

UW Climate Partnership Independent Study
Climate Friendly Investing:
Phase I Analysis

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Abstract:

Climate change has clearly become an issue of global importance that must be considered and addressed by governments of all levels. Regulations and other mechanisms to control and limit the emissions of greenhouse gases are already in place and more will certainly be implemented. Corporations and the investment community also have a critical role to play as their investment decisions help to shape the flow of financial capital that drives the global economy and the emissions produced as a result of this economic activity. This paper marks the first phase of research and will introduce and explain a concept called climate friendly investing (CFI), highlight the evolving field of CFI, provide a rationale for why investors should consider CFI, and describe how one such investor, the University of Washington's Consolidated Endowment Fund, currently manages its holdings. The second phase of the research will delve more deeply into the CFI topic and adapt a framework for how institutional investors, such as the UW, could pursue CFI strategies.

What is Climate Friendly Investing?

For purposes of this paper, Climate Friendly Investing (CFI) is defined as *the deployment of capital that leads to the direct or indirect reductions of greenhouse gas emissions while achieving strong financial performance*. This definition may have varying implications for each organization contemplating how they might pursue CFI. The following are three investment options an organization could pursue under a CFI banner:

- investing in activities that reduce the greenhouse gas (GHG) emissions associated with an organization's activities;
- investing capital internally in new lines of businesses that lead to GHG reductions;
- investing capital externally in projects or funds focused on reducing GHG emissions.

For the purposes of this paper we will focus on the third option, investing capital externally, with an emphasis on institutional investors. This paper is not focused on the related topic of emissions offsets.

What are CFI options?

Several drivers are responsible for the increased interest in and establishment of projects or services that reduce emissions. Perhaps the primary driver has been regulations. International treaties such as the Kyoto Protocol as well as the European Union Emissions Trading Scheme (EU ETS) have helped to spur the funding and development of projects that reduce emissions. As other regulatory approaches are implemented, such as the Regional Greenhouse Gas Initiative in the northeastern U.S. and the Western Regional Climate Action Initiative, and CO₂ emissions become more constrained, a growing interest in identifying and funding emissions reduction projects is likely.

Perhaps the classic example of a CFI option is investing in a renewable energy company, project or a fund focused on renewable energy. For example, if an investment in a wind energy facility provided an amount of emissions-free energy, then the investment could be considered a CFI option. though this would be dependent upon the degree to which the wind energy displaces fossil fuel-derived energy. Alternatively, an investment could be made in a company that has pledged to reduce their own emissions or that provides products and services that reduce emissions, such as energy efficiency products. One such example is GE, which has launched a well-publicized "ecomagination" initiative.¹ Such investments would need to take into account the full range of the investee's corporate activities to determine whether the investment was truly supporting overall emissions reductions as well as other social and environmental considerations.

Other investment vehicles are emerging partially in response to the existing regulations in the EU and anticipated regulations in the United States. One such example is the nearly

¹ <http://ge.ecomagination.com/@v=020220071742@/site/index.html>

\$1 billion carbon fund that Climate Change Capital in London has established.² The purpose of this fund will be to invest in projects, primarily in China, that reduce emissions. Climate Change Capital can then sell the certified emissions reductions (CERs) from the projects in the EU ETS or potentially in any trading scheme that may be established. Phase II of our research will elaborate on these types of investments.

Current Context for CFI

CFI is an emerging field populated by numerous organizations that are helping to evolve and develop the information infrastructure necessary for wider CFI adoption. The existence of these organizations and the work they do is critical for helping to establish a strong foundation for CFI and to create an environment that makes CFI a safe issue to consider, rather than mere folly. The following provides a partial description of some of the organizations that are doing this work, broken down by three categories. By no means is this description exhaustive or exclusive, and an organization identified in one category could very well fit into either of the other categories as well.

Coalition Building:

Coalition building is important in terms of building a movement to affect change, to amplify the voice of organizations that have shared interests and to signal the breadth and extent of interest in a particular issue. With respect to climate friendly investing, CERES is a non-profit organization that describes itself as “a national network of investors, environmental organizations and other public interest groups working with companies and investors to address sustainability challenges such as global climate change.”³ CERES has been instrumental in pulling together corporations, investors and the public sector to develop common recommendations regarding climate change reporting and corporate responses to climate change. One specific effort they launched is the Investor Network on Climate Risk (INCR), which “strives to promote better understanding of the risks and opportunities posed by climate change among institutional investors. It organizes summits, conferences and forums to educate pension fund managers and other investment professionals about climate risks to their portfolios.”⁴

Developing Frameworks for Reporting:

The absence of regulations regarding the reporting of GHG emissions means that gathering information about the GHG emissions associated with a corporation is difficult and not necessarily readily accessible. In the case where a corporation has revealed their emissions, the absence of a common reporting framework can make comparisons across companies difficult. The Carbon Disclosure Project (CDP) is a group of institutional investors that has collaborated to overcome these challenges. The CDP is described as “a secretariat for the world's largest institutional investor collaboration on the business implications of climate change. CDP represents an efficient process whereby many institutional investors collectively sign a single global request for disclosure of information on Greenhouse Gas Emissions. More than 1,000 large corporations report on

