Duke University's Contribution to Reducing Greenhouse Gasses: Toward A Climate-Responsible Investing Approach

Advisory Committee on Investment Responsibility
Report to President Vincent E. Price
on Fossil Fuel Investment
May 2019

Executive Summary

Having investigated the question of Duke University's fossil fuel investments and the desire to use Duke's investment leverage to help reduce Greenhouse Gasses, the Advisory Committee on Investment Responsibility (ACIR) has developed five main recommendations for President Price to consider:

- The Board of Trustees (BOT) should not require DUMAC to divest from fossil-fuel-related investments;
- DUMAC, with the necessary approvals from the BOT, should further develop its proxy voting policies so as to use its investor voting power, where possible, to encourage companies to reduce their reliance on fossil fuels and the production of Greenhouse Gasses;
- Duke should consider seeking endowment funding for its Social Choice (ESG) Fund, established in 2014, and should consider the creation of a more focused "Green" Fund that might attract contributions from potential donors who desire to support such specific purpose funds;
- Duke should consider supporting the student Duke Impact Investing Group (DIIG) in their endeavor to create a "green" seeding fund for entrepreneurship;
- Duke should encourage an investigation into the feasibility of creating a carbon tax on selected investments in order to earmark those investment returns for allocation to "green" initiatives undertaken or encouraged by Duke.

Introduction and Background

The Advisory Committee on Investment Responsibility (ACIR) provides advice to the University President, Vincent Price, on matters concerning investments Duke might have in certain industries or sectors. The President can decide whether to act on this advice by taking his ensuing views to the Duke Board of Trustees (Board) which, in turn, can decide whether to adjust the mandate of DUMAC, which manages the University Endowment investments.

One of the longest standing matters before the ACIR has been how Duke should manage its investments in companies that extract fossil fuels or otherwise contribute to greenhouse gas (GHG) emission. The concern is that detrimental climate change is occurring rapidly and is the result of human activities. Duke might, in its investor capacity, be able to influence the reduction in dependency on fossil fuels and help stimulate the development of alternative sources of energy and reduce dependence on GHG. On November 24, 2014, ACIR submitted a report and recommendations on fossil fuels to President Brodhead (**2014 Report** attached). The ACIR declined to recommend to President Brodhead that the University divest from its investments in fossil fuel extraction or GHG-related companies.

Instead, the ACIR made a number of other recommendations for:

a) Annual reports from DUMAC on Duke's fossil fuel and clean energy holdings;
b) Regular meetings with DUMAC representatives to discuss DUMAC actions designed to support reductions in investments involving carbon emissions;
c) Directing DUMAC to target environmentally friendly proxy voting and corporate governance activities, consistent with DUMAC's fiduciary responsibilities, when exercising its shareholder powers. (For the full recommendations, see the **2014 Report**.)

Numerous requests for reconsideration of Duke investments have subsequently been, and continue to be, made by a group that was known as Divest Duke and is now known as the Duke Climate Coalition (DCC). The DCC has conducted extensive research and participated in numerous ACIR and ACIR subcommittee meetings, as well as in informal discussions with the ACIR chair and various groups and individuals around the Duke community. In the spring of 2018, the DCC returned to the ACIR with the request that the ACIR recommend Duke divestment from fossil fuel companies. The DCC was supported by numerous resolutions from other student bodies at Duke.

The ACIR considered this request, memos from, and presentations by, the DCC. We acknowledged that the DCC request and related possibilities deserve serious consideration, consistent with the **2014 Report**. The issue has also been made more urgent in the wake of many new scientific reports clearly indicating that dangerous climate change is occurring more rapidly than previously thought, and that this change is being significantly promoted by the emissions resulting from fossil fuel extraction and use and the production of GHG.

In the fall of 2018, the ACIR decided to recommend to President Price that a subcommittee be formed to explore the possibilities for managing Duke's investments in a way that would help promote reduced societal dependency on fossil fuels and more rapid development in alternative energy options. We believed not only that the DCC's insistence on revisiting the issue was well founded, but that such inquiry would be consistent with and encourage other Duke actions, such as the commitment to carbon neutrality by 2024, Duke's Carbon Neutral & Sustainable Duke/Bleed Blue Live Green initiatives, and the growing interest in deploying solar energy where possible. President Price approved the subcommittee inquiry and a subcommittee was launched in late 2018 with a commitment to report to the ACIR and, consequentially, to President Price by May 2019.

The Fossil Fuel Investment (FFI) Subcommittee includes a small group of ACIR members: Professor Baxter as chair, Dr. Marty Smith, Ewan Kingston (ACIR graduate student representative), Professor Jim Cox (the former chair of the ACIR and drafter of the **2014 Report)**, and three members of the DCC (Ethan Miller, Gabrielle Richichi and Amanda Padden[1]).

The FFI Subcommittee met in formal session three times:

a) To engage with the DUMAC leadership (CEO Neal Triplett, COO Anil Madhok, and Chief Compliance Officer Jennifer Dimitri) to explore the possibilities that DUMAC could apply consistent with its mandate (January 10, 2019);
b) To review options other than divestiture and report back on individual and group meetings held with others by members of the FFI Subcommittee (February 28, 2019); and
c) To review this draft report at the FFI Subcommittee meeting on April 10 2019, for onward submission to the ACIR for its meeting on April 22, 2019.

[1] Chair Baxter, Chris Lott (Deputy General Counsel), and the DCC student representatives also met on December 7, 2018 to have the student representatives sign confidentiality agreements.

In addition to these meetings, members from the FFI Subcommittee met with helpful groups in the Duke community or administration, including:

a) Officers from the Annual Fund Staff (Jennifer Spisak-Cameron), Gift Planning (Mike Sholtz) and Endowment Administration (Peter Balbirnie), and
b) Student groups such as the Duke Impact Investing Group (DIIG) - Co-Presidents Michael Tan and Saheel Chodavadia. See https://www.dukeimpact.org/#1.

Some members of the FFI Subcommittee attended expert panels on climate change and the desirability of divestiture. Guidance has also been given during this process by the Senior Vice President and Secretary to the Board of Trustees, Richard Riddell, whose feedback has been valuable in assessing the viability of possible recommendations from the ACIR.

Finally, the ACIR met in full session on April 22, 2019, to consider a draft of this report. The three representatives from the DCC were invited guests. The following is ACIR's report to President Price.

Divestiture is not a Constructive Option

Notwithstanding the strength of views on the subject, the FFI Subcommittee concluded that divestment would not be an effective contribution to the reduction of GHG. Accordingly, the Subcommittee recommended, and the ACIR unanimously agreed, **against** a mandate to DUMAC to divest. In this respect the FFI Subcommittee divided, with a majority being opposed to a divestiture recommendation. After receiving the FFI Subcommittee report and considerable discussion, the ACIR was unanimous in voting against divestiture.

We **recommend against divesture** for various reasons, several of which coincide with those given by the ACIR in its **2014 Report**. In short, these are:

a) Divestment by Duke in any of the companies that might be identified would have no impact on the companies concerned and would serve merely as a symbolic gesture;
b) The sale of shares held by Duke would not have sufficient volume to affect stock prices, and the shares would quickly be bought by other investors;
c) Symbolic gestures work well where the activities of the company concerned are condemned as evil, immoral, or unacceptable, and there is clear and strong consensus that this is the case. To the extent that Duke and its entire community is dependent on the consumption of fossil fuels and will be for a long time, a symbolic gesture would be hollow and, to a visible degree, downright hypocritical;
d) Divestiture in the complex arena of fossil fuels and the development of alternative energy is likely to be counterproductive, serving to polarize the debate over climate change rather than contribute constructively;
e) Strict prohibitions against certain investments could interfere with fund manager relationships;
f) Fossil fuel divestment could set an ambiguous precedent with the potential for an ever-expanding scope. For example, would there be a demand that Duke University stop investing in or providing meat dishes in its cafeterias and restaurants, since methane from cows are a major contributor to GHG?

