disagree that climate change represents a real issue that society should deal with. The issue is identifying the appropriate methods to tackle the problem.
Organizations should align their investments with their mission.	Some institutions see investment in fossil fuel companies as inconsistent with their mission or core values. Colleges and universities are dedicated to the principles of academic freedom and integrity; fossil fuel companies that actively seek to thwart or obstruct climate science are an assault on the basic mission of higher ed institutions. Columbia's ACSRI makes this particular point in its "stand up for science" approach to dealing with fossil fuel investments.	Not all institutions see their missions the same way; thus divestment may or may not be consistent with their mission. While colleges and universities agree on the principle of academic freedom, some argue that the endowment is not the right place to make political statements and that avoiding divestment actually supports academic freedom. Colleges and universities have not been consistent in how they respond to public policy or social questions. Many divested from South Africa apartheid, and some from tobacco, but are reluctant to divest from fossil fuels. The scale of the issue may have more to do with a willingness to divest, as fossil fuels are ingrained in our society in ways previous divestment issues were not. There is also the issue of legality: fossil fuel extraction and consumption are legal whereas, in the case of South Africa, apartheid was contrary to our own U.S. Constitution and definition of human rights. Many institutions argue that the endowment is the wrong place to make a political statement and are reluctant to divest.
Divestment is hypocritical because we use fossil fuels every day.	Some institutions are reluctant to divest because they use fossil fuels to carry out their daily operations.	There may not be an inconsistency here, as one long-term goal of the fossil fuel divest movement is to transition to a fossil free economy, something that will have to occur gradually. Recent reports suggest that it will take 20-30 years at best to develop energy sources cheap enough to transition all energy usage (cars, appliances, etc.) away from fossil fuels.
Divesting from fossil fuels will lead to a slippery slope.	Some argue that fossil fuel divestment will lead to calls to divest investments from other causes.	Historical action has shown that colleges and universities make divestment issues idiosyncratically; a decision to divest from one industry does not necessarily mean that the college will divest from another issue.

What role should mission play in an institution's investment strategy

Will divestment have a material impact in combating climate change?							
Argument	Supporting Argument	Counter Argument					
Divestment will have no direct impact on fossil fuel companies' profits.	Because there will always be a transfer of ownership of fossil fuel securities, divestment will have no impact on the financial condition of fossil fuel companies.	Supporters of divestment stipulate that divestment will have no impact on the financial condition of fossil fuel companies.					
Divestment may harm investments in renewable energy.	Some fossil fuel companies are big investors in alternative energy; divesting from these companies could hurt efforts to develop renewables.	If divestment has no impact on the financial condition of fossil fuel companies, it cannot also inhibit investments in alternatives.					
Divestment has a powerful symbolic value and can change behavior.	The main impact that divestment can have is to stigmatize fossil fuel companies and pressure governments to enact legislation to curtail emissions thus limiting the activities of fossil fuel companies. The more institutions divest, the louder the "chorus" to change behavior will be.	Institutions are reluctant to divest because, in isolation, it is only a symbolic act. Stigmatizing a sector of the economy on which the consumer depends daily could have unintended consequences. Consumers tend to react to pocketbook issues by voting <i>against</i> the legislators who impose the taxes or regulations.					

Is divestment a financially risky investment strategy?							
Argument	Supporting Argument	Counter Argument					
Divestment will negatively impact financial returns for the College's endowment.	Many institutions worry that if you restrict investments in fossil fuels, you will hinder returns. Most used historical data to project future returns.	Those who chose to divest discount that past performance is indicative of future returns; they argue that the future will be different and that fossil fuel companies will find it more difficult to be profitable with pending regulations and legislation restricting activities.					
Stranded assets make it risky to invest in fossil fuels.	The obverse of the first argument: To limit warming temperatures to no more than 2°C will require fossil fuel companies to leave 80% of known reserves in the ground, "stranded," limiting their economic value. As a result, in the future, investments in fossil fuel companies will be risky and will hurt returns.	The market is extremely efficient and should already be factoring some of the risk of stranded assets in how they value fossil fuel companies. The market is not likely to discount assets entirely until there is evidence that new legislation is imminent. Moreover, good investors will get out of fossil fuel investments if they do not believe they will yield returns.					



SECTION 3 HIGHER EDUCATION RESPONSES TO SOCIAL AND POLITICAL ISSUES

Colleges and universities, like Barnard, have faced social issues in the past, including South Africa apartheid, tobacco, Sudanese genocide, private prisons, and admissions policies. Institutions of higher education have treated divestment differently, depending on the issue, with some favoring divestment on issues like South African apartheid, tobacco, and private prisons, while others resisting it as in the case of fossil fuels. Fossil fuel divestment may be more complex than other issues but it comes at a time when fiduciaries are increasingly being asked to consider the role of environmental, sustainability, and governance (ESG) issues as they make financial decisions. When considering Barnard's role as an actor in society, we have a history of facing social issues to look back on as a guide.

INSTITUTIONS HAVE AN INCONSISTENT TRACK RECORD IN RESPONDING TO PUBLIC POLICY QUESTIONS: Academic institutions, colleges, and universities, including Barnard, are dedicated to providing excellence in education and research for their students. As noted earlier, some institutions declined to divest from fossil fuels on the theory that, to protect academic integrity, endowments must not be used to make political statements. But, in the face of social issues, institutional behavior, including Barnard's, has not been consistent over time; colleges and universities have supported adjusting their investment strategies in response to social and political issues in the past. For example, many colleges and universities (including Barnard and Columbia) chose to divest from South Africa during the 1980s to protest its apartheid policy, from tobacco companies in the 1990s citing public health concerns, from Sudan in the 2000s, and most recently from private prisons (Columbia in 2015).

Issues like South African apartheid and Sudan genocide were absolute violations of human rights where colleges and universities saw a clear moral imperative not to support such actions. In the case of tobacco, divestment was motivated, as Harvard noted, "by a desire not to be associated as a shareholder with companies engaged in significant sales of products that create a substantial and unjustified risk of harm to other human beings."⁷³ Similarly, Columbia's decision to divest from private prisons stemmed from a concern that the business model for such prisons is based on increasing incarceration levels, which do not fit with the University's missions and values.

These issues entailed relatively defined financial investments, thus making it easier for an institution to disentangle them from other holdings. By contrast, the issue of climate change is unprecedented in its global scale, with many human endeavors reliant on the use of fossil fuels. The fossil fuel industry has been a reliable, high performing investment in the past, making divestment much more complicated. In addition, the way colleges and universities manage endowments today—in commingled funds and outsourced to CIOs—is very different than it was during the time of South African divestment and gives most American colleges much less direct control over such investment decisions.

Implementing meaningful policies regarding the fossil fuel industry is complicated by the fact that nearly everything we do connects in some way to greenhouse gas emissions. The fossil fuel divestment movement has chosen to focus solely on divesting from companies that directly extract and produce fossil fuels, as a way of publicly drawing attention to the fossil fuel industry's political influence and contribution to climate change. However, it is not easy to draw bright lines around specific actors. Emissions are caused by fossil fuel extractors as well as end users—i.e., those of us who power our homes, cars and, in fact, our academic institutions.

THE MODERN LEGACY OF SLAVERY HAS PARALLELS WITH THE FOSSIL FUEL

DEBATE: If we look back in history, we can see that the actions of colleges and universities, whether academic, operational, or financial, will be judged by later generations. Consider the discussion on many campuses about the institutional implication of the slave trade and the ramifications today of decisions made in the past. The slave economy offers a useful case study with parallels to today's fossil fuel economy in the degree to which the slave trade was ingrained in the global economy, represented a clear moral issue with many viewing such participation as unavoidable, and hamstrung by the daunting view that it would be impossible to transition the economy beyond dependence on slave labor.

What is totally unacceptable today was, at the time, perceived as a deeply complicated and intractable social, political, and economic issue. In the 1800s, abolition was a much discussed but still distant ideal, championed by some but dismissed by many as impossible, too difficult, and not practical. Today, our economy is equally enmeshed in a system that has serious adverse implications for the planet. And while the two situations cannot be equated⁷⁴, there is a parallel, and a lesson to be learned. As Ralph Hamann writes for *The Conversation*: "The abolition analogy also helps counter claims that investment decisions are not political . . . It is disingenuous to say that investments are made purely for economic reasons, as long as they are legal. Laws change, and norms play a role too. Just because slavery was legal does not mean that it was morally or economically right."⁷⁵

In response to Georgetown's legacy of slavery, the university's president, John J. DeGioia, said, "I think all of us need to get it right this time." As we consider the reaction on campuses across the country from actions taken by earlier generations, perhaps the lesson to be learned in the case of climate change is that it would be wise to get it right the first time.