² <http://www.climatechangeecapital.com/pages/pressdetail.asp?id=243&>

³ <http://www.ceres.org/ceres/>

⁴ <http://www.incr.com/index.php?page=2>

their emissions through this web site.”⁵ CDP claims that its website “is the largest registry of corporate greenhouse gas emissions in the world.”⁶ A broader reporting framework has been developed by the Global Reporting Initiative, which is attempting to make reporting on economic, environmental and social performance by all organizations routine and comparable as financial reporting.”⁷ CERES has participated in both of these efforts, which represent complementary approaches to generating greater transparency and creating common frameworks for GHG emissions reporting. These efforts are fundamental for setting quasi-standards and enabling investors to compare the climate risks and emissions inventories of large corporations. In effect, they help to create potential leverage that the investor could use, if they so choose, to shape and direct their investments.

Providing Research and Analysis:

Complementing the emergence of reporting frameworks is the analysis of climate change risk and corporate performance. Innovest, which wrote the fourth report for the CDP, is one firm that is focused on providing analysis in the climate friendly investing field. Innovest describes itself as an “internationally recognized investment research and advisory firm specializing in analyzing companies' performance on environmental, social, and strategic governance issues, with a particular focus on their impact on competitiveness, profitability, and share price performance.”⁸ On a larger scale, the past few years have seen large commercial banks, including Goldman Sachs, UBS, Citigroup, JP Morgan and many others, publishing their own climate change reports, investing in this area or generally just trying to stake out a competitive position in this emergent field.

CFI is growing and strengthening. It is a field attracting a multitude of actors who are adding value and mainstreaming the concept, which may have seemed marginal only a few years ago. These actors, including non-profits, large institutional investors and financial advisors, are collaborating to establish quasi-reporting standards, to increase transparency and to provide analytical services regarding climate change and corporate disclosure and performance. The previous section does not provide a comprehensive list of the organizations involved in advancing the field of climate change investing nor do the categories have strict boundaries. The field is robust, continually evolving and fluid.

The Rationale for CFI:

Climate change continues to receive increasing attention from institutional investors. Large shareholders concerned about climate change have successfully influenced companies to take action. A striking example of shareholder action is the aforementioned Carbon Disclosure Project (CDP). In 2006, 91% of FTSE 500 companies had responded to the request. In 2007, the total investment assets of CDP signatories have ballooned to \$41 trillion dollars (see chart below).

⁵ <http://www.cdproject.net/>

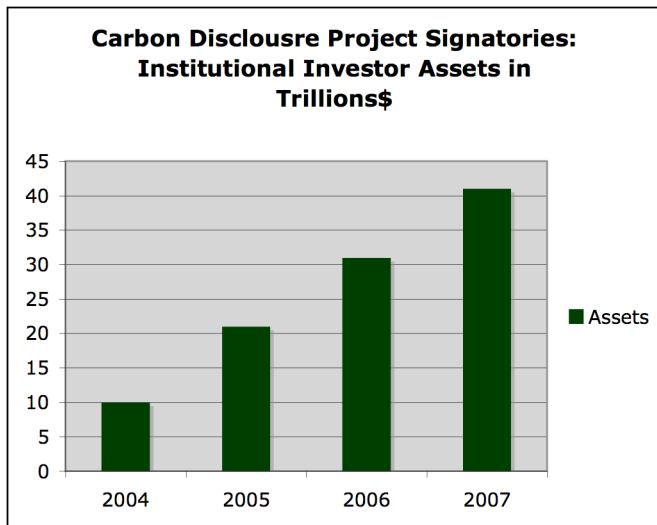
⁶ Ibid

⁷ <http://www.globalreporting.org/Home>

⁸ <http://www.innovestgroup.com/>

Source: Carbon Disclosure Project Website

Figure 1: Carbon Disclosure Project Assets



A variety of reasons exist for why institutional investors are engaging with companies on climate change. Some investors view global warming as an ethical issue and choose to pursue the policy with the aim of increasing social welfare. Other fiduciaries, representing organizations committed to reducing GHG emissions, participate in shareholder resolutions to reflect their organization’s values and further organizational goals. Institutional investors also engage companies on climate change because they see positive economic benefits.

Currently climate change is most relevant to institutional investors with long-term investment horizons—such as pensions, foundations and endowments. In a survey of European fund managers and analysts, 78% believed management of environmental and social risk was important to a company’s long-term market value, while only 32% believed it was important to short-term value⁹. The impact of climate change on the long-term market value of an investment is typically evaluated in relation to risks and opportunities. These risks and opportunities are identified in the Figure 2 below and described in the following passage.