A Meaningful Way for Duke University to Use Its Investing Power to Help Combat Greenhouse Gasses

Instead, the ACIR believes that Duke has other possible ways to meaningfully promote GHG-reductions. Furthermore, some of these actions would draw on the interest of the valuable members and institutions of the Duke community, both in terms of enthusiasm and expertise. Duke University could be seen as *living* the commitment to GHG reduction in ways that take the dangers of climate change seriously.

Inspired by the vision, the FFI Subcommittee spent time exploring what the investment-related options might be (keeping in mind that the ACIR has no mandate to address non-investment-related Duke activities). The following areas of focus were identified as most plausible and most likely to yield constructive action:

a) Proxy Policy and DUMAC Voting Power
b) ESG Funds and Duke's Social Choice Fund
c) Support for the Duke Impact Investing Group Proposal
d) Potential for a "Portfolio Carbon Tax"

Each of these possibilities received considerable FFI Subcommittee attention, though some options are highly tentative and would require much further analysis for feasibility and implementation.

These possibilities were discussed at length by the ACIR. The ACIR believes that even though divestiture is not favored, Duke University does have the ability to take investment-related steps that could be a strong statement in favor of reduced GHG dependency and continued reduction in fossil fuel extractive investments. These actions would also be consistent with Duke's overall commitment to carbon neutrality and support for the development of alternative forms of energy. We believe that such measures would engage the Duke community (students, faculty and investors) more broadly to play our part in the complex process of addressing the causes of detrimental climate change.

1. Proxy Policy and DUMAC Voting Power

Shareholder resolutions regarding climate-responsible business practices have been steadily increasing in volume and sophistication since the recommendation in the ACIR's **2014 Report** that DUMAC/Duke exercise their voting power to promote alternative energy and reduce fossil fuel dependency. In 2018 in the United States, 80 resolutions were filed with a range of extraction, utility, and other companies, aimed at aligning company goals and strategies with the political and practical changes necessary for a safe climate. Support from some institutional shareholders is high, with investment firms such as Allianz, Wells Fargo and Credit Suisse voting in favor of over 80% of such resolutions. Resolutions are often withdrawn after successful negotiations between management and shareholders but three such resolutions passed in 2017, including one requiring Exxon Mobil to disclose its climate change risks. Four such resolutions were passed in 2018.

Bearing in mind that the Board of Trustees (BOT) has the final say on proxy voting, DUMAC is obliged to comply with BOT directives, and Duke's ability to exercise meaningful proxy voting power is limited to situations in which Duke is a direct shareholder and not investing through third party managers, Valuable discussions were held between the FFI Subcommittee, the ACIR as a whole, and members of the DCC, on one hand, and DUMAC on the other.

These discussions considered the possibility of:

a) DUMAC working within existing proxy voting guidelines,
b) The BOT making adjustments to the **Duke Proxy Policy** (attached), and
c) Promoting a focused exercise of DUMAC/Duke shareholder voting power with the intent, wherever practical, to support filed resolutions that encourage companies in which Duke is invested.

These considerations would elaborate on the general principles already contained in the **2014 Report**. Proxy votes are not tracked at this stage, but changes could be made in recording, and consideration in enlisting the use (and expense) of an outside firm to do so is a possibility. Even where third party managers make proxy voting decisions, DUMAC could also remind them of our commitment to alternative energy and the reduction in reliance on fossil fuels as factors that should influence funds managers' decisions.

The ACIR recognized that changes to the proxy voting guidelines would need careful consultation with DUMAC and perhaps approval by the BOT. We decided to **recommend**, however, that the issue should be explored more fully. Certain detailed changes were suggested as examples of what might be done if feasible. These *might* include changes to the guidelines that could apply:

For all companies, wherever the practical opportunity arises, ***to:***

- Advocate the disclosure of financial risks, of companies in which Duke is invested, of operating in a global regulatory environment in which corporate GHG-related activities constitute an unnecessary threat to the global environment;
- Support energy transition, that is, the transformation of a company's energy sources from GHG-emitting fuels to carbon-free, renewable energy sources.
- Encourage company-wide GHG targets.

For extractive fossil fuel companies and electricity utilities, where the practical opportunity arises, to:

- Request disclosure of lobbying practices and expenditures to ensure that a company's lobbying aligns with their stated mission, goals, and values and to reduce the financial risk associated with lobbying;
- Advocate the management and/or disclosure of methane emissions.

In addition,

- DUMAC could provide the Executive Committee of the Board with an annual record of proxy voting endeavors, including; (1) resolutions brought forth to vote, (2) resolutions in which DUMAC exercised their proxy voting power, (3) as requested, information on such resolutions. DUMAC could provide a copy of such record to the ACIR along with its annual report.

While DUMAC does not endorse these recommendations, having not been fully engaged, DUMAC has committed to help the ACIR and DCC draft refined proxy guidelines. The suggestions above only represent ACIR's provisional thoughts. When finalized, these revisions would, to the extent that they might involve substantive changes to DUMAC's mandate, need to be approved by the Board.

The FFI Subcommittee and the ACIR believe that this effort might offer some assistance toward producing a constructive outcome with those companies in which Duke has sufficient voting power to make a difference. This work would, it is hoped, also contribute to steadily reducing Duke/DUMAC dependence on investments in fossil-fuel extractive companies.[2]

2. Social Choice Funds

Environmental, Social and Governance (ESG) funds have been growing in popularity. Notwithstanding a mixed history of past performance, more refined investment techniques and selection appear to be producing ESG funds that earn rates of return comparable to those of various other funds that have provided the traditional focus of endowment investment. Duke has earmarked an as-yet unendowed **"Social Choice Fund"** to alumni and other potential donors as one of their giving options. To become active, the Fund would require an endowment of $100,000. Having not yet been endowed, the Fund is not yet a realistic choice for potential donors, and it has received minimal donor attention since it was formed in 2014.

A small group from the FFI Subcommittee, including the chair and one of the student representatives, met with officers from Duke's Annual Fund, Gift Planning and Endowment Administration to explore possibilities. The most important was the possibility for making the Social Choice Fund more visible to alumni, perhaps serving as an attractive fund for younger alumni who do not tend to give significantly in their early years after graduation yet many of whom are strongly committed to concerted actions to reduce dependence on fossil fuels. DCC student representative Amanda Padden, suggested from her experience that new and recent graduates could be strong supporters of such a fund.

Three possibilities suggest themselves:

a) Endowing the Social Choice Fund.
This would entail finding a large donor (or group of donors) with an interest in promoting social choice investing in general. The fund could then serve as a target for socially-minded future donors;

b) Creating a specific "Green" Fund.
The BOT could approve a new Fund dedicated to promoting alternative energy work at Duke (including perhaps helping the DIIG sponsor an "evergreen fund"—see further below).

As with the Social Choice Fund, to become active, the Fund would have to be endowed. We were encouraged to think about exploring ways to fund an endowment. The possibility of targeting new or rising graduates was discussed as an example (perhaps $20,000 each from new graduates to form a combined $100,000 endowment, or lesser amounts from a larger spread of students?). It is also possible that more senior graduates might show an interest in an alternative energy endowment fund, were it to acquire heft and be marketed more visibly.