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) INVESTING PRINCIPLES

ARE BECOMING MORE PREVALENT: There is an understandable tension between Barnard's response to climate change and the Board's fiduciary duty to create financial returns on investments that will help fund operations, salaries, financial aid, and other critical programs, and most importantly, ensure the continued existence of the College. While fiduciary duty has been widely considered to be focused on maximizing investment returns on behalf of the institution, this perception is changing. ESG investment practices have become more prevalent, the expectations of investors have evolved, and the assumptions that have propelled prevailing finance theories from recent decades are being questioned. The ground-breaking 2005 Freshfields Report⁷⁶ on fiduciary duty stated: "In our opinion, it may be a breach of fiduciary duties to fail to take account of ESG considerations that are relevant and to give them appropriate weight" and that "leading financial institutions are satisfied that a strong link between good ESG performance and good financial performance exists."⁷⁷

The U.S. Labor Department guidance for retirement plans covered by the Employee Retirement Income Security Act of 1974 (ERISA) notes that "ESG factors may have a direct relationship to the economic and financial value of the plan's investment."⁷⁸ Numerous pension funds around the world, including the two largest pension funds in America,⁷⁹ have chosen to divest from fossil fuels to some degree, reinforcing the notion that fiduciary duty does not necessarily conflict with socially motivated investing.

The lesson for Barnard is to acknowledge the public's increasing demand for institutions to act with more than financial returns in mind, and to be sensitive to the impact this trend will have on Barnard's "brand" as the College seeks to attract

⁷⁴ See https://www.thenation.com/article/new-abolitionism/. Chris Hayes in *The Nation* is clear on this point: "There is absolutely no conceivable moral comparison between the enslavement of Africans and African-Americans and the burning of carbon to power our devices."

⁷⁵ https://theconversation.com/divestment-from-fossil-fuels-should-be-linked-with-activeengagement-59990. "The Conversation" is an Australian online media publication which was founded by four Australian universities and sources content from researchers and academics.

⁷⁶ http://www.unepfi.org/fileadmin/documents/freshfields_legal_resp_20051123.pdf ⁷⁷ (UNEP FI, 2005, p. 100).

⁷⁸ https://www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/fact-sheets/fsetis.pdf

⁷⁹ Both the California Public Employees' Retirement System (endowment size: \$289.9 billion) and the California State Teachers' Retirement System (endowment size: \$188.7 billion) announced in 2016 that they would divest from U.S. thermal coal companies.

students, faculty, donors, and alumnae loyalty. A recent Dartmouth report on divestment notes that "prospective students, faculty, and staff may feel greater or lesser affinity for Dartmouth after learning of Dartmouth's decision on divestment."⁸⁰ Additionally, in a survey of 8,200 students, the Princeton Review found that 69% of college applicants say that having information about a college's commitment to environmental issues would contribute to their decision to apply to or attend the school.⁸¹ Regardless of the outcome, the decision to divest or not divest will have implications for Barnard's global reputation.

> Barnard faculty have consistently been leaders in climate and sustainability research as highlighted in the hopeful, high profile work on "turning carbon dioxide into stone."

BARNARD'S HISTORICAL RESPONSES TO SOCIAL AND POLITICAL ISSUES: An examination of Barnard's history, from President Ellen Futter's fight to keep Barnard independent of Columbia to the recent transgender admissions policy, reveals different responses to a variety of social and political issues.

Presidential Statement: In 1969, Barnard President Martha Peterson issued a statement in response to the Vietnam conflict urging that: "There are times to be silent and times to speak. The accumulated costs of the Vietnam war make this a time to speak out against it in clearest terms...the costs are not in men and materials alone. There are costs too in the effects on young people's hopes and beliefs."⁸² President Peterson's decision to make this statement was certainly due, at least in part, to the level of engagement and protest among students and faculty. This statement was then sent to the President of the United States, with the specific aim of encouraging policy change by urging the withdrawal of the United States forces from the ongoing conflict in Vietnam.

Formal Divestment: In May 1985, as a response to the violence and racial injustice perpetuated by the apartheid South African government, Barnard's Board of Trustees resolved to divest from companies with operations in South Africa, noting that:

The Board of Trustees of Barnard College has a responsibility to invest and administer the College's financial resources in a prudent manner, ensuring the College's basic mission of teaching, learning, research and free exchange of

⁸⁰ Dartmouth "Report to the President on the Considerations involved in Divesting" (April 2016)

⁸¹ http://usatoday30.usatoday.com/news/education/2011-04-20-green-college-campus-princeton-review.htm

⁸² A Statement on Vietnam, October 1, 1969

knowledge will endure. The Board also believes it is appropriate to take ethical considerations into account in the course of managing the College's resources.

The system of apartheid supported by the Republic of South Africa is abhorrent and contrary to values and fundamental principles of human decency to which the Barnard community is committed. The Board believes that although there are other areas of the world where violations of human rights exist, the situation in South Africa is so egregious as to require special attention and action.⁸³

This resolution brought portfolio investments in line with the Board's belief that Barnard should not continue to support in any visible way the continued apartheid policies of the South African government. There was strong public consensus on the moral issue of apartheid and the companies doing business in South Africa could be easily identified by their adherence with the Sullivan Principles⁸⁴ and holdings sold. When Barnard divested from South Africa in May of 1985, the College sold its direct holdings from companies maintaining operations in South Africa, including IBM and General Motors. The value of divested assets "represented 3.1 % of the college's \$31 million endowment and approximately 9.5 % of its securities investments."⁸⁵ The financial impact to the College was deemed limited because portfolio and sector impact was not concentrated and portfolio diversification could still be achieved with other stocks within the same sectors without significant impact on risk-adjusted returns.

Informal Divestment: In the case of tobacco investments, science viewed inhalation of tobacco smoke as detrimental to the health of smokers/students but, for the most part, smoking was a freedom of individual choice issue. In April of 1998, Barnard's Committee on Investments (but not the full Board) encouraged the investment managers to gradually reduce investments in tobacco companies but did not mandate such a change:

After some discussion, the Committee agreed not to formally direct any of the managers to hold or sell any particular stock in any particular industry, but to informally convey to them that the general wish of the Committee is that tobacco investments not be added to the portfolio but gradually reduced and eliminated. This policy was unanimously approved by the Committee and has been transmitted to all the investment managers.⁸⁶

Once proven that second hand smoke was equally harmful to a wider population - in this case, the students, faculty and staff– the College mitigated the detrimental effects by making Barnard a smoke-free campus in March 2011.⁸⁷

Administrative Policy: In 2015, the College's Board of Trustees approved a resolution regarding admission of transgender women. The admission of transgender women is directly relevant to Barnard's core mission, as it pertains to providing a liberal arts education to women in light of an evolving understanding of gender in modern society. The June 2015 resolution reads:

⁸³ Board of Trustees, May 29, 1985 Preamble to Resolution, pp 3480-3481

⁸⁴ The Sullivan Principles were a list of six principals written in 1977 and adopted by divestment proponents as a means of identifying which companies were following moral and ethical practices in their business in South Africa. http://michiganintheworld.history.lsa.umich.edu/antiapartheid/files/original/32720fa65a6e9fc6ace836cb5e5b4393.pdf

⁸⁵ Columbia Daily Spectator "BC Sells S. Africa Stock" (September 3, 1985)

⁸⁶Board of Trustee minutes: Report from the Committee on Investments, April 28, 1998 pp 5157

⁸⁷ http://bwog.com/2011/03/01/barnard-campus-to-be-smoke-free/

"Since its founding in 1889, Barnard's mission has been to provide generations of promising, high-achieving young women with an outstanding liberal arts education in a community where women lead. Every aspect of this unique environment is, and always will be, designed and implemented to serve women, and to prepare our graduates to flourish and make a difference in the world. This mission is powerful and remains vital today, perhaps more so than ever.

In furtherance of our mission, tradition and values as a women's college, and in recognition of our changing world and evolving understanding of gender identity, Barnard will consider for admission those applicants who consistently live and identify as women, regardless of the gender assigned to them at birth. We will also continue to use gendered language that reflects our identity as a women's college."⁸⁸

The policy to admit transgender women could be classified in the category of social justice and human rights. It did not have financial or investment implications for Barnard's endowment.