Figure 2: Risks and Opportunities

Climate Change: Investment Risks and Opportunities		
Risks	Risks & Opportunities	Opportunities
Physical	Regulation	Technology
Legal	Reputation	New Products
	Competitiveness	

⁹ “Who Cares Wins” Global Compact Leaders Summit, UNEP Finance Initiative. New York, 2004

Physical Risk:

Global warming is anticipated to cause changes in the physical environment. These changes include rising sea levels, higher temperatures, and greater severity of weather events such as windstorms, rainstorms and droughts¹⁰. The impact of these physical changes is anticipated to have a market-wide effect dampening global GDP. Particular industries predicted to be especially hard-hit include tourism, real estate, off-shore oil drilling, fisheries and agriculture¹¹.

Legal Risk:

There are currently four lawsuits outstanding in the United States related to climate¹². As awareness of the consequences of climate change grows, the risk that litigators will sue heavy carbon emitters for negligence or harm also grows. Recent examples of litigation risk impacting investors occurred in relation to tobacco and asbestos.

Regulation Risk & Opportunity:

Carbon emissions are regulated in many countries and it appears increasingly likely that the US will federally regulate carbon emissions by 2015. In any regulation plan there will be winners and losers. The winners will likely be efficient companies with small carbon footprints while the losers are expected to have carbon-intensive operations. For example, the Financial Press reported that utilities such as “Constellation Energy, Florida Power & Light and Exelon may benefit from a carbon cap”, while “American Electric Power, First Energy and Southern” would be hurt by carbon regulation¹³.

There are a variety of different regulatory approaches to climate change. These include carbon tax systems, carbon cap and trade systems, government efficiency standards, and government subsidies to clean tech industries. The effect of climate regulation is already impacting investments. Under the Kyoto protocol countries such as France, Germany and Russia have agreed to stabilize and cap greenhouse gas emissions. In the United States regional action is being taken. The Northeast Regional Greenhouse Gas Initiative was passed in 2005. California passed the Global Warming Solution Act in 2006, committing the state to reduce emissions to 2000 levels by 2010, and to 1990 levels by 2020¹⁴.

Reputation Risk & Opportunity:

A January 2007 survey found that the majority of the public in a variety of countries are concerned with climate change (Figure 3):

¹⁰ “Climatic Consequences” Citigroup Global Equity Research, 2007

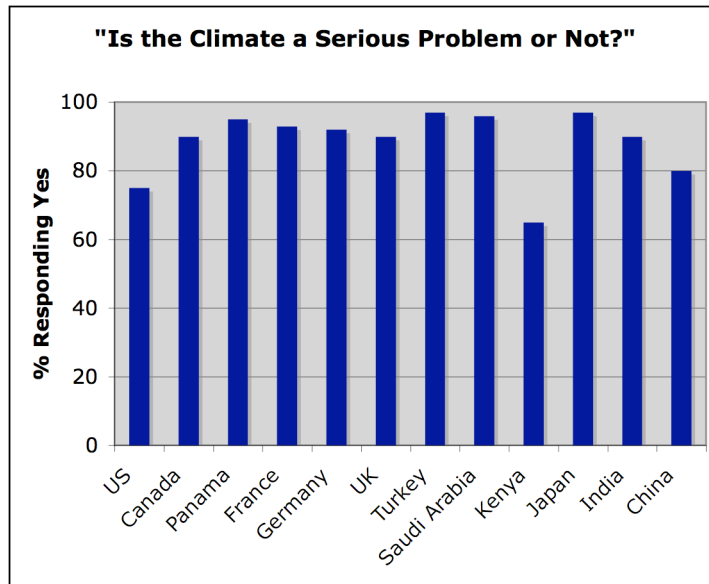
¹¹ “Climate Change: Beyond Whether” UBS Research Focus, 2007

¹² “Climatic Consequences” Citigroup Global Equity Research, 2007

¹³ “Can Economics Save Global Warming” Nightly Business Report, 2/2/2007

¹⁴ John Llewellyn “The Business of Climate Change” Lehman Brothers, 2007

Figure 3: Countries Responses to Climate Change



Source: UBS "Climate Change: Beyond Weather" January 2007

Public interest in climate change can impact the reputation of a firm. Firms that are perceived as leaders on climate change stand to benefit, while the reputation of companies viewed as laggards could diminish.

Climate change also can impact the reputation of company management with investors. Financial analysts report that management quality is an important factor in company reports. The ability of a company's management to implement effective strategies to deal with complicated issues like climate change is increasingly important in the assessment of management competence and quality. The investment bank Goldman Sachs highlighted the importance of the issue when it said, "Climate change is a topic that should be on the agenda of every Board of Directors."¹⁵

Competitiveness Risk & Opportunity:

Climate change will alter the business landscape and competitive environment. Companies need to position themselves to offer the products and services that customers will want in the future. Global warming increases the likelihood that green companies will fare better than those whose product offerings do not reflect this altered landscape.

Technological Opportunity:

New Technologies may offer solutions to many of the problems created by global warming. Increased interest on the part of investors, governments and consumers will help discover new technologies that will directly or indirectly help reduce green house

¹⁵ "Growing Interest in Environmental Issues" Goldman Sachs Portfolio Strategy, 2005

gas emissions. The most obvious example can be found in the renewable energy sector where venture capital investment has risen sharply. Technologies such as wind power, solar power, biofuels and fuel cells all could offer energy sources with lower carbon emissions compared to fossil fuels.