Work would be necessary to determine whether there should be two separate funds or one, and how the fund(s) might ideally be designed. DUMAC has indicated that it could help with trading services for anything in the fund that is publicly traded (but would not manage the fund). The development officers with whom the FFI Subcommittee met, though clearly not committing to anything without much more examination, anticipated few problems in creating a new Fund, or growing the Social Choice Fund, should we be able to find ways to

[2] It should be noted that DUMAC has already been pursuing this path over the past few years and these recommendations are also consistent with the recommendations made in the **2014 Report**.

endow and promote them. These efforts would, of course, require engagement with Duke's Legal, Treasury, and Development offices to ensure that the Social Choice Fund and any other dedicated endowment be properly coordinated with Duke's overall development/fund raising programs.

c) Retirement Fund(s)

The Subcommittee and ACIR also considered the possibility of an appropriate ESG fund, to be made available in the menu of selections employees can make for their retirement plans. However, after discussing with Counsel's Office, ACIR learned that the retirement funds are selected and monitored by fiduciaries in a process that is governed by the federal law, Employee Retirement Income Security Act of 1974. Duke's current investment lineup includes a social choice fund and employees can select investments from a brokerage window, which includes the three environmental funds identified by the FFI. [3] Unfortunately, therefore, the possibility of encouraging employees to invest in these social choice funds is not available.

Even so, the FFI Subcommittee and the ACIR believe that boosting the existing Social Choice Fund, both in recruitment of an endowment, new gifts, and marketing; the possible creation and endowment of a new "Green Fund"; might combine to create a constructive way for Duke to demonstrate its commitment to reduction in fossil fuel dependence and support for alternative energy development. The ACIR therefore **recommends** that President Price consider a small committee to address these non-retirement fund options more fully.

3. Support for a Duke Impact Investing Group Proposal

Duke University has an organization called the Duke Impact Investing Group (DIIG). See https://www.dukeimpact.org/#1. This group is a student-led and student-run organization that serves as the only outlet for Duke undergraduates to engage in the field of impact investing. Currently, DIIG leads impact investing education programs (notably through a 0.5-credit Duke House Course), performs pro-bono consulting for regional social enterprises, and conducts research on important topics in the impact investing field such as impact measurement. DIIG consists of 10 executive board members, 20 analysts, and 400 general listserv members. The faculty advisor for DIIG is Matthew Nash, Managing Director of Social Entrepreneurship at the Duke Innovation and Entrepreneurship Initiative (I&E). Accordingly, DIIG works closely with Duke I&E as well as regional impact investing organizations and companies.

The FFI Subcommittee chair and a member of the DCC (Ethan Miller) met with the leadership of the DIIG to discuss the possibility of the BOT, or President Price acting alone if the amount were appropriate, to authorize the creation of an "Evergreen Fund" for the purpose of promoting corporate social responsibility through targeted investments and shareholder activism, with an immediate focus on the energy industry. The discussions were very productive, and the FFI Subcommittee views the DIIG as representing precisely the kind of Duke community activism and entrepreneurial promotion that might produce constructive results in influencing a turn toward alternative energy and a reduction in fossil fuel dependence. Moreover, as a student organization the DIIG could draw on the enthusiasm of the student body for accelerating efforts to combat detrimental climate change and can help promote "pro-environmental" thinking among many who will soon become industry leaders. The FFI

[3] Sustainability Bond Index Fund FNDSX; Select Environment and Alternative Energy Portfolio FSLEX; US Sustainability Index Fund FITLX (all available via the brokerage window); and the Vanguard FTSE Social Index Fund (VFTNX).

Subcommittee believes that the DIIG should be encouraged in its pursuit of Board approval for such a fund, properly constructed and governed.

At the request of the chair, the DIIG developed the possible design of such a fund (see **Memo** attached). The amount of the fund would depend on the President's and/or the BOT's willingness to set such funds aside for this special purpose. Capital of $1 million was contemplated, but the fund could be effective with a lesser amount. If Duke could not provide funding directly, perhaps the University could lend its stamp of approval, which would help in raising funds elsewhere.

The concept was discussed at the ACIR meeting and consensus was that the idea be included as one of the **recommendations** for consideration by President Price.

4. Potential for a "Portfolio Carbon Tax" (i.e. a self-imposed tax on greenhouse gas-intensive investment earnings)

To the extent that greenhouse gas (GHG)-intensive investments are nearly unavoidable (see divestment discussion above), there might be a way to tie Duke's promotion of alternative energy activities to the profits derived from GHG associated investments. One of the ACIR members of the Subcommittee, Dr. Marty Smith, an environmental economist, has a particular interest and expertise in carbon taxes and offsets. Dr. Smith made the interesting suggestion of a "**Portfolio Carbon Tax**." (See Dr. Smith's **concept memo** attached.)

In Dr. Smith's view, a central economic driver of climate change is society's *failure to price carbon*. He raises the interesting possibility that the Board might ultimately approve the allocation of a small amount of funds—let us call this a "carbon tax" on endowment earnings—for the purpose of funding and supporting select alternative energy and GHG-reducing initiatives at Duke. It should be emphasized that <u>Dr. Smith's view is extremely preliminary and the idea would require a lot of research and discussion, in particular regarding the method of assessing the size of the "tax</u>."

The "portfolio carbon tax" is novel and could set Duke apart for the following reasons. Our peers fall into two categories: 1) universities that place no restrictions on investing in companies that contribute to climate change, and 2) universities that arbitrarily draw a line in the sand, demonizing coal and oil companies while ignoring the contributions of greenhouse gases from electric utilities, food and agriculture, manufacturing, the transportation sector, and basically every other sector of the economy. By exploring novel ideas such as the carbon tax on investment earnings, Duke would be charting a course more consistent with the science of climate policy, instead of placing itself on one side or the other of the two extremes just mentioned.

Were Duke to explore this initiative, a particular benefit would be that Duke University would be the first university in the world to try something like a "portfolio carbon tax". As Dr. Smith has said in his memo, the initiative "would bring into alignment Duke's intellectual strengths in studying climate change and climate change policy, with Duke's commitment to carbon neutrality, and Duke's commitment to socially responsible investing. Duke could position itself as a global leader in socially responsible investing that is consistent with our academic understanding of the climate change problem."

A carbon tax and associated fund might serve a number of purposes. The most important would be:

a) To send a signal to fund managers that investments relating to fossil fuels require a substantially higher return than others to be justified, given their detrimental impact on the environment; and

b) To allocate a "carbon tax fund" that would tie profits from greenhouse gas (GHG)-intensive investments to Duke spending on alternative energy-related funds or other "green" initiatives, such as reducing GHG emissions on campus and attempts to be carbon neutral by 2024.

Considerable work would of course need to be done with Duke's environmental scientists and economists, the Duke Administration, Legal, and DUMAC, on matters of how to devise the assessment methodology for measuring carbon intensity and determining the tax rate and the resulting size of the carbon tax fund. The methodology for pricing carbon (across both extractive companies and others consuming substantial energy or contributing to GHG emissions) would likely prove difficult to develop. These issues would need extensive further exploration.

The FFI Subcommittee and the ACIR believe that the portfolio carbon tax assessment might offer another constructive initiative consistent with the overall effort to reduce dependency on GHG-intensive investments, slow continued generation of GHG, and the promotion of alternative energy development. The project could be a signature one for Duke, and one in which Duke could be seen as leading the pack on the thorny issue of carbon taxes.

We therefore **recommend** that the ACIR propose to President Price that further study of this concept be encouraged, acknowledging the need for considerable further development and investigation. Such a study would aim for completion by the end of the 2019-20 academic year.

DUKE LAW

JAMES D. COX
BRAINERD CURRIE PROFESSOR OF LAW
DUKE UNIVERSITY SCHOOL OF LAW
SCIENCE DRIVE AND TOWERVIEW ROAD
BOX 90360 • DURHAM, NC 27708
TEL 919–613–7056 • FAX 919–668-0995
COX@LAW.DUKE.EDU

November 24, 2014

President Richard Brodhead
Box 90001
Duke University
Durham NC 27708

Re: ACIR Report and Recommendations on Fossil Fuels

Dear President Brodhead:

In December 2013 you asked the Advisory Committee on Investment Responsibility (ACIR) to consider the matter raised by Divest Duke. On behalf of the (ACIR), please consider this our report and recommendations that were unanimously approved on November 14, 2014, with 12 of 14 ACIR members present (2 ex-officio members were unable to attend).

