

**SKIDMORE COLLEGE
TASK FORCE ON DIVESTMENT
REPORT ON PHASE 1 OF DIVESTMENT REVIEW**

EXECUTIVE SUMMARY

In late 2013, the Skidmore College Board of Trustees authorized the Administration to create a Task Force on Divestment (TFD) to undertake a study and present recommendations on a proposal that the College divest its holdings of investments related to fossil fuels. An initial proposal to that effect had been made by a student petition to the Trustees and subsequently endorsed by the Student Government Association (SGA). The charge to the TFD was to consider the various complexities and implications of divestment in two phases. Phase I was to include an examination of the meaning of divestment and what it is meant to accomplish. Phase II was to include an analysis of the likely effect of divestment upon our endowment and to produce a non-binding recommendation to the Administration and Trustees. This report is a summary of our Phase I work as well as a preliminary analysis of some of Phase II, based largely on a study from Skidmore's investment advisors, Colonial Consulting.

The pressing context for this work is, of course, climate change. It is now unequivocal that there is warming of the climate system, and it is consensus that human influence has been the dominant cause of this warming. The reach of climate change is unparalleled, and its impacts threaten societies and cultures around the world. While divestment is unlikely to have an impact on the market valuation of individual fossil fuel companies, divestment campaigns are intended to send a strong signal to policymakers and financial markets, sustain public pressure, and foster informed public debate.

To date, 15 institutions of higher education in the United States have announced their intention to divest at some level, while many others have engaged in analyses and conversations but have chosen not to divest. The institutions that have divested tend to have small endowments and an institutional mission founded on sustainability, and have articulated a values-based argument for their divestment. The most commonly cited reasons for not divesting are risk to endowment returns and complications associated with comingled funds (funds from a number of institutions pooled into a managed fund).

Skidmore's total investment funds of about \$377 million are actively managed by 40-50 managers in largely comingled funds, and our endowment income supports everything from scholarships to personnel to collaborative research. Based on an analysis by Colonial Consulting, we currently invest between 3-5% of our endowment in fossil-fuel assets. However, largely due to apparent necessity to exit our current comingled investments as well as private equity and hedge funds in order to fully divest, we are advised that divesting could mean significant reductions in the rate of return earned by our endowment – from a current projection of 8.3% annually to 6.4% annually. Under the assumptions outlined by Colonial Consulting, this could reduce the growth of our endowment by approximately \$121 million over 10 years, and our endowment spending (takeout) by a cumulative \$ 27 million over ten years.

There are fruitful conversations to be had regarding the assumptions used in various financial analyses, our diverse values as an institution, and potential future shifts in the investment landscape. We look forward to engaging the broader Skidmore community in discussions about fossil fuel divestment. To that end, we are scheduling several open meetings for Wednesday, February 25th.

<p style="text-align: center;">SKIDMORE COLLEGE TASK FORCE ON DIVESTMENT REPORT ON PHASE 1 OF DIVESTMENT REVIEW</p>
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JANUARY 2015

INTRODUCTION

In late 2013, the Skidmore College Board of Trustees authorized the administration to create a Task Force on Divestment (TFD) to undertake a study and present recommendations on a proposal that the College divest its holdings of investments related to fossil fuels. An initial proposal to that effect had been made by a student petition to the Board of Trustees and subsequently endorsed by the Student Government Association (SGA). The charge to the TFD, in the words of President Philip Glotzbach, was to “consider the various complexities and implications relating to the call for divestment” of the college’s investments in fossil fuel companies. After receiving the endorsement of the Institutional Policy and Planning Committee (IPPC), the TFD was duly constituted (by April 2014) through processes of willingness-to-serve and appointments, with representation from faculty (3), staff (3), student body (3), and the Board of Trustees (1). The following is the composition of the TFD:

Faculty

James Kennelly, Professor of Management and Business (Chair)

Pat Oles, Associate Professor of Social Work

Robert Turner, Associate Professor of Government

Staff

Kyle Bernard, Controller, Director of Financial Services and Associate Treasurer

Karen Kellogg, Associate Dean of the Faculty for Infrastructure, Sustainability and Civic Engagement (Vice-Chair)

Levi Rogers, Sustainability Coordinator

Students

Jessica Aleman '15

Brian Fredericks '16

Madeleine Welsch '17

Trustee

Charles B. Buchanan

The TFD was charged to accomplish its work in two phases:

- *Phase 1* was to encompass an examination of the *meaning* of the divestment request and an understanding of what the call for divestment was intended to accomplish in advancing the goals of sustainability. It was also to include research on how other institutions (particularly our comparison group) have handled this issue, with the goal of learning what we can from their experiences.

- *Phase 2* was to include an analysis of the likely effect of divestment upon our endowment, operating budget, financial aid, etc., and to produce a non-binding recommendation to the Administration and Trustees regarding the divestment proposal itself.

The Task Force met on a bi-weekly basis during the Fall 2014 semester, focusing on the information gathering phase of its work (Phase 1).

Importantly, the TFD also began to study the potential effects of fossil fuel divestment on Skidmore's endowment (Phase 2). To that end, in December 2014 the College received a study from our investment advisors, Colonial Consulting, outlining their view of the potential impacts of fossil fuel divestment on Skidmore's endowment and ongoing funding. Their analysis is included in this report.

The following report, then, summarizes our work to date; it is organized as follows:

- Section 1 – The Meaning & Purpose of Divestment
- Section 2 – Divestment Campaigns at Other Institutions
- Section 3 – Skidmore's Investment Portfolio and Potential Financial Impact of Divestment

We hope that this report will prove informative to the Skidmore Community, and will provide useful background and context for a community discussion on fossil fuel divestment. We expect to begin a process of engagement and conversation with the Skidmore community, including faculty, staff, students, and alumni, early in the Spring 2015 semester. We intend to develop, and deliver, our recommendation to the Board of Trustees by May 2015.

SECTION 1 MEANING, PURPOSE AND BACKGROUND ON DIVESTMENT

Skidmore Divestment Petition

The Skidmore Student Petition on Divestment called on Skidmore College to freeze any new investment in fossil-fuel companies and withdraw from direct ownership and from comingled funds including fossil-fuel public equities and corporate bonds within five years.¹ The Petition also asked Skidmore College to develop a socially and environmentally responsible investment strategy. Four-hundred-ninety-eight students, eleven alumni and forty-seven others signed the document. The Petition provided information as to why divestment was important, and asserted that “we cannot safely burn even half of global fossil-fuel reserves without dangerously warming the planet for several thousand years.” The petition suggested that divestment “will not only be a sound decision for [Skidmore's] financial portfolio, but also for the wellbeing of its current and future graduating classes, who deserve the opportunity to graduate with a future not defined by climate chaos.” Overall, the petition proposed that we divest for reasons of social responsibility and for Skidmore to engage in a more sustainable, long term investment strategy that ensured the wellbeing of future students.

¹ Skidmore Divestment Petition to President Glotzbach and Board of Trustees.

SGA Divestment Resolution

The Student Government Association Resolution 23-51, “A Resolution to Support the Development of a Socially and Environmentally Responsible Investment Policy” was a response to the petition and call to action.² This document reiterated that fossil fuel divestment would bring Skidmore’s investments in line with the aims of the strategic plan, which states that “Skidmore will work to be ‘a socially and environmentally responsible corporate citizen.’” In this resolution, fossil fuel companies were defined as “any of the two-hundred publicly-traded companies with the largest coal, oil, and gas reserves, as listed in the Carbon Tracker Initiative’s ‘Unburnable Carbon’ report.” Interestingly, the resolution also stated that the MSCI KLD 400, the oldest socially-responsible index, had performed on par with the S&P 500 over the past fifteen years, suggesting that “socially responsible investing does not negatively impact the growth of endowments.” The SGA Resolution also called for the development of a socially and environmentally responsible investment policy.

Greenhouse Gas Emissions and Climate Change

As articulated in the Skidmore student Divestment Petition and accompanying Resolution, greenhouse gas (GHG) emissions, and the resulting climate change, are the motivations for the international fossil fuel divestment movement. While climate systems are incredibly complex, the causes of contemporary climate change and many of the potential impacts are now well understood. The atmospheric concentrations of several greenhouse gases (e.g., carbon dioxide, methane, and nitrous oxide) have increased to unprecedented levels in at least the last 800,000 years, and carbon dioxide levels are now hovering around 400 ppm, a concentration beyond the 350 ppm concentration now widely recognized as a target level to preserve our social systems³. As a result, it is unequivocal that there is a warming of the climate system, including the atmosphere and oceans, and it is consensus that human influence has been the dominant cause of warming since the mid-20th century. We understand with varying degrees of certainty that this warming has and will continue to cause snow and ice melt, sea level rise, ocean acidification, loss of permafrost, increased severity of storm events, significant changes in precipitation patterns, biodiversity loss, spread of certain insect-borne diseases, and the displacement of human populations and cultural loss. And the positive and negative feedback loops inherent in the climate system could very well accelerate these impacts.⁴ It is also worth noting that there are major inequities intrinsic in contemporary climate change. Relatively few people have enjoyed the benefits of high levels of GHG emissions, and, of course, not everyone is experiencing the burdens of climate change equally. As one metric, climate change-induced displacement range from 150-300 million people by 2050, with low-income countries having the far largest burden of disaster-induced migration.

² Arnow S., Barber S. “Resolution 23-51: A Resolution to Support the Development of a Socially and Environmentally Responsible Investment Policy.”

³ IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

⁴ IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

While major climatic shifts are indeed part of geological history, contemporary climate change is different. It is being caused by rational beings who are able to predict, with varying degrees of certainty, the profound changes that will impact, directly, the lives of each and every one of us. The reach and depth of climate change sets it apart from any other social issue we have ever encountered or will likely ever encounter.