New Product Development Opportunity:

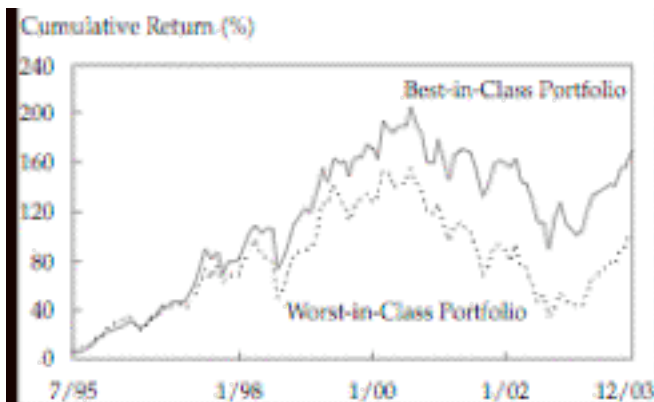
The demand for new products is not necessarily limited to technology. A shift in consumer demand towards low carbon, high efficiency goods and services could boost demand for a variety of low tech products that can demonstrate a smaller or reduced carbon footprint.

Climate & Investment Management

The net impact of the aforementioned climate risks and opportunities on an investment portfolio could be sizable. Indeed, there is strong evidence that investors who incorporate climate, environmental, and social factors in the investment process can achieve competitive market returns.

In 2005, Goldman Sachs reported that “recent academic work indicates that socially responsible investment strategies may deliver excess returns”¹⁶. One academic study found that companies with better environmental records appear to have better-than-average return on assets¹⁷. Another found that companies with high eco-efficiency scores outperformed those with low eco-efficiency scores in the stock market from July 1995 to December 2003 (see chart below):¹⁸

Figure 4: Cumulative Return Comparison of High and Low Eco-Efficiency Portfolios July 1995 to December 2003



¹⁶ “Growing Interest in Environmental Issues” Goldman Sachs Portfolio Strategy, 2005

¹⁷ Michael Russo and Paul Fouts “A Resource-Based Perspective on Corporate Environmental Performance and Profitability” 1998

¹⁸ Jeroen Derwall, Nadja Guenster, Rob Bauer, Kees Koedjik, “The Eco-Efficiency Premium Puzzle” Financial Analysts Journal V61,N2. CFA Institute 2005

The Dow Jones Sustainability Index (DJSI) provides another example of strong performance by an environmentally managed fund. The Sustainability Index outperformed the benchmark MSCI World Index over the five years ended August 2006 (see graph):

Figure 5: DJSI World Performance



At this point it is inconclusive how environmental factors may influence asset valuation. An academic study used discounted cash flow models and scenario analysis to show that the financial impact of future environmental regulation on US pulp and paper companies could be up to 11% of market value in coming years¹⁹.

In 2007, a convincing argument can be made that climate friendly investing, regardless of social benefits, is a good financial decision. As a senior economic policy advisor at Lehman Brothers put it:

“we consider that climate change poses many challenges but also presents many business opportunities. Firms that recognise the challenge early, and respond imaginatively and constructively, will create opportunities for themselves and thereby prosper. Others, slower to realise what is going on or electing to ignore it, will likely do markedly less well.”²⁰

University of Washington: A Case Study

The University of Washington’s Endowment

Endowments accomplish two, almost competing purposes: preserving the long-term value of the investment while providing a steady stream of income for the university’s programs and departments. The University of Washington relies on its Consolidated

¹⁹ Robert Repetto & Duncan Austin “Pure Profit: The Financial Implications of Environmental Performance” World Resource Institute, 2000

²⁰ John Llewellyn “The Business of Climate Change” Lehman Brothers, 2007

Endowment Fund (CEF) to provide a predictable revenue source for its programs. It supports the University's programs even during volatile markets. A portion of the interest of the investment is distributed across campus while the remainder is reinvested. It is an extremely important revenue source for all universities.

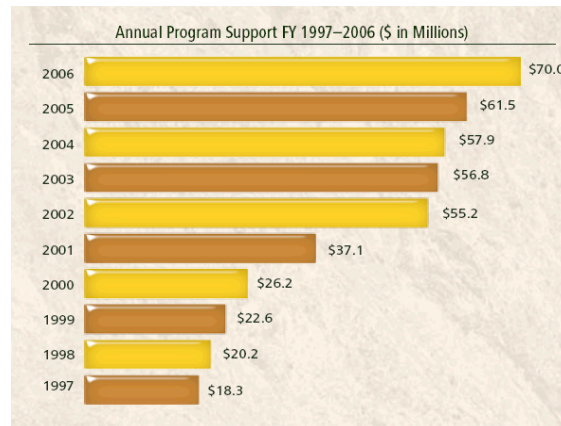
The CEF has approximately 2,243 separate endowments. The current total of the CEF is \$1.69 billion, as of June 20, 2006.²¹ Over the past 10 years, \$551 million was added to the CEF. In fiscal year 2006 alone, the market value of the Endowment funds increased by \$316 million. The CEF showed excellent performance, with a 17.7% return on its investment. The high rates of return have placed the UW in the second quartile of university and college large endowments.