Executive Summary

All members of the ACIR express support for Duke pursuing appropriate and reasonable actions that will contribute to reducing in the effects of climate change, including but not limited to actions specific to the use and support of fossil fuels. We recognize that the University has already done much in this regard, including its pledge to become carbon-neutral by 2024, decommissioning its coal plant and replacing it with a new steam plant, investing in a North Carolina hog farm for carbon offsets, moving to natural gas and electric busses and vehicles, and many others. There is undoubtedly more that can be done, but as it relates to the role of ACIR the established guidelines for the committee set thresholds that must be met before ACIR can make recommendations on matters before it.

The recommendations set forth below call for several steps that collectively ACIR believes are consistent with how an endowment can act responsibly while maintaining holdings in fossil fuel companies. These include:

- Annual reports by DUMAC to the ACIR on Duke's fossil fuel energy and clean energy/ technology holdings;

- Regularly meeting with DUMAC representatives to discuss DUMAC's programs, policies and practices designed to support through its investment activity reductions in carbon emissions and promotion of non-fossil fuel energy;
- Directing DUMAC, consistent with the fiduciary obligations of its officers and directors, to have among its strategies targeting investments that advance environmentally friendly clean energy strategies;
- With respect to significant direct equity holdings in fossil fuel companies, directing DUMAC to engage those companies to encourage their managers to develop strategies consistent with the quest for clean or cleaner sources of energy; and
- When exercising the power to vote proxies, directing DUMAC to support well-crafted and reasonable proposals that appear consistent with the objective of encouraging a firm's managers to report on, or take action with regard to, efforts to reduce carbon emissions.

With respect to the request made by Divest Duke, however, we make the following findings:

> that there is a lack of clarity that divestment will have the desired impact,
> that divestment, while certainly symbolic in that it communicates where Duke stands on this topic is a single occurrence whereas we believe other actions referenced in the report reflect the benefits of multiple acts and communications that are more consistent with the missions of a great university, and, finally,
> that the Trustee Guidelines to ACIR indicate that before divestment a company is to be "afforded reasonable opportunity to alter its activities."

We acknowledge that action, even when likely to have little direct impact, divestment can make an important symbolic statement. Duke and other universities are well situated to communicate values and to raise among their audiences questions necessary to debate and advance values. However, in light of the overall weight of the above-listed findings, we do not, under the present circumstances, recommend divestment.

The ACIR also notes with great enthusiasm that although it is beyond its scope of deliberations, its members believe individually and collectively that the University can do more to foster debate and discussion on our campus and beyond. Therefore, we also include several recommended areas that may benefit from further consideration or exploration outside of the ACIR process.

Background

Concern for climate change has great resonance within the ACIR. Had there not been a request from Divest Duke pending before ACIR was reconstituted and reoriented in late fall 2013, the committee would nonetheless have engaged the question of whether fossil fuels pose the type of harm proscribed by the Board of Trustees in its "Guidelines on Socially Responsible Investing, adopted on August 20, 2004". Although the Guidelines is included in its entirety in

Appendix B, for emphasis and clarity we set forth below, and quote directly in this report, those paragraphs of the Guidelines that framed much of our analysis. (emphasis below added):

> Actions the University takes may or may not materially affect an offending corporation, but such actions may have significant symbolic value. When the University community has engaged in substantive discourse on an issue and expressed broad concern that substantial social injury is being caused by such policies or practices, the president may make a recommendation to the Board of Trustees.
>
> Where the Board of Trustees finds that a company's activities or policies cause substantial social injury, and that a desired change in the company's activities would have a direct and material effect in alleviating such injury, it may instruct the Duke University Management Company (DUMAC) to take appropriate action, including the exercise of the University's practicable shareholder rights to seek modification of the company's activities to eliminate or reduce the injury, using such means as:
>
> a) direct correspondence with management
>
> b) proxy votes
>
> c) sponsoring shareholder resolutions.
>
> If the Board of Trustees further concludes that the company has been afforded reasonable opportunity to alter its activities, and that divestment will not impair the capacity of the University to carry out its educational mission (for example, by causing significant adverse action on the part of governmental agencies), then it may instruct DUMAC and its managers to divest the securities in question within a reasonable period of time.

Process

The ACIR has had considerable deliberation on this topic since you brought it to our attention a year ago. We met with members of Divest Duke in April 2014, at the ACIR's open forum on October 6, 2014, and again on October 22, 2014. Prior to its April 2014 meeting, we benefitted from the perspective shared in the original Divest Duke proposal and materials offered that set forth its call for total divestment. Then in October they provided several alternative and interim steps that could be pursued in lieu of total divestment.

The committee has also studied the actions by our peer institutions such as Brown, Harvard, Stanford, UNC and Yale. At our September 2014 meeting, the Committee analyzed a list DUMAC prepared of the fair market value as of June 30, 2014, of direct energy holdings, both equity and derivatives[1] and was briefed on the details of the limited divestment approved by

[1] "Direct" refers to investments over which DUMAC has control that are not pooled investments; "energy holdings" are of companies set forth on the 350.Org list of top 200 fossil fuel

Stanford in May 2014. Particularly constructive in its deliberations, ACIR drew upon on several authorities within the Duke community. At its October 22, 2014, meeting, the committee had extensive discussions with Professors Brian Murray (Director of Economic Program, Nicholas Institute for Environmental Policy Solutions), Richard Newell (Gendell Professor of Energy and Environment and Director, Duke Energy Institute, Nicholas School of the Environment), William "Billy" Pizer (Sanford School of Public Policy and Nicholas Institute for Environmental Policy Solutions), Tim Profeta (Director, Nicholas Institute for Environmental Policy Solutions) and Jon Wiener (Wm. And Thomas L. Perkins Professor of Law, School of Law, Professor of Environmental Policy (Nicholas) and Professor of Public Policy (Sanford)).

More generally, since the inaugural ACIR meeting under its broadened membership and charter in December 2014, Committee members have individually become consumers of the extensive literature discussing whether fossil fuel holdings sit well, if at all, within the mission and philosophy of institutions of higher learning.

Deliberations vis-à-vis the ACIR Guidelines

The ACIR guidelines set forth very clear conditions and considerations that guide the committee's actions regarding investment recommendations:

1. Substantive community discourse. The ACIR makes recommendations to the president who may make a recommendation to the Board after an issue has had "substantive discourse" within the Duke community, and where there has been "expressed broad concern that substantial social injury is being cased by such policies or practices."

   Even though the fossil fuel divestment movement has been on-going for several years, we believe Duke and other universities are still at the early stage of considering what is the best response to these issues. For example, we inquired of the Divest Duke representatives and others with whom we consulted whether there has been an on-campus forum on fossil fuels and the endowment or more generally a program to explore strategies that Duke might pursue to shine a light on the issues. Notwithstanding support conveyed through petitions and dialog within segments of the community, we do not believe that broad-based community programs engaging individuals on all sides of the issue in rigorous debate had occurred. For example, none of the energy experts we consulted, nor any member of ACIR, has participated in or attended any Duke community forum focused on fossil fuels and the endowment or more generally a

firms. The list was only for the University portion of endowment managed by DUMAC and did not, therefore, include any holdings by the Health Systems, retirement funds subject to ERISA, or the Duke Endowment.

program to explore strategies that Duke might pursue so as to address carbon emissions[2]. Thus despite the importance and complexity of the issues related to global warming, fossil fuels and endowment holdings, the ACIR finds there has not been a significant enough level of informed engagement on campus to meet the criteria set forth in its guidelines. Specifically, without multiple, balanced forums open to all segments of the university community, we are concerned that not enough knowledge has been placed before the Duke community for a full understanding of these multi-faceted issue and the most effective means the University can and has implemented to address them.

