Attorney General Maura Healey
Office of the Attorney General
Non-Profit Organizations/Public Charities Division
One Ashburton Place, Boston, MA 02108

Dear Attorney General Healey —

The Corporation of the Massachusetts Institute of Technology ("the MIT Corporation"), as fiduciary of a non-profit educational institution, is bound by the laws of Massachusetts to promote the well-being of MIT's students and community and to further the Institute's commitment to educational excellence. MIT's mission is to "advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century."[1] MIT's "shared purpose" is to "make a better world through education, research, and innovation."[2]

Under the Massachusetts Uniform Prudent Management of Institutional Funds Act, the Corporation has a fiduciary duty to invest with consideration for MIT's charitable purposes — a duty that distinguishes non-profit institutions from other investors. It may be problematic, then, that the Corporation has invested a portion of MIT's 27.4-billion-dollar endowment in the fossil fuel industry — damaging the world's natural systems, disproportionately harming youth, low-income people, and communities of color, and imperiling the Institute's financial and physical condition. In the midst of the climate crisis, powerful institutions must take responsibility for their contributions to global warming. As concerned students, faculty, alumni, political leaders, civic groups, and community members, we ask that you investigate this conduct and use your enforcement powers to bring the Corporation's investment practices into compliance with its fiduciary obligations.

Massachusetts law provides rules that charitable managers and investors must follow in managing institutional funds. As stewards of the MIT endowment, the Corporation is required to act in good faith and with loyalty, taking care that its investments further the purposes of the Institute. The Corporation may not seek profit at any cost: the privileges that MIT enjoys as a non-profit institution come with the responsibility to ensure that its resources are put to socially beneficial ends. By investing an estimated 274 million dollars in fossil fuel stocks,[3] the Corporation is in violation of these duties to MIT and the public.

The values that should guide the Corporation's investments are clear. According to the MIT charter, the Institute was established "for the purpose of instituting and maintaining a society of arts, a museum of arts, and a school of industrial science, and aiding generally, by suitable means, the advancement, development and practical application of science in connection with arts, agriculture, manufactures, and commerce."[4] The Corporation recognizes that

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[1] Policies and Procedures: 1.1: Mission and Objectives, MIT Corporation (last visited Feb. 3, 2022).
[2] About MIT, Massachusetts Institute of Technology (last visited Feb. 3, 2022).
[3] This figure is only a very rough, conservative estimate. *See infra* at __. [end of Part I]
[4] Charter of the Massachusetts Institute of Technology (Comprised of the Acts and Resolves of the General Court of the Commonwealth of Massachusetts concerning the Massachusetts Institute of Technology and related materials), Acts of 1861, Chapter 183, § 1 (Jan. 2000).

"[d]ecarbonizing the world's economy in time to avoid the most damaging consequences" is urgently needed and that "MIT is in an extraordinary position to make a difference."[5] And yet, despite the demonstrable financial and social benefits of institutional fossil fuel divestment, the Corporation continues to provide financial support for an industry whose business model inexorably leads to environmental destruction and social injustice.

It is now widely recognized that climate change is an existential threat to humanity and our environment. In addition to sea level rise, extreme weather events, and species die-off, climate change causes injuries to all members of society, and particularly to the most vulnerable. Pollution from the combustion of fossil fuels results in an estimated 10,000 premature deaths daily. Communities of color disproportionately suffer pollution and health burdens from fossil fuel extraction and combustion. Low-income people bear the brunt of climate-based economic dislocation, as illustrated by the plight of climate migrants and refugees already forced from their homes by drought, flooding, and social conflict. Indigenous communities are regularly invaded and harmed by the spread of fossil fuel infrastructure. And, as a result of the economic precarity and increased burden of care work that results from climate disruptions, women suffer more serious detriments.

The need to refrain from promoting such outcomes is obvious for any institution that calls itself a charity. Yet the Corporation has repeatedly refused to apply MIT's values to its investment activity. From managers of an institution of higher education, this conduct is especially galling. Fossil fuel companies have long engaged in a well-documented campaign to undermine climate science and distort public debate about how to deal with the climate crisis. The industry's spread of scientific misinformation and funding of questionable research undermines the work of MIT faculty and students who are designing solutions for a sustainable future. Likewise, the flow of fossil fuel money to politicians and think tanks has diverted or delayed serious government action to address the climate crisis, placing a special burden on young people whose futures will be most impacted by these investments. Even as the MIT community grapples with the reality that "[h]uman actions have resulted in a climate crisis that threatens the systems that support life for all species,"[6] the Corporation channels funds to an industry committed to winning short-term profits at the expense of the public good.

A similar inversion of values underlies the Corporation's funding of climate degradation despite its duty to protect MIT's physical property. As documented in the City of Cambridge Climate Change