Skidmore's Values

Skidmore has recognized the important role that institutions of higher education must play in major societal issues, and this is reflected in our institutional strategic goal of preparing every student to make the choices of an informed, responsible citizen at home and in the world. Furthermore, we acknowledge the deep connection between our commitment to responsible citizenship and our institutional behavior - especially in the realm of environmental awareness and sustainability. As a result, Skidmore has made admirable strides in sustainability. We have added faculty who teach sustainability-related courses, offered development workshops for existing faculty to increase our sustainability-related offering, and increased co-curricular offerings and outreach around sustainability. The Skidmore Sustainability Office was established to serve as a hub for coordinating and making visible our sustainability-related efforts, and the Campus Sustainability Subcommittee, the Environmental Action Coalition, and the Sustainability Subcommittee of SGA have all formed to help us push sustainability forward at Skidmore. And we have tackled GHG reductions very directly through numerous infrastructure projects ranging from the installation of lighting retrofits to solar fields. As a result we have reduced the total of our direct GHG emissions plus the GHG emissions from our purchased power by approximately 48% since 2000, and preliminary calculations indicate that this reduction will be closer to 73% with our recent solar, micro-hydro, and solar thermal projects. The formation of the TFD and our serious exploration of fossil fuel divestment is another step in our institutional response and effort to address climate change.

Fossil Fuel Divestment

Fundamentally, fossil fuel divestment represents the process of selling equity or other investments in companies engaged in the exploration, extraction, processing or sale of fossil fuels, primarily for ethical rather than economic reasons. One NGO addresses it as follows:

Divestment is the opposite of an investment – it simply means getting rid of stocks, bonds, or investment funds that are unethical or morally ambiguous.⁵

Such divestment can operate at varying levels of intensity: it can be limited to coal companies, can include integrated oil and gas companies, and can sometimes also include oil service companies. Most divestment campaigns appear to focus on coal, oil and gas companies and do not include service companies. The process of divestment can also take varying lengths of time. Prominent advocates for divestment 350.org are campaigning for divestment within a five-year window.

⁵ gofossilfree.org/what-is-fossil-fuel-divestment/ sourced on October 14, 2014.

Although there are reportedly more than 1,800 publicly traded fossil fuel companies in the world, those companies typically targeted for divestment usually represent the top 200 such companies (100 coal & 100 oil and gas) by reported carbon reserves (CO2 emissions potential). These companies were initially reported in a list produced by the non-profit Carbon Tracker Initiative (CTI) in 2011. The “Carbon Tracker 200” was subsequently used by many divestment campaigners. More recently, in 2014, Fossil Free Indexes LLC, a newly established ESG research firm, updated the list of the top 200 fossil fuel companies by the carbon content of their fossil fuel reserves and reported them in the “Carbon Underground” report. 350.org, the NGO that initiated the fossil fuel divestment movement, has indicated that it will use the Carbon Underground report as the “target list” in its continuing campaign.

Goals of Fossil Fuel Divestment

The overarching goal of fossil fuel divestment campaigns is clear: to use fossil fuel divestment to send a strong signal to both policymakers and financial markets that the burning of fossil fuels is “not ok” and that immediate steps must be taken to reduce CO2 emissions and thereby mitigate global climate change and its consequences. A second and related goal is to make continued investment in fossil fuel companies a moral issue, rather than a purely economic one.

Although *in theory* divestment, especially if it reaches critical mass, ought to have a dampening impact on market valuation of individual fossil fuel companies, and on energy industry capital markets more generally, there is simply no evidence of this in the short term. Indeed, divestment campaigns rarely make reference to any intent to affect capital markets, and Bill McKibben, founder of 350.org (a prime driver of the divestment movement) has gone to great pains to say that they are not trying to starve energy companies of capital. As he puts it, “We can’t bankrupt these companies, but we can bankrupt their social license.”⁶ Given the large market capitalization of the top 200 fossil fuel companies, and assuming that financial markets are efficient at matching willing sellers and buyers, it is unlikely that even significant divestment successes would affect their market values.

Arguments cited in favor of fossil fuel divestment therefore focus more on financial risk (to the investor), matching investment decisions with values, creating sustained public pressure and visibility, and finally, fostering an informed public debate.

Financial Risk: The argument for divestment for financial reasons centers on the risk of energy companies being stuck with “stranded assets” that are likely to lose value in the future. “Stranded assets” have been described as:

*... environmentally unsustainable assets [that] suffer from unanticipated or premature write-offs, downward revaluations or are converted to liabilities. These risks are poorly understood and are regularly mispriced, which has resulted in a significant over-exposure to environmentally unsustainable assets throughout our financial and economic systems.*⁷

⁶ Sourced on 29 January 2015 from <http://gofossilfree.org/usa/the-largest-college-and-university-investment-consultant-says-there-are-a-number-of-colleges-working-on-divestments-now/>

⁷ The Stranded Assets Programme at the University of Oxford’s Smith School of Enterprise and the Environment.

In this context, stranded assets refer to the fossil fuel reserves that energy companies own and “capitalize” on their balance sheets, and which they regularly communicate to investors and potential investors. These are assets (proven fossil fuel reserves) that will be “stranded” or impaired if there are negative changes in the demand for fossil fuel, either through reduced consumer demand, government action such as carbon taxes, carbon regulations, international agreements to limit CO2 emissions, etc. In other words, there could be considerable risk that fossil fuel assets will lose their value, and that fossil fuel companies will need to “write down” these assets in the future. Such write downs would affect the market value of these equities, with a knock-on negative effect on their investors. If such a likelihood is at all probable, it will mean significant risk to institutions holding investments in fossil fuel companies.

As a coda to this, it is also argued that divestment will free up money for alternative investments in sustainable technologies and clean energy.

Matching Investment Decisions with Values: The basic idea is that it is morally wrong to continue to emit carbon dioxide into the atmosphere, contributing to global warming and climate change. Most fossil fuel divestment campaigns hope that their efforts, if successful, will help call into question the fossil fuel industry’s legitimacy and its “social license” to operate. The goal is simply to stigmatize the largest “enablers” of CO2 emissions on the planet, painting them as the most culpable participants in global warming and climate change. Divestment campaigner fossilfree.org states:

Fossil fuel divestment takes the fossil fuel industry to task for its culpability in the climate crisis. By naming this industry’s singularly destructive influence — and by highlighting the moral dimensions of climate change — we hope that the fossil fuel divestment movement can help break the hold that the fossil fuel industry has on our economy and our governments.⁸

So, if indeed climate change is destroying the planet, and if fossil fuel companies are the primary enablers of such destruction, then the argument goes that institutions of higher education who claim to have core values of sustainability and global citizenship have a moral obligation to match their investments to their values, and divest their fossil fuel holdings.

Creating Sustained Public Pressure: Divestment proponents argue that divestment is a way of keeping climate change visible and “newsworthy.” The South African divestment campaign, they argue, had just that effect. It started quite slowly, and built over an extended period of time, ratcheting up public pressure throughout. It was that international public pressure that, over time, exerted a strong influence over the toppling of South Africa’s apartheid regime.

Fostering Informed Public Debate: Divestment, as well as ongoing divestment campaigns, can also represent a process of education — a means of organizing a thoughtful, informed, and extensive debate within a community on the critical issue of climate change.

⁸ <http://gofossilfree.org/what-is-fossil-fuel-divestment/>

Divestment History

Divestment campaigns have historically emerged to protest social injustices and to pressure governments to end practices that are seen as immoral or unjust. These campaigns include divestment from Israel in protest of Palestinian occupation⁹, divestment from arms manufacturing companies¹⁰, sweatshop labor, and tobacco advertising.¹¹ Many large institutions, including Harvard, Columbia, Brown, Dartmouth, Stanford, Johns Hopkins, University of Michigan, and University of California, have divested from the tobacco industry.¹²

So far, divestment from South Africa represents the most successful and well-known divestment movement. Begun as a protest against the policy of apartheid - racial segregation in South Africa – it started to gain critical social mass in the United States in the 1960s. In November, 1962, the United Nations General Assembly established the UN Special Committee against Apartheid, and passed Resolution 1761, which called for economic and other sanctions on South Africa. Subsequently, the Sullivan Principles were developed as a response to government inaction. Established in 1977 by Rev. Leon Sullivan, the seven principles aimed to promote corporate social responsibility and to lobby businesses and institutional investors to end their involvement with the apartheid state.¹³ It was not until the 1980s that economic sanctions were implemented on a large-scale basis; by then, some universities had already taken action. In 1977, Michigan State University and Stanford University divestment began. A year later, Columbia University and University of Wisconsin-Madison followed. Hampshire College completely divested in 1977, Harvard University partially divested (amid resistance), and the University of California withdrew \$3 billion, a large majority of their South African investments. While most would argue that the boycotts and sanctions were effective in raising public awareness and public moral standards of South African repression, there are conflicting views on the impacts to the financial markets.^{14,15} It is also worth noting that, compared to South Africa, fossil fuel investments are much larger (a multi-billion dollar industry), and the fossil-fuel divestment campaign is different in that it is aimed at many corporations, rather than one country.

SECTION 2 DIVESTMENT CAMPAIGNS AT OTHER INSTITUTIONS

Divestment Decisions

To date, 15 institutions of higher education in the United States have announced their intention to divest *at some level*. In addition, 3 institutions outside the United States have decided to divest (see Table 1, below). These have tended to be schools with relatively small endowments (only one

⁹ <http://www.bdsmovement.net/bdsintro>

¹⁰ http://www.admin.ox.ac.uk/councilsec/governance/committees/srirc/report_march_2010/

¹¹ <http://www.nytimes.com/1990/05/24/us/harvard-and-cuny-shedding-stocks-in-tobacco.html?pagewanted=all&src=pm>

¹² <http://www.phil.upenn.edu/~weisberg/Tobacco-Final.pdf>

¹³ <http://www.marshall.edu/revleonsullivan/principles.htm>

¹⁴ Gethard, Gregory. Protest Divestment and the End of Apartheid. (2014). *Investopedia*. Retrieved from: <http://www.investopedia.com/articles/economics/08/protest-divestment-south-africa.asp>.