2. Direct and material effect. Action by the Board of Trustees is guided by a determination that (a) companies in which Duke invests are causing social injury through their actions and (b) "a desired change in the company's activities would have a direct and material effect in alleviating such injury."

   Energy is something that is an essential part of our daily lives.[3] Without energy, most of which is produced by fossil fuels, we would struggle to exist even at a subsistent level. Not only does this fact define the present demand for fossil fuels, but makes us doubtful that the present world-wide demand will abate in the face of increasing populations, rising standards of living, and growing economies. There is every reason to believe, and studies support this as well, that the resulting demand for fossil fuels will rise, not abate and certainly not retreat. Whether in the U.S., Europe, Asia, or Africa, both inertial forces and economic realities dispel the likelihood that fossil fuels will, anytime soon, take a rear seat to other forms of energy sources. This concern was reinforced at our October 2014 meeting with faculty experts when Professor Billy Pizer shared estimates prepared by the Intergovernmental Panel on Climate Change and the International Energy Agency setting forth estimates of usage of coal, oil and gas, assuming successful implementation of strategies to mitigate atmospheric warming. Even assuming the contemporary goal of limiting warming to 2 degrees by 2100 is met, there will continue to be substantial use of fossil fuels (even relative to current usage levels) in the form of natural gas. And while there will be a noticeable decline in use of oil and particularly coal in such a scenario, their usage will nonetheless still be quite significant for at least the next two decades. The conclusion to draw from the study is that even with an aggressive mitigation strategy, fossil fuels will continue to have a large and indispensable role in our daily lives for many, many years.

---

2 We note that in the final stages of drafting this report a notice was circulated by Divest Duke representatives announcing such a forum would be held the evening of November 18, 2014. This is a step in the right direction.

3 In contrast, conflict minerals and apartheid, previous issues examined by this committee, are not essential to our daily lives, and in fact we can live better and longer without them.

Moreover, the above-quoted Guidelines reference that “a desired change in the company’s activities would have a direct and material effect in alleviating such injury.” Unlike prior cases for divestment that can be impacted through directed action (e.g., Apartheid, Darfur, conflict minerals), the impacts of fossil fuels in global warming can only be mitigated through global action and will not be effective through local action alone. Without a coordinated, global approach, opposing actions of another country or company may negate the benefits that result from the positive actions of any one country or company.

The ACIR, therefore, lacks any basis to believe that divestment by Duke can be expected to have any direct impact on our contemporary unavoidable dependence on fossil fuels. Thus, divestment of fossil fuels, or even of coal, if it is to be embraced, must be understood primarily for its symbolic effect.

3. Symbolic effect of actions. Notwithstanding the question of whether action by Duke would materially impact a given company, the above-quoted Guidelines references that the University might reach decisions with respect to its endowment for symbolic effect:

> Actions the University takes may or may not materially affect an offending corporation, but such actions may have significant symbolic value.

Thus, the fact that Duke’s withdrawal from investment in a cohort of companies would likely have little to no effect on those companies’ activities is not itself disabling of a divestment recommendation. Symbolism can matter. We note that symbolism’s worth is in the message that it communicates. Duke and other universities are well situated to communicate their values and to raise among their audiences questions necessary to debate and advance values. This is indeed part of the life of universities and certainly so for Duke. We contrast this role with the limited expressive power of the single-shot divestiture decision. The symbolism behind Duke’s actions should be consistent with, and not be in conflict with, the values of a great university, namely open and vigorous engagement. Duke is a unique and vibrant place for engagement. And, Duke does much more than just discuss, debate, and ponder. Duke acts, and has acted, with respect to the global warming in ways we believe are far more constructive. Investing millions to convert the university’s boilers to natural gas goes far beyond symbolism; it was an expensive and the nontrivial expense that signaled the depth of Duke’s concern for global warming, coal’s contribution to global warming, and the overall commitment by Duke to reduce greenhouse gas emissions. Similarly, Duke’s commitment to be carbon neutral by 2024 is not a slogan without effect; it’s a commitment to address the seriousness of climate change and encouragement to others to follow suit. These are important messages and we believe distinguish Duke as an institution where engagement with the issues leads to celebrated results. We believe the recommendations in this report will send a message consistent with the symbolic impact of what Duke has already done in this area.

4. Affording opportunity to alter activities. The ACIR guidelines indicate that the Board may consider divestment if company has "been afforded reasonable opportunity to alter its activities" and if divestment "will not impair the capacity of the University to carry out its educational mission."

   Divestment, according to the Guidelines, is to be resorted to after other steps toward engaging a company or companies that are targeted for investment. To our knowledge, there has been no initiative by Duke to engage any fossil fuel company held by the endowment and therefore jumping directly to the divestment option might harm the ability of Duke representatives to constructively engage with industry. [4] That said, tough social issues are worthy of the focus of a great university. Universities are places of open discussion, collaboration, and path breaking innovations whether theoretical or tangible. So it should be with engaging how to address fossil fuel's contribution to global warming. More importantly, if global warming is to be retarded, it will come not solely by technological developments, such as carbon capture and storage techniques; this suggests that there likely will be a social/ political response needed to overcome the inertial forces so that new, albeit likely expensive, technologies can be implemented. Incentives such as cap and trade, a carbon tax, and the like each require a broad movement to fill their sails so they can move forward.

   Some members of the committee are concerned that divestment could have negative unintended consequence of polarizing discussion of how best or better to respond to fossil fuel's contributions to global warming and thereby weaken the possibility for constructively address the problem and developing solutions.

   We recognize the seriousness of the threat to human well-being as a result of climate change and we recognize the need to dramatically reduce carbon emissions. But we do not believe that divestment would be a politically constructive and materially effective response to the problem. There is, nonetheless, much that can be done in many areas by the University, which has already acted strongly on this issue. In that spirit, below we offer a series of recommendations that fall within the scope of our charge.

Findings

Relative to the four-above considerations available to the ACIR, the committee concludes that:

- There has not yet been substantial enough discourse on the impact and viability of fossil fuel divestment. Such discourse should engage Duke's own faculty experts in this domain.
- While fossil fuel's impact on climate change was convincing and compelling to the ACIR, it was less clear that divestment at Duke—or even divestment by scores of other

[4] In the recent past, substantial progress was made in reducing acid rain following a process in which industry and non-industry experts engaged to find solutions.

universities and companies—would have the desired global impact because demand in other countries could easily offset any positive effect of those divestments.

- The ACIR was convinced that even though divestment at this time may not be effective in a material sense, the symbolic impact of action by Duke is important and notably includes Duke's 2024 pledge to become carbon neutral. Further symbolic and tangible actions may be valuable, but is considered to be outside the purview of the ACIR.
- Today, individual faculties already engage in policy discussion regarding climate change and fossil fuels, sometime with specific corporations. Further action to engage companies operating in this domain may be desirable, but is considered outside the purview of the ACIR's charter.

Because we are not persuaded that divestment is an effective strategy to hasten the processes by which we will become less dependent on fossil fuels in the near term, and because of our concern that divestment could polarize discussions surrounding strategies that could accelerate development and use of non-fossil fuel energy, we do not support any of the divestment options set forth by Divest Duke.

Until further and substantive discourse occurs within the Duke community, and until the effect of Duke's actions (and that of other investing bodies) can be shown to have a positive contribution at the global scale, the ACIR does not find cause for specific divestment action at this time.

