

**Appendices to the
ACSRI Report of
February 22, 2017**

ACSRI

Appendix A:

ACSRI report of Nov 17, 2015

(with CDCJ Appendix Attached)

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November 17, 2015

Response of the ACSRI to the CDCJ Proposal of October 2015

Executive Summary

The Advisory Committee on Socially Responsible Investing (“ACSRI” or “the Committee”) has decided not to recommend to the Trustees a proposal of the student group Columbia Divest for Climate Justice (“CDCJ”) calling for divestment from the Columbia endowment of all stocks or bonds in firms listed in the Carbon Underground 200TM. The more the Committee has deliberated over the possibility and the scope of a possible divestment recommendation, however, the stronger has become the feeling that divestment is too narrow a lens through which to consider Columbia University’s engagement with the climate change issue. The Committee has also become acutely aware that it is the wrong forum to debate and then propose the specifics of a Columbia University action plan. In light of the grave threats posed by climate change and the University’s capacity to play a national leadership role, the ACSRI thus recommends that President Bollinger appoint a representative committee to formulate a Plan of Action that contemplates engagement across the University. We expect that such a Plan of Action would address (i) further efforts by the University to shrink its carbon footprint including specific goals, (ii) further support for the University’s leadership in climate change research, (iii) support for research into new technologies related to renewable energy as well as atmospheric carbon abatement, (iv) support for public educational efforts on the mechanisms of climate change and the risks, (v) support for legal, economic, and regulatory analysis of the current US and international approaches to climate change.

Precisely because the science regarding climate change has been disputed on non-scientific grounds and because the public policy issue, the looming threat of climate change, is so serious, ACSRI may well recommend, as matter of socially responsible investing, a targeted fossil fuel divestment/no-investment policy that are aimed at “standing up for the science.” This would mean targeting for divestment (or non-investment) publicly traded firms that engage in climate change denialism whether by “word” or by “deed.” Such an approach responds to the particular role and responsibility of a university in a democratic society. The Committee would of course also consider a differently targeted divestment petition from the CDCJ or other group.

A principal basis for the Committee’s decision not to support the CDCJ petition is that it calls for broad-based divestment without regard to whether such divestment would affect the future behavior of any particular firm. Divestment would be undertaken solely as a matter of symbolic speech. The strategy draws no distinctions based on the conduct of the firms in question, even where differences in conduct materially affect the firm’s carbon burden.

In rejecting broad-based divestment as a requirement of socially responsible investment, the ACSRI wants to be clear that its negative recommendation would not conflict with a decision

by the Trustees acting as financial fiduciaries that fossil fuel investments, in whole or in part, present unacceptable risks of value erosion and that it is appropriate to adopt investment strategies designed to minimize exposure to such risk. The Committee also invites the Trustees to consider sending a letter to its investment managers similar to the one sent by David Swensen, head of the Yale Investment Office, which stated that “Yale asks [its investment managers] to avoid companies that refuse to acknowledge the social and financial costs of climate change and that fail to take economically sensible steps to reduce greenhouse gas emissions.”¹

The ACSRI also believes that the University should continue its policy of active engagement through the proxy process for energy firms that remain in the endowment. This would be facilitated by the University’s signing onto the Carbon Disclosure Project,² CERES,³ or another appropriate forum that requires full disclosure on climate change. We will make a specific recommendation shortly.

In light of support for divestment expressed by some alumni, the ACSRI recommends that the University establish a separate “fossil free” investment vehicle to receive the contributions of alumni who would prefer such investment management for their contributions to the University’s endowment.

We think the efforts of the CDCJ to call the University community’s attention to the grave threat presented by climate change are commendable and much to be praised. In the Committee’s view, galvanizing a broader, deeper response by the University should have greater impact than divestment, which would operate in the symbolic realm only.

Report

In fall 2013 the student group “Columbia Divest for Climate Justice” (“CDCJ”⁴) presented a petition to the Advisory Committee on Socially Responsible Investing (“ACSRI” or “the Committee”) requesting that Columbia University divest from the 200 companies on the “Carbon Underground 200TM list.”⁵ In May 2014 the ACSRI declined to recommend the requested action to the Trustees on the grounds that it did not meet the three criteria for

¹ See Letter of David Swensen to Yale Investment Managers, reprinted in Financial Analysts Journal (May/June 2015), pp 11-12, available at <http://www.cfapubs.org/doi/full/10.2469/faj.v71.n3.3> [visited on Nov. 5, 2015].

² <https://www.cdp.net/>.

³ <https://www.ceres.org/>.

⁴ In the 2014-15 academic year the group changed its name from Barnard/Columbia Divest for Climate Justice because of the formation of a specific Barnard group targeting the independently managed Barnard endowment.

⁵ The Carbon Tracker Initiative is led by Jeremy Leggett, a geologist and former executive in the fossil fuel industry who developed the concept of “stranded assets.” The original list of 100 coal and 100 oil and gas companies who hold the largest fossil fuel reserves is being kept up to date by fossilfreeindexes.com [visited on Nov. 5, 2015], an investment firm led by Stuart Braman, a Columbia alumnus and adjunct research scientist at the Lamont-Doherty Earth Observatory.

divestment: (1) that there must be broad consensus in the Columbia community, (2) that the merits must lie clearly on one side, and (3) that there be no feasible alternative to divestment. However, the Committee also decided that the issue warranted further investigation and thus established a standing subcommittee on fossil fuels. The ACSRI report to the community on the original CDCJ proposal is found on its website, <http://finance.columbia.edu/content/socially-responsible-investing>. The initial ACSRI report, which this Committee endorses, explicitly applied the three divestment criteria, which reflect a strong presumption against divestment in favor of engagement and other alternatives that pursue the same objective.

During the 2014-2015 academic year ACSRI devoted considerable time to developing an approach that could lead to targeted divestment, focused on a singular feature of the fossil fuels divestment debate, namely, a denial in some circles of the underlying scientific facts of climate change. That is, in addressing divestment questions relating to South Africa or Sudan, the underlying facts of apartheid or Sudanese government participation in the genocidal violence in Darfur were not in dispute. Rather, the divestment decision turned on socially responsible investment behavior in light of such facts. In the case of fossil fuels, however, the serious threshold problem is that the core facts of anthropogenic influence on global climate are denied by important governmental leaders and are regarded as highly contestable within mainstream political discourse despite the overwhelming scientific consensus. This is partly because energy companies engaged in fossil fuel extraction can exert significant leverage on public policy formation and have in various ways fostered denial of climate change science.⁶ Actions to avert climate change ultimately depend upon the concerted actions of governments, especially legislatures, and will entail tough choices, trade-offs, and compromises by political leaders, as they balance private economic interest and public environmental concern. Thus the denial of human agency in climate change is a first order problem in the climate change debate. The consensus scientific evidence indicates that climate change is, in effect, an on-rushing train, and we stand in the tracks. It's the denial of the science that keeps us frozen on the tracks rather than engaged in the concerted actions necessary to jump away.

These considerations led us to work on an approach that we call “standing up for the science.” Columbia University is the producer of some of the key research in the climate change domain;⁸ the social function of the University generally is to foster research that produces new knowledge and to help assure that this research guides the important public policy questions of the day. Precisely because the science regarding climate change has been disputed on non-scientific grounds and because the public policy issue, the looming threat of climate change, is so serious, ACSRI may well recommend, as matter of socially responsible investing, a targeted

⁶ The possible role of particular firms in promoting materially misleading assessments of climate change risk has recently come under investigation by the New York State Attorney General and other governmental actors.

⁸ A list of centers consulted during the 2014-2015 academic year, with links to their websites, can be found in Appendix A to this document.

fossil fuel divestment/no-investment policy, and other strategies, that are aimed at “standing up for the science.” This would mean targeting for divestment (or non-investment) publicly traded firms that engage in climate change denialism whether by “word” or by “deed.” Such an approach responds to the particular role and responsibility of a university in a democratic society.

A “stand up for the science” approach shares the focus on the energy sector, specifically on companies engaged in fossil fuel extraction,⁹ of broader calls for divestment, but attempts to discriminate on the basis of the companies’ specific behavior and action. These are possible parameters:

- First, a company’s role in stirring up popular confusion about the scientific conclusions regarding anthropogenic influence on global climate by sponsoring and publicizing specious research or overemphasizing small differences in the scientific community. This we call “denying the science by word.”
- Second, a company’s attention to alternative solutions as measured by credible investment in low-carbon/renewable energy or carbon capture technology. This can be called “affirming the science by deed.”
- Third, a company’s investment in high carbon-content resource exploration and development, resources that can never be consumed in light of the climate change concern. This can be called “denying the science by deed.”

In short, the strategy would be to distinguish among firms on a list like the Carbon Underground 200TM between those companies whose deeds and actions bespeak a rejection of climate change science and those whose deeds and actions indicate acceptance of the science. As with the Sudan divestment approach adopted by the Trustees, the goal would be to produce a list of “divest/do not invest” companies. The impact would be measured not just in a decision to “divest” from a particular company but rather to call attention to company behavior that “denied the science.”

Our work plan for the 2015-16 included an effort to see if this approach could be operationalized through various public metrics so as to provide a basis for a specific recommendation to the Trustees.

In September 2015 the CDCJ student group asked us to consider anew the petition for divestment from the Carbon Underground 200TM, asserting that various procedural flaws meant that the proposal had never been squarely addressed by the ACSRI notwithstanding the specific response in May 2014.¹⁰ Rather than debate the procedural claims, the Committee decided to

⁹ The approach could also include companies like coal-burning electricity generators that could switch to a lower carbon fuel source like natural gas but resist doing so.

¹⁰ The 2015 CDCJ Proposal is Appendix B to this document.

consider the CDCJ Proposal de novo. There has been substantial Committee turnover since 2013-14 and it was worth testing whether views had evolved since the last consideration.