According to the National Association of College and University Business Officers (NACUBO), the UW is ranked 29th in the nation for fiscal year 2006 market value of endowment assets.²² The percent change in the market value of the UW Endowment from 2005 to 2006 is 20.4%. The ranking evaluated 765 colleges and universities in the U.S, with over \$340 billion total in endowed assets. The results were published in NACUBO's 2006 Endowment Study Results (see Appendix 2 for a list of the top 30 endowments). NACUBO is a non-profit organization, which represents financial officers and administrators at more than 2,100 college universities nationwide.

Program Distributions

During 2006, the University distributed \$70 million to programs, an increase of 13.8% from 2005. Approximately \$426 million has been distributed to university programs in the past ten years. Recently, the University has been able to increase its endowment spending. The two factors responsible for the increase include the Board of Regents modifying the CEF spending policy and the administration investing operating funds of \$301 million in the CEF during fiscal years 2002- 2006.²³ Figure 6 shows the increase in program support over the last 10 years.

Figure 6: UW Program Support, 1997-2006



The management of the CEF allows the University to depend upon a consistent flow of funding for its programs and departments. This funding is used for scholarships, fellowships, professorships, department chairs and research activities. In 2006, the endowment provided for 254 professorships and department chairs. Figure 7 highlights the breakdown on how the endowment was used, by school and by purpose.

²¹ UW Treasury Office Endowment Report 2006

²² 2006 NACUBO Endowment Study Results, Table: All Institutions Listed by FY 2006 Market Value of Endowment Assets with Percent Change Between 2005 and 2006 Endowment Assets

²³ UW Treasury Office Endowment Report 2006

CEF Management

Several entities within the University are responsible for the management of the endowment, including the Treasury Office, the Board of Regents, the Finance, Audit and Facilities Committee, the advisory committee UWINCO and the CIO, Keith Ferguson. Each entity is responsible for individualized portions of the CEF management. Additionally, the UW employs a wide variety of independent and professional investment managers to assist with the investment practices. See Appendix 1 for the full list of investment managers.

Figure 7: 2006 CEF Program Support



The Board of Regents is responsible for determining the spending policy of the endowment. The policy is based on recommendations from UW management and consultants.²⁴ Currently, the policy is set at 5% of a three-year moving average market value. This is consistent with the significant majority of other schools tracked by NACUBO. The intention of the spending policy is to allow monetary distribution while maintaining the investment. Returns on the CEF strongly reflect the current market volatility.

The core concept of the spending policy is focused on intergenerational equity. This is “the idea that spending policy must ensure that future generations of faculty and students receive the same level of benefits from the endowment as today’s.”²⁵

Investment Policy

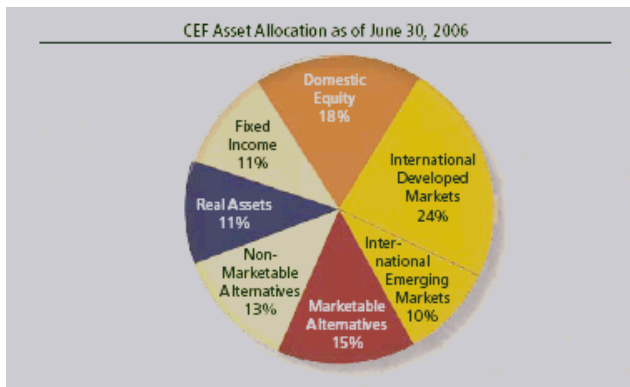
The main investment objective for the CEF is “to provide a maximum level of return consistent with prudent risk levels”²⁶ It is important to balance risk and return with the endowment, as the University depends so heavily upon this revenue source. Also included in the investment objectives, the CEF is expected to obtain returns at least comparable to the largest 50 colleges and universities listed in the Cambridge Associates Universe. This last point is important since the University benchmarks its success in comparison with the success of other, comparable universities and colleges.

²⁴ UW Treasury Office Website <http://www.washington.edu/admin/treasury/faqs.htm>

²⁵ UW Treasury Office Website, CEF Spending Policy <http://www.washington.edu/admin/treasury/endowspendingpolicy.htm>

²⁶ UW Statement of Investment Objectives and Policy for the Consolidated Endowment Fund, approved June 8, 2006.

Figure 8: CEF Asset Allocations- needs to be with graphic



In order to best address market instability and fluctuations, the CEF is broadly diversified. This is required by the UW's investment policy. The consistent diversification of the investment greatly reduces the overall risk of the CEF. In 2006, 78% of the endowment was invested in equities. Approximately 11% was invested in real assets while an additional 11%

was invested in fixed income. The investment strategies are managed by professional investment managers external to the UW. See Figure 8 for the specific amount of asset allocations.