Reporting Requirement: The Board of Trustees has also focused on the role of women among the College's asset managers. In engaging an OCIO, the Board felt that, as a women's college, it was important to increase the number of female managers who work with Barnard's endowment. In order to encourage alignment between this value and Barnard's investment policies, the Board currently requires that the OCIO report on the number of positions held by women among its managers.

Issue	Timing	Action
Vietnam War	1969	Presidential statement
South African apartheid	1985	Formal divestment; Board resolution
Tobacco	1998	Informal divestment; Board's Investment Committee non-binding statement
Transgender admissions policy	2015	Board resolution to change admissions policy
Monitoring Women Investment Managers	2006	Reporting requirement

TABLE 2: BARNARD'S HISTORY RESPONDING TO SOCIAL OR POLITICAL ISSUES

Barnard is a pioneer in environmental research and education. Barnard also responds to issues through research and education. Barnard faculty have consistently been leaders in climate and sustainability research, as highlighted in the hopeful, high profile work on "turning carbon dioxide into stone"⁸⁹ released in summer 2016 by a Barnard faculty member. Involving Barnard students and facilities, this research is literally ground-breaking in its implications for accelerating the reduction of concentrations of heat-trapping gases in the atmosphere. Other faculty are national leaders in such fields as the implications of warming on the Arctic, contaminated drinking water in Bangladesh, the history of climate science, inequality of access

⁸⁸ https://barnard.edu/news/barnard-announces-transgender-admissions-policy

⁸⁹ http://science.sciencemag.org/content/352/6291/1312

to energy in African nations, and the social effects of conservation and development activities.

Education: Barnard has a long history of educational engagement on the issue of sustainability. As early as 1951, the Department of Geology and Geography, together with the Botany Department, offered a new major called "Natural Resources," which was renamed "The Conservation of Natural Recourses" a decade later. The first course in environmental science was taught at Barnard in 1968. In 1970, the department of Geology and Geography split and changed the name of the conservation major to "Environmental Conservation and Management" with a new directive to focus on issues crucial to the survival of mankind. This major was the direct precursor to the formation of the Department of Environmental Science in 1982.

In terms of undergraduate education, Barnard is pioneering in our recognition of the importance of the climate issue and integration of climate change topics into our teaching. As far back as the mid-1990s, Barnard changed the environmental major requirements to include a foundational course in climate, making Barnard, one of the first, if not the first college to require a course on climate for any environmental major.

Today our portfolio of climate and sustainability teaching has expanded dramatically; at least thirteen departments or programs offer a course dealing with climate, sustainability, or the environment—ranging from Anthropology to Urban Studies and including First Year Seminars, required courses, and upper level electives. This multifaceted, cross-disciplinary approach is one of Barnard's strengths. But it has been an ad hoc endeavor, led by the professional and personal interests of our faculty.

Engagement: Looking more broadly, both within and outside of the classroom, there are many misconceptions and hurdles to overcome in engaging people in the issue of climate change. Barnard is also a pioneer in this area, with a Barnard faculty member leading one of the nation's largest federal climate education partnership grants, focused on developing and testing innovative approaches.

SECTION 4 FINANCIAL IMPLICATIONS FOR THE ENDOWMENT

The key question the Task Force analyzed is whether divestment will have a detrimental financial impact on Barnard's endowment and found that there is no clear answer to this question. It is not possible to predict how divestment will impact the endowment.

We analyzed five possible scenarios both with and without fossil fuels. We reviewed actual ten-year returns and projected these returns forward over the next ten years to help gauge potential impact. Such analysis is entirely assumption-driven; the five scenarios are artificial but can help bound the upsides and downsides of different strategies. We used the same assumptions regarding receipt of endowment gifts consistent with the goals of our capital campaign—the Bold Standard—and annual endowment spending. The scenarios we reviewed are as follows:

Scenario #1: Status Quo-Total Asset Allocation

In this model, the financial structure of the College's endowment would remain the same. The returns for this model were based on Barnard's actual ten-year investment return as of June 30, 2016.

Scenario #2: S&P 500 Excluding Energy

In this model, the College's endowment is invested 100% in an S&P 500 Excluding-Energy Index fund for a ten-year period. The returns for this model were based on the actual S&P 500 Ex-Energy Index's ten-year investment return as of June 30, 2016.

Scenario #3: S&P 500

In this model, the College's endowment is invested 100% in an S&P 500 Index fund for the ten-year period. The returns for this model were based on the actual S&P 500 Index's ten-year investment return as of June 30, 2016.

Scenario #4: MSCI ACWI Index

The Morgan Stanley Capital International All Country World Index Fund is currently used as one of Barnard's endowment benchmarks for global equities. In this model, the College's endowment is invested 100% in an MSCI ACWI index fund for the ten-year period. The returns for this model were based on the actual MSCI ACWI index's ten-year investment return as of June 30, 2016.

Scenario #5: Status Quo-Global Equity Only

In this model, the College's endowment would only be invested in its historical Global Equity investments based on the College's current financial structure for the tenyear period. The returns for this model would be based on Barnard's actual ten-year investment return as of June 30, 2016 for Global Equity only.

For the five scenarios, the following investment return assumptions were used over a ten-year period from July 1, 2016 to June 30, 2026:

TABLE 3: TEN-YEAR RETURNS TOTAL

Scenario	Ten-year Return as of 6/30/16
Status Quo — Total Assets	6.8%
S&P 500 Ex-Energy Index	7.7%
S&P 500 Index	7.4%
MSCI ACWI Index	4.8%
Status Quo — Global Equity Only	5.5%

Using this analysis, the average ten-year returns ranged from 4.8% to 7.7%, with the S&P 500 Excluding Energy performing the best. But while the average returns appear close, the projected cumulative impact on endowment value can be significant. For purposes of our analysis, we assumed that the respective ten-year investment returns in the five scenarios were earned consistently in each of the ten years. In addition, each scenario had the same assumptions for annual endowment gifts and endowment spending rate. We assumed that endowment gifts will be \$12.8 million per year based on recent historical trends and the College's Capital Campaign endowment goals. For the endowment spending rate, the Task Force used the College's current model of 5% of the three-year average of the market value of the endowment.

In developing the above models, the Task Force did consider a scenario that included only fossil fuel-free index funds. The Task Force reviewed the Green America's Fossil-Fuel Divestment Guide and identified five funds that had ten-year return data. However, the composition and structure of these funds were so different that the Task Force concluded it could not provide comparable results to be included in a separate scenario.

Based on the above assumptions, the Task Force projected the endowment returns for each of the ten years in the period and noted the following results:

Scenario	Projected Market Value at 6/30/26	Projected Average Annual Endowment Spending	Projected Average Annual change in spending vs Status Quo	Projected Cumulative Change in Spending vs. Status Quo
Status Quo — Total Assets	\$491.0	\$17.8	\$ -	\$ -
S&P 500 Ex-Energy Index	\$531.0	\$18.5	+.6	\$6.0
S&P 500 Index	\$517.0	\$18.3	+.4	\$4.0
MSCI ACWI Index	\$414.0	\$16.6	-1.8	(\$18.5)
Status Quo — Global Equity Only	\$439.0	\$17.0	-1.2	(\$12.2)

TABLE 4: PROJECTED RETURNS

Even though the ten-year investment returns for each of the scenarios had a narrow range of 4.8% to 7.7%, the cumulative differences in the returns, on an annual basis, have significant impacts on the College's endowment and related annual endowment spending. The cumulative change in the College's endowment spending for the ten years as compared to the Status Quo scenario ranged from an increase of \$6.0 million to a decrease of \$18.5 million, and annual spending changes ranging from an additional \$600k to a loss of \$1.8 million per year.

Based on the varied results of the projections, the Task Force has concluded that the future financial impact of fossil fuel divestment cannot clearly be predicted. Any change in the components of the College's endowment may pose a financial risk to the endowment's performance, but that risk cannot be quantified.

While fossil fuel divestment may limit the tools that an investment manager has at their disposal, the risk of that limitation cannot be fully measured. As a result, active management, whereby an endowment manager seeks to make investments that do better than passive benchmarks, is critical if we are to take advantage of opportunities available to the College.