Specifically, the current CDCJ Proposal (October 2015) calls for (1) a “freeze” on any new investments in the publicly traded companies identified in the Carbon Underground 200TM list; (2) a public divestment commitment to divest from “direct ownership of fossil fuel holdings and from any commingled funds that include fossil fuel public equities and corporate bonds” in an advance of the December 2015 United Nations climate change meeting; (3) a five year divestment period to facilitate a low-cost transition to other investments. Representatives of the CDCJ presented their proposal at the October 2015 ACSRI meeting and responded to questions of Committee members.

The Committee has decided not to recommend the CDCJ Proposal. While accepting climate change science and the grave risks associated with global warming, the ACSRI does not believe that such an across-the-board divestment approach would satisfy the demanding criteria for a divestment recommendation. The Carbon Underground 200TM list consists of “the top 100 coal companies globally and the top 100 public oil and gas companies globally, ranked by the potential carbon emissions content of their reported reserves.”¹¹ Divestment on the basis of identification on this list would not distinguish among firms on the basis of their current conduct (e.g., the rate to which they are adding to reserves or the extent of research and development investment in renewables or in carbon-reducing technologies). The list includes natural gas companies as well as coal-mining companies, yet the substitution of natural gas for coal is one immediate way of reducing the carbon footprint of energy production. The list also omits electric utilities that generate a disproportionately high share of electricity from coal despite the opportunity to shift to natural gas.

Broad-based divestment by Columbia would be unprecedented given the pattern of the University’s previous divestment decisions. In the case of South Africa and Sudan, for example, the goal of divestment was to persuade companies that did business with those two regimes to stop doing so, and thereby impose a penalty on governments that engaged in conduct that was profoundly morally objectionable. Because most of the targeted companies did only a relatively small fraction of their business with the particular regimes, it was reasonable to think that the stigma associated with divestment could change the companies’ behavior. In the case of fossil fuels companies, divestment is unlikely to have any such effect. The largest companies generally look to retained earnings to finance their activities; the stigma of divestment is unlikely to lead the firms to turn away from their core business. Broad-based divestment would be undertaken without any regard to whether it would affect the future behavior of any particular firm. Rather it would be undertaken solely as a matter of symbolic speech. As such it would draw no distinctions based on the conduct of the firms in question even where differences in conduct materially affect the firm’s carbon burden.

¹¹ <http://fossilfreeindexes.com/research/the-carbon-underground/> [visited Nov. 5, 2015].

Last year the Committee recommended that the Trustees divest from companies that operated private prisons on the grounds that the companies' business prospects were linked to an increase in already historically high levels of incarceration so as to be inconsistent with the University's mission and values. It is hard to take such a position with respect to all fossil fuels firms given the University's own position as a major user of fossil fuels in its on-going activities, both directly (gasoline for its fleet of vehicles; natural gas to heat its buildings) and indirectly (electricity produced by fossil-fuel burning generation). Indeed, one specific action taken by the University to reduce its carbon footprint has been to substitute natural gas for heating oil. Where is the consistency in saying that divestment from large natural gas producers is required as a matter of socially responsible investing?

The Committee does not believe that its consideration of a more tailored approach to the divestment question would undercut a broad-based movement that seeks to deprive fossil fuel firms of a "social license" and thereby to hasten legislative engagement with the underlying climate change issue. For example, thus far no major research university has signed onto broad-based fossil fuel divestment from its endowment. Harvard, Yale, Princeton, MIT, and the University of California have rejected divestment outright.¹² Stanford and Oxford have taken a more targeted approach, undertaking to avoid direct investments in coal companies and tar-sands development.¹³

The more the Committee has deliberated over the possibility and the scope of a possible divestment recommendation, the stronger has become the feeling that divestment is too narrow a lens through which to consider Columbia University's engagement with the climate change issue. The Committee has also become acutely aware that it is the wrong forum to debate and then propose the specifics of a Columbia University action plan, which presumably would address (i) further efforts by the University to shrink its carbon footprint including specific goals (ii) further support for the University's leadership in climate change research, (iii) fostering research into new technologies related to renewable energy as well as atmospheric carbon abatement, (iv) support for public educational efforts on the mechanisms of climate change and the risks, (v) support for legal and regulatory analysis of the current US and international approaches to climate change. Thus we recommend that President Bollinger appoint a representative committee charged with making recommendations for a Columbia University response to the challenge of climate change with the goal of producing a Plan of Action that engages efforts and capacities across the University.

ACSRI appreciates that its charter extends to "social responsibility" in investing, not the economics, and is also mindful of the disputed economic case, from an endowment management perspective, for divestment from companies that produce fossil fuels. While we ultimately

¹² The University of California recently disposed of its direct holdings in coal and tar sands companies as a matter of investment strategy not divestment policy.

¹³ A list of actions by other universities as of October 30, 2015 is provided in Appendix C.

believe that a successful solution to climate change will need to marry economic and environmental/social welfare arguments, we have not attempted to resolve the economic case from the University's perspective. In rejecting broad-based divestment as a requirement of socially responsible investing, we want to be clear that our negative recommendation would not conflict with a decision by the Trustees acting as financial fiduciaries that fossil fuel investments, in whole or in part, present unacceptable risks of value erosion and that it is appropriate to adopt investment strategies designed to minimize exposure to such risk. The Committee also invites the Trustees to consider sending a letter to its investment managers similar to the one sent by David Swensen, head of the Yale Investment Office, which stated that "Yale asks [its investment managers] to avoid companies that refuse to acknowledge the social and financial costs of climate change and that fail to take economically sensible steps to reduce greenhouse gas emissions."¹⁴

The ACSRI also believes that the University should continue its policy of active engagement through the proxy process for energy firms that remain in the endowment. This would be facilitated by the University's signing onto signing on to CDP,¹⁵ CERES,¹⁶ or another appropriate forum that requires full disclosure on climate change. We will make a specific recommendation shortly.

Subsequent to the filing of the CDCJ Proposal, the ACSRI has received emails and phone messages of support for the Proposal from various alumni. The Committee proposes that the University establish a separate "fossil free" investment vehicle to receive the contributions of alumni who would prefer such investment management for their contributions to the University's endowment.

We think the efforts of the CDCJ to call the University community's attention to the grave threat presented by climate change are commendable and much to be praised. In the Committee's view, galvanizing a broader, deeper response by the University should have greater impact than divestment, which would operate in the symbolic realm only.

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November 17, 2015

¹⁴ See Letter of David Swensen to Yale Investment Managers, reprinted in *Financial Analysts Journal* (May/June 2015), pp 11-12, available at <http://www.cfapubs.org/doi/full/10.2469/faj.v71.n3.3> [visited on Nov. 5, 2015].

¹⁵ <https://www.cdp.net/>.

¹⁶ <https://www.ceres.org/>.

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Appendix A

Response of the ACSRI to the CDCJ Proposal of October 2015

Over the course of the 2014-2015 academic year, we consulted with colleagues from:

CDP, www.cdp.net

Center on Capitalism and Society, <http://capitalism.columbia.edu/>

Center on Global Energy Policy, <http://energypolicy.columbia.edu/>

Center for International Earth Science Information Network (CIESIN), <http://www.ciesin.org/>

Lamont-Doherty Earth Observatory (LDEO) and Department of Earth and Environmental Sciences in the Graduate School of Arts and Sciences, <http://www.ldeo.columbia.edu/>

Columbia Center on Sustainable Investment, <http://ccsi.columbia.edu/>

The Sabin Center for Climate Change Law and Environmental Law Clinic,
<http://web.law.columbia.edu/climate-change>

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Proposal for Divestment from the Top 200 Publicly-Traded Fossil Fuel Companies

Authored by Columbia Divest for Climate Justice and published on October 6, 2015

Columbia Divest for Climate Justice (CDCJ) presents the following proposal for fossil fuel divestment to the Board of Trustees and President Lee Bollinger.

1. Summary.

Given that the international community has agreed upon 2°C as the maximum ‘safe’ limit for global warming, and given that communities of color and low-income communities who have historically contributed the least to the problem will be affected the most;

Given that 80% of proven fossil fuel reserves must stay in the ground in order for that limit not to be exceeded;

Given that the fossil fuel industry instead continues to explore for new reserves, obstruct regulation that would reduce society’s use of fossil fuels, and fund climate denial to obscure the importance of such action;

Given that the fossil fuel divestment movement is growing at a rapid pace – with \$2.6T of assets under management committed to divestment, as of September 2015 – and has proven to be effective in revoking the social license of the fossil fuel industry;

And given that the Columbia University community has shown a significant level of support for the petition of Columbia Divest for Climate Justice over the past three years;

The Board of Trustees of Columbia University must:

- 1) Immediately implement a freeze on any new investments in the top 200 publicly traded fossil fuel companies currently holding the vast majority of the world’s proven coal, oil and gas reserves defined in the Carbon Underground 200TM list.ⁱ
- 2) Publicly commit to divesting the Columbia University endowment from direct ownership of fossil fuel holdings and from any commingled funds that include fossil fuel public equities and corporate bonds, in advance of the COP-21 conference taking place in December 2015.
- 3) Ensure the divestment of these funds within 5 years’ time after the initial commitment, allowing for fund managers to evaluate reinvestment strategies and minimize transaction costs in a gradual process.

Columbia has a moral obligation to stop funding an industry that undermines the safety of its students’ futures and the integrity of its own climate scientists’ ground-breaking research. By immediately committing to divest from the fossil fuel industry, Columbia will join hundreds of universities, cities and countries, religious congregations, and other mission-oriented institutions that have already issued bold commitments for climate justice. Columbia will also have the chance to stand out in history as a leader among Ivy League institutions.