Ethical Considerations

While the University is ultimately concerned about the return on its endowment investment, it has incorporated two ethical considerations into the investment policy for the CEF. The first consideration focuses on the corporate responsibility of the companies in which the University invests. The degree of commitment to this consideration is unclear. The language used is "due consideration shall be given".²⁷ There is no explicit declaration of investing only in companies devoted to the principles of corporate responsibility.

The second consideration precisely states the policy's intention. "Direct investment in companies doing business in Sudan whose business activities support the Sudanese government in its continuing sponsorship of genocidal actions and human rights violations in Darfur is prohibited."²⁸ This divestment policy is unique, as the momentum to include it in the overall investment policy of the CEF was generated from student involvement in the issue. The UW student group, Save Darfur Coalition, pressed the divestment issue with the Board of Regents. A year after lobbying the Board, the policy was adopted in June 2006.

This was not the first time the UW divested from companies based on ethical concerns. A similar situation occurred in the 1980's when UW divested from businesses supporting the South African government during the apartheid.

"It is the final statement that you can make that a particular issue- in this case from the Darfur situation- is unacceptable," said V'ella Warren, Treasurer for the Board of Regents. "And if enough institutions that run large amounts of money take this sort of an action, it hopefully will be one of a number of things that will influence the government

²⁷ UW Statement of Investment Objectives and Policy for the Consolidated Endowment Fund, approved June 8, 2006.

²⁸ UW Statement of Investment Objectives and Policy for the Consolidated Endowment Fund, approved June 8, 2006.

to change their ways.”²⁹ An excerpt from the investment policy is included in Appendix 3.

Future Research

At the outset of our research, we set out to list specific options for the University in which to participate in climate friendly investing. We knew from the outset, this topic was quite broad in scope. As we began researching and continued through the quarter, it became apparent we would need a larger time frame, especially if we wanted to fully understand the investment strategy and implement a lasting policy.

Our next steps in research will focus on five important issues. First, we will identify how other universities are addressing the climate friendly investment issue. Have other school focused a portion of their endowment into CFI? Is momentum building among the largest institutional investors to refocus how their money is invested? What universities and colleges have made direct commitments to this type of investment? See Appendix 4 for an evaluation of UW’s endowment and campus policies on sustainability.

We plan to probe the educational community, discovering what has already been accomplished and what is lacking. We will focus specifically on the universities and colleges identified by the UW as peer institutions. This includes the Global Challenge Peer State Institutions, the Higher Education Coordinating Board Peer Group and the Office of Financial Management Peer Group. See Appendix 5 for the full listing of these peer comparison groups.

Second, we will identify how climate friendly investing could align with organizations values. For example, does the organization state a commitment to the environment or to reducing their carbon impact? Climate friendly investing could provide an opportunity to further the commitment.

Third, we will provide greater specificity regarding the risks and opportunities associated with climate friendly investing. This is an extremely important component to our research and to the overall implementation strategy of CFI. A college or university will need to know the rationale behind such an investment strategy and the risks associated with such a strategy. Institutional investors will need to be fully informed about the CFI option before they can be involved. Our research will further expand on what we have completed already during the quarter.

Fourth, we will develop an implementation strategy for institutions to pursue climate friendly investments. An initial implementation strategy was created this quarter. As implementation is usually the most difficult step in the policy process, our final action plan will explicitly define steps for an organization or institution to follow for successful implementation.

²⁹ Seattle Post-Intelligencer, *UW to Vote on Investment Curbs in Sudan; Regents Consider Stepping Up Response to Rights Violations*, June 6, 2006

Fifth, we will focus more research time on the emerging carbon-focused investment opportunities arising. As climate friendly investing is burgeoning into a larger field, more research, involved organizations and innovations are developing. We plan to harness their inventive spirit to further our research objectives.

Finally, the sixth issue is the possibility of the UW engaging in climate friendly investments options. We plan on developing relationships with key members in the University and working together to incorporate into the UW investment policy. Our contacts in the University have been quite receptive to our project and research thus far. We hope this positive response continues and will flourish next quarter.

We hope this extended research period will not only enable us to further examine this complex issue but also allow us to truly develop a meaningful and pragmatic implementation plan. As the notion of climate friendly investments continues to grow, acceptance will continue to expand. Our research will build upon existing frameworks and we will continue to define new frameworks and strategies through our research.

Appendix 1
NABUCO 2006 Endowment Study
Top 30 universities and colleges

**Institutions Listed by Fiscal Year 2006 Market Value of Endowment Assets with Percent Change
Between 2005 and 2006 Endowment Assets**

* "Percent Change" does NOT represent the rate of return on investment for the listed endowment. This figure represents an endowment's change in market value between fiscal year-end 2005 and fiscal year-end 2006. Factors such as growth from gifts, reductions due to expenditures and withdrawals, and investment returns determine an endowment's fiscal year-end market value.