SECTION 5 OPTIONS FOR CONSIDERATION

The Task Force developed five options for the Board to consider with regard to divestment, ranging from maintaining the status quo to full divestment.

Option 1: Maintain the status quo

Under this option, Barnard would maintain our existing portfolio and not divest from fossil fuels. This option subscribes to the view that the primary goal of the endowment is to earn returns. The best way to earn high returns is to invest in sectors of the economy that perform well, even if this means continued investments in the fossil fuel industry.

Option 2: Status quo plus

Under this option, Barnard would essentially maintain the status quo but would invest in fund focused on alternative energy as a signal of Barnard's support for carbon-free alternatives. Like Option 1, Option 2 does not view divestment as a compelling reason to restrict investments. That said, investing in an alternative energy fund would represent a measured effort to increase sustainable investments and support the transition to alternative energies. Until such time as sustainable options offer viable earnings prospects and reasonable portfolio returns, the percentage allocated to sustainability funds is likely to remain modest.

Option 3: Divest from Coal

Option 3 would include an investment in a fund focused on alternative energy and divestment from companies that mine coal and tar sands. We would work with Barnard's OCIO to ensure that Barnard's endowment gets as close to zero exposure (no greater than >0.01% of the endowment) to these types of fossil fuels as soon as possible. While this option acknowledges that Barnard has some responsibility to mitigate the impacts of climate change and plans to do its part by limiting or eliminating investments in coal, it also assumes that Barnard's endowment will be financially better off if we maintain investments in fossil fuels.

Recommended

Option 4: Divest from Climate Deniers

Under this option, Barnard would commit to a good faith effort to divest the endowment from any investments in fossil fuel companies that deny climate science or otherwise seek to thwart efforts to mitigate the impact of climate change and bring these investments to as close to zero as possible. In addition, the Committee on Investments will work closely with Barnard's OCIO to implement this commitment in such a manner to protect the financial returns of the endowment. This option would establish a working group of faculty, students, staff, and Trustees to develop criteria that Barnard's OCIO can use to screen fossil fuel companies. Barnard's OCIO should assess the efficacy of this approach and to regularly report to the Investment Committee. With option 4, Barnard would also divest from companies that mine coal and tar sands and work with Barnard's OCIO to ensure that Barnard's endowment gets as close to zero exposure (no greater than >0.01% of the endowment) to these types of fossil fuels as soon as possible.

The option recognizes that divestment can have a social impact, even if symbolic, and that aligning the endowment with values such as academic freedom is a priority for the College. Divesting from climate deniers also recognizes that there is value

in differentiating the behavior of fossil fuel companies and assumes that some fossil fuel companies will be important players in transitioning to a clean energy economy. It should be noted that additional research will need to be completed in order to identify the companies that are "climate deniers," but a screen of the Top 200 fossil fuel companies can be used as an initial proxy. It should also be noted that monitoring "climate deniers" will be an on-going exercise, requiring constant review and probably additional management expense.

> Divesting from climate deniers also recognizes that there is value in differentiating the behavior of fossil fuel companies and assumes that some fossil fuel companies will be important players in transitioning to a clean energy economy.

It will take many years to achieve this goal. At June 30, 2016, Barnard's endowment included approximately \$18 million in private equity partnerships that had some exposure to the fossil fuel industry. While Barnard can sell its partnerships to others, it will likely have to do so at a discount resulting in losses to the endowment that the Task Force does not recommend. Rather, a commitment to divest from climate deniers would have to be achieved over a period of years and would not necessarily be fully realized until we liquidate our private partnership obligations.

Option 5: Full Divestment

Under Option 5, Barnard would commit to reducing the endowment's exposure to fossil fuels to as close to zero as possible from all fossil fuel companies over the next five years. The Committee on Investments would work closely with the OCIO to implement this commitment in such a manner to protect financial returns of the endowment. While Option 5 may seem to be a full endorsement of divestment, such a comprehensive approach does not differentiate among firms whose business model is shifting to renewables, natural gas companies, and others.

Like option 4, it will take many years to achieve the "near-zero" standard because of Barnard's investments in private equity partnerships.

HOW COULD OPTION 4 WORK IN PRACTICE?

There are challenges to implementing a divestment strategy focused on climate deniers: Definitions and implementation.

POSSIBLE CRITERIA FOR DEFINING AND SCREENING CLIMATE DENIERS:

The issue of how to define companies that deny climate science is a central one. The Union of Concerned Scientists (UCS) recently developed extensive criteria that institutions can use to screen fossil fuel companies for behavior that is antithetical to efforts to mitigate climate change. The UCS criteria,⁹⁰ summarized below, should be considered by the Committee on Investments in discussions with the working group and with Barnard's OCIO. With the UCS criteria, Barnard would evaluate companies on their actions to:

Renounce misinformation on climate science and policy:

- Accurate and consistent public statements on climate science and the consequent need for swift and deep reductions in emissions from the burning of fossil fuels; and
- Company affiliation with specific trade associations and industry groups that spread climate misinformation on climate science and/or policy.

Plan for a world free from carbon pollution including:

- Public support for the international climate change agreement adopted in Paris in 2015; and
- Company-wide commitments and targets to reduce net emissions of heattrapping gases from their operations and the use of their products.

Support fair and effective climate policies including:

• Consistent support for U.S. federal action to reduce carbon emissions.

Fully disclose climate risks including:

• Disclosure of physical risks to a company's operations and infrastructure from climate impacts.

AN ILLUSTRATIVE IMPLEMENTATION APPROACH: One possible way to implement this option, subject of course to discussions with the OCIO, is to vet fossil fuel companies and categorize them with respect to performance, thus creating incentives for the poorest performers to change their practices. In this case, the work done by the UCS is instructive. In a preliminary analysis with a sample size of eight fossil fuel companies, the UCS classified the performance of the companies along a number of dimensions. UCS showed that these eight companies exhibited a range of performance with all of the firms demonstrating poor or egregious behavior based on at least one criterion (see figure 1 on the following page).

How can we find a way to distinguish among these companies in way that exploits the power of Option 4? Based on UCS's analysis, we can think about three categories:

- •Divest: Those egregious on one or more dimensions (5 companies);
- Watch List: Those never egregious but also never good (Shell); and
- Maintain Investments: Those never egregious but good on at least one dimension. (BP and Conoco Phillips)

Using this framework, we can adopt the following approach: divest from the bottom 5,

⁹⁰ http://www.ucsusa.org/sites/default/files/attach/2016/10/climate-accountability-scorecard-full-report.pdf

put Shell on a divestment watch-list, and maintain investments in the other two. We can strengthen and augment this approach based on screening of companies in the Top 200. Ideally, companies at the bottom could face pressure to move up, as would those in the middle. Those at the top are not secure either; as others move up their relative position becomes more precarious, creating incentives to improve. This approach harnesses the power of Option 4 in ways that blanket coverage simply cannot.



FIGURE 1: COMPANIES REVIEWED BY THE UNION OF CONCERNED SCIENTISTS

SECTION 6 SUSTAINABILITY INITIATIVES

Along with examining divestment, the President charged the Task Force with analyzing "how Barnard can address climate change on a micro level by reducing its carbon footprint across campus and its operations," especially in the context of our "ethical responsibilities as good global citizens." Many other colleges and universities have linked their conversations about divestment with a parallel discussion of sustainability on campus. Even among schools that did not divest, almost all chose to enact some kind of "climate action plan" as a result of their consideration of divestment. Indeed, it is clear that policies affecting consumption and demand for fossil fuels must be part of any effective response to climate change. As such, the Task Force has worked closely with the Tripartite Sustainability Committee to conduct a detailed study of Barnard's existing sustainability initiatives and to outline a vision for moving forward.

As a small, elite, liberal arts college for women located in New York City, Barnard is uniquely positioned to become a leader in urban campus sustainability. Our highly motivated and intelligent students are not only acutely aware of the problem of climate change but have the ability to creatively address it. Our faculty has the pedagogical and research experience to both guide the students and inform best practices. And our small size is an advantage; we have the capacity to pilot innovative programs and systems that potentially could be modeled and scaled for the larger New York community and campuses around the country.

The Task Force agrees that reducing Barnard's carbon footprint and modeling innovative sustainability solutions are essential values for the College. With these values, and in alignment with our assets as stated above, it is time for a 360-degree campus focus on sustainability.