2. Fossil fuels and climate change

In 2009, over 100 countries including the United States and China signed the Copenhagen Accord.ⁱⁱ The Accord affirms that **global warming must stay below 2°C** in order to avert “dangerous anthropogenic interference with the climate system,” even though low-lying nations are projected to disappear at an increase of 1.5°C.ⁱⁱⁱ After only a 0.8°C rise in temperatures in the 20th century, the impacts of climate change are already being seen in the form of increasingly intense natural disasters, melting glaciers, ocean acidification, increasing conflicts over food insecurity, spreading tropical disease, and more.^{iv} Scientists are asserting that a 2°C rise in average global temperature may trigger disastrous nonlinear processes, such as the melting of the Greenland and West Antarctic ice sheets and a faster rise in sea levels than ever expected.^v The effects of climate change are, however, not far in space or time – tremendous storms like Hurricanes Irene and Sandy have already devastated the Northeast and New York City itself.

Under a business-as-usual (BAU) scenario for carbon emissions, the United Nations’ Intergovernmental Panel on Climate Change (IPCC) projects global temperatures to rise between **3.7-4.8°C by 2100**.^{vi} Meanwhile, the World Bank has reported that “there is no certainty that adaptation to a 4°C world is possible.”^{vii}

To stay within the 2°C limit of global warming, we can only afford to emit 565 more GT of carbon dioxide.^{viii} However, current global proven reserves of fossil fuels amount to a massive 2,795 GT of carbon dioxide – nearly five times the ‘carbon budget’ we are allotted.^{ix} **The fossil fuel industry plans to burn those reserves and irreversibly change our planet and humanity as we know it.**

Estimates give us 16-28 years before we exceed our ‘carbon budget’ to stay with 2°C.^x Meanwhile, carbon emissions from burning coal, oil, and gas are currently rising to record levels, not falling,^{xi} and the top 200 fossil fuel companies spent \$674B in 2012 alone on exploring for new reserves.^{xii}

Meanwhile, fossil fuel companies also continue to fund climate denial – for example, Exxon pledged to stop funding climate denial in 2007 but has since contributed \$2.3M to members of Congress who deny climate change and the American Legislative Exchange Council (ALEC), a corporate lobbying group that denies climate change.^{xiii} At the same time, a report by the Union of Concerned Scientists (UCS) revealed an internal memo indicating that Exxon has been factoring climate change into its own operating decisions since 1981.^{xiv} As shown by the UCS report, fossil fuel companies have specifically recycled the techniques of Big Tobacco to fund an intentional campaign of disinformation and inaction on climate change, despite knowing its devastating risks. Fossil fuel companies suggest in their publicity platforms that they are investing into renewable energy in order to soften their images, but their operational budgets show that they do not, in fact, invest significantly into renewable energy development. For example, BP tried to change its image by renaming itself Beyond Petroleum; however, they sold off their solar energy division in 2011.^{xv}

Columbia University must divest our endowment from the fossil fuel industry, because transitioning from fossil fuels to renewable energy is central to the work necessary for a sustainable future. However, fossil fuel companies have refused to act in the best interest of humanity.

3. Fossil fuel extraction is unethical; climate change is a social justice issues

While climate change is and will be affecting us all, it disproportionately affects low-income communities and people of color – both on a global and local scale, even though these communities have historically contributed the least to the problem. **Climate justice** is the framework for considering and a call to action for addressing this paradox.

For example, in the last 25 years, 95% of deaths that resulted from natural disasters occurred in developing nations.^{xvi} While a major drought in the US can lead to higher food prices, a major drought in a country like Sierra Leone that relies heavily on subsistence agriculture can trigger mass starvation. As sea levels rise, low-lying countries like Bangladesh will experience extreme flooding and simply not have the infrastructure or resources to support their populations. In both of these examples, what is clear is that climate change will continue to be something that people of privilege consider a threat to “their grandchildren,” while it has already been a reality for frontline communities across the world (predominantly in the Global South)^{xvii}.

Here in New York City, the aftermath of Hurricane Sandy in 2012 demonstrated how class and racial divides influence the distribution of the worst effects of climate change. For example, the New York Environmental Justice Alliance has documented how major industrial areas that are populated mostly by people of color are in storm surge areas, making the residents vulnerable to toxic pollution from increasing numbers of natural disasters.^{xviii}

The climate justice framework sheds light on climate change as a grave public health issue.^{xix} Warming and increased flooding also lead to increased spread of disease, particularly in countries with poor sanitation.^{xx} Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress.^{xxi} More recent estimates have put the number at 300,000 deaths and suggest that an additional 325 million people are seriously (though non-fatally) affected by climate change.^{xxii}

As UN Secretary-General Ban Ki Moon has said, “Climate change is the single greatest threat to sustainable development.”^{xxiii}

Fossil fuel divestment requires consideration of the same racial, social, and economic inequities that inspired the Board to take leadership by divesting from private prisons.

Columbia must now divest from fossil fuels and take a moral stand for the people who will most significantly and immediately be affected by unchecked climate change – from Red Hook to Bangladesh.

For Columbia to divest from the fossil fuel extraction industry is to announce to the world that we are committed to fighting for human rights, on behalf of all of our current and future students. The fossil fuel industry is actively contributing to the release of carbon into the atmosphere and has no foreseeable plans to halt its activity. By remaining complacent on this issue, Columbia is, in fact, assisting highly immoral and unethical activities.

4. Divestment is an effective tactic for social change

Divestment has been used as a powerful catalyst for change in cases when other tools were proven ineffective. A particularly instructive example is that of apartheid in South Africa. The apartheid divestment campaign began at Stanford and Michigan State in 1977. It eventually led over 150 universities to divest from companies involved with South Africa's oppressive regime. In 1978, following a year-long student campaign, Columbia agreed to stop investing in bonds and financial institutions directly involved with the South African regime. From 1982-1985, student organizers such as the group Coalition for a Free South Africa (CFSA) continued organizing for full university divestment from companies with major South African interests. In 1982, after a blockade of Hamilton Hall and protests by thousands of students, the University committed to full divestment and withdrew their funds by 1991.^{xxiv} Studies suggest that while the direct economic impact of this large-scale divestment was minimal, the long-term social impact was substantial. By demonstrating that participation in apartheid South Africa was unacceptable, these universities sparked a national movement. The US government soon followed suit, passing sanctions against South Africa.^{xxv} When Nelson Mandela was released from prison and he made a speaking tour across America, his organizers said the Bay Area was "a must stop" for Mandela, as he had to personally thank the University of California system and the surrounding cities for divesting, an action that he saw as a turning point for the anti-apartheid movement internationally.^{xxvi}

Columbia's Board has recently shown leadership by voting for Columbia to become the first university in the nation to divest from private prisons, following the inspiring organizing work of the student group Columbia Prison Divest.^{xxvii}

By divesting from fossil fuel companies, Columbia can help remove the veneer of respectability from those who seek to profit from fueling climate change.

5. Fossil fuel divestment is a successful, global movement

The first fossil fuel divestment campaign in the US started at Swarthmore College in 2010. The movement snowballed in November 2012, when Bill McKibben and 350.org spread the call for divestment campaigns through a public speaking tour called "Do the Math."

As of September 2015, according to a report published by Arabella Advisors, 430 institutions and 2,040 individuals across 43 countries and representing **\$2.6 trillion** in assets have committed to divest from fossil fuel companies. An estimated 3-8% of these funds are invested in fossil fuels, representing anywhere from **\$78 billion to \$208 billion**.

The divestment movement has grown exponentially since Climate Week in September 2014, when Arabella Advisors last reported that 181 institutions and 656 individuals representing over \$50 billion in assets had committed to divest (\$1.56 billion to \$4.16 billion divested). At that time, divestment advocates pledged to triple these numbers by the December 2015 Paris UN climate negotiations. Three months before the negotiations, we have already witnessed a **fifty-fold increase** in the total combined assets of those committed to divest from fossil fuels.

The organization 350.org/Go Fossil Free^{xxviii} lists more than 20 American universities that have committed to varying forms of divestment, including Stanford, which pledged to divest direct holdings from 100 coal companies in May 2014 and has an endowment valued at \$18.7B.^{xxix} Locally, The New School voted in February to divest its \$220M endowment from all fossil fuel holdings and explore reinvestment opportunities into renewable energy.^{xxx}

From May to June alone, the University of Washington^{xxxi} system pledged to divest its \$2.8B endowment from direct holdings in coal, becoming the largest public university to do so; the University of Hawaii^{xxxii} system pledged to divest its \$66M endowment from all fossil fuel holdings; Georgetown University^{xxxiii} pledged to divest its direct holdings from coal; and the Rhode Island School of Design^{xxxiv} pledged to divest its \$330M endowment of its direct holdings in fossil fuel stocks, valued at \$6M.

On September 9, the University of California system announced that it has disinvested its \$100 billion endowment and pension fund from investments in coal and oil sands companies worth \$200 million.^{xxxv}

Divestment campaigns are also active at universities across the globe. In October 2014, Glasgow University^{xxxvi} became the first European university to divest its \$27M of fossil fuel holdings; most recently, the University of Oxford^{xxxvii} pledged not to make future direct investments in coal and oil sands in June. On the frontlines of climate change, the College of the Marshall Islands voted to divest from fossil fuels in December 2014.^{xxxviii}

On the governmental front, action has ranged from Norway divesting its \$890B sovereign wealth fund^{xxxix} from companies that rely more than 30% on coal for their revenues (thereby implicating utilities, as well) to the 41 city governments that have pledged to divest (as of March 2015).^{xl} On July 7, New York State Senator Liz Krueger and Assembly Assistant Speaker Felix W. Ortiz announced the new bill Krueger is sponsoring: the Fossil Fuel Divestment Act(S.5873/A.8011).^{xli} The bill would require the State Comptroller to divest the Common Retirement Fund (CRF) from coal within one year and from all fossil fuel holdings by 2020.^{xlii} There are divestment bills in the pipeline in other states, including for Massachusetts'^{xliii} \$62.3B pension fund and California's pension funds.^{xliv}

On September 29, 2015, **Mayor Bill de Blasio announced a proposal to divest New York City's \$160 billion pension fund from coal.**^{xlv}

International financial services firms have taken action as well – in 2013, Norwegian pension fund and insurer Storebrand (with \$74B in assets) divested from 19 fossil fuel companies, and French insurance company AXA announced it will divest more than \$500M of coal-related assets and reinvest into renewables this past May^{xlvi},^{xlvii}.