Institution	State	2006 Endowment Funds (\$000)	2005 Endowment Funds (\$000)	*Percent Change in Endowment (2006 - 2005)
1 Harvard University	MA	28,915,706	25,473,721	13.5%
2 Yale University	CT	18,030,600	15,224,900	18.4%
3 Stanford University	CA	14,084,676	12,205,000	15.4%
4 University of Texas System	TX	13,234,848	11,610,997	14.0%
5 Princeton University	NJ	13,044,900	11,206,500	16.4%
6 Massachusetts Institute of Technology	MA	8,368,066	6,712,436	24.7%
7 Columbia University	NY	5,937,814	5,190,564	14.4%
8 University of California	CA	5,733,621	5,221,916	9.8%
9 University of Michigan	MI	5,652,262	4,931,338	14.6%
10 The Texas A&M University System and Foundations	TX	5,642,978	4,963,879	13.7%
11 University of Pennsylvania	PA	5,313,268	4,369,782	21.6%
12 Northwestern University	IL	5,140,668	4,215,275	22.0%
13 Emory University	GA	4,870,019	4,376,272	11.3%
14 University of Chicago	IL	4,867,003	4,137,494	17.6%
15 Washington University	MO	4,684,737	4,268,415	9.8%
16 Duke University	NC	4,497,718	3,826,153	17.6%
17 University of Notre Dame	IN	4,436,624	3,650,224	21.5%
18 Cornell University	NY	4,321,199	3,777,092	14.4%
19 Rice University	TX	3,986,664	3,611,127	10.4%
20 University of Virginia	VA	3,618,172	3,219,098	12.4%
21 Dartmouth College	NH	3,092,100	2,714,300	13.9%
22 University of Southern California	CA	3,065,935	2,746,051	11.6%
23 Vanderbilt University	TN	2,946,392	2,628,437	12.1%
24 Johns Hopkins University	MD	2,350,749	2,176,909	8.0%
25 University of Minnesota and Related Foundations	MN	2,224,308	1,968,930	13.0%
26 Brown University	RI	2,166,633	1,843,904	17.5%
27 Ohio State University and Foundation	OH	1,996,839	1,726,007	15.7%
28 University of Pittsburgh	PA	1,802,859	1,529,884	17.8%
29 University of Washington	WA	1,794,370	1,489,924	20.4%
30 New York University	NY	1,774,700	1,548,000	14.6%

Appendix B

UW Investment Managers in 2006

Investment Managers as of June 30, 2006

Domestic Equity	Life Income	New Enterprise Associates
AXA Rosenberg Investment Management	Kaspick and Company	Oak Investment Partners
Rainier Investment Management	Marketable Alternatives	Oaktree Capital Management
Sands Capital Management	Adamas Partners	Parthenon Capital
Snyder Capital Management	Bridger Capital	Paul Capital Partners
Tukman Capital Management	Chesapeake Partners	Polaris Venture Partners
Tygh Capital Management	Fir Tree Partners	Pomona Capital
Fixed Income	Highline Capital Management	Quadrangle Group
Aberdeen Asset Management	Lone Pine Capital	Westbridge Capital Partners
Morgan Stanley Alternative Investment Partners	North Sound Capital	Sevin Rosen Funds
Payden & Rygel	OZ Advisors	TA Associates
Pugh Capital Management	Satellite Asset Management	Texas Pacific Group
Quellos Group	Sirios Capital Management	The Riverside Company
International Developed Markets	Standard Pacific Capital	Vestar Capital Partners
Arrowstreet Capital	Varde Partners	Voyager Capital
Axiom International Investors	Non-Marketable Alternatives	Weston Presidio Capital
Grantham, Mayo, Van Otterloo & Company	Angelo, Gordon & Co.	Shott Capital Management
Harris Associates	ARCH Venture Partners	Real Assets
Liberty Square Asset Management	ArcLight Capital Partners	Aetos Capital
MAC Asset Management	Bain Capital	Beacon Capital Partners
Silchester International Investors	Battery Ventures	Berwind Property Group
Sparx Asset Management Co.	ChrysCapital	Cabot Properties
State Street Global Advisors	Code Hennessy & Simmons	Commonfund Capital
International Emerging Markets	Commonfund Capital	Crow Holdings
Arisaig Partners (BVI)	Domain Associates	Jefferies Capital Partners
City of London Investment Management	Endeavour Capital	La Salle Investment Management
F&C Asset Management	Frazier & Co.	Merit Energy Company
Tree Line Investment Management	General Catalyst Partners	Natural Gas Partners
Morgan Stanley Alternative Investment Partners	HarbourVest Partners	PIMCO
State Street Global Advisors	Ignition Partners	Resource Management Services
Ward Ferry Management	InterWest Partners	Thackeray Partners
Goldman Sachs Group	Madrona Venture Group	Wellington Management
	MatlinPatterson Asset Management	

Appendix 3

Except from the University of Washington CEF Investment Policy

Over the long term (rolling five-year periods), the CEF's diversification is expected to generate risk-adjusted returns that meet or exceed those of blended market indices.