RECOMMENDATIONS

As such, the Task Force proposes that Barnard:

- Issue a clear and public Sustainability Mission and Values statement.
- Develop a climate action plan with clear, time-bound and measurable goals to
 - Reduce energy consumption on campus. Energy in the form of local combustion and purchased electricity accounts for approximately 20% of Barnard's carbon footprint. The climate action plan should examine reduction in usage, retrofits, and alternative sources of energy;
 - Change campus wide patterns of consumption and waste. Thoughtful purchasing policies, an emphasis on re-use, landfill reduction, and more mindful disposal systems can reduce Barnard's carbon footprint significantly;
 - Instill a culture of sustainability on campus. Air travel and other individual patterns of behavior account for a significant portion of Barnard's carbon footprint. The climate action plan should examine the systems and culture on campus and identify ways to make it easier for the Barnard community to reduce its collective footprint; and

- Improve our local environment. The climate action plan should explore ways for the Barnard community to make sustainable choices in campus operations and to improve the local environment, from using pesticidefree grounds keeping materials to supporting urban farming in the neighborhood; and
- Link our operational changes with teaching and research to clearly communicate sustainability efforts to the classroom.
- Launch a campus-wide process of community engagement to set and achieve measureable goals, generate both on-campus and off-campus community buy-in, and foster a campus culture of sustainability; and
- Create the personnel and budgetary structure necessary to achieve our goals including:
 - Creating a position of Sustainability Dean or Officer, charged to work with student, faculty, and staff representatives on the Tripartite committee and with our neighbors in the community and at Columbia.
 - Working with functional departments on campus to appoint a sustainability representative to participate in identifying and implementing specific goals for each department; and
 - Allocating 5-10% of the Campus Services Repair and Rehabilitation (R&R) budget for sustainability initiatives, with priorities determined by the Tripartite Committee.

In order to arrive at these recommendations, the Task Force evaluated Barnard's current carbon footprint, conducted a review of peer institutions, and assessed Barnard's initiatives to date in comparison with those peers.

BARNARD'S CURRENT CARBON FOOTPRINT

Barnard was among one of the first colleges and universities to participate and succeed in meeting Mayor Bloomberg's first carbon challenge PlaNYC 2030, and has signed up for a second target along with Governor Cuomo's "Rev Challenge." Both challenges include measurable reductions in our carbon footprint. However, in order to look forward and set more comprehensive and community goals, the Task Force, together with the Tripartite Committee and consultants from Gotham 360, conducted a comprehensive assessment of Barnard's greenhouse gas (GHG) emissions. The Greenhouse Gas Protocol sets the standards for this reporting and divides emissions into three groups, called scopes.

- **Scope 1**—Direct emissions from owned or controlled sources, such as onsite fuel combustion for heating and cooling or from campus fleet vehicles.
- **Scope 2**—Indirect emissions from the generation of purchased electricity.
- Scope 3—All other indirect emissions, such as those released in daily commutes to and from campus, school-sponsored travel, trash disposal, the production of office paper and other purchased goods, and more.

In reporting GHG emissions, most colleges and universities focus only on emissions from Scopes 1 and 2, largely because utility data is easy to collect and assess. Some consider certain Scope 3 emissions as well, but these assessments are typically extremely limited – usually including emissions from commuting and trash disposal. Barnard chose to take a 360-degree view of *all* of the activities that contribute to our community's carbon footprint, and the results are striking.

FIGURE 2: BARNARD COLLEGE CARBON FOOTPRINT FY 2015



	- :	and Very 2015	eCO ₂	
	FI	scal fear 2015	Metric Tonnes	Percent of Total
Seene 1	A Stationary Combustion		4,594.6	21%
Scope I	B Fleet Vehicles		29.7	<1%
Scope 2	С	Purchased Electricity	2,529.3	11%
	D	Commuting	913.7	4%
	E	Directly-financed Air Travel	1,681.9	8%
	F	Study Abroad Air Travel	872.3	4%
	G	Student Travel to/from Home	4,568.3	21%
Scope 3	Н	Solid Waste	1,962.2	9%
	I	Food	3,101.3	14%
	J	Stuff	1,734.9	8%
	K	Scope 2 Line Losses	156.3	1%
		Scope 1	4,624.3	21%
		Scope 2	2,529/3	11%
Totals		Scope 3	14,990.9	68%
		All Scopes	22,144.6	

As shown in figure 2, in fiscal year 2015, Barnard emitted nearly 22,000 metric tons of CO_2 . While Scopes 1 and 2 (direct and indirect energy consumption) represent a large portion of our collective footprint, roughly two thirds of our impact originates in Scope 3 emissions that focus on operations and behaviors. These results align with a recent study by the *Journal of Industrial Ecology*, which estimates that 60% - 80% of global greenhouse gas emissions can be traced back to household consumption—i.e., the trips we take, food we eat, and things we buy and discard.⁹¹ By establishing an innovative, 360-degree understanding of how our activities on campus contribute to our shared footprint, we can work as a community to craft an innovative, 360-degree response.

THE EXPERIENCE OF PEER INSTITUTIONS

The Task Force reviewed the climate action plans and sustainability programs of a number of schools and conducted more in-depth research through in-person meetings and workshops with sustainability officers from Columbia, Swarthmore, Harvard, and the New School. We found that most college and university "climate action plans" are diverse in goals and in magnitude, but generally include the following elements:

- A public statement of purpose or public commitment to addressing climate change;
- A sustainability office or program, often with at least one full-time staff member;
- Explicit targets and timelines for emissions reduction, energy usage, waste reduction, etc., and operational initiatives to support meeting sustainability targets;
- Initiatives aimed at creating a culture of sustainability on campus, and;
- Curricular and/or research initiatives.

For notable highlights from peer institutions, see Appendices 6 and 7.

Peer institutions we spoke with highlighted the importance and the challenge inherent in creating lasting change on the institutional and operational levels and in the campus culture itself. Improvements in sustainability depend on changing the behaviors of individual and large-scale systems. Without consideration of this reality, the best intentions and goals can be derailed not by intent, but by inertia. Engaging all community stakeholders in a sustainability effort should be a clear priority and something to consider as we build on our current initiatives.

Columbia, for example, has begun to tackle institutional change with a robust process aimed at campus-wide engagement of multiple stakeholders. Columbia's "multi-faceted and multi-tiered approach" is to develop a strategic plan in support of a set of campuswide sustainability principles. The university has held a series of town hall meetings and begun work by focus teams "comprised of students, faculty and staff from across the University" to facilitate engagement by all stakeholders in order to identify shared goals, or buy-in, and create the conditions for lasting change.

HOW DOES BARNARD COMPARE?

Even before the advent of the divestment movement, Barnard had undertaken robust efforts to become more sustainable. The Task Force compared and assessed Barnard's efforts to date on the five common elements of campus sustainability programs.

⁹¹ http://onlinelibrary.wiley.com/doi/10.1111/jiec.12371/abstract

A statement of purpose or public commitment to address climate change: The Barnard website states that "Barnard's commitment to sustainability is our pledge for a better, greener, future: not only for the Barnard community and Morningside Heights, but for a more environmentally and socially responsible planet. It's the College's intention to involve and integrate students, faculty, and staff into promoting sustainable practices, reducing our environmental footprint, and encouraging the adoption of effective and efficient programs that demonstrate our commitment as a leader in the urban environmental landscape."

While Barnard's statement is clear, it is not widely known within our community. Currently, the website highlights our achievements to date, though there is still room for growth in presenting Barnard as a leader in urban sustainability. Comprehensive and measurable goals with stated targets and timelines could be detailed on the website along with a stronger and more thorough representation of educational and curricular initiatives and a more dynamic and interactive forum for engagement from our community. The Tripartite Committee, for example, is working with faculty to test a campus sustainability app under development. This type of real-time, interactive connection with our operations, curriculum, and student activities would distinguish our website.

Sustainability office or program: Barnard's sustainability initiatives are currently coordinated through Campus Services and the Tripartite Committee. The Committee is comprised of students, faculty, and staff, and is chaired by the VP for Campus Services. Barnard does not have full-time staff dedicated to sustainability. The current Program Manager for Environmental Science dedicates 20% of the week to her role as Sustainability Coordinator. Other staff members from Campus Services and Facilities regularly work on sustainability programs, as do members of the Tripartite Committee, and there is a wide range of student- led initiatives, but Barnard currently has no dedicated office, budget line, or personnel to coordinate multilateral sustainability initiatives.