Assets by philanthropic foundations that have pledged to divest represent \$5B according to Divest-Invest Philanthropy, a platform calling on foundations to sign onto a commitment letter and begin the processes of divestment and reinvestment in low-carbon alternatives^{xlviii}. At this time, 103 foundations have become signatories since January 2014. One notable signatory is the Rockefeller

Brothers Fund, with more than \$860M in assets, which pledged to divest from fossil fuels in September 2014^{xliv}.

In light of the Pope's recent encyclical on climate change *Laudato si'*, the growing number of religious congregations divesting from fossil fuels is seen by some commentators as positioning climate change more strongly as a moral issue^l. The Vatican itself is considering divestment, but the first to act was the United Church of Christ, which voted to divest from all fossil fuels in stages in 2013^{li, lii}. In 2014, the World Council of Churches – which represents half a billion Christians – voted to divest from all fossil fuels^{liii}. In May, the Church of England announced it had dropped \$18M worth of oil sands and thermal coal investments^{liv}. At the end of this June, the Lutheran World Federation announced a policy of not investing in fossil fuels^{lv}. The leadership of the Episcopalian Church voted last week to divest \$380M of holdings from fossil fuel companies and to instruct parishes and dioceses to start moving funds away from fossil fuels and towards renewable energy^{lvi}. The neighboring Union Theological Seminary voted to divest their \$108.4M endowment from all fossil fuels in 2014^{lvii}. While Christian denominations have been the center of divestment activity so far, there is broad momentum from a spectrum of religious groups calling for a strong COP-21 agreement.

Divestment has also drawn attention from public health, development, and scientific experts. The British Medical Association became the first health organization to divest from all fossil fuels in 2014, and an organization representing more than one million medical students signed a petition calling for the Bill and Melinda Gates Foundation and the Wellcome Trust to divest^{lviii, lix}. They claim fossil fuel investments contradict the Hippocratic Oath. Academics Stand Against Poverty (ASAP), an association of 2,000 researchers, have issued a statement calling for divestment, as well^{lx}.

Finally, *The Guardian* has become a strong voice in the divestment campaign with their “Keep It In the Ground” campaign, calling on the Bill & Melinda Gates Foundation (and the Wellcome Trust) to divest from the Carbon Underground list of top 200 fossil fuel companies^{lxi}. Despite not yet winning the campaign, they have raised serious questions in the United Kingdom; two-thirds of UK survey respondents now view fossil fuel investments as ‘risky’^{lxii}.

Many actors that have made divestment pledges have cited a study by the Stranded Assets Programme at the University of Oxford's Smith School of Enterprise and the Environment completed in 2013.^{lxiii} It suggests that the number of campaigns in the fossil fuel divestment movement is growing faster than in any previous divestment campaign, such as the campaign against apartheid in South Africa in the 1960s and 1970s.

6. Why divestment from the Carbon Underground 200 is necessary

The Carbon Underground 200TM list was created by Fossil Free Indexes – founded by Columbia alumnus, adjunct associate research scientist at the Lamont-Doherty Earth Observatory, and financial services professional Stuart Braman, Ph.D.^{lxiv}

The list identifies the top 100 public coal companies and the top 100 public oil and gas companies globally ranked by the potential carbon emissions content of their reported reserves. Fossil Free Indexes have assessed that “the reserves of these companies total 555 gigatons (Gt) of potential CO₂ emissions, almost five times more than [their proportion of the carbon budget that] can be burned for the world to have an 80% chance of limiting global temperature rise to 2°C (3.6° F).”^{lxv}

Our campaign’s focus on divesting from the Carbon Underground 200TM list is echoed by hundreds of fossil fuel divestment campaigns around the globe. Using a list of pre-selected companies to define the “fossil fuel industry” makes the task of divestment clearer for fund managers.

Some institutions have recently committed to divesting from the coal industry, including Stanford and Norway’s sovereign wealth fund. Divesting from coal is clearly important; coal is the most carbon-intensive fossil fuel and the industry is undergoing structural decline.^{lxvi}

However, the science makes it clear that an end to coal would not keep us within 2°C of warming – we must leave the majority of *all* fossil fuel reserves in the ground if we are to ensure a stable climate system. Divesting from coal sends the wrong message about the change that we need.

As Fossil Free Stanford has written to their Trustees as they continue to advocate for full fossil fuel divestment, **“No amount of action against coal can mitigate the impacts of oil and gas enough to protect the hundreds of millions of people, countless species, and trillions of dollars threatened by climate change.”** This is why we urgently call for divestment from the top 200 fossil fuel companies. Columbia has the opportunity to lead, rather than follow, other major educational institutions by divesting from the Carbon Underground 200TM list.

7. Support for fossil fuel divestment at Columbia

Since our founding in Fall 2012, Columbia Divest for Climate Justice has garnered incredible support for fossil fuel divestment across the university. In October 2013, 73.7% of Columbia College voted in favor of fossil fuel divestment in the first-ever ballot referendum at Columbia College.^{lxvii} The Columbia College Student Council (CCSC) then adopted the referendum as its official position and pledged to advocate for divestment. Support has not been confined to Columbia undergraduates. In September 2014, Columbia Divest mobilized more than 300 students from Barnard, the Law School, Mailman, SIPA, and the Graduate School of Arts and Sciences, among other schools, to attend the People’s Climate March.^{lxviii} The March was the largest climate demonstration in global history, with more than 300,000 people gathered here in NYC. Columbia was the largest university contingent.

A petition signature calling on the Board to divest has more than 2,000 signatures from students and alumni, representing almost all of the undergraduate and graduate schools across campus. This winter, Professors Todd Gitlin and Paige West co-authored an open faculty letter to the Board, which currently has over three hundred signatures from faculty across all departments, including many scientists from Lamont-Doherty Earth Observatory. *The Guardian* covered the letter in the spring.

We have engaged with all possible channels of administration, from working for years through the Advisory Committee for Socially Responsible Investing process to meeting, of course, with members of the Board of Trustees. President Bollinger has been supportive of our campaign, stating that it is accepted that **divestment would have no significant impact on the endowment.**

There is also strong alumni support. In addition to many petition signatures from alumni, we work with a number of individuals who have remained active in the Columbia community by attending our weekly meetings and organizing their classmates. On Monday, October 5, alumni called President Bollinger and Professor Gordon of the ACSRI to voice their support for divestment.

This spring, Divest Barnard launched its own campaign across the street. They have already met with President Spar, and they have organized students on their campus. The neighboring Union Theological Seminary voted to divest their \$108.4M endowment from all fossil fuels in 2014^{lxix}, and the Jewish Theological Seminary's List College just launched a divestment campaign including a unanimously endorsed letter from their student governing board to their chancellor.^{lxx}

Graduate students have been organizing their peers at the Law School, School of International and Public Affairs, Mailman School of Public Health, and in the Graduate School of Arts and Sciences. We are building exciting cross-university coalitions and doing the work of educating and engaging with the university about climate justice, in general, rather than only fossil fuel divestment.

Our campaign and members have been featured in or written for media outlets from *The Nation*, *Yahoo! Finance*, *MSNBC*, *Columbia Spectator*, *Bwog*, *The Christian Science Monitor*, *Huffington Post*, and more. We are connected to the Divestment National Network, and a coalition of New York City schools campaigning for fossil fuel divestment including Divest NYU.

We are committed to ensuring that Columbia stands up for students and a future free of climate chaos by divesting from fossil fuels, and our campaign has seen unprecedented levels of interest and recruitment – with more than 100 new members coming to our first meeting this fall. We are confident that our campaign will continue until Columbia divests fully from the fossil fuel industry.

Endnotes:

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- ⁱⁱ <http://www.c2es.org/international/negotiations/cop-15/copenhagen-accord-targets>
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<http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf> ^{iv}
http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf
- ^v James Hansen; <http://www.washingtonpost.com/news/energy-environment/wp/2015/07/20/the-worlds-most-famous-climate-scientist-just-outlined-an-alarmed-scenario-for-our-planets-future/>
- ^{vi} IPCC, 2014; <http://www.carbonbrief.org/blog/2014/04/degrees-of-change-the-ipcc%E2%80%99s-predictions-for-future-temperature-rise/>
- ^{vii} <http://www.worldbank.org/en/news/feature/2012/11/18/Climate-change-report-warns-dramatically-warmer-world-this-century>
- ^{viii} This estimate refers to the amount of CO₂ that can be emitted prior to 2050 in order to maintain an 80% chance of avoiding 2°C of warming. The IEA and the IPCC present slightly different carbon budgets based on different timeframes and levels of certainty. However, all estimates suggest that a significant fraction of fossil reserves must be left in the ground.
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- ^{xvi} https://www.genevaassociation.org/media/201070/geneva_report%5B2%5D.pdf or <http://unu.edu/publications/articles/solutions-for-those-at-risk-in-climate-disasters.html#info>
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- ^{xxv} <http://richardknight.homestead.com/files/uscorporations.htm>
- ^{xxvi} <http://www.nytimes.com/1990/07/01/us/mandela-ends-tour-of-us-with-oakland-appearance.html>
- ^{xxvii} <http://columbiaspectator.com/news/2015/06/22/columbia-will-divest-private-prison-industry>
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- ^{xxxii} <http://www.theguardian.com/environment/keep-it-in-the-ground-blog/2015/may/22/university-of-hawaii-system-votes-to-divest-from-fossil-fuels>
- ^{xxxiii} http://www.huffingtonpost.com/2015/06/08/georgetown-divestment-coal_n_7536724.html
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- ^{xxxv} <http://www.latimes.com/local/education/la-me-ln-uc-coal-20150909-story.html>
- ^{xxxvi} <http://www.theguardian.com/environment/2014/oct/08/glasgow-becomes-first-university-in-europe-to-divest-from-fossil-fuels>
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<http://open.nysenate.gov/legislation/bill/S5873-2015>
- ^{xliii} http://insideclimatenews.org/news/11062015/mass-lawmakers-propose-5-billion-pension-fund-cleansing-divestment-oil-coal-gas?utm_source=Inside+Climate+News&utm_campaign=077fc95ec-e-Weekly_Newsletter_6_13_20156_11_2015&utm_medium=email&utm_term=0_29c928ffb5-077fc95ece-327531193
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- ^{xlviii} <http://divestinvest.org/philanthropy/>
- ^{xliv} http://www.nytimes.com/2014/09/22/us/heirs-to-an-oil-fortune-join-the-divestment-drive.html?_r=0
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- ^{lii} http://www.nytimes.com/2013/07/04/us/church-dropping-fossil-fuel-investments.html?smid=tw-share&_r=1
- ^{liiii} <http://thinkprogress.org/climate/2014/07/11/3459111/wcc-christians-divests/>
- ^{liv} <http://www.theguardian.com/environment/2015/apr/30/church-of-england-ends-investments-in-heavily-polluting-fossil-fuels>
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Fossil Fuel Divestment & Disinvestment as of October 2015