¹⁵ Teoh, S. W., I. Welch, C. P. Wazzan, 1999. "The Effect of Socially Activist Investment Policies on the Financial Markets: Evidence from the South African Boycott." *Journal of Business*, 1999, vol. 72, no. 1.

institution, the University of Dayton, has an endowment that is larger than Skidmore's), several have historically defined their institutional niche as sustainability, and none of them are in Skidmore's peer/aspirant group. A considerably larger number of schools have decided not to divest (including 5 colleges in Skidmore's aspirant/peer group).

Table 1

Decided to at least partially Divest	Decided not to Divest (incomplete list)
1. College of the Atlantic	1. Cornell University
2. Foothill-De Anza Community College Foundation	2. Bowdoin College (Aspirant)
3. Green Mountain College	3. Harvard University
4. Hampshire College	4. Swarthmore College
5. Naropa University	5. Pomona College
6. Peralta Community College District	6. Middlebury College (Aspirant)
7. Pitzer College	7. Boston College
8. Prescott College	8. Vassar College (Peer)
9. San Francisco State University Foundation	9. Brown University
10. Santa Fe Art Institute	10. Roosevelt University
11. Stanford University	11. Bryn Mawr College
12. Sterling College	12. Colby College (Aspirant)
13. Unity College	13. Wellesley College
14. University of Dayton	14. Bates College (Peer)
15. Unity Theological Seminary	15. American University

Rationale and Motivation

Institutions that Decided to Divest

Almost all schools that have decided to divest have articulated a moral/ethical/value-based argument. Simply put, this argument holds that it is unconscionable to be invested in and profit from fossil fuel extraction and exploitation, considering that fossil fuel emissions are the main driver of climate change. These institutions find investment in fossil fuel companies to be morally objectionable and something which their core values do not permit them to support. Many, such as Hampshire, Green Mountain, Unity, Sterling, and Pitzer, made explicit and cogent arguments about environmental leadership and the role of academic institutions in confronting climate change as global citizens and national leaders. Some framed divestment as another step in the continuing project of aligning their investments with their values.

Other common points included the following:

1. The institution did not believe that divesting from fossil fuels would have a significant impact on endowment returns, and/or were concerned about over-exposure to such a risky industry as fossil fuels – and the potential for negative financial consequences. (Foothill De-Anza, San Francisco State University Foundation, Sterling, Unity)
2. The institution did not believe that, realistically, shareholder activism (through maintaining equity ownership in fossil fuel companies) would further the goals of sustainability.
3. While the institutions acknowledged that their divestment would not have a significant financial impact on the fossil fuel companies, they viewed divestment as broadening support for sustainable and local enterprises, thus further assisting in the transition to a sustainable economy. (Hampshire, College of the Atlantic)
4. Others focused upon the unequal social impacts of climate change - social justice concerns (U of Dayton) or the need to invest in future generations by increasing the *social* returns of the endowment. (Hampshire, Foothill-De Anza, Pitzer, Sterling)

Institutions that Decided NOT to Divest

Of all the colleges that have rejected divestment, only 2 (Colby and Bates) failed to cite the risk to endowment returns as a major motivator for their decision; for almost all, it appears to be the primary motivation for NOT divesting.

To that end, many schools judged the threat to endowment returns as unacceptable by describing the purpose and function of the endowment. The argument, in short, is that using the endowment to further any social or political end is beyond its correct use. The paradigmatic form of this argument was memorably articulated by President Drew Faust of Harvard University:

Harvard is an academic institution. It exists to serve an academic mission - to carry out the best possible programs of education and research. We hold our endowment funds in trust to advance that mission, which is the University's distinctive way of serving society. The funds in the endowment have been given to us . . . to advance academic aims, not to serve other purposes . . . we maintain a strong presumption against divesting investment assets for reasons unrelated to the endowment's financial strength and its ability to advance our academic goals.

We should, moreover, be very wary of steps intended to instrumentalize our endowment in ways that would appear to position the University as a political actor rather than an academic institution. Conceiving of the endowment not as 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. The endowment is a resource, not an instrument to impel social or political change.¹⁶

¹⁶ (<http://www.harvard.edu/president/fossil-fuels>)

Other commonly cited reasons for NOT divesting included:

1. Divestment will have no discernable impact on climate change, or divestment will not effect change in the relevant human institutions (Harvard, Bryn Mawr, Colby, and Middlebury).
2. It is not responsible to divest and harm the endowment, or even to go through the trouble of divesting, if it is merely a *symbolic choice*; the institution should be focusing on real, not symbolic, change. (Pomona, Swarthmore)
3. It is extremely difficult to divest due to the way that the endowment is invested (e.g. commingled funds). Divestment could cause institutions to lose access to the best money managers, those who can consistently achieve “higher than market” returns. (Middlebury, Vassar, Bates, Pomona)

Levels of Divestment

Although Stanford is generally counted among those institutions that have committed to divestment, it is important to clarify that it only committed to divest from its investments in coal; in addition, it indicated that it would exert “best efforts” to convince its investment managers to find ways to divest their funds (generally commingled with funds from other institutions) from fossil fuel investments.

Deliberative Process

Many schools on both sides of the divide made a decision relatively quickly, with little deliberation or community input; after submission of a student petition/student government resolution, the relevant Board of Trustees committee, the Board at large and/or the endowment/investment advisory panel considered the request and returned a response within a few months. Aside from student support for divestment (as evidenced by petitions presented to Boards of Trustees) there was generally no inclusive and public process of consultation.

A few institutions went through longer processes (Stanford - 1 year, Bates - 1 1/2 years, Middlebury - 2 years), and the processes at Bates and Middlebury were more inclusive and transparent than most schools, including various outlets for input and communication. It is also worth noting that while most schools used pre-existing panels or committees to evaluate divestment, some schools, like Wellesley, commissioned groups to explore divestment.

Divestment: Not Just a “Yes” or “No” Decision

Decisions on fossil fuel divestment are not limited to simple yes or no declarations. Interest, awareness, and understanding about fossil fuel divestment continues to grow, leading to new information and other influences that affect institutional decisions. Some schools have adopted specific processes that allow their institution to analyze and interrogate emerging information, and react if deemed necessary. For example, Oberlin College adopted a divestment policy that allows students, employees, and alumni to express concerns regarding Oberlin’s holdings. Oberlin developed clear guidelines for community members to follow while submitting divestment proposals, and the Board of Trustees will consider divestment if activities “shock the conscience.”

Institutions have also created positive investment channels. Bard College offers a sustainable investment option in their Social Choice Fund. Gifts can be earmarked to this alternative endowment where all companies have been negatively screened for environmental, labor, and legal practices. Oberlin College also created an Impact Investment Platform (IIP), which is a subcommittee tasked to find ways of investing that brings sustainable “positive change.” The subcommittee is comprised of two trustees, two students, one alumnus, one faculty member, and one member of the institution’s Investment Committee. “The IIP will seek to identify investments that, among other things, meet high-impact, solution oriented social and environmental standards and operate in a manner that reinforces a clear commitment to people, the planet, and corporate social responsibility.”¹⁷ Middlebury College, even though it rejected divestment, subsequently indicated that it was directing \$25 million of its endowment towards “investments focused on sustainability business such as clean energy, water, climate science, and green building projects” and also allocated \$150,000 to be managed by a student-run Socially Responsible Investment Club.¹⁸

Finally, the fossil fuel divestment movement appears to be here to stay. It has spread faster than similar divestment campaigns, and appears to be gaining momentum. At those institutions that have rejected divestment, student campaigners have not quietly accepted the decision. Recent student actions at schools on the ‘Rejected Divestment’ list include: campus rallies, training camps, continuing petition drives, ongoing meetings with Boards of Trustees and top administrators, student-organized panels and discussions, and other forms of campus demonstrations.