Non-Investment Considerations

We believe there are likely other strategies and initiatives that Duke might develop consistent with its mission that can be expected to lead to explicit plans, policies, and practices that will accomplish far more than withdrawal via divestment of fossil fuel holdings. The committee members' expertise and our charter do not prepare or allow us to delve into what other steps might be taken that would have greater force than a one-time divestment announcement. At a minimum, therefore, we believe a fuller campus-wide discussion of what Duke, and more broadly, the nation can do to curb dependence on fossil fuels would be among the initiatives that the deans and senior officers would consider as effective responses to the concerns raised by Divest Duke.

Although the ACIR's Guidelines limit our development of recommendations to those related to investment, the committee nonetheless believes strongly that certain non-investment actions by the University would be keeping with the mission of the university and the establishment of the ACIR. Specifically, we are persuaded that certain non-investment actions can be as or more effective than divestment, which after all does not get at the heart of reducing carbon emissions and rather only offers Duke-owned investments within the market place for another willing investor to purchase, therefore only shifting the investment to another. Therefore, we encourage continued strong action by the university to reduce carbon emissions including but not limited to:

- Conservation efforts broadly on the campus, including building-level energy utilization and monitoring capabilities,
- Continued investment in new technologies (such as natural gas vehicles) and carbon offsets,
- Behavioral changes by our community such as could be provided through alternative modes of daily transportation and use of video and other technologies as an substitute for travel,

Further, we raise for consideration providing regularly and highly visible programs similar to the Provost Lecture Series that would focus broadly and deeply on the global warming and man's contribution to it.

Recommendations

Based upon our charter, ACIR's recommendations focus on issues of socially responsible investing related to the University's endowment. ACIR believes that strategies to develop, initiate and monitor the progress of initiatives such as those suggested here will be both consistent with the teaching and research mission of Duke and will enhance understanding of how an endowment can act responsibly while maintaining holdings in fossil fuel companies. While the scope of ACIR's input is to be limited to endowment-related recommendations, we nonetheless observe in this report that there are multiple initiatives pertaining to the linkage of fossil fuels and climate change that the University can pursue.

1. We recommend that DUMAC regularly discuss with the senior officers strategies and procedures used in managing the endowment in ways that are consistent with the overall financial objectives of the endowment and that are supportive of the quest toward clean or cleaner energy sources so as to further the goal of reducing society's dependence on fossil fuels. In this regard, we recommend full consideration be given to the following:

    i) To the extent practicable, annual reporting to ACIR by DUMAC on fossil fuel energy and clean energy/ technology holdings. Somewhat related, we urge evaluation of the development of an annual analysis of carbon exposure across the portfolio. See Alicia Selger, Unconventional Wisdom, Appendix F (discussing this strategy and referencing that Harvard's announcement of its intent to become a signatory to the Carbon Disclosure Project);

    ii. DUMAC, consistent with the fiduciary obligations of its officers and directors, and to the extent practicable, have among its strategies targeting investments that advance environmentally friendly clean energy strategies (along the lines of the recent announcement by the University of North Carolina to include such efforts among its own responses for calls to divest from fossil fuels) as well as investments

in energy conservation technologies with an overall goal of increasing Duke holdings in clean energy relative to fossil fuels;
iii) With respect to significant direct equity holdings in fossil fuel companies, engage those companies to encourage their managers to develop strategies consistent with the quest for clean or cleaner sources of energy; and
iv) DUMAC and the university consider other steps that can be taken as investors to influence the movement toward clean energy.

2. We recommend that ACIR, or a similarly charged committee, regularly meet with DUMAC representatives to discuss DUMAC's programs, policies and practices designed to support through its investment activity reductions in carbon emissions and promotion of non-fossil fuel energy. We believe such monitoring is within the current charge to ACIR; however, global warming is of such significance we recognize that there may well be a counterpart to ACIR that is specifically charged with a wide-range of initiatives (a matter referred to in the preamble to our recommendations) not limited to endowment related matters who the administration may believe should serve this function with respect to both investment-related and non-investment related initiatives.

3. We recommend that Duke, when exercising its power to vote proxies should support well-crafted and reasonable proposals that appear consistent with the objective of encouraging a firm's managers to report on, or take action with regard to, efforts to reduce carbon emissions.

4. Consistent with the findings of this report:
that there has not been sufficient discourse on the topic,
that there is a lack of clarity that divestment will have the desired impact,
that divestment, while certainly symbolic in that it communicates where Duke stands on this topic is a single occurrence whereas we believe other actions referenced in the report reflects the benefits of multiple acts and communications that are more consistent with the missions of a great university, and, finally,
that the Trustee Guidelines to ACIR indicate that before divestment a company is to be "afforded reasonable opportunity to alter its activities,"
under the present circumstances we recommend against divestment.

Attachments

Appendix A-ACIR Membership Roster

Appendix B- Guidelines on Socially Responsible Investing, adopted on August 20, 2004

Appendix C- Divest Duke Proposal Spring 2014

Appendix D-Divest Duke October 2014 Proposal supplementing and amending earlier Proposal

Appendix E-Direct Equity and Derivative Positions of DUMAC June 30, 2014

Appendix F- Alicia Selger, Unconventional Wisdom

DUKE UNIVERSITY
PROXY POLICY

Introduction

This statement establishes the policy and procedures regarding the exercise of proxy voting rights of securities of Duke University. This statement applies to all proxy voting rights with respect to securities administered by DUMAC which DUMAC has delegated to the Manager(s) unless specified otherwise. These guidelines are intended to provide a general framework for the exercise of proxy voting rights, and do not attempt to address every specific issue that might be subject to a shareholder vote. Furthermore, notwithstanding the guidelines set forth in this statement, the exercise of proxy voting rights of securities shall be in accordance with the applicable fiduciary standards of the Uniform Prudent Management of Institutional Funds Act of North Carolina, as amended.

General Principles

Certain general principles consistent with governing fiduciary standards are applicable to the exercise of proxy voting rights of securities, and are set forth below.

• The right to vote a security constitutes a right that can be valued, and therefore, should be viewed as part of the asset itself.

• In exercising proxy voting rights, the Manager(s) should engage in a careful evaluation of issues that may affect the rights of shareholders and the value of the security.

• Consistent with general fiduciary principles, the exercise of proxy voting rights must be conducted with care, prudence, and diligence.

• In exercising proxy voting rights, a manager should conduct itself as a fiduciary with respect to the ultimate beneficial owners of the securities.

• Managers shall make every attempt to exercise fully all proxy voting rights.

•DUMAC (including its officers and employees) and its managers (including their officers and employees) shall not accept any item of value in consideration of a proxy voting decision.

• Consistent with the above principles, the Manager(s) should exercise proxy voting rights in a manner calculated to maximize shareholder value .

Proxy Voting Procedures

Manager(s) shall maintain a record of all proxy voting decisions for a period of three years. If the Manager votes contrary to the guidelines as set forth below, the record shall indicate the reason for such a vote. Upon the request of DUMAC, the Manager(s) shall make voting records available to DUMAC personnel on a periodic basis for review.

Specific Guidelines

Prudence

In making a proxy voting decision, the Manager(s) shall give appropriate consideration to all relevant facts and circumstances, including the value of the securities to be voted and the likely effect any vote may have on that value. Since proxy decision-making should be an informed judgment, investigation should be a critical minimum step.

Conflict of Interests

The Manager(s) should normally exercise proxy voting rights on the basis of its good faith determination as to how to maximize shareholder value. Decisions should not be made by the Manager(s) solely on the advice of third parties, particularly those that might have a personal or financial interest in the outcome of the vote, although managers may consult third parties such as Institutional Shareholder Services. In the event of a conflict of interest, the General Principles (above) applicable to the exercise of proxy voting rights shall apply.