IVY Peer Group

School	Divestment Request	Action Taken	Date
Brown	Request to divest from coal only	Rejected	October 2013
Columbia	Request to divest from Carbon Tracker 200 Companies	Rejected, but original proposal was resubmitted in October 2015. Current proposal is under review	May 2014
Cornell	Request to divest from fossil fuels; strong faculty support	Rejected	May 2014
Dartmouth	Request to divest from fossil fuels	No Final Action Taken (College President Phil Hanlon asked the Advisory Committee on Investor Responsibility to prepare a report that details the implications of withdrawing the College's investments in publicly-traded fossil fuel companies)	September 2014
Harvard	Request to divest from fossil fuels; strong faculty support	Rejected	October 2013
U. Pennsylvania	Request to divest from fossil fuels	Undergraduate student referendum passed in February 2015. Motion now needs to go through six additional steps of approval.	February 2015
Princeton	Request to divest from fossil fuels	Rejected	July 2015
Yale	Request to divest from fossil fuels	Rejected	August 2014

University Endowments >\$1 billion

School	Divestment Request	Action Taken	Date
Amherst	Request to divest from coal only	No action taken	March 2015
Cambridge University	Request to divest from fossil fuels	The University Council has voted to support a wide-ranging investigation of the University's £2.2 billion endowments fund. Aiming to make investment more "environmentally and socially responsible", the review plans to last a year and involve collaboration from students, academics and staff	May 2015
Duke	Request to divest from fossil fuels	Rejected	January 2015
Georgetown	Request to divest from fossil fuels	Divested from coal	June 2015
Middlebury	Request to divest from fossil fuels	Rejected	August 2013
MIT	Request to divest from fossil fuels	Rejected	October 2015
Oxford University	Request to divest from fossil fuels by students, academics and alumni	Rejected Ruled out future investments in coal and tar sands in endowment, but said it would not divest from all fossil fuels as demanded by thousands of students, academics and alumni	May 2015
Stanford	Request to divest from fossil fuels	Divests only from companies that mine coal	May 2014
Swarthmore	Request to divest from fossil fuels	Rejected	May 2015
Tufts	Request to divest from fossil fuels; strong faculty support	Rejected Divestment Pursue the establishment of a Sustainability Fund, both as a statement of the direction in which we would like to see the University move eventually and to test the feasibility of this kind of investment.	February 2014

University of California	Request to divest from fossil fuels	Sold off about \$200 million of direct holdings in coal and oil sands companies in 2015 however "...there has been no official change in University of California policy with regard to coal mining or oil sands companies"	September 2015
University of Washington	Request to divest from fossil fuels	Voted to prohibit direct investment of endowment funds in publicly traded companies whose principal business is the mining of coal for use in energy generation	May 2015
University of Wisconsin	Request to divest from fossil fuels	No action taken	February 2014
Vassar	Request to divest from fossil fuels	Rejected	February 2013
Wellesley	Request to divest from fossil fuels	Rejected	March 2014
Williams	Request for divestment from coal	Rejected Williams is investing up to \$50 million over the next five years in efficient buildings, renewable energy projects and climate change education aiming to achieve carbon neutrality by the end of 2020. Committed to reduce our net greenhouse gas emissions to 35 percent below 1990 levels by 2020"	September 2015

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ACSRI

Appendix B:

ACSRI report of April 15, 2016

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Date: April 15, 2016

To: Members of the Trustees Subcommittee on Shareholder Responsibility

From: Advisory Committee on Socially Responsible Investing (ACSRI)

Re: Recommendation to become a signatory to the CDP Climate Change program

The ACSRI voted on March 23 to recommend that Columbia University become an Investor Signatory to the CDP Climate Change program. This recommendation followed further consideration of the University's investment and shareholder engagement practices as promised in the Committee's November 2015 response to the divestment proposal of Columbia Divest for Climate Justice.

The purpose of CDP's Climate Change program is to collect and disseminate standardized data on greenhouse gas emissions with a view towards (i) enabling investor engagement on this issue, (ii) providing data for research, and (iii) encouraging companies to focus on their carbon footprint and to take steps to manage it. This data collection and dissemination focus aligns well with the University's mission of education and research on a critical issue and fits with the ACSRI's "stand up for science" approach. It is consistent with the University's preference for shareholder engagement over divestment. The cost to the University is de minimis. Columbia will be joining peer institutions such as Harvard and the University of California in becoming a CDP signatory. The data that CDP makes available to signatories will help the ACSRI formulate its own position on fossil fuel divestment.

Becoming a signatory entails a voluntary annual fee of \$975 in 2016; the fee will be mandatory from 2017 onwards.

A periodic reassessment of the University's signatory status would also be advisable.

CDP: Background

Founded in 2000 and operating from London, New York and Berlin¹, CDP (formerly the "Carbon Disclosure Project"²) is a nonprofit organization that works with shareholders and corporations to

¹ CDP has charitable status in the USA and is a registered charity in the UK, as is CDP Europe in Germany. It has partners in 18 of the world's major economies who help deliver the program globally.

² Around 2012, the name was changed to reflect the broadening of the mission of the organization to encompass the three programs beyond the Climate Change program.

promote the disclosure of the greenhouse gas emissions (“GHG”) of major corporations. In 2010, CDP was called "The most powerful green NGO you've never heard of" by the Harvard Business Review. CDP's climate change program aims to reduce companies' greenhouse gas emissions and mitigate climate change risk. To this end, CDP requests information on risks and opportunities related to climate from the world's largest companies on behalf of its institutional investor. CDP works with 3000 of the largest corporations in the world to help them ensure that an effective carbon emissions reduction strategy is made integral to their business. CDP also works with companies to obtain the relevant data for their global supply chain.

The underlying philosophy is that governments have been reluctant to develop stringent national limits on emissions, in part for fear of big companies relocating their factories and jobs to nations with laxer regulatory regimes. CDP attempts to sidestep these national interests by focusing on individual companies, and using the clout of institutional investors to exert pressure on companies to focus attention on carbon emissions, energy usage and reduction – wherever companies and assets may be located. It is thought that once companies disclose their emissions, they become aware of the issues involved and more willing and able to manage them.

In terms of collecting data on carbon footprints, CDP is effectively the only game in town. CDP has established the world's largest repository of GHG emissions and energy use data accounting for some 26% of global anthropogenic CO₂, and works towards establishing a globally-used standard for emissions and energy reporting. Other providers (both commercial and non-profit) overwhelmingly use CDP's raw data. As a representative from the investment office of the UC California system put it in a presentation last June:

“It's crucial that CDP exists and that we support the mission of collecting data from companies in order to increase transparency ... You can't manage what you can't measure.”

He characterized becoming a signatory as a “no-brainer”, as did the other speakers at the event.³

Signatories are limited to institutional investors only.

Possible Levels of Engagement for Columbia University

Currently the ACSRI does not contemplate a higher level of engagement with CDP beyond becoming a signatory to its Climate Change program, such as (a) becoming a signatory to the Carbon Action program as well, or to all four CDP programs, including Water and Forests or (b) CDP Investor Membership. For completeness, these stronger levels of engagement are briefly described below.

The level of engagement of signatories varies, on a voluntary basis. In the Climate Change program, CDP requests information “on behalf of” the signatories to the program, and provides an “engagement tool” to signatories -- a monthly spreadsheet that records which companies have received the questionnaire and whether they have responded. CDP obtains contact information for

³ A link to the 45-minute video for the event is available at <https://vimeo.com/131251704>. Other endowment representatives at the event came from the New School and Harvard Asset Management (the comments of the latter are not publicly available beyond a statement that they use CDP's data for shareholder engagement, company selection and research).

relevant officials at the companies and provides suggested text for follow-up letters reminding the companies to respond to the questionnaire. CDP currently has about 825 Climate Change signatories with a combined \$100 trillion in assets.

The relatively recent Carbon Action program is more activist than the Climate Change program. CDP analyzes companies' previous years' reports and suggests ways for them to improve their performance by reducing their GHG emissions year-on-year, setting and publicly disclosing reduction targets, and identifying projects that deliver reductions at an acceptable return on investment. The program currently sends one of five letters (ranging from mild to stern) to remind companies of their performance, but its scope is expanding under the leadership of a newly hired expert.⁴ The process of having to respond to CDP often produces changed business practices that use less energy and, in many cases, a higher proportion of energy from renewable sources.

Over 300 of the Climate Change signatories, with US\$22 trillion in assets under management, are currently also Carbon Action signatories.

In addition to its Climate Change and Carbon Action programs, CDP has related programs that collect information on water quality, supply chain environmental impact, deforestation and cities' emissions and climate change strategies.

CDP Data Collection

The climate change data that CDP collects is self-reported; nearly 2000 businesses reported in 2014. Much of the data elicited has never been collected before. Questionnaires (available on the CDP website, www.cdproject.net) are distributed to 8000 companies globally (including supply chain firms). Among the US S&P 500 firms, about 70% respond,⁵ and this percentage has remained roughly constant in the past few years. Utilities and energy companies are generally less willing to respond.