SECTION 3

SKIDMORE INVESTMENTS AND THE POTENTIAL FINANCIAL EFFECT OF DIVESTMENT

Investment Composition

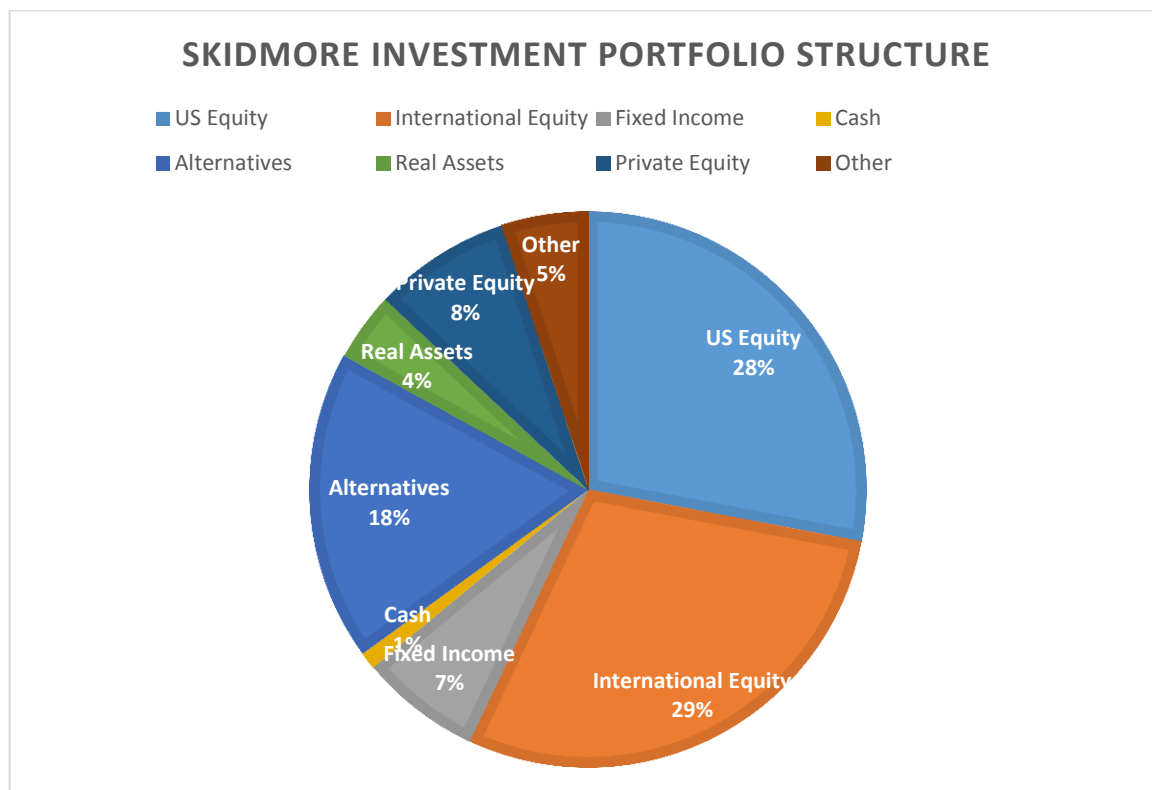
Skidmore’s investment portfolio has an asset allocation strategy that has been designed to yield investment returns of at least annual regular spending (the endowment “takeout”) plus inflation, while maintaining appropriate levels of risk. The portfolio is diversified by asset class (equities, bonds, cash, etc.), industry, geography, currencies, and in other ways to mitigate risk. As of June 30, 2014, Skidmore’s investment portfolio totaled approximately \$377 million, which represents the total value of assets overseen by the Investment Committee of the Board of Trustees (with advice from professional investment advisor, Colonial Consulting).

We should note that although Skidmore’s investment portfolio totals approximately \$377 million, the component that is defined as “endowment” is approximately \$335 million. The College currently invests approximately \$42 million of additional working capital (operating funds) with the endowment to maximize returns on these funds.

¹⁷ Board Allocates \$5 Million for Impact Investment Platform, Adopts Divestment Policy. Sourced on January 3, 2015 at: <https://oncampus.oberlin.edu/source/articles/2014/10/02/board-allocates-5-million-impact-investment-platform-adopts-divestment-policy>

¹⁸ Designing an Endowment Portfolio for a Sustainable Society. Sourced on January 21, 2015 at: <http://www.middlebury.edu/sustainability/news-events/news/2014/node/475901>

The following is a chart of the overall asset allocation of Skidmore's investment portfolio:



Within each of the above asset categories there are a number of separately managed funds. Although Skidmore completes an initial and ongoing rigorous due diligence process for every manager, each investment manager independently develops and executes its own strategy and makes investment decisions to buy and sell individual securities. Once invested, Skidmore's funds are pooled and invested with other colleges, foundations and other third parties and Skidmore no longer has control over the underlying investment decisions. These funds are actively managed by between forty to fifty managers. Skidmore investment positions generally range from \$1 million to \$40 million. It should be noted that the College generally does not invest directly in individual stocks and bonds. As noted above, individual securities are part of *comingled funds* and therefore in order to divest from a particular security, the College would need to liquidate 100% of its position with the fund manager. There are often future contractual commitments associated with certain asset classes as well as liquidity restrictions and a complete divesture would force the sale of many private/illiquid investments through a secondary market, which could expose the portfolio to losses.

In order to further understand the composition of the investment portfolio and determine where the current portfolio could have exposure to fossil fuels, we utilized the assistance of Colonial Consulting to examine current underlying portfolio holdings and their exposure to fossil fuels. Based on the preliminary analysis, Colonial Consulting noted that specifically identifiable exposure to fossil fuels was less than 4%. This analysis included approximately 92% of the total assets in the Skidmore portfolio. Private equity assets were excluded since there is limited information available to investors on the underlying holdings. For analysis purposes, Colonial Consulting used the list of global

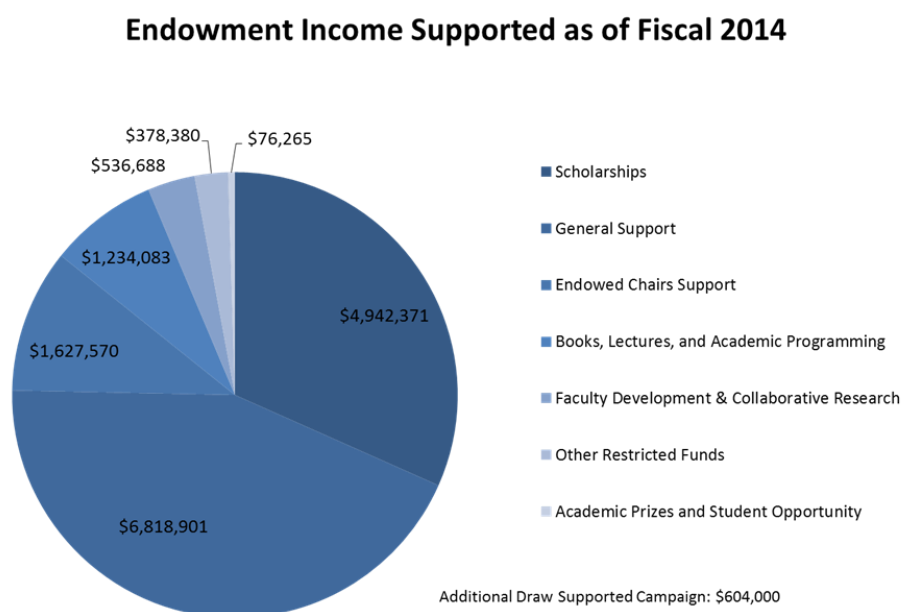
securities created by Fossil Free index, which is cited by 350.org. The list contains the top 100 coal companies and top 100 oil and gas companies on a global basis. It should also be noted that although current holdings (excluding private equity) are less than 4%, individual securities are embedded within a number of significant investment managers, and as a result, cover a much higher percentage of assets based on their commingled nature. In other words, since the College does not generally purchase individual stocks and bonds which can be sold on the open market, for the College to execute a divestment strategy, it would require the termination of any manager whose commingled fund makes *any* investment in fossil fuels. As a result, it is far more complicated than selling 4% of the endowment holdings and replacing them with green alternatives - divestment would necessitate significant changes to a high percentage of the portfolio (since many managers and asset classes such as private equity and hedge funds would need to be avoided entirely).

Additionally it should be noted that many managers often hedge their positions on a short term basis with the S&P 500 and other indices, which may include “fossil fuels” so there is no assurance that these securities will be avoided by many of Skidmore’s current managers.

In summary, it is the view of our financial advisors that the impact of divestment would likely be a significant and fundamental change in the composition of the portfolio. We will address this in more detail later in this report.

Mechanics of the Endowment

Skidmore’s endowment, like most colleges and universities, represents its single largest financial asset. Since approximately 80% of the College’s revenues come from tuition and fees, investment income represents a significant component of maintaining a balanced budget. The following graph illustrates how the College spends earnings from the endowment:



Please note that many of the above categories of expenditures (income uses) are determined based on donor stipulations, while “general support” is used for other important operating expenses such as personnel costs, employee benefits, supplies, etc. It should also be noted that any change in the College’s endowment value (positive or negative), has a direct effect on our endowment take-out calculation, which in turn directly impacts the College’s operating budget and ability to fund the above expenses.

The endowment’s value is derived primarily through gifts from donors and subsequent earnings on the invested gifts. The earnings can be spent in accordance with donor stipulations, applicable laws, and the College’s spending policy, which is summarized below.

The spending policy for the College is determined by the Budget, Finance and Infrastructure Committee of the Board of Trustees. It is currently 5% of the weighted average of endowment values over the prior three years. To achieve its long-term investment objective, the Investment Committee of the Board of Trustees will strive to meet or exceed a rate of return (net of fees) equal to the spending policy rate (5%) plus the Consumer Price Index (an inflation measure) over an investment cycle. The spending policy for the College may be supplemented by the Budget, Finance and Infrastructure Committee to fund certain fundraising expenses. Such special draws must be authorized by the Board of Trustees each year they are in effect.

The College’s endowment spending was approximately \$16 million for the 2013-14 fiscal year. Note that “endowment spending” is often also referred to “endowment take-out” or “endowment draw.”

The Financial Effect of Divestment on Endowment (Other Colleges)

There is limited empirical evidence on which to base an opinion. Those schools that have chosen to divest have either indicated at the time of their decision that they believed there would be no adverse financial effect on their endowment, or did not explicitly address the issue – discussing values rather than financial effects. The University of Dayton, the only divesting institution with an endowment larger than Skidmore’s (\$670 million), indicated that it was “confident this investment strategy will not have a significant negative financial impact on the University” and that they could restructure an investment portfolio that was “consistent with its long-term risk and return mandates.”¹⁹ Unity College in Maine (\$14 million endowment) has indicated that its investment returns since it divested have exceeded its benchmarks.