Maximizing Shareholder Value

Determining whether a specific proxy resolution will increase the market value of a security is a matter of judgment. In determining how a proxy vote may affect the economic value of a security, consideration may be given to both short-term and long-term values.

The balance of this statement provides more specific criteria for voting on specific management and shareholder proposals.

Specific Criteria

Routine Actions:

Director Nominees in a Non-Contested Election

Manager(s) generally will cast votes in favor of management proposals on director nominees. However, Manager(s) should vote against any director or slate of directors if the Manager believes that the director or slate of directors has not acted in the best economic interest of all shareholders.

Director Nominees in a Contested Election

Where management's proposed nominees are opposed, a board candidate or slate usually runs for the purpose of seeking a significant change in corporate policy or control. Therefore, the economic impact of a vote in favor of or in opposition to nominees in a contested election must be analyzed using a higher standard appropriate to changes in control. In a contested election, manager(s) should evaluate the qualifications of each nominee, the performance of the current board and other relevant factors, and should vote in the manner it believes will maximize shareholder value.

Selection of Auditors

Manager(s) generally will cast votes in favor of proposals to ratify independent auditors, unless the manager has reason to believe the auditing firm is no longer performing its required duties or has had its independence impaired.

Stock Related Matters:

Increase in Authorized Common Stock

Manager(s) generally will cast votes in favor of proposals to authorize additional shares of common stock for appropriate corporate purposes, except where the proposal establishes classes of stock with superior voting rights.

Blank Check Preferred Stock

Manager(s) generally will cast votes in opposition to management proposals authorizing the creation of new classes of preferred stock with unspecified voting, conversion, distribution or other rights. In addition, votes will generally be cast in opposition to management proposals to increase the number of authorized blank check preferred shares.

Targeted Placement

Manager(s) generally will cast votes in favor of shareholder proposals requesting that companies first obtain authorization before issuing voting stock, warrants, rights, or other securities convertible into voting stock to any person or group, unless the voting rights at stake in the placement represent less than 5% of existing voting rights.

Preemptive Rights

Manager(s) generally will cast votes in favor of shareholder proposals to create or restore limited preemptive rights.

Matters Relating to Board of Directors:

Director Liability and Indemnification

Manager(s) generally will cast votes in favor of proposals limiting director liability.

Classified Boards

Manager(s) generally will cast votes in opposition to classified boards.

Issues Related to Restructurings or Changes in Control:

Approval of Mergers

Manager(s) generally will cast votes in opposition to proposals that require a super-majority of shareholders to approve a merger or other significant business combination. Similarly, managers generally will support proposals seeking to lower super-majority vote requirements for approval of a merger or other significant business combination.

Approval of Reincorporation

Manager(s) generally will cast votes in favor of reincorporation proposals that specify satisfactory business reasons and have no significant negative impact on matters of corporate governance and management accountability. Manager(s) generally will cast votes in opposition to reincorporation proposals seeking a more favorable legal structure to resist hostile takeovers.

Approval of Share Repurchases

Manager(s) generally will cast votes in favor of share repurchase plans in which all shareholders may participate on equal terms.

Shareholder Rights Plans (Poison Pills)

Manager(s) generally will cast votes in opposition to poison pill plans and in favor of shareholder resolutions asking companies to put poison pill proposals to shareholder vote.

Fair Price Provisions

Manager(s) generally will cast votes in opposition to fair price provisions that would require a potential acquiror to pay a fair and uniform price to all shareholders in an acquisition, unless it determines that such provisions would not discourage acquisition proposals.

Considering Non-Financial Effects of a Merger Proposal

Manager(s) will cast votes in opposition to proposals that allow boards to consider non-financial effects of a merger, unless directed otherwise by DUMAC.

Anti-Greenmail Proposals

Manager(s) generally will cast votes in favor of proposals to require shareholder approval of any "greenmail" payment (payment of a premium price to repurchase shares and avert a hostile takeover), and generally will vote in opposition to the payment of "greenmail" for any reason.

Golden Parachutes

Manager(s) generally will cast votes in opposition to proposals for golden parachutes.

Opt Out of State Anti-takeover Law

Manager(s) generally will cast votes in favor of bylaw amendments requiring a company to opt out of state anti-takeover statutes.

Compensation Matters:

Compensation Proposals

Manager(s) will cast votes on a case-by-case basis, generally in favor of reasonable incentive plans designed to attract and hold quality professional management. However, managers generally will cast votes in opposition to excessive incentive plans to executives without prior approval by shareholders, which might include:

• Options plans that, if exercised, could dilute the earnings-per-share of existing shares by more than 5%;

• Replacing or re-pricing underwater options;

• Proposals that include reloading of stock options (the granting of additional options to replace options that have been exercised) or pyramiding of shares (i.e., using shares received upon exercise of a stock option to satisfy the exercise price of additional stock options); and

• Omnibus stock plans that give directors broad discretion to decide how much and what kind of stocks to award, when, and to whom.

Compensation of Non-Employee Directors

Manager(s) generally will cast votes in favor of stock-based formulations as substitutions for cash compensation for outside directors if they appear reasonable and contain fixed exercise rules. Manager(s) generally will cast votes in opposition to proposals in which management controls the structure or exercise of options, jeopardizing the independence of outside directors.

Shareholder Rights:

Confidential Voting

Manager(s) generally will cast votes in favor of confidential voting by shareholders and against any attempt or proposal to curtail the confidentiality of the voting process.

Equal Access to the Proxy

Manager(s) generally will cast votes in favor of shareholder proposals asking that management allow large shareholders equal access to management's proxy materials to discuss and evaluate management's director nominees, or to nominate candidates for election to the board.

Limiting Shareholders' Rights

Manager(s) generally will cast votes in opposition to any proposals for the elimination or restriction of shareholders' rights, or any significant transfer of authority from shareholders to directors. This includes proposals designed to limit shareholders' rights to remove directors, amend bylaws, fill board vacancies, call special meetings, nominate directors, or take other actions that may limit or abolish the rights of shareholders to act independently.

Social Issues:

Proposals Related to Social Issues

With respect to all social issue related shareholder proposals, managers always will cast votes in the economic best interest of Duke University, unless otherwise directed by DUMAC.

To: Lawrence Baxter, Chair of ACIR

From: Michael Tan & Saheel Chodavadia, Co-Presidents of DIIG

Re: Duke Impact Investing Fund Proposal

Date: April 10th, 2019

I. Overview and Mission:

The Duke Impact Investing Group (DIIG) is a student-led and student-run organization that serves as the only outlet for Duke undergraduates to engage in the field of impact investing. Currently, DIIG leads impact investing education programs (notably through a 0.5-credit Duke House Course), performs pro-bono consulting for regional social enterprises, and conducts research on important topics in the impact investing field such as impact measurement. DIIG consists of 10 executive board members, 20 analysts, and 400 general listserv members. The faculty advisor for DIIG is Matthew Nash, Managing Director of Social Entrepreneurship at the Duke Innovation and Entrepreneurship Initiative (I&E). Accordingly, DIIG works closely with Duke I&E as well as regional impact investing organizations and companies.

DIIG's mission is to promote social impact and to provide avenues for undergraduates to engage with impact investing. Investing in public equities is a crucial and effective way to further this mission. Therefore, DIIG requests $1,000,000 from the Duke Board of Trustees dedicated to an evergreen fund for the purpose of promoting corporate social responsibility through targeted investments, with an immediate focus on the energy industry.