Of course a mandatory disclosure regime would generate more comprehensive data, but this is not the reality today though policymakers around the world are making proposals in that direction. It should be noted that to implement COP21, this data is needed; CDP's reports follow the GHG emission reporting guidelines of the Intergovernmental Panel on Climate Change.

As disclosure of emissions-related data is CDP's primary activity, the quality of the data is key. CDP encourages better reporting by recognizing companies with high-quality disclosure as top scoring companies in the Climate Disclosure Leadership Index (CDLI). CDLI scores are *not* affected by the actual amount of emissions reported but provide a perspective on the range and quality of responses to CDP's questionnaire. Direct pressure from signatory institutions on the companies they invest in is also of value in this regard.

CDP's Partners and Funding

⁴ She is Helen Wildsmith, who will combine the job with her role at CCLA, one of the UK's largest charity fund managers.

⁵ More than 70% in terms of market cap: larger companies are more responsive as they are better able to dedicate the resources needed to generate the data.

CDP has obtained backing from blue chip investors including HSBC, JPMorgan Chase, Bank of America, Merrill Lynch, Goldman Sachs, American International Group, and State Street Corp. It works with corporations including WalMart, Tesco, Cadbury Schweppes, Procter and Gamble, Siemens, L'Oréal, Nestlé and many others to measure emissions throughout the supply chain.

CDP receives funding support from a wide range of organizations including foundations and governments. CDP also receives funding through corporate sponsorship, CDP member packages, and global partnerships.

The latest financial statements available on the website are for the year ending March 2014, in which total expenditure was just over £6 million.

CDP Investor Signatories

Investor Signatories are financial institutions including banks, investment managers, pension funds, insurers, foundations, endowments, private equity and real estate investors with an interest in addressing the companies they invest in or lend money to, on the key structural challenges presented by climate change and natural resource scarcity. CDP investor signatories have free access to the database of climate change, water and forest risk commodity information on thousands of disclosing companies. CDP's investor signatories use CDP data for a wide range of purposes including integration into investment decision making and for shareholder engagement. Becoming a CDP signatory allows investors access to all company information at no charge through endorsement of the annual questionnaires.

Becoming a signatory is free in 2016, with a voluntary fee of \$975. After 2016 the fee will be mandatory. The fee is the same irrespective of the number of programs the signatory chooses to support.

The data made available to signatory investors and lenders is *not* intended for the university community at large. There is a separate channel for making data available for use by students, faculty and researchers, through an academic data package at a subsidized price of \$2500 a year that gives full access to the current and historic public datasets. Over 150 papers published in peer-reviewed journals use or cite CDP data. Also, a CDP associate noted that a large part of the data is available open-source, for free.

Signatories are not obliged to provide data on their own carbon footprint.

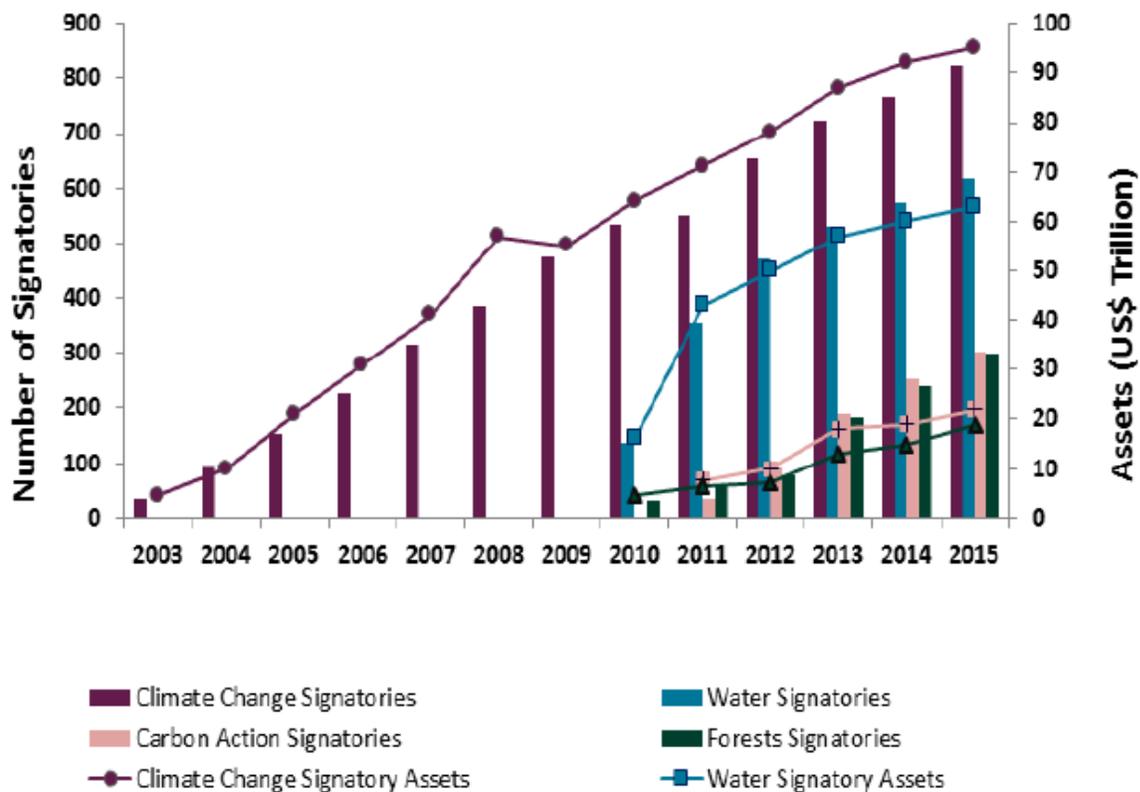
Most signatories are private-sector financial institutions and include many major banks, institutional investors, etc. Some (but far from all) nonprofit signatories are listed below (those who are also Members, as described below, are starred *; Carbon Action signatories are marked +):

- California Public Employees' Retirement System*
- California State Teachers' Retirement System*
- California State Treasurer
- California State University, Northridge Foundation
- Harvard Management Company, Inc.
- New York City Employees Retirement System

- New York City Teachers Retirement System
- New York State Common Retirement Fund*
- New York State Comptroller
- The Colorado College
- The New School+
- The University of Edinburgh Endowment Fund
- TIAA CREF*
- Unity College
- University of California*+
- University of Massachusetts Foundation+
- University of Sydney Endowment Fund
- Universities Superannuation Scheme (USS), UK
- York University Pension Fund
- University of Toronto (intention to become a signatory announced March 2016)

The above list includes, inter alia, *all* signatories with “university”, “school” or “college” in their name as of March 2016.

CDP Signatories & Signatory Assets: 2003 - 2015



There is a variety of reasons why many of Columbia's Ivy League peers are, unlike Harvard and the University of California, not among the signatories. Some have simply not considered the issue for lack of requests coming from students or faculty. Some feel that their directly managed assets are so small a proportion of their endowment that CDP data would serve no purpose in daily investment decisions; the impact on their environmental stewardship would not be substantive, and it is inappropriate to make purely symbolic gestures. Others are waiting for the carbon footprint metrics to become better developed, arguing that in the meantime it would be premature to use the data in guiding investment strategies -- even while conceding that becoming a signatory would signal an understanding of the issues and concerns. One peer school observes that the CDP data is also released directly by companies themselves and that it generally supports shareholder proposals seeking disclosure of greenhouse gas emissions.

CDP Investor Members

A higher level of support is CDP Investor Membership, which allows signatories to signal their commitment to and financial support of CDP, and gives access to powerful software enabling easy analysis of company responses. Membership is open to any CDP signatory and offers a number of additional benefits including:

- Enhanced access to all CDP responses via customized reports in excel format;
- Engagement facilitation;
- Improved understanding of portfolio company climate change, water and forests risk management and energy efficiency initiatives; and
- Enhanced recognition on CDP global reports and on the CDP website.

The annual fee to become a member is \$7,000 for organizations with assets of up to \$10 billion and \$9,000 for organizations with assets of \$10 billion or more.

There are currently close to one hundred Investor Members including asset managers, insurers, pension funds and other financial institutions as well as prominent nonfinancial companies such as BP. The Investor Members include two universities: the University of California and the University of Toronto.

CDP Partners

CDP also has a number of service partners that work with it to further its goals. Many of these are nonprofits; in the education and training area, CDP partners with a university, the Carroll School of Management Center for Corporate Citizenship at Boston College.

Useful Links

[CDP website](#)

[Webinar for college endowments](#) (June 2015)

ACSRI

Appendix C:

Proposal from 25 Earth Institute Faculty Members

Submitted Sept. 12, 2016

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ACSRI Proposal Submission Overview

Date of Submission to the ACSRI: September 12, 2016

Subject of Review: Fossil fuel divestment

Contact Name: Michael B. Gerrard

Contact Email: michael.gerrard@law.columbia.edu Phone Number: (212) 854-3298

University Affiliation: Andrew Sabin Professor of Professional Practice

Dept./Office: School of Law

Requesting on behalf of an organization? Yes

If yes, which organization? 25 members of Earth Institute Faculty signing statement

Provide a summary of the issue, the action requested, and the rationale:

There is a University-wide consensus that climate change poses a grave threat to humanity and to the natural systems on the planet, and that the use of fossil fuels is the principal cause. This proposal (formulated and signed by 25 members of the Earth Institute Faculty and others) calls upon the University to engage in an orderly divestment of the shares of the largest coal companies, and to submit questions to the largest oil and gas companies to ascertain their policies with respect to the needed transition from fossil fuels to cleaner sources of energy, the exploration for and production of unconventional fossil fuel resources, the acknowledgment of the need to reduce greenhouse gas emissions, and related matters. Based upon the results of this survey, divestment from some of the oil and gas companies may be recommended.