A climate action plan including stated targets and timelines for emissions reduction, energy usage, waste reduction, etc., and operational initiatives to support meeting those goals: Barnard does have a climate action plan that includes participation in the Mayor's PlaNYC Challenge to significantly reduce carbon emissions by 2030. Barnard has already met the first goal of a 30% reduction of carbon emissions by 2020. Barnard is now working on the next step of the Mayor's Challenge and has joined the New York State Energy Research and Development Authority (NYSERDA)'s REV Campus Challenge, part of Governor Andrew Cuomo's statewide climate strategy.

Other operational initiatives include:

- Maintaining the Diana Center's gold LEED rating;
- Garnering at least a silver LEED rating for the new Teaching and Learning Center (which includes LED lighting and more efficient mechanical equipment);
- Installing lower-flow toilets, showers, and sinks, to reduce unnecessary water consumption;
- Participating in the Mayor's Cool Roof Program to reduce heat load within the buildings;
- Replacing lights in Reid, Hewitt, and portions of Brooks residence halls with LED systems, and plans for the remainder of the Quad buildings and Plimpton are underway;

- Initiating a landfill reduction pilot program in 2017; and
- Undertaking energy initiatives in coordination with NYSERDA, including the Barnard Energy Master Plan.

Initiatives aimed at campus culture: Barnard has undertaken initiatives aimed at improving sustainability in daily life and campus culture, some originating from the students, some from the Tripartite Committee, and some from courses or faculty research. A few examples include:

- Installing water refilling stations around campus;
- Installing a bio-digester in Hewitt Dining Hall to reduce food waste;
- Promoting a "Use the Stairs" campaign to encourage stair versus elevator use;
- Implementing a re-useable mug program and price incentive program aimed at reducing the use of disposable coffee cups on campus; and
- Implementing numerous student-led activities, like Earth Week and bi-weekly clothing swaps, a "Green Fund" grant for student-proposed projects in sustainability, and the Give and Go Green donation drive during end-of-year move out.



As at many other schools, change has been slow to come and difficult to sustain. We can learn lessons from the ongoing "coffee cup" initiative undertaken by the Tripartite Committee. The Committee attempted to reduce the number of single-use coffee cups sold in Liz's Place. Discounts for using reusable cups, offering ceramic cups for customers who stay, clearly posted signs at the counter, and distribution of reusable travel mugs to all students have been parts of the campaign. Nonetheless, research collected by members of the Tripartite Committee indicate that this year, of 49,000 cups of coffee sold, only 3% were sold in reusable mugs. In other words, each member of the Barnard community had, on average, less than one cup of coffee in a reusable mug over the course of the year.

The coffee cup struggle illustrates the point made by the numerous campus sustainability experts: change is hard, especially when it requires both institutional, systemic and individual adjustments. Indeed, this is a problem the entire sustainability movement faces. But such changes are possible. A smoke-free campus, for example, might have seemed highly unlikely at one point in Barnard's history, but it is now accepted as a matter of fact. These types of challenges represent an opportunity for Barnard. As a small campus, we are capable of engaging our community to pilot new systems and methods, especially at the intersection of individual actions and larger collective goals.

Curricular and/or research initiatives: Barnard currently offers a number of courses that deal with the topic of sustainability and has a long history of leadership in related teaching and research. Many faculty members are engaged in sustainability-related research and integrate sustainability into the curriculum in departments as varied as anthropology, architecture, economics, environmental science, history, and theatre. However, there is currently no central program or page on our website to find all of the courses that touch on climate change or sustainability. The "Green Curriculum" page mentions only the Environmental Science program. In addition, there is little centralized emphasis, support, or connectivity between research, curricula, and campus initiatives relating to sustainability. Our new *Foundations* curriculum does not include any mention of sustainability; this is something that should be raised when the new curriculum comes up for discussion and review.

It would be a logical next step to present these courses and research programs more cohesively, and to find ways to connect our operations, our campus life, and our teaching more fully. Sustainability is no longer the sole province of environmental scientists—it must be seen as a truly cross-disciplinary practice that touches every aspect of our work as scholars, students, and as a community. BCRW and the Athena Center represent great examples of how Barnard can focus and enrich cross-disciplinary topics on campus and connect with other local and global players. Similarly, Barnard could create a center, program, or other platform to connect our educational and operational practice, either as a free-standing entity, or in conjunction with an existing center, like the Athena Center or the Earth Institute.

SUSTAINABILITY AT BARNARD: LOOKING FORWARD

Barnard has the opportunity to position itself as a leader in urban campus sustainability, where responses to climate change are comprehensive, multi-lateral, and span our entire community and operational system. We can serve as a laboratory, developing and prototyping systems for living and working that range from the local to the institutional, and that can contribute to the larger off-campus movement.

Even as Barnard creates its own blueprint for sustainability, including structural and personnel changes, it is important to remember that climate change is a problem that touches every aspect of our lives, and solutions cannot be solely the province of a Sustainability Office. To find lasting solutions no one office or person can be responsible, and no person or office can be exempt—from students to curriculum, facilities, dining services, and the financial and investment arms of the College. We all have a responsibility to tackle these problems in our own areas of expertise and our own spheres of influence on campus.

APPENDICES



APPENDIX 1

BOARD OF TRUSTEES RESOLUTION ESTABLISHING THE TASK FORCE

Barnard College Board of Trustees December 9, 2015 Executive Session

CONSENT AGENDA

5. Authorization of the Presidential Task Force to Examine Divestment: Upon the recommendation of the Committee on Investments, the board authorizes the formation of a Presidential Task Force to examine the issues surrounding divestment from fossil fuels.

BARNARD COLLEGE PRESIDENTIAL TASK FORCE ON FOSSIL FUEL DIVESTMENT CHARTER

BACKGROUND

Recognizing that climate change is an urgent issue, that consumption of fossil fuels is an important contributor to climate change, and that Barnard College is an ethical and responsible global citizen, the Board of Trustees voted to establish a Presidential Task Force on Fossil Fuel Divestment to study how Barnard can respond to these global challenges . A decision whether and how to seek divestment from fossil fuels rests with the Investment Committee of the Board of Trustees.

PURPOSE

The purpose of the Task Force is to enable the Committee on Investments and, subsequently, the full Board of Trustees make an informed decision about whether to seek divestment from companies that extract, process, distribute, and sell fossil fuels. The Task Force on Divestment will also seek to facilitate broader discussions on sustainability between the Board and other campus leaders/organizations including the previously established Tripartite Committee on Sustainability and the Sustainable Initiatives Consulting Board that can provide more in depth work on both micro approaches to sustainability on campus in addition to the macro approach of divestment.

The Task Force should:

- 1. Provide an objective and rigorous analysis to the Investment Committee on the implications of divesting from companies that extract, process, distribute, and sell fossil fuels;
- 2. Articulate the arguments for and against divestment, and the validity of these arguments;
- 3. Determine the potential financial implications (whether positive or negative) on Barnard's endowment from divestment;
- 4. Assess the feasibility of divestment within the current Investure consortium;
- 5. Discuss the potential social, political, economic, and physical impact a decision for Barnard College to divest will have on climate change and international policy;
- 6. Help the Board understand the moral and ethical issues surrounding divestment; and
- 7. Collaborate with the Tripartite committee on Sustainability to facilitate the creation of a parallel analysis of how Barnard can address climate change on a micro level by reducing its carbon footprint across campus and its operations.

KEY QUESTIONS

In doing so, the Task Force is charged with addressing these key issues and questions:

Scope of Divestment

- What criteria should the College use to determine which investments qualify for divestment? For example, should Barnard consider divestment from holdings in the top 200 fossil fuel companies or from any company that extracts, processes, distributes, or sells fossil fuels?
- What about companies that play a less direct role, like building pipelines and handling transportation?

Arguments for Divestment

- What is the underlying rationale for divestment?
- What problem does divestment attempt to solve and what is the likelihood that Barnard's actions will solve that problem?
- What have other colleges, universities, and other non-profit organizations done? What can we learn from their decisions and rationales?

Arguments against Divestment

- What are the arguments against divestment that are relevant to Barnard College's divestment?
- Are there things Barnard can do to address climate change short of divestment? What have other liberal arts colleges done? Why haven't more schools chosen to divest? Understand the driving causes for schools that have chosen not to divest.

Financial Implications

[Note that the Investment Committee cannot make an informed decision unless it has objective analysis of the financial implications to the endowment. This analysis has to be specific, yielding either a point-estimate or a range in terms of the financial gains or loss to the endowment from different investment assumptions.]