On the other hand, the majority of institutions that have considered divestment have decided against it, and the primary reason most have given is the expectation that divestment would have significant negative financial effects on endowment values. This is almost always connected with the issue of commingled funds. For example, Middlebury College (endowment of more than \$1 billion) uses more than 150 fund managers (through its investment manager Investiture) who manage funds in which Middlebury investments are “commingled” with investments from other institutions. Middlebury’s operative assumption was that these investment managers, who are judged solely on their “alpha” (the returns they generate above and beyond overall “market” return) would not divest from fossil fuels, or

¹⁹ Accessed on 14 January 2015 from: https://www.udayton.edu/news/articles/2014/06/dayton_divests_fossil_fuels.php

in any event *could not* divest from fossil fuel investments without the consent of all the investors. Thus, Middlebury assumed that in order to divest, they would have to exit all such funds, and thus give up these larger above-market returns. Specifically, they assumed that the returns of 9.9% that they had been receiving would be reduced to a market rate of 7.3%, at a cost of \$550 million over ten years.

A detailed analysis prepared by Cambridge Associates for Pomona College, (which can be found on the Divestment Task Force website at www.skidmore.edu/divestment) took the same approach. The analysis estimated that divestment would result in the endowment market value being approximately 16% less than it would have been after a ten year period (\$419 million / \$2.66 billion), along with accompanying reductions in annual endowment spending. Their analysis was based on exiting all “managed” funds and instead investing in fossil free index funds that would achieve market returns.

The key assumptions that undergird these analyses are 1) existing fund managers will not and/or cannot divest of fossil fuel investments (especially due to commingled nature of investor funds), so the only way to divest is to exit from these funds and 2) funds would be reinvested in unmanaged, fossil free, index funds (funds that mimic the overall market averages rather than specific “stock picking”). This appears to be due to the belief that there are not yet fossil free funds available (managed by credible investment professionals) that are considered to be the equal of the managed funds that these institutions have heretofore been using.

Still, we should note that almost all decisions to divest have been made relatively recently (and such divestment can take place over up to 5 years) so there is not yet a track record of performance that will enable us to categorically state whether or not institutions that have divested have seen any significant erosion of their endowment investment performance.

Fossil Free Portfolios

If we ignore the “commingling problem,” however, what can we say about the performance of fossil free portfolios? There is evidence to suggest that the difference between overall market returns for a fossil free portfolio compared to a portfolio including fossil fuels is, on an overall basis, relatively small.

An MSCI-ERG Research Brief published in December 2013 evaluated the 10-year returns of a market index that excluded fossil fuel stocks, and compared it to an index (the MSCI ACWI Select Energy Producers IM) that included 95% of the fossil fuel companies on the Carbon Tracker list. They found that the index that excluded fossil fuels had a 1.2% higher return.²⁰ A further test was done over 5 years, in which a fossil free index was compared to an index that included fossil fuel companies; in this case, the fossil-fuel index underperformed the market index by a negligible 0.16%.²¹

Investment managers The Aperio Group issued a report in 2014 that concluded that “Optimized carbon-free portfolios closely tracked the U.S. market since 1988 and the global market since 1997.” Aperio further concluded that:

²⁰ MSCI ERG Research Brief “Responding to the Call for Fossil-Fuel Free Portfolios

²¹ MSCI ERG Research Brief “Responding to the Call for Fossil-Fuel Free Portfolios

While there is no definitive answer, the often-presumed assumption of a return penalty [for divestment] is not consistently borne out by research. In fact, results from a wide range of studies on social and environmental screening do not provide a consensus on whether there has been a return penalty or benefit from carbon screening.

We are left to conclude that there is not yet clear evidence to suggest that there is an intrinsic “return penalty” with regard to divestment. The “penalty”, if there is one, is related to the manner in which institutions invest their assets, rather than on the returns foregone by divesting fossil fuel investments.

Much hinges on the availability of alternative investments; if funds are taken back from fund managers who will not invest fossil-free, then logically, they should be re-invested in similar funds, managed by similarly competent investment professionals, but invested on a fossil-free basis. Such funds do exist, but our investment advisors believe that using them as a substitute for hedge funds, private equity and other commingled vehicles would be costly and risky – at least at this time. (See further explanation, below.)

The “Stranded Asset” Argument

We introduced the idea of “stranded assets” earlier in this report. Basically, this is the idea that fossil fuel reserves (coal, oil and gas still “in the ground”) which have yet to be exploited run a very serious risk of being “stranded” or unusable in the future. If the world gets serious about climate change, and governments enact policies that will serve to reduce the demand for fossil fuels, then fossil fuel reserves will simply become less valuable and these assets will be “impaired,” causing fossil fuel companies to write down their value, generating losses, and in theory also reducing the market value of such equities. Thus, shareholders of fossil fuel companies will have to absorb significant losses.

More starkly, proponents of divestment make the argument that only so much more carbon can be burned before a critical limit is reached and this limit would be reached long before fossil fuel companies exhaust their carbon reserves. Thus, these “unburnable” reserves would be left stranded, and investors would be impacted.

Although the stranded asset hypothesis is being taken seriously by many investors, it is hotly disputed by many others. For one thing, they note that fossil fuel companies already trade at significant discounts to their calculated values (based on projected cash flows), so they would be unlikely to suffer massive deterioration in their market capitalization. They further argue that proponents of the stranded asset idea use a much wider definition of fossil fuel reserves than that which is actually used by investors in valuing a company, and finally, they point out that the International Energy Agency projects global energy demand to continue to rise, and foresees that even in 2030 two thirds of that demand will be still be met by fossil fuels.

Potential Financial Effect of Divestment on Skidmore

Skidmore’s independent investment advisor, Colonial Consulting, has produced a report (including appendix) that offers their view of the possible financial implications of a Skidmore divestment from fossil fuel investments (see Colonial report and appendix, attached). In summary, Colonial forecasts that full divestment would reduce the financial return on the endowment (over the next ten years) from

8.3% annually to 6.4% annually, resulting in an endowment value (in ten years) that is \$120 million lower than it would have been without divesting from fossil fuels. This would have the effect of reducing our endowment spending (from what it *would* have been) by \$318,000 in Year 1, increasing annually to over \$6 million in Year 10.

Colonial's analysis is broadly consistent with similar analyses (like the above-noted analysis that was done for Pomona College) that the Task Force has reviewed. In short, Colonial advises that in trying to invest fossil free, Skidmore would be limiting its options and the options of its investment managers, eliminating asset classes that have historically produced the highest returns (private equity and hedge funds), losing the "best" managers that have achieved the highest "alpha" (returns in excess of market), and generally assuming more risk. It is important, however, to understand in some detail how and why lower returns have been forecast.

Simply put, Colonial Consulting has concluded that in order for Skidmore to divest of its approximately 4% of holdings in fossil fuel stocks, it would need to exit from all of the funds in which it invests jointly with other institutions (these are the already noted "commingled funds"), since it is assumed that money managers will not change their investment criteria solely based on the desires of Skidmore. In exiting these funds (in which the majority of Skidmore's endowment is invested), then, the assumption is that the "extra" above market returns achieved by these sophisticated money managers with strong track records will be eliminated – and Skidmore will have to be satisfied with returns which are at, or closer to, overall market averages. In addition, Colonial has assumed that all of Skidmore's investments in private equity and hedge funds will, similarly, need to be eliminated, hence further impacting our returns.

Before concluding this section of our report, however, it seems appropriate and important to note again certain key elements in the Colonial Consulting analysis. First, a fundamental postulation of Colonial's analysis is that, if Skidmore wishes to utilize the "best" investment managers, there is no question of their investment selections being constrained in any way. If we attempted to do so, we would be told to take our money elsewhere.

A second important assumption is that the investment managers who run fossil-free funds "generally are simply not the best investors." In other words, to get the best return, we must use the best managers; and the best managers will not accept limits on their investment choices or options.

It is also worth noting that Colonial is bullish on the prospects of the fossil fuel sector, suggesting that it presents "an opportunity to create value over an extended period of time" and although "tremendous headway has been made in the alternative/renewable energy space, this sector still hasn't become a substitute, in terms of practical use and investment opportunity, for Oil & Gas. It's very reasonable to assume that these dynamics will shift over a longer period of time, but the fundamentals still currently favor Oil & Gas." Colonial did note that "in the years ahead there may be opportunities to achieve appropriate financial investment returns within acceptable risk parameters, while achieving certain environmental goals."

In general, it appears that the "mechanics" of investing – at Skidmore and at other institutions of similar size and complexity – represent the greatest difficulty in divesting the Skidmore endowment of investments in fossil fuel companies. At a practical level, divestment would mean fundamentally

altering the way that Skidmore invests its endowment, and while the financial impact of such changes is uncertain, the level of difficulty in “unpacking” our investments is clear.

Finally, we hope that this report will be widely distributed, and will serve as a resource for the Skidmore Community as it contemplates the question of fossil fuel divestment. In the interests of such a community discussion, we plan to hold several open meetings, tentatively scheduled for Wednesday, February 25th. We will communicate details of these meetings (time and venue) shortly. Additionally, we have created a website on divestment at <http://www.skidmore.edu/divestment/>. This website is intended to be a resource for the Skidmore Community, and contains copies of reports and updates specific to Skidmore, as well as links to other background information and opinion on divestment.

Purpose of Analysis:

Over the past several years, there have been a number of groups at colleges across the United States and internationally calling for divestment of fossil fuels from their institutions' respective endowment portfolios. These groups primarily have certain environmental, social and moral concerns with these investments. While we understand these concerns, it is important for us, as Skidmore College's independent investment advisor, to focus our analysis on the financial implications of a potential divestiture of fossil fuel investments.

Background:

The fossil fuel sector is a massive asset class and, according to data from Bloomberg New Energy Finance, the market capitalization for the sector is approximately \$5 trillion, which places it behind only the information technology sector in these terms. This asset class can be further segmented into two main sub-sectors, oil & gas and coal. As of June 30, 2014 each represented 95% and 5% of the market capitalization for the entire sector, respectively. This is important to note since coal is popularly viewed as one of the fossil fuels that has the most negative environmental and public-health impact. However, as can be seen in the statistic above, it represents only a small portion of the entire energy asset class.

Fossil fuels have been a significant source of returns for investors over the past few decades. One of the unique attributes of this asset class is that it is one of the only asset classes that has significant scale and growth potential, while also providing investors with opportunities for liquidity and yield. Despite the attractiveness and size of some other asset classes, none of them collectively encompass all of the aforementioned attributes. Thus, in considering a complete divestiture of this asset class, it's important to note that there are few, if any, other investments that are comparable substitutes. While renewables and other forms of clean energy may provide better environmental alternatives to fossil fuels, the scale and range of these investment opportunities have not yet reached that of fossil fuels.

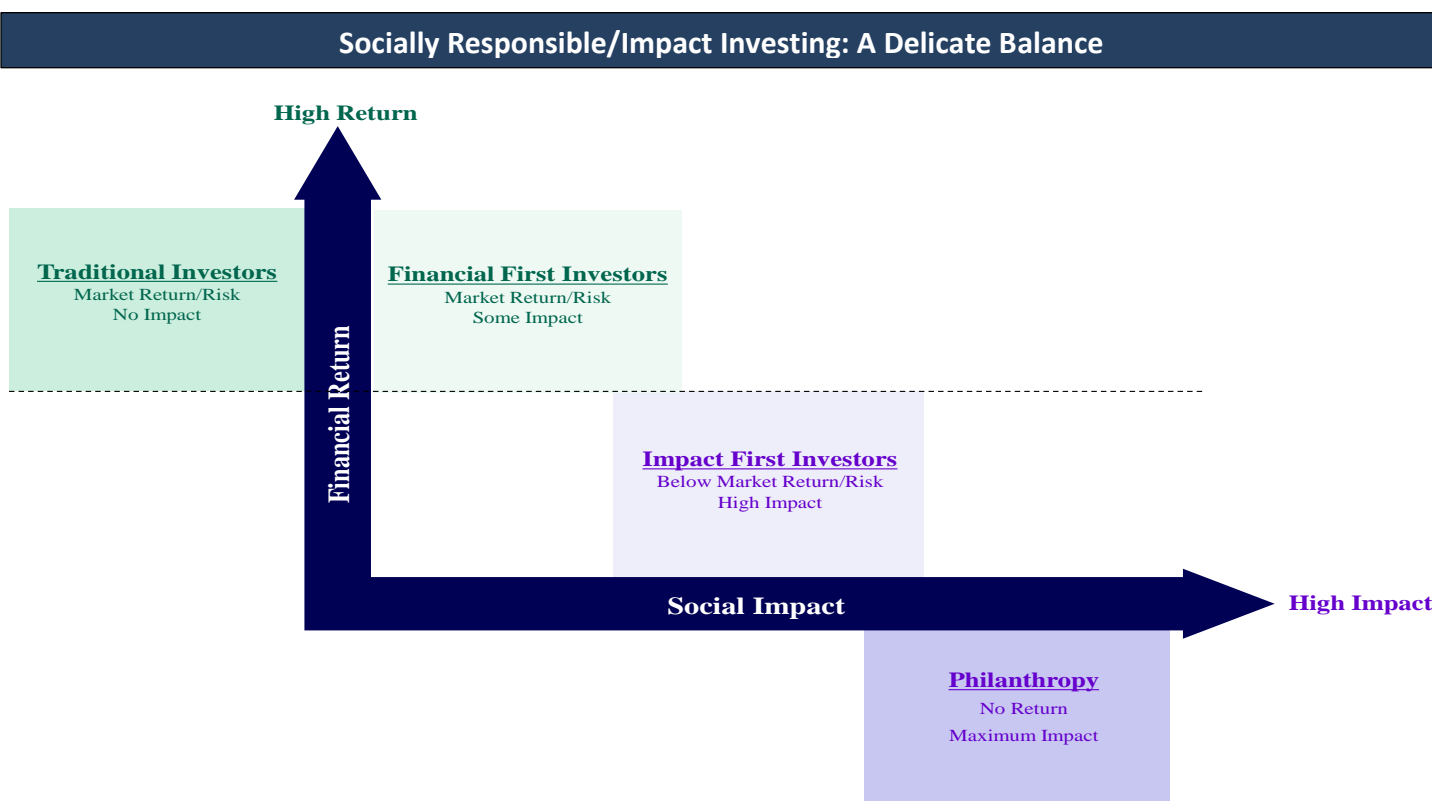
Socially Responsible Investing:

In considering the full divestment of fossil fuel securities from Skidmore's endowment, the Task Force should be aware of the financial consequences that could result from this decision. There are options that would be more in line with socially-conscious investing strategies; however, these substitutes don't possess the same return potential or alpha characteristics, which could in turn negatively impact the overall return of the endowment. The diagram on the next page depicts the range of socially responsible investments in a return/impact spectrum. The upper-left corner marks where the traditional relationship exists: where an investor places no constraints on the investment manager and expects the maximum return for a given level of risk regardless of possible philanthropic or social impact. The lower-right corner marks where maximum philanthropic impact is possibly achieved, but with little or no return; an example of this type of relationship would be a charity making a low interest-rate loan to another not-for-profit where the philanthropic missions / objectives are aligned. The middle sections of the diagram can be considered both separate

account/direct investment and commingled-investment options where the investment manager excludes certain industries.

Asking a separate account manager to exclude coal company investments would fall into the shaded area labeled 'Financial First Investors'; in this case, there would be a potential social impact but the manager could still generate above-benchmark returns; the more industries excluded, the more significant the negative-return impact and the possible larger the mission impact. This depicts the current commingled offerings in the market place labeled as socially responsible and fall into the shaded area labeled 'Impact First Investors' in the diagram. Even the current offerings of commingled funds that screen out fossil fuels tend to be owned/managed by for-profit and highly compensated investment firms that possibly using their "green" status to gather fee-generating assets generally without proven track record strategies to provide above-benchmark returns.

Colonial believes that investment professionals managing these negatively-screened commingled portfolios generally are simply not the best investors. Over time we expect it is likely more, and in turn, better-managed portfolios to enter the socially-responsible space. However, selling the commingled strategies in the Skidmore portfolio today in favor of the socially-screened comingled portfolios would likely have, in our opinion, a significant negative-return impact.



*Illustration adapted from the Monitor Institute: *Investing for Social and Environmental Impact*

There are several asset classes, including hedge funds and private equity, which are only offered in a commingled format for all but the multi-billion dollar endowments. While these investment strategies may or may not have fossil fuel exposure, their use in an endowment portfolio that mandates fossil fuel exclusion would have to be eliminated. Not only would removing current hedge fund and private equity exposure from the Skidmore endowment take a number of years to complete, excluding hedge funds and/or private equity from the endowment would create a sizeable decrease in return expectations for years to come and create more risk as there are less opportunities for diversification.

Roughly 15% of the Skidmore endowment is managed through separate accounts and invests predominately in US equity. A separate account offers the owner of that account the ability to establish their own investment parameters/exclusions. We believe that most separate-account investment managers focused on US equity maybe can exclude coal companies without too much performance impact on their respective portfolios. The recent divestiture of coal companies by Stanford was accomplished based on the difference between separate accounts (sometimes referred to as direct investments) and commingled strategies. Stanford mandated that all of their separate-accounts investment managers divest their portfolios of the coal companies on the list from 350.org, and then wrote letters to their commingled investment managers suggesting that they consider eliminating coal company investments from their respective funds as well. We note Stanford's endowment size is considerably larger than Skidmore by every measure.

Estimated Return Impact from Full Divesture:

Colonial Consulting forecasts ten-year returns, expected alphas (expected above-benchmark returns), standard deviations and correlations for all major asset classes each year, to be used in asset allocation reviews for our clients. The table below provides our 2014 estimates. Hedge funds and private equity both have some of the highest return and alpha expectations and would need to be excluded if fossil fuels were mandated to be excluded from the entire endowment portfolio. Additionally, nearly all of the alpha expectations from the long-only asset classes would have to be dramatically reduced or removed completely from the model if accessed through actively-managed commingled strategies that screen out fossil fuels.

Asset Class	Expected Market Return	+ Expected Manager Alpha	= Expected Total Return	Expected Standard Deviation
US Large Cap Equity	8.0	1.0	9.0	19.0
US Mid Cap Equity	8.5	1.1	9.6	21.0
US Small Cap Equity	8.9	1.2	10.1	22.5
Non-US Developed Large/Mid Cap Equity	9.2	2.0	11.2	21.0
Non-US Developed Small Cap Equity	9.8	2.5	12.3	23.0
Non-US Emerging Markets Equity	12.0	2.5	14.5	30.0
US Aggregate Bonds	2.3	0.8	3.1	6.0
US TIPS	3.5	0.0	3.5	7.0
US Short-Term Gov./Credit	1.5	0.0	1.5	3.2
US High Yield	5.5	0.8	6.3	13.5
US Bank Loans	4.5	0.8	5.3	10.0
Global Bonds	4.0	1.0	5.0	9.5
Non-US Emerging Markets Debt	6.5	1.0	7.5	13.5
US REITS	4.5	0.5	5.0	21.5
Private Real Estate	7.0	4.0	11.0	21.5
Private Timberland	7.5	0.7	8.2	16.5
Multi-Strategy Hedge Funds	4.5	3.0	7.5	11.8
Hedged Equity	6.2	4.5	10.7	14.6
Private Equity	8.0	6.0	14.0	33.0
Liquid Commodities/Resources	6.8	1.3	8.1	17.2
US Cash & Equivalents	0.8	0.0	0.8	2.1

Inflation Expectations: 2.7%

Skidmore's Investment Committee annually reviews asset allocations through both mean variance optimization and Monte Carlo simulations, looking for the appropriate risk/return balance that can achieve a net-of-fees return in excess of endowment's spending plus inflation. Based on the endowment's current 5% spending policy and Colonial's forecast of inflation, the endowment needs a 7.7% net-of-fees return just to maintain purchasing power.