B. ETHICAL CONSIDERATIONS

1. While fiscal goals are of central importance, due consideration shall be given to the degree of corporate responsibility exercised by the companies in which investments are made.
2. Direct investment in companies doing business in Sudan whose business activities support the Sudanese government in its continuing sponsorship of genocidal actions and human rights violations in Darfur is prohibited.

C. INVESTMENT PHILOSOPHY

The investment of the CEF is based on a set of beliefs and practices:

1. Invest for the long term
 - a. Preserve capital for use by future generations
 - b. Rely on asset allocation as the primary determinant of return
 - c. Avoid short-term speculative activity
 - d. Accept illiquidity if justified by higher alpha
2. Build a well-diversified portfolio

Appendix 4

Sustainable Endowment Institute's College Sustainability Report Card

UNIVERSITY OF WASHINGTON		B-
		\$1.8 billion
ADMINISTRATION	A	In August 2004, newly-arrived University of Washington President Mark A. Emmert created an Environmental Stewardship Advisory Committee, an environmental stewardship coordinator position, and formalized a policy on environmental stewardship to give full institutional support to the cause of campus sustainability. UW works to promote sustainability practices in every position and community member in order to demonstrate the concept by example. The campus had been working on energy conservation measures since the late 1980s.
CLIMATE CHANGE & ENERGY	A	All of the Seattle campus's electricity purchases are from renewable and carbon-neutral sources. Since the early 1990s, the University has been working with the Seattle City Lights utility company—which has a portfolio that is 93 percent renewable and 100 percent carbon-neutral or carbon-mitigated—to reduce energy use on campus. In May of 2006, the University began paying a premium for renewable wind energy for the remaining 7 percent of its electricity needs, making it among the top ten largest higher-education purchasers of renewable energy credits in the country.
FOOD & RECYCLING	A	The University is able to request that their distributor purchase from certain local food sources as part of the Socially Aligned Partnerships program. Last year, \$475,000 worth of fruits, herbs, and vegetables, grown locally by 46 farmers, was supplied by Charlie's Produce, a local employee-owned company. The University provides a large array of organic products including milk, potatoes, coffee, tea, chocolate, cereal, pasta, and poultry. Food scraps are composted; unused food is donated to local charities; and "Scram," an end of the year donation program, donated over 20,000 pounds of reusable material such as clothing, books, and furniture to local charities this year. Future projects may include converting used cooking oil into biodiesel and a reusable mug program.
GREEN BUILDING	A	In compliance with the state of Washington's High Performance Building legislation, the University declared that all new building will be LEED Silver-certified, at a minimum. The University has achieved one LEED-certified and two LEED Silver-rated projects, totaling over 325,000 square feet. Three projects currently under construction, totaling 320,000 square feet, are targeted at LEED Silver and LEED Gold ratings. An additional four registered projects, totaling 215,000 square feet, are targeted at LEED Silver or higher. In addition, the University has over 50 LEED-accredited professionals, 30 of whom work directly on the design and construction of new and renovated buildings.
ENDOWMENT TRANSPARENCY	F	The University has no known policy of disclosure of endowment holdings or its shareholder voting record.
INVESTMENT PRIORITIES	C	The University prioritizes investing to maximize profit and has not made any public statements about investigating or investing in renewable energy funds or community development loan funds.
SHAREHOLDER ENGAGEMENT	F	The University has not made any public statements about active ownership or a proxy voting policy.

Data compiled from independent research as well as through a campus sustainability policy survey.

Appendix 5

**University of Washington, Planning and Budgeting, Office of Institutional Studies:
Peer Comparisons**

Global Challenge Peer State Institutions

California

- University of California, Davis
- University of California, Irvine
- University of California, Los Angeles
- University of California, San Diego

Colorado

- University of Colorado, Boulder
- University of Colorado, Denver with Health Sciences

Connecticut

- University of Connecticut with School of Medicine and Dentistry

Maryland

- University of Maryland at College Park and at Baltimore

Massachusetts

- University of Massachusetts at Amherst and at Worcester

New Jersey

- Rutgers University with University of Medicine and Dentistry of New Jersey

Virginia

- University of Virginia

Office of Financial Management Peer Group

- University of Arizona
- University of California, Berkeley
- University of California, Los Angeles
- University of Illinois, Urbana/Champaign
- University of Iowa
- University of Michigan, Ann Arbor
- University of North Carolina, Chapel Hill
- University of Oregon with Oregon Health Sciences Center

Higher Education Coordinating Board Peer Group

<ul style="list-style-type: none">• Cornell University, Contract Colleges• Michigan State University• Ohio State University• Texas A&M University, College Station• University of Arizona• University of California, Davis• University of California, Irvine• University of California, Los Angeles• University of California, San Diego• University of Cincinnati• University of Florida• University of Hawaii	<ul style="list-style-type: none">• University of Illinois, Chicago• University of Iowa• University of Kentucky• University of Michigan, Ann Arbor• University of Minnesota, Twin Cities• University of Missouri• University of New Mexico• University of North Carolina, Chapel Hill• University of Pittsburgh• University of Virginia• University of Wisconsin, Madison• University of Utah
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