- Specifically, what will be the financial impact on Barnard's endowment in both the short and long term if we divest?
- Will investments in alternative energy sources yield good financial returns? If so, what types of investments should we pursue and how long will it take to realize returns?
- If Barnard divests and invests in companies that yield lower returns, how can/ should Barnard make up the lost revenue? Is there an acknowledgement for having lower returns in the short run, if long term yields prove to be higher and more sustainable?
- Are there alternatives to divestment that the College should pursue?

Feasibility of Divestment

- How can Barnard divest inside of the Investure consortium? What flexibilities does Barnard have for current and future investments?
- What steps will Barnard need to undertake with Investure to divest? How long will it take?

Moral and Ethical Responsibilities

• How does Barnard strike the appropriate balance between seeking healthy financial returns for the endowment and acting as an institution whose investments reflect its values?

Sustainability

- What initiatives has Barnard undertaken to become more environmentally sustainable, and how can the Tripartite Committee take on new efforts?
- Understanding that the Tripartite Committee is charged with reducing the campus' collective environmental footprint, how does accounting for investments affect that footprint? How can divestment impact the limit and reduction of Barnard's footprint?

ORGANIZATION AND STRUCTURE

The Task Force shall consist of the following:

- 2 Trustee Ex Officio Members
- 3 Trustees
- 4 Students
- 3 Faculty Members
- •1 Staff

CHAIR AND EXECUTIVE DIRECTOR

- The COO will chair the Task Force and be responsible for organizing the Task Force's work, setting the agenda, and preparing the final report.
- The VP for Finance will be the Executive Director responsible for assisting the Chair in organizing the team's work and leading the effort to understand the financial impacts of divestment.

DELIVERABLES

- The Task Force shall produce a written report for presentation to the Investment Committee of the Board of Trustees at its December 2016 meeting.
 - The Task Force shall provide an update on its efforts to the President at the end of the spring semester and again in September 2016.
 - The Task Force shall produce a final report to the President and the Chair of the Investment Committee no later than 30 days prior to the December 2016 Board meeting.
- In the course of its work, the Task Force should work with the President's Office to organize public events to engage the Barnard community on issues of divestment and sustainability.

APPENDIX 3

TASK FORCE WORK PLAN

PROS, CONS, AND ECONOMICS OF DIVESTMENT

This group should articulate the arguments supporting divestment from fossil fuels and assess the state of the fossil fuel industry to help put divestment efforts in context. What does divestment achieve?

The group should also discuss the arguments against divestment. The group should survey the actions of other liberal arts colleges and non-profit institutions and explain why some have chosen to divest while others not. What are the factors motivating such decisions and what lessons can we draw to inform Barnard's course of action?

This group should assess the state of the fossil fuel industry. What is the long-term outlook for the fossil fuel industry? What impact have divestment movements around the country (and the world) had on the industry, and how has the industry responded? Do continued investments in fossil fuels present any long-term financial risks? How should we think about the market for alternative energies? Where are alternative energies being most vigorously applied, and how cost effective are they?

- Stephanie Pfirman, Faculty Co-Lead
- Rajiv Sethi, Faculty Co-Lead
- Camille Kelleher, Trustee
- Dan Zwirn, Trustee
- Evelyn Mayo, Student Rep
- Camilla Puig, Student Rep
- Michelle Depardieu, Student Rep

FINANCIAL IMPLICATIONS AND FEASIBILITY

This group should determine the specific financial impact divestment will have on the value of our endowment over the long term. The group should endeavor to estimate the impact of various investment paths both with and without divestment, assuming a continued consortium relationship with Investure. What kind of returns can Barnard expect if it invests in alternative energy sources? Are there investments in alternative/sustainable energy that are as robust as our existing investments? How will returns with divestment compare to expected returns if Barnard chooses not to divest?

This group should also outline the mechanics of divestment within the Investure consortium. Is divestment feasible within the Investure consortium context? What does it mean to divest when our funds are comingled with others? What steps will Barnard have to go through to divest? What impact will divestment have on our Investure partners? The Rockefeller Brothers foundation recently exited Investure

to pursue fossil-free investments. What can their experience tell us about how this process worked?

Finally, the group should consider the alternatives to divestment. Are there actions that Barnard can take short of, or along, with, divestment?

- Eileen Di Benedetto, Lead
- Rajiv Sethi, Faculty
- Purnima Puri, Trustee
- Camille Kelleher, Trustee
- Evelyn Mayo, Student Rep
- Michelle Depardieu, Student Rep
- Outside Help

SUSTAINABILITY

This group should work closely with the Tripartite Committee on Sustainability to determine what steps Barnard can take to become more sustainable.

- Sandra Goldmark, Faculty Lead
- Dan Zwirn, Trustee
- Julia Wang, Staff Rep
- Christine Pries, Student Rep

ETHICAL AND MORAL RESPONSIBILITIES

This group should place Barnard's decision whether or not to divest in a larger socio-political context. What are Barnard's responsibilities on issues like climate change? What does it mean for Barnard to be a leader on such issues, and what actions does this drive us to? How should the Board of Trustees and the Barnard Administration balance our role in the world with the need to realize healthy financial returns?

- Stephanie Pfirman—Faculty Co-Lead
- Sandra Goldmark, Faculty Co-Lead
- Camille Kelleher, Trustee
- Julia Wang, Staff Rep
- Camille Puig, Student Rep
- Christine Pries, Student Rep

MEETINGS AND STRUCTURE

PLENARY MEETINGS: The full Task Force (TF) will hear reports from the group leads, determine whether the TF will take a position on a particular issue, and provide advice and direction to team leads and work groups. Meetings of the entire Task Force will take place once per month.

EXECUTIVE COMMITTEE: Team leads and one student representative will form an Executive Committee to oversee the more detailed work of the TF. The Committee will be responsible for integrating the work of the teams into a coherent report. The Committee should meet every two weeks to discuss the status of the work and provide any detailed direction as necessary.

GROUP MEETINGS: The majority of the work will take place in the smaller group meetings. Team leads will direct the work, be responsible for drafting sections of the final report, and meetings of work groups will meet as often as necessary and practical at the discretion of the Group Leads.

SUMMARY OF DIVESTMENT DECISIONS AND ACTIONS OF OTHER HIGHER EDUCATION INSTITUTIONS

Institution	Date of announcement	Estimated Endowment size (\$ in millions)	Coal	Coal and Tar Sands	Тор 200	All Fossil Fuels	Unclear Policy/ Other
Brevard College, NC	20-Feb-15	24	-	-	Direct and indirect	-	_
California Institute of the Arts, CA	15-Dec-14	140	-	-	-	less than 1.3%	_
Chico State University, CA	12-Dec-14	55	-	_	Direct and indirect	_	_
Colby College, ME	1-Sep-15	746	_	_	Direct	_	_
College of the Atlantic, ME	11-Mar-13	46	_	_	Direct and indirect	_	_
Foothill-De Anza Community College Foundation, CA	23-Oct-13	N/A	-	_	Direct and indirect	_	_
Georgetown University, DC	4-Jun-15	1,529	Direct and Indirect	_	_	_	_
Goddard College, VT	14-Jan-15	N/A	_	_	_	Direct and indirect	_
Green Mountain College	10-May-13	2,926	_	_	Direct and Indirect	_	_
Hampshire College, MA	19-Apr-16	40	-	-	-	Scope not clear	_
Humboldt State University, CA	26-Nov-14	28	_	_	_	Direct and Indirect	_
Naropa University, CO	31-Oct-13	6	-	_	-	Direct and Indirect	_
Peralta Community College District, CA	31-Jan-14	N/A	_	_	_	_	Policy statement
Pitzer College, CA	12-Apr-14	133	-	_	-	less than 0.8%	_
Pratt Institute, NY	9-Mar-16	123	Direct and Indirect	_	_	Direct and Indirect	_
Prescott College, AZ	28-Feb-14	5	-	-	Direct and Indirect	-	_
Rhode Island School of Design, RI	3-Jun-15	328	_	_	_	Direct and Indirect	_
San Francisco State University Foundation, CA	22-Oct-13	68	-	-	-	-	Policy statement
Stanford University, CA	6-May-14	2,220	_	Direct and Indirect	_	_	-