Based on the latest review and approval of the asset allocation policy by the Investment Committee, the expected net-of-fees return on the endowment is 8.3% over the next ten years. If we run the Colonial model while excluding certain asset classes (private equity and hedge fund) and reducing the alpha expectations from long-only asset classes, our ten-year return estimate falls to 6.4%. A return of 6.4% would erode the endowment's purchasing power over time. Compounding a \$335 million portfolio at returns of both 8.3% and 6.4% over a ten-year period leads to a difference in value worth more than \$120 million.

Socially-conscious investment strategies may achieve greater environmental and social impact, but there exists an inherent trade-off between returns and impact as it relates to investment strategies. The Task Force should be aware that many companies and investment managers have taken notice of the growing demand by investors to divest of fossil fuel assets. In response, many companies have incorporated strict environmental, social, and governance standards (ESG) with a focus on minimizing negative environmental impact. Over time, it can be expected that more initiatives will be implemented and in the years ahead there may be opportunities to achieve appropriate financial investment returns within acceptable risk parameters, while possibly achieving certain environmental goals.

Colonial Recommendation:

We note similar to other colleges and universities with significant endowments, the Skidmore endowment has fifty or so fund managers that at times have investments (albeit at times small) in the energy sector, either in public companies or through private partnerships. We have calculated that between 3 and 5 percent of the endowment is invested in the fossil-fuel sector. The amount varies as managers buy and sell holdings. We also note that most managers hold net long or net short positions, generally with S&P 500 indices' or other similar positions, which could be viewed by some also as having some exposure to fossil fuels.

It is unlikely that any of the fifty or so fund managers who today invest Skidmore's endowment in their commingled funds would adopt a policy of fossil-free investing. Whether or not they hold such investments today, investment managers who are incented to maximize their returns do not wish to limit their investment choices. This is the answer to the often-asked question of why Skidmore, or any institution with a medium to large endowment, cannot easily divest an endowment of fossil-fuel stocks. For Skidmore, we estimate we would have to reinvest a significant portion of the portfolio, we believe at considerable cost and/or increased risk.

Colonial recommends that the Task Force consider all of these factors and perhaps explore other ways to mitigate exposure to or local consumption of fossil fuels. In our opinion, completely divesting from the current roster of investment managers or excluding high-returning asset classes from portfolio construction would be challenging, costly, and would likely impact the Colleges ability to fund student financial aid, academic and related program support, employee pay and benefits, capital projects and other expenditures that are essential to carrying out the College's educational mission.

Appendix A – Supplemental Analysis Requested by the Divestment Task Force:

The purpose of this appendix is to supplement and provide clarifications to Colonial's memo as requested by Skidmore College's Divestment Task Force. The following questions asked by the Task Force have been answered below and represent our independent expert opinion.

- 1) Can you please provide a summary (in plain English terms) of how Monte Carlo simulations work, and then more specifically what assumptions you used in your analysis to generate the expected returns (please quantify how much of the difference in expected returns is a result of the elimination of private equity/hedge fund assets classes and how much is related to the assumed decrease in alpha)? What is the alpha of the 50 investment firms Skidmore uses? For example, Pomona College's Cambridge memo specifies their alphas on p. 2-3, i.e. "U.S. Equity: Pomona's U.S. Equity managers have outperformed the Russell 3000 Index benchmark by 1.18% on an annualized basis (5.9% vs. 4.7%)."
- 2) Can you please comment on why you calculated a single figure (6.4%) as opposed to a range (or at least a final expected standard deviation)?
- 3) Can you please elaborate on the "scale and growth potential" of the fossil fuel sector? How does this reconcile with the "stranded asset" argument that some individuals have made (i.e. that fossil fuel companies have large fuel reserves recorded as assets that may need to be written off in the future due to changes in regulations, changes in demand, etc.)?
- 4) Can you please summarize the components of the oil/gas and coal sub-sectors at a more disaggregated level (i.e. exploration, retail, pipelines, renewables, etc.) and comment briefly on the scale, growth potential, liquidity, and yield of each?
- 5) Are there any potential future world events (political, environmental, economic, etc.) that would change your analysis or overall conclusion as presented in the memo?

Colonial's Response to Questions 1 & 2:

On page 2 of this appendix we have included the output of our mean variance optimization analysis. The output includes a return estimate, standard deviation estimate, Sharpe ratio and a spending rate that each asset allocation can support. Skidmore's Investment Committee of the Board of Trustees has approved and utilizes "Asset Mix 1" in accordance with its investment policy. Asset Mix 1 has a return estimate of 8.3% and a standard deviation of 16.2%. Therefore, based on the generally accepted statistical analysis of a normal bell curve, approximately 2/3rds of the time the portfolio's annualized return should be between -7.9% and +24.5% (8.3% plus or minus 16.2%). This return range is extremely wide and is why we include other statistics and methods to assist investment committees with important and complex asset allocation decisions.

One statistic is the Sharpe ratio that can be considered a measure of portfolio efficiency. The higher the Sharpe ratio the more efficient a portfolio is relative to others. The Sharpe ratio measures a unit of return for every unit of risk taken. The ratio combines the return and standard deviation estimates in the following formula return minus a risk free rate divided by the standard deviation.

Under the normal bell curve a standard event typically captures 2/3rds of the potential outcomes. To help differentiate the potential asset allocation options, Colonial prefers to focus on potential worst case scenarios. One way to accomplish this analysis is to increase the level of standard deviations to capture a higher percentage of potential outcomes. At the bottom of page 2, the exhibit has captured 99% of the potential outcomes over multi-year periods.

On page 3 we have included our return, alpha and standard deviation 10 year estimates. These estimates are utilized in both the mean variance optimization and Monte Carlo simulation. At the beginning of every year, our entire experienced investment team meets for a series of robust discussions designed to update all aspects of this data. We collect dozens of estimates from multiple sources, including economists, brokerage firms and investment managers to review, analyze, and ultimately arrive at our own estimates. Historically, the movement up or down in our estimates tends to be small and mean-reverting. For example, when considering the large returns from US equity over the last few years, our 10-year forward-looking return estimates have been lowered by 0.2% - 0.4% annually in each of the last four years.

As noted in Colonial's accompanying memo, we estimate that Skidmore's investment return would fall from 8.3% to 6.4% if the divestment from fossil fuel was implemented throughout the College's entire portfolio. The total return difference is 1.9% and our estimate is comprised of the following return differences from private assets, hedge funds and the reduction of alpha from long-only managers as follows:

Private Assets	Minus 0.5%
Hedge Funds	Minus 0.8%
Removal of alpha from long-only investment	Minus 0.6%

The returns above are estimated prospective returns. To further assess the reasonableness of this estimate we have retrospectively analyzed the alphas earned by the Skidmore endowment on a weighted average basis. This analysis yielded a difference in returns that is similar to our forward looking analysis (1.9% vs 1.7%), which further corroborates the reliability of our estimation process. Below is a summary of four major asset classes that have represented 80%-85% of the Skidmore endowment historically.

Asset Class	Benchmark	Alpha (% / basis points)	Composite start date	Current Endowment Weight %
US Equity	S&P 500	1.0% / 100	12/31/1990	28.7%
International Equity	MSCI EAFE	1.9% / 190	1/31/2005	29.6%
Fixed Income	Barclay's Aggregate	0.3% / 30	6/30/1992	4.9%
Hedge Funds	HRFI Multi-Strategy	2.9% / 290	2/28/1997	17.9%

Asset Classes (% of Total Portfolio)	Current	NACUBO	Asset Mix 1
US Large/Mid Cap Equity	30.2	23.5	26.0
US Small Cap Equity	0.0	3.5	0.0
Non-US DM Large Cap Equity	20.8	13.7	16.0
Non-US DM Small Cap Equity	1.2	5.3	1.2
Emerging Markets Equity	5.4	5.4	5.4
Total Equity	57.6	51.4	48.6
Aggregate Bonds	1.9	11.9	1.9
US High Yield Bonds	0.0	1.1	0.0
Global Bonds	2.2	1.5	3.2
Bank Loans	2.8	0.0	4.8
Emerging Markets Debt	0.0	0.5	0.0
Total Fixed Income	6.9	15.0	9.9
Multi Strategy Hedge Funds ¹	13.6	13.0	16.1
Long/Short Equity Hedge Funds ¹	4.7	6.0	8.0
Private Equity	7.8	7.0	8.0
Private Real Estate	4.6	3.0	4.6
Liquid Commodities/Resources	2.1	1.0	2.1
Total Alternatives	32.8	30.0	38.8
Cash & Equivalents	2.7	3.6	2.7
Ten Year Projections			
Median Expected Return (%)	8.4	8.0	8.3
Standard Deviation (%)	17.1	15.3	16.2
Sharpe Ratio ²	0.29	0.29	0.30
Spending Rate Supported (%) ³	5.7	5.3	5.6
Worst Case Returns (99% Probability)			
Lowest One Year Return (%)	-24.4	-22.0	-23.2
Lowest Three Year Return (%)	-11.9	-10.5	-11.2
Lowest Five Year Return (%)	-7.7	-6.6	-7.1
Lowest Ten Year Return (%)	-3.3	-2.6	-2.8

Asset Class	Expected Market Return	+ Expected Manager Alpha	= Expected Total Return	Expected Standard Deviation
US Large Cap Equity	8.0	1.0	9.0	19.0
US Mid Cap Equity	8.5	1.1	9.6	21.0
US Small Cap Equity	8.9	1.2	10.1	22.5
Non-US Developed Large/Mid Cap Equity	9.2	2.0	11.2	21.0
Non-US Developed Small Cap Equity	9.8	2.5	12.3	23.0
Non-US Emerging Markets Equity	12.0	2.5	14.5	30.0
US Aggregate Bonds	2.3	0.8	3.1	6.0
US TIPS	3.5	0.0	3.5	7.0
US Short-Term Gov./Credit	1.5	0.0	1.5	3.2
US High Yield	5.5	0.8	6.3	13.5
US Bank Loans	4.5	0.8	5.3	10.0
Global Bonds	4.0	1.0	5.0	9.5
Non-US Emerging Markets Debt	6.5	1.0	7.5	13.5
US REITS	4.5	0.5	5.0	21.5
Private Real Estate	7.0	4.0	11.0	21.5
Private Timberland	7.5	0.7	8.2	16.5
Multi-Strategy Hedge Funds	4.5	3.0	7.5	11.8
Hedged Equity	6.2	4.5	10.7	14.6
Private Equity	8.0	6.0	14.0	33.0
Liquid Commodities/Resources	6.8	1.3	8.1	17.2
US Cash & Equivalents	0.8	0.0	0.8	2.1

Inflation Expectations: 2.7%

Monte Carlo Simulation.