II. Structure and Function

DIIG advocates for the creation of a new fund of $1,000,000 that will operate under its own mandate with the assistance of DUMAC as a means of investment execution. Specifically, this new mandate would focus on reducing the negative environmental impact of fossil fuel companies and providing support for promising, sustainable energy technology companies. This fund would necessarily function as an ESG-targeted fund, which will focus on financing sustainability-focused companies to improve upon and expand their operations. There exists ample precedent for this. At the start of 2016, over 80 educational institutions had "applied ESG criteria to assets that collectively totaled $293 billion. (The Forum on Sustainable and Responsible Investment)."

With regards to the ESG fund, investment opportunities would be evaluated under several metrics. As a baseline, all investments should strive to achieve both quantifiable social goals as well as financial returns. Social impact can be measured through systems such as, but not limited to, our unique set of metrics developed from the GIIRS Fund Rating Methodology[1], which is widely adopted as the industrial standard for measuring investment impact. DIIG's investment targets will exhibit the following characteristics:

- Impact through business: the business believes in the power of for-profit models in generating social impact more efficiently and the business incorporates this belief in its operations; and
- Focus on sustainability: the business either has sustainability as a core value or has dedicated significant resources towards the goal of sustainability.

Additional avenues of investment include direct investing into profitable and established impact investing funds. This would allows for indirect investment into socially impactful private companies, yet another socially and financially lucrative opportunity. 15% of impact investors outperform the market, with 76% in-line with the market (GIIN).

These criteria are not intended to be exhaustive. Any determination relating to the merits of a startup may be based on these general guidelines as well as other considerations, factors and criteria that DIIG deems relevant.

III. Alignment with Duke University

Funding DIIG goes hand in hand with ACIR's consideration of more sustainable and environmentally intelligent investment practices. Direct financial action is a crucial component of creating material change in the energy industry. Financial action such as directing investments toward sustainability-focused companies opens up a new level of impact that Duke can generate, which in turn significantly increases the leverage that Duke has to empower sustainability and social change. As such, this type of fund directly aligns with Duke's mission to promote a healthy and sustainable global future.

IV. Conclusion

To work towards Duke's sustainable investing goals, the Duke Impact Investing Group proposes that the Board of Trustees allocate $1,000,000 for the purpose of creating

[1] http://b-analytics.net/products/measure-and-evaluate/b-impact-assessment

an evergreen fund. The fund can be allocated into private direct investments (via management structures such as limited partnership), public investments (via public shares and bonds) or both. International research has shown that typical strategic investors invest on average $100,000 per impact private equity fund (GIIN), which, combined with expert opinion, deems it ideal to inject $1,000,000 into the proposed fund for sustainable and diversified investing activities. This fund will foster direct, positive impact socially and financially without interfering with the existing financial structure of Duke's investments, and will harness DIIG's unique position as Duke's only impact investing group at the undergraduate level. Furthermore, this fund will allow for avenues of expansion, such as collaboration with graduate students and the Fuqua Center for the Advancement of Social Entrepreneurship, which has done extensive work in the impact investing field. This fund will mobilize the talents and passions of Duke students and faculty across a variety of disciples and take advantage of DIIG's strong reputation and network in the Duke community and beyond.

The Duke Impact Investing Group thanks ACIR for its consideration.

DRAFT PROPOSAL

CONFIDENTIAL -- DO NOT CIRCULATE BEYOND ACIR FOSSIL FUEL DIVESTMENT SUBCOMMITTEE

To: Lawrence Baxter, Chair of ACIR

From: Marty Smith

Date: March 5, 2019

RE: Proposed portfolio carbon tax

There is broad agreement in economics that the central economic driver of climate change is society's **failure to price carbon**. Here we propose a way of pricing carbon in Duke's investment strategy.

Carbon taxes and cap and trade programs at the local, regional, national, and international scale are all attempts to price carbon. Voluntary commitments of organizations like Duke University to go carbon neutral similarly are attempts to price carbon by internalizing the costs of climate change. In the absence of regulation, individuals, firms, and other organizations generally fail to internalize the costs of emitting carbon dioxide and other greenhouse gases. Economists and policy scientists refer to these costs as "the social cost of carbon." The logic of a carbon tax is simple. It essentially forces the firm to pay the social cost of carbon by changing the marginal incentives of firms to emit greenhouse gases. If it is cheaper to reduce pollution by one unit than to pay the tax, the firm will reduce pollution. But if it is cheaper to pay the tax, the firm will pay the tax and emit the unit of pollution. In this way, the carbon tax is an efficient way to produce a desired level of pollution reduction. Importantly, the tax does not prohibit a particular type of economic activity. It discourages carbon-intensive production and encourages innovation in pollution reduction technologies and carbon-free alternatives.

Students in Decarbonize Duke have put forward a number of proposals to divest from fossil fuels companies. These proposals are motivated by an ethical imperative to address global climate change. Divestment would restrict DUMAC from investing in certain companies that are deemed particularly bad actors in their contributions to climate change. However, divestment is inconsistent with the broad consensus that the solution to climate change is to price carbon. All companies and consumers have some role in contributing to global climate change. Some companies play a more important role than others, but no company, individual consumer, or organization can claim to have no part in the problem.

Divestment is a form of a ban. Although there are exceptions, a ban is rarely the most efficient policy to achieve a particular objective. Divestment artificially creates a binary distinction between guilty and innocent companies. Choosing one company over others, all of which are to a greater or lesser extent involved in fossil fuels, will in many cases be arbitrary and create ephemeral distinctions. To the investment manager, it means that the price of investing in a company on the guilty list is infinite, whereas the price of investing in a company just on the other side of the dividing line is zero. Placing a carbon tax on earnings within Duke's portfolio, scaled according to carbon intensity, is a way to address ethical concerns about fossil fuel companies—and other major contributors to climate change—without restricting fund managers.

To implement a carbon tax within the portfolio would require an assessment of the carbon intensity of different companies in Duke's portfolio. Each part of the portfolio, perhaps divided by type of industry/sector, would receive a carbon score. This exercise should be limited to direct holdings. Derivatives do not hold the underlying assets and, as such, are carbon neutral by construction. As a practical matter, the assessment would have to reflect a particular moment in time and possibly repeat on an annual basis. The holdings might be changing within a year, but it would likely be impractical to update the carbon assessment in real time.

The tax itself would be a flat percentage of earnings within the portion of the portfolio weighted by the carbon score. Like the carbon score, earnings would be measured at the annual time step. A very low tax rate would send a symbolic signal to fund managers. A high tax rate would create significant incentives to avoid certain companies, and investing in them would make sense only if expected returns were particularly high. In this way, if speculation in alternative energy or other low-carbon alternatives led to significant underpricing of fossil fuels companies, fund managers would still be able to exploit those investment opportunities.

A weakness of the proposed tax is that there is not a direct analog in the social cost of carbon literature. Economists debate about what the appropriate social cost of a ton of carbon should be, but that number has little bearing on an appropriate tax rate for a portfolio. Nonetheless, it would be relatively straightforward to set a rate to generate an expected stream of tax revenue.

A natural question about the portfolio carbon tax is what to do with the money. Duke is already engaged in greenhouse gas emissions reductions and attempts to be carbon neutral by 2024. Some efforts to reduce Duke's carbon footprint pay for themselves, but many are costly and in one way or another come out of Duke's endowment. Revenue from a portfolio carbon tax could be used to offset some of these costs, and while the money coming from the endowment may be the same, it would be a way to link efforts on campus to reduce greenhouse gas emissions with efforts to internalize costs of investing in carbon-intensive industries.

A significant benefit to Duke from implementing a portfolio carbon tax is that Duke would be the first university in the world to do something like this. It would bring into alignment Duke's intellectual strengths in studying climate change and climate change policy, Duke's commitment to carbon neutrality, and Duke's commitment to socially responsible investing. Duke could position itself as a global leader in socially responsible investing that is consistent with our academic understanding of the climate change problem.