Please attach in PDF format the following additional required information and supporting evidence (20 pages max):

- 1) State which criteria the proposal is using to make the case (1 paragraph)
- 2) Provide all the critical data with footnotes for any arguments in your proposal
- 3) Provide research on the possible opposite argument against your conclusions
- 4) Conclusion - provide bullet points for the final recommendations to the ACSRI citing the criteria for each one

Email the proposal to the ACSRI Staff Administrator as posted on the website

Proposal on Fossil Fuel Divestment and Engagement

Michael B. Gerrard
Andrew Sabin Professor of Professional Practice
Director, Sabin Center for Climate Change Law
Columbia Law School
Chair of the Faculty of The Earth Institute

During the 2015-2016 academic year, the faculty of The Earth Institute held intensive discussions about whether Columbia University's endowment should divest from fossil fuel stocks. On March 1, 2016, a statement was released that was signed by 25 members of this faculty and by several Earth Institute researchers. It was not issued as a formal statement of the faculty itself; the faculty had never previously issued a statement on a social/policy issue and some members were uncomfortable with doing so now.

The relevant portions of the faculty members' statement are pasted below. (The remainder called for efforts to advance the efforts to reduce the greenhouse gas footprint of campus operations, and to continue research, educational and public service activities concerning climate change; all of these are being pursued as well.)

I am submitting this proposal to ACSRI on behalf of myself and the other signatories to the statement.

Statement on University Investment and Sustainability Policy

The undersigned faculty and researchers of Columbia University's Earth Institute recommend that Columbia University implement a policy that recognizes the critical need for society to transition to non-fossil fuel energy sources, the role of the University in promoting public good through its investments, and the importance of upholding these principles through activities on its campuses. Columbia University should proactively lead these efforts both within and without the University and recognize that such investment choices need not adversely affect University finances, but they do provide an opportunity to strengthen the University financially, civically and morally. We are aware of no evidence of a clear

correlation between fossil fuel divestment and portfolio return.

1. Coal combustion is the largest and fastest-growing anthropogenic source of greenhouse gas emissions. Major reductions in global coal use are an essential part of any strategy to fight climate change. Coal companies are bad investments for the planet and for forward-looking investment portfolios. If these companies are losing money (as many of them are), Columbia University should not suffer the losses; if they are making money, Columbia should not share in the profits. Columbia should engage in orderly divestment from the stock of any companies that are primarily in the coal mining business, and should refrain from buying any such stock in the future.
2. Companies that are primarily involved with other fossil fuels need to transition to clean sources of energy in the decades to come. In order to stay in or join Columbia University's stock portfolio, oil and natural gas companies should provide satisfactory affirmative answers to these questions, and should provide documentation supporting the answers:
 - a. Has the company publicly and clearly subscribed to the goal agreed to by 196 countries in Paris in December 2015 to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels," and to the limits on GHG emissions needed to meet that goal?
 - b. Has the company left, or never joined, business groups that lobby or litigate against effective climate policies to achieve the temperature goal, and does it refrain from such activities itself?
 - c. Has the company ended, or never engaged in, any exploration and development of unconventional reserves (for example, in the Arctic and much of the Canadian oil sands)?
 - d. Has the company demonstrated that it remains a good investment despite society's transition away from fossil fuels, and has it published and is it implementing a plan to transition to low-carbon energy sources and technologies, as called for by the Paris Agreement?
3. Columbia University should hold no shares in any company, in whatever sector, that directly or through organizations that it supports rejects the scientific consensus on climate change.
4. The University should be an active investor in companies whose shares it continues to hold. The University should initiate or participate in shareholder resolutions

and other activities that urge companies to behave in a responsible manner toward climate change, including, *inter alia*, the reduction in the emission of greenhouse gases and the transition to non-fossil fuel energy sources. In doing so, the University should cooperate with other organizations engaged in similar activities.

Applicable Criteria

ASCRI has identified three basic tests or criteria that must be met before divestment is recommended:

- 1) There must be broad consensus within the University community regarding the issue at hand;
- 2) The merits of the dispute must lie clearly on one side;
- 3) Divestment must be more viable and appropriate than ongoing communication and engagement with company management.

If "the issue at hand" is defined as whether climate change is a serious threat to humanity and to the planet, and the "dispute" is whether fossil fuels are a major contributor to climate change, the first two criteria are easily met. There is broad consensus among the scientific community (including, I believe it is fair to say, every member of the Earth Institute faculty) about the threat caused by climate change, and the central role of fossil fuels in causing it. Nor does there appear to be any serious disagreement within the University community about these points. I have participated in countless meetings and public fora at Columbia about climate change, and I do not recall ever hearing anyone express disagreement on these key points. There is certainly disagreement about the magnitude and pace of the climate threat, and about the best technical and policy tools for addressing it, but not about the underlying merits. The most authoritative current study of the causes and impacts of climate change is probably the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, which is linked [here](#). If

the ACSRI desires further scientific references on these points, I would be happy to provide them.

Many members of the University community support divestment. In October 2013 Spectator conducted a ballot referendum of Columbia College students; 73.7% voted in favor (though it is unclear from what I have found whether that is a percentage of all students, or of all respondents to the poll). Last spring an open faculty letter to President Bollinger and the Trustees received more than 350 signatures (see [here](#)). According to the Columbia Divest for Climate Justice website, linked [here](#), over 2,000 students and faculty members have signed their petition to divest from fossil fuels, representing all undergraduate and graduate schools at Columbia. As the ACSRI is well aware, the issue has been the subject of a great deal of student activism on campus. Not everyone agrees with divestment but to my knowledge no groups have organized to oppose it, and there have been no counter-petitions. This is merely anecdotal, but I will report that in November 2014 I organized and chaired a public forum at the Law School about divestment; I had a great deal of difficulty finding anyone on or off campus willing to speak in opposition, and I had to fly an investment advisor in from Colorado to represent that point of view.

The third criterion is whether divestment is more viable and appropriate than ongoing communication and engagement with company management. There has been extensive shareholder activism with respect to climate change since the early 1990s. As a result a number of manufacturing companies have agreed to reduce their carbon footprint and take other environmentally beneficial actions. However, while this activism has had some effect on the securities disclosures of fossil fuel producers, it has had little discernible effect on the substantive practices of fossil fuel producers (as opposed to fossil fuel users). A large shale oil

producer, Continental Resources, did agree to reduce its flaring (burning) of natural gas at its North Dakota well. ExxonMobil agreed to make certain disclosures (the adequacy of which are now a subject of investigation by the New York Attorney General). There may be other examples, but I have not found any.

Many groups continue to be engaged in shareholder activism on climate change; the Interfaith Center for Corporate Responsibility plays a leading role in organizing such efforts. However, it is unlikely that this kind of activism will induce any fossil fuel companies to move away from their core business. The fossil fuel divestment campaigns are ultimately aiming to achieve a major reduction in the use of fossil fuels around the world. One key element is the movement to "leave it in the ground" -- to not utilize the proven reserves that are a large piece of the asset base of many fossil fuel companies. Regulatory requirements, reduced markets, and economic factors (such as the currently low prices for oil and gas) may help achieve that, but it is difficult to imagine that shareholder activism could induce a company to abandon its assets and effect a fundamental shift in its business model. The more likely that a resolution is to seriously impair a company's profits (as opposed to alter its practices around the edges), the less likely that it will be supported by major investors and come anywhere close to a majority vote.

The present proposal would call for immediate divestment only from coal companies. It leaves room open for engagement with oil and gas companies, as they attempt to demonstrate (or don't) that they meet the other factors set forth in the faculty members' statement.

Few proponents of fossil fuel divestment believe that it alone will move the coal, oil and gas companies or even affect their stock price; there will always be other buyers for the shares. Rather the act of divestment is symbolic, and in important ways. It would help signify that Columbia University is using every tool available to it to address the grave issue of climate

change: we are conducting research and education, we are greening our campuses, and now we would be pulling our shares from coal companies, and perhaps later from oil and gas companies. Divestment would also convey the idea that fossil fuel use is in growing disfavor, and so are the fossil fuel producers (whose views still carry great weight in Congress and other political bodies).

While a large number of entities around the world have announced partial or total fossil fuel divestment (see [this](#) compilation), few leading universities have. But among those that have announced partial divestment are Stanford, Georgetown, Oxford, and the London School of Economics. Columbia could mark itself as a leader in taking this action, while at the same time doing everything it can to reduce its own fossil fuel use and to participate in the scientific quest for alternatives.

Differentiating the Fuels

The proposal would immediately divest from coal companies, and disfavor the development of unconventional reserves. The divestment from coal is largely due to its emissions profile, which is far worse than all other fossil fuels. A major objective of EPA's Clean Power Plan and of many other efforts to reduce GHG emissions is to drive down the use of coal.