Monte Carlo simulation is the probability of certain outcomes by running multiple trial runs. Colonial utilizes estimates for return, standard deviation and correlation. The software that we use for Monte Carlo simulations run thousands of trials. Colonial's focus for Monte Carlo simulations is on downside characteristics of different asset allocations. On the table below we provide the Monte Carlo results as well as the definition of spending disruptions and asset impairment.

Spending Disruption Risk – As the name suggests, this is basically the shorter term risk (5 to 10 years) of a real reduction in spending for the Endowment. This can be analyzed by running Monte Carlo simulations for each of the portfolios. Each of these simulations represents a different path of returns which in turn lets us calculate the likelihood of a real reduction in spending over various periods. Please keep in mind that the percentages on the following page represent a point-to-point 5 year calculation. Therefore, it is possible over shorter periods to see sharper declines occurring with a different frequency than shown here.

Asset Impairment Risk – This is the most serious risk in that it represents a long term loss of purchasing power for the Endowment. Again, using Monte Carlo simulation, we are able to capture the uncertainty of our return forecasts for the portfolio on a year to year basis, including the impact of actual spending withdrawals. The end result is a calculation which provides the probability of asset impairment.

If the portfolio's forward looking return estimate was lowered to 6.4%, the potential of asset impairment becomes a near certainty in our Monte Carlo simulation analysis.

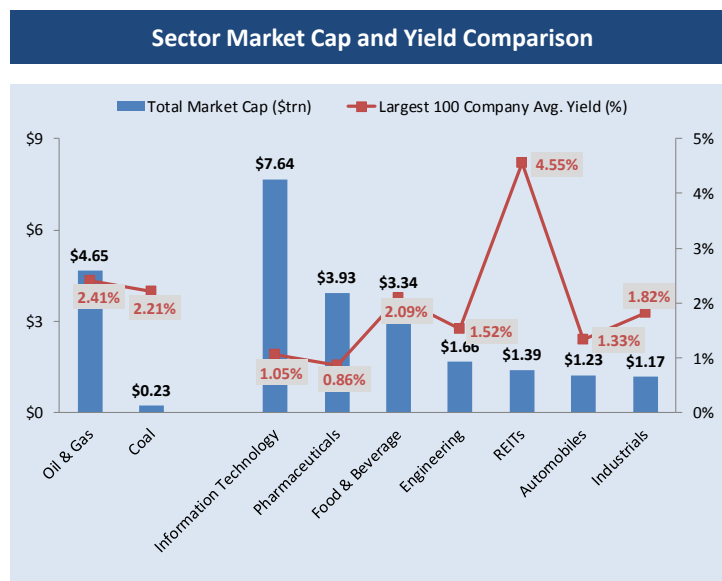
Spending Disruption	Current	NACUBO	Asset Mix 1
<i>(Probability of Real Spending Reduction Over Next 5 Year Period. Does Not Apply to Shorter Periods.)</i>			
10% Reduction (%)	34.4	34.8	34.1
20% Reduction (%)	21.6	20.9	20.9
30% Reduction (%)	11.5	10.0	10.6

Asset Impairment	Current	NACUBO	Asset Mix 1
<i>(Probability of Real Asset Declines Over Next 50 Year Period. Does Not Apply to Shorter Periods.)</i>			
20% Decline (%)	36.8	42.0	37.6
33% Decline (%)	31.3	35.6	31.8
50% Decline (%)	22.3	25.5	22.3

Colonial's Response to Questions 3-5:

Before reviewing the future prospects of the fossil fuel industry and its subsectors it is important to reiterate Colonial's rationale for opposing implementation of a fossil fuel free endowment at this time, which is singularly focused on gaining access to the best/highest alpha producing investment managers. In our judgment, the best investment managers (highest alpha producers) in almost all asset classes only offer commingled products. The contracts/offering documents for commingled investments specifically detail that the investment manager has complete discretion on all investment decisions. Most investment managers do not want clients telling them what to purchase or what to avoid. Although fossil-free products do exist, in practice the top investment managers would simply tell potential or existing clients to take their money elsewhere before agreeing to client demands on security selection. Additionally, many investment managers are concerned that by allowing clients to screen out fossil fuels today, there will undoubtedly be calls from certain groups to screen out other potentially objectionable industries such as tobacco, alcohol, firearms, gambling, etc. Today's clients may want to avoid fossil fuel and tomorrow's clients may want to only invest in companies that have a zero carbon footprint. Once a manager starts accepting client restrictions, the number of restrictions will grow - thus reducing investment options and alpha potential. Once alpha potential is removed from the investment process, an investment manager simply cannot achieve optimal returns while maintaining acceptable levels of risk. Until the best investment managers available are willing to exclude fossil fuels from their investment programs, Colonial will, when asked for our opinion, continue to recommend a nonrestrictive investment approach.

The Fossil Fuels sector is diversified in many ways including geographically and is one of the only sectors that involves every continent. Very few sectors, and by extension the companies within those sectors, have the ability or scale to operate on such a comprehensively global level. Advancements in technology, coupled with strong supply/demand fundamentals resulting from the emergence of a large and growing international middle class continue to drive growth in the space. Given the complexity and capital-intensive nature of the industry, an opportunity to create value over an extended period of time is presented. Furthermore, an enormous amount of capital goes into maintaining the existing infrastructure, and even more capital is needed to fund new growth initiatives. According to data gathered from Apollo Global Management, the North American Energy sector will require \$2.6 trillion of capital over the next four years for the Upstream Oil & Gas sub-sector alone.



When discussing the Fossil Fuels sector at large, it's important to delineate Oil & Gas from Coal, particularly as it relates to the stranded asset debate. This debate is currently more relevant to Coal in our judgment, as there has been an increase in regulation and it has long been considered among the most environmentally harmful of fossil fuels. Despite this recent attention, it's important to note that Coal only constitutes ~5% of the entire market capitalization for the Fossil Fuels sector. While it would be reasonable to assume that regulation for Oil & Gas will increase in the years ahead, there just simply aren't enough viable substitutes able to replace American and international dependency on Oil & Gas today. While tremendous headway has been made in the alternative/renewable energy space, this sector still hasn't become a substitute, in terms of practical use and investment opportunity, for Oil & Gas. It's very reasonable to assume that these dynamics will shift over a longer period of time, but the fundamentals still currently favor Oil & Gas; the threat of a massive and immediate shift away from its use appears unlikely in our judgment. Although over time this may change, divestment before viable alternatives are in place would subject the Skidmore endowment to significant unnecessary risk.

The Energy sector is complex and can be segmented into various sub-sectors. The chart below provides an overview of the landscape, particularly as it relates to Oil & Gas, Mining, and Alternatives. Given the entangled nature of the energy space, it would be extremely difficult to generalize scale, growth potential, and, ultimately, economics. This is in large part due to the multitude of factors that go into determining outcomes (i.e., geography, size of firm, basin, public capital vs. private capital, equity vs. debt, etc.). A large multi-national such as Exxon would have a diversified portfolio of assets across the energy continuum and across multiple geographies. It may be appropriate to compare yields and returns to direct competitors, but the return characteristics would vary significantly when compared to the outcomes of other players in the energy ecosystem. This scenario would hold true for most players in the Energy space.

Oil & Gas			Mining	Alternatives
Upstream	Infrastructure	Services	Coal	Wind
Exploration	Midstream	Oilfield Services	Minerals & Metals	Solar
Production	Downstream			Clean Tech
<ul style="list-style-type: none"> ➤ Upstream, also known as Exploration & Production (“E&P”), involves the searching for, recovery and production of crude oil and natural gas. ➤ Midstream is defined as the collection and transportation of crude oil, natural gas, and refined products. ➤ Downstream can be defined as the manufacturing, selling and distribution of natural gas products derived from crude oil. ➤ Services involves companies that provide services to the oil and gas companies, but do not produce petroleum or petroleum products themselves. 			<ul style="list-style-type: none"> ➤ The mining sector ranges from bulk commodities such as coal and iron ore to niche minerals targeting specific end markets or applications. 	<ul style="list-style-type: none"> ➤ Alternative energy consists of power generated through sources that are considered non-threatening or less harmful to the environment, when compared to traditional fossil fuels.

In Colonial’s view the only future event that could change our overall conclusion in the accompanying memo would be a situation where the entire investment management industry universally agrees to remove fossil fuel investments from the universe of potential investment opportunities.