Institution	Date of announcement	Estimated Endowment size (\$ in millions)	Coal	Coal and Tar Sands	Top 200	All Fossil Fuels	Unclear Policy/ Other
Sterling College, VT	4-Feb-13	1	_	-	Direct	-	-
SUNY ESF College Foundation	1-Dec-14	22	-	-	Direct and Indirect	-	-
Syracuse University, NY	31-Mar-15	1,166	_	-	-	Direct and Indirect	-
The New School, NY	6-Feb-16	300	-	-	Direct and Indirect	-	-
Unity College, ME	1-Sep-12	15	_	-	Direct and Indirect	-	_
University of California, CA	9-Sep-15	14,300	-	Direct	-	-	-
University of Dayton, OH	23-Jun-14	518	_	-	-	Direct and Indirect	_
University of Hawaii, HI	21-May-15	66	-	-	-	Direct and Indirect	-
University of Maine System, ME	26-Jan-15	285	Direct and Indirect	-	-	-	-
University of Mary Washington, VA	15-Apr-16	41	-	-	Direct	-	-
University of Maryland, MD	28-Jun-16	283	_	-	Direct	-	-
University of Massachusetts Foundation	25-Mar-16	768	-	-	-	Direct	-
University of Washington, WA	14-May-15	3,076	Direct	-	-	-	_
Warren Wilson College, NC	12-Oct-15	60	-	-	Direct and Indirect	-	-
Yale University, CT	12-Apr-16	25,570	_	_	_	_	\$10 million from 2 companies

DIVEST BARNARD MISSION STATEMENT AND STUDENT PETITION

OUR MISSION

We strive to use our privileged position at a world-renowned academic institution whose mission seeks to promote women's education and empowerment, to provide a platform for the voices of marginalized peoples particularly women. We seek to educate the broader Barnard community on the injustices that face marginalized women (including preexisting systems of oppression including but not limited to: gender, racial, and socio-economic class inequities) which are exacerbated by climate change through having an active presence on campus and as part of the activist community that encourages students to engage with the struggle for social justice. Moreover, Divest Barnard sits on the Presidential Task Force to Examine Divestment voted by the Board of Trustees in December 2015. This Task Force includes Trustees, staff, faculty, and students and has a one year timeline to create a report on what divestment would mean for Barnard to be presented to the Board of Trustees for a vote in Spring 2017.

SGA REFERENDUM ON FOSSIL FUEL DIVESTMENT

The purpose of this referendum is to gather campus-wide opinion on fossil fuel divestment, a topic that was brought before the SGA by Barnard students. The result of this vote will allow SGA to better identify student body sentiment towards this topic.

Below you will find some background information about divestment in general, as well as information specific to fossil fuel divestment at Barnard College. Please read this information carefully, and vote "yes" or "no" to the question at the end. We encourage you to conduct your own research beyond what is presented in this document.

Each student is allowed one vote. Once you submit a response, you will not be able to change your answer.

We thank you for your vote! SGA (sga@barnard.edu)

SGA ANNOUNCEMENT ON REFERENDUM RESULTS FROM FEBRUARY 8, 2016

SGA recently conducted a referendum on Fossil Fuel Divestment. 23.82% of the student body participated, and of that number, 95.92% voted in favor of divestment. As per our Constitution*, this referendum has passed. Thank you to all those who participated!

DIVEST BARNARD STUDENT PETITION

Stop Barnard College from Profiting off Climate Destruction!

By: Divest Barnard Target: Barnard Administration and Board of Trustees, New York City, NY 3,101 SUPPORTERS IN NEW YORK CITY 23,783 SUPPORTERS 25,000 GOAL

It has been unequivocally established that climate change is real, happening now, caused by human activity, and is exponentially increasing in severity, making it one of the most imminent threats to the safety of all people, particularly marginalized groups who are often on the front lines of climate change.

At this very moment, Barnard College of Columbia University is profiting from the fossil fuel industry, the main perpetrator of climate change and the consequent widespread displacement of women, minority groups, and inhabitants of the global south.

Barnard's endowment is invested in the fossil fuel industry. We believe that Barnard must divest from this industry by removing all of its investments from companies whose majority profit comes from the extraction, production, and marketing and sales of oil, coal, and natural gas. By divesting, Barnard can quicken the necessary transition away from fossil fuels, towards a low-carbon economy reliant on sustainable energy sources.

"As a college for women, Barnard embraces its responsibility to address issues of gender in all of their complexity and urgency" —Barnard Mission Statement

It is irrefutable that climate change disproportionately affects women and gendernonconforming people. To dismiss these effects and further exacerbate pre-existing inequalities directly contradicts Barnard's mission. As a college in the privileged position of having a global platform to elevate voices that are not heard, and as an institution that is necessarily invested in the futures of its students and global citizens, Barnard has a responsibility to divest its endowment from fossil fuel companies.

We believe that ownership of fossil fuel stocks is a gross violation of the standards that Barnard claims to uphold. If you agree, sign our petition and tell Barnard College to put their money where their mouth is.

SUSTAINABILITY HIGHLIGHTS FROM PEER INSTITUTIONS

THE NEW SCHOOL adopted a comprehensive approach to climate action that had an impact on investment decisions, operations, curricula, and public leadership. The University fully divested from fossil fuels as part of its overall plan to address climate change and has publicly committed to "support initiatives to integrate sustainability and eco-literacy into curriculum, campus programming, and events." Operational efforts range from metering of buildings and spaces to the newly constructed University Center, which is LEED Gold-rated. The New School offers a wide range of courses focused on sustainability and publishes handbooks for students and employees aimed at creating a culture of sustainability in campus life.

HARVARD did not divest from fossil fuels but did implement a broad range of sustainability initiatives that serve as a strong example of the "campus as laboratory" model for integrating operations and curricula/research. Harvard set concrete goals for reducing greenhouse gas emissions, waste per capita, water use, and the amount of organic landscaping. In one example of linking campus operations to research, Harvard recently committed to reduce endocrine disrupting chemicals like flame retardants on campus, an initiative notable for two reasons: the university demonstrated the link between research and operations and an understanding that campus sustainability initiatives are not limited only to emissions or energy efficiency but can tackle as well food, materials, grounds, etc.

SWARTHMORE has launched a modified version of a "carbon tax," designed to incentivize emissions reductions among specific users, such as departments or branches of the College. Proceeds from the internal carbon tax fund sustainability initiatives.

COLUMBIA'S example is most notable for the process of campus-wide engagement and for the emphasis placed on the link between climate response and the academic mission. The University developed and adopted a set of Sustainability Principles that highlight the need to "enhance education, research and public outreach activity to promote sustainability and disseminate knowledge about how earth systems operate, how humans affect them, and how negative impacts can be reduced and reversed; prepare current and future generations to utilize and advance this knowledge."

SUSTAINABILITY PROGRAM ORGANIZATIONS

Institution	Sustainability Position/ Department	Staff Size	Reports to
The New School	Assistant Director of Sustainable Initiatives (within Facilities Department)	Staff of 2 —including 1 in Facilities Department	Assistant Vice President, Facilities
	Tishman Environment and Design Center	Staff of 1 —Sustainability Associate, Tishman Environmental Institute; part of a larger team of 7	Dean of Milano School of International Affairs, Management, and Urban Policy (and Director of Tishman Environment and Design Center)
Swarthmore College	Sustainability Department	Staff of 3 —Sustainability Director, Program Manager, Climate Action Senior Fellow	President of College
Columbia University	Environmental Stewardship	Staff of 5–Assistant Vice President; Director, Transportation Demand Management; Operations Manager; Manager of Planning & Outreach; Office Manager	Vice President of Campus Services
Yale University	Sustainability Department	Staff of 7 –Director, Associate Director, Education + Outreach Manager, Metrics + Program Manager, Senior Administrative Assistant, Urban Sustainability Program Associate, Woodbridge Fellow	Vice President for Global and Strategic Initiatives
Middlebury College	Office of Sustainability Integration	Staff of 4 –Director of Sustainability Integration, Global Food Studies Coordinator, Farm Educator, Sustainability Communication and Outreach Coordinator	Dean of Environmental Affairs
Pitzer College	Robert Redford Center of Southern California Conservancy	Staff of 2 –Conversancy Director and Professor, Program Manager	Provost of the College
Harvard University	Office of Sustainability	Staff of 18 –1 Director, 2 Assistant Directors, Sustainability Communications Director, Digital Communications Project Manager	Vice President for Campus Services

BARNARD