The amount of carbon dioxide (CO₂) produced when different types of fossil fuels are burned is easily measureable and calculable. According to the U.S. Energy Information Administration, the breakdown in tonnes of CO₂ per gigawatt hour (converted from the original data of pounds/million BTUs by multiplying by a conversion factor of 1.5477) is as follows¹:

¹ U.S. Energy Information Administration (U.S. EIA), *How much carbon dioxide is produced when different fuels are burned?*, June 18, 2015; <https://www.eia.gov/tools/faqs/faq.cfm?id=73&t=11>

Coal (anthracite)	353.81
Coal (bituminous)	318.37
Coal (lignite)	333.38
Coal (subbituminous)	331.68
Diesel fuel and heating oil	249.65
Gasoline	243.30
Propane	215.13
Natural gas	181.08

However, carbon dioxide and other greenhouse gases are also emitted during processes other than combustion, including but not limited to extraction, transportation, and processing. Thus an entire “cradle to grave” lifecycle analysis of fossil fuels is a more appropriate measurement of total greenhouse gas emissions. While the definition of a fossil fuel’s lifecycle is not standardized, the World Nuclear Association analyzed 21 different lifecycle reports and reported the following total lifecycle greenhouse gas emissions in tonnes of CO₂ equivalent per gigawatt hour²:

² World Nuclear Association (WNA), *Comparison of Lifecycle Greenhouse Gas Emissions of Various Electricity Generation Sources*, July 2011, http://www.world-nuclear.org/uploadedFiles/org/WNA/Publications/Working_Group_Reports/comparison_of_lifecycle.pdf

Technology	Mean	Low	High
	tonnes CO ₂ e/GWh		
Lignite	1,054	790	1,372
Coal	888	756	1,310
Oil	733	547	935
Natural Gas	499	362	891
Solar PV	85	13	731
Biomass	45	10	101
Nuclear	29	2	130
Hydroelectric	26	2	237
Wind	26	6	124

To be sure, oil also generates a substantial amount of GHG emissions per unit of energy produced. The question may be asked why, if Columbia should divest from coal, should it not also divest from oil? A major reason concerns the availability of substitutes. The coal used for energy goes almost entirely to make electricity. (Some coal is also an input in certain metallurgical processes.) There are many other, cleaner ways to make electricity. All nuclear, hydropower, and wind turbine energy goes to make electricity, as does most solar and much natural gas. These cleaner energy sources are available in the rapidly developing countries. For example, both China and Brazil have already developed a great deal of hydropower, and many other populous and rapidly developing countries, including India and Indonesia, have the natural features necessary to develop a great deal themselves. See [here](#). According to the Renewables 2016 Global Status Report from REN21, available [here](#), China is the world leader in solar photovoltaic capacity and additions, while India is ninth (p. 63), and China is first in wind power capacity and additions, while India is fourth (p. 77). In the world's poorest countries, where

large segments of the population have no electricity at all, distributed energy (primarily solar photovoltaic) is being rapidly installed and (unlike central station coal plants) does not require the installation of extremely expensive transmission lines. (id, at pp 87-97; see also [this](#)). In India, solar power is now cheaper to provide than coal. See [here](#).

In contrast, about 71% of the world's oil goes to transport, see [here](#), and 93% of the energy used for transport in the world comes from oil, see [here](#). Major efforts are underway around the world to use more electric cars, but there are only about 1.3 million electric automobiles now on the road around the world, see [here](#), out of about 1 billion total, see [here](#) – just 0.1%. There are currently no commercial substitutes for petroleum or gas for heavy duty vehicles (such as trucks and buses) or for aircraft.

In other words, today there are many large-scale substitutes for coal in making electricity; the substitution of oil for transport is nowhere near that scale.

With respect to unconventional oil and gas, there are numerous and varying estimates of their emissions intensity. However, these methods of extraction all share one thing in common: they involve a quest for fossil fuel resources that should be left in the ground. We already know where massive coal reserves are located, and they can be extracted with very modest effort. However, most of the easily-recoverable oil and gas reserves (except for those in protected areas such as Antarctica) have already been extracted, and extraordinary efforts are needed to find and produce new ones. Given the solid scientific information available about the need to limit the amount of fossil fuel extracted (despite continuing questions about the exact amounts -- see [this](#)), elaborate hunts for new methods of extracting oil and gas, and the commencement of production in environmentally sensitive areas such as the Arctic and in deep waters offshore, amount to either a rejection of the science of climate change, or a cavalier disregard of its outcomes, in the

same way that development of tar sands amounts to a rejection or disregard of science by deed.

Differentiating the Companies

How would the companies targeted for divestment be identified?

Fossil Free Indexes LLC is a research and investment company based in New York. Its web site is [here](#). It identifies its mission as "to source and analyze carbon emissions data and to generate research, benchmarks, and investment solutions for investors who are attentive to climate risk." One of its products is the Carbon Underground 200, which it describes as "a list of the 100 largest public oil and gas and the 100 largest public coal companies globally, as measured by the potential CO2 emissions of their reported fossil fuel reserves."

The lists are proprietary and available from Fossil Free Indexes for a fee. However, they publicly list the ten largest coal companies:

Rank	Coal Company	Coal Gt CO2
1	Coal India	43.104
2	Adani Enterprises	27.809
3	China Shenhua Energy	23.143
4	Inner Mongolia Yitai Coal	11.756
5	China Coal Energy	9.492
6	Mechel	9.483
7	Exxaro Resources	9.433
8	Public Power	9.339
9	Glencore	8.692
10	Peabody Energy	8.059

This list would be a convenient way to identify the coal companies that, under the proposal, should not be in Columbia's portfolio.

Fossil Free Index also maintains a list of the 20 public companies with the largest tar sand

reserves.

The list of the 100 largest public oil and gas companies would also be a good starting point for identifying the companies that are engaged in offshore oil exploration and shale gas production. Much of this information is readily available. For example, Rigzone Data Services publishes information about the owners of offshore oil rigs, for example. See [here](#). Various centers or groups at Columbia could be engaged to carry out the needed research.

The proposal calls upon Columbia to send a questionnaire to oil and gas companies to inquire about certain specified activities and positions. The proposal itself sets forth the key questions (though some refinement and definitions would be in order). The Fossil Free Index would provide the list of companies that should receive the questionnaire.

One of the questions is whether the company has "published and is it implementing a plan to transition to low-carbon energy sources and technologies, as called for by the Paris Agreement." I note that at least one large oil company -- Total, which is headquartered in Courbevoie, France -- has published such a plan. See [here](#).

It is unknown how many companies would respond to this questionnaire. One option would be for Columbia to ask the Carbon Disclosure Project to add these to the questions it includes in its annual Climate Change Information Request. This year's Request form is [here](#). (I am aware that in April 2016 the ACSRI recommended that Columbia become an Investor Signatory to the CDP Climate Change program. I do not know whether this recommended has been acted upon.)

Another task required under the faculty members' proposal is identifying each company "that directly or through organizations that it supports rejects the scientific consensus on climate change." The number of publicly traded companies that fall within that category today is probably

very low. Some of those that formerly did, such as ExxonMobil, no longer do. Few trade associations do so any longer. Some substantial companies still actively do, directly or indirectly, most prominently Koch Industries and Murray Energy, but they are privately held. Ongoing research at Columbia could help identify any such companies, but this is not likely to be a large category.

Much of the information sought can be obtained through research without resort to questionnaires. For example, a great deal of information is available publicly about private leasing of coal lands. See [this](#) and [this](#), and the sources cited therein.

Conclusion

The ACSRI should recommend that the Trustees:

1. Direct the University's fund managers to engage in orderly divestment from the stock of any companies on the list of the 100 largest holders of coal reserves, and refrain from buying any such stock in the future.

2. Request the ACSRI to send a questionnaire to the 100 largest public oil and gas companies, asking them the questions posed in the faculty members' statement, or become an Investor Signatory to the CDP Climate Change program ask CDP to pose these questions.

3. Request the assistance of the ACSRI in helping the University become an active investor in companies whose shares it continues to hold. The University should initiate or participate in shareholder resolutions and other activities that urge companies to behave in a responsible manner toward climate change, including, *inter alia*, the reduction in the emission of greenhouse gases and the transition to non-fossil fuel energy sources. In doing so, the University should cooperate with other organizations engaged in similar activities.

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MEMORANDUM

To: Advisory Committee on Socially Responsible Investing

From: Michael B. Gerrard, Andrew Sabin Professor of Professional Practice, Columbia Law School

Date: September 30, 2016

Re: CDP Questions and Earth Institute questions

The Earth Institute faculty members' proposal to the ACSRI ("EI Proposal") suggested that Columbia send a questionnaire to oil and gas companies posing certain questions. Concerns may arise about how this process would work. In view of the ACSRI's recommendation that Columbia University become a signatory to the CDP Climate Change program, I looked through the questions now posed by CDP to its Climate Change members. I found that the existing CDP questions already cover most of the EI issues, though with different wording.

Question "a" from the EI Proposal is, "Has the company publicly and clearly subscribed to the goal agreed to by 196 countries in Paris in December 2015 to hold 'the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels,' and to the limits on GHG emissions needed to meet that goal?" The CDP questionnaire does not specifically ask about the Paris goals, but CDP Questions CC3.1 and CC3.3 ask for detailed information about the company's emission reduction and renewable energy targets and initiatives.

Question "b" from the EI Proposal asks, "Has the company left, or never joined, business groups that lobby or litigate against effective climate policies to achieve the temperature goal, and does it refrain from such activities itself?" CDP Question 2.3 asks for detailed information

about the company's membership in or funding of trade associations and other activities aimed at influencing climate policy.

Question "c" from the EI Proposal asks, "Has the company ended, or never engaged in, any exploration and development of unconventional reserves (for example, in the Arctic and much of the Canadian oil sands)?" The CDP questions do not address this issue. However, this sort of information is readily available for oil sands exploration, and publicly available sources also reveal what companies have engaged in exploration in the U.S. portion of the Arctic; such information for some of the other countries' portions of the Arctic may or may not be easily obtainable.

Question "d" is, "Has the company demonstrated that it remains a good investment despite society's transition away from fossil fuels, and has it published and is it implementing a plan to transition to low-carbon energy sources and technologies, as called for by the Paris Agreement?" CDP questions CC2.1 and 2.1 ask about the company's risk management procedures with respect to climate risks and opportunities, and about how, if at all, climate change is integrated into a company's business strategy.

CDP publishes the overall scores that it assigns to all reporting companies, but it does not publish the companies' reports. Many companies have published the own reports, and the CDP gives an "A" rating only to those companies that have published their reports.

Of the 20 top "carbon majors" (from the Heede list), 10 are investor-owned. (The rest are state-owned.) Of these 10, CDP reports of 8 them are posted on-line (though not necessarily the most recent one): Chevron, ExxonMobil, BP, Royal Dutch Shell, Conoco Phillips, Total, BHP- Billiton, and Anglo American. The only ones without posted CDP climate reports are Peabody Energy and Consol Energy (both of which are primarily in the coal business).

Columbia could indicate that in lieu of responding to a questionnaire, companies could supply their most recent CDP reports (or at least their responses to the above-listed questions). Failure of a company to supply these responses or to answer the questionnaire could create a presumption in favor of divestment from the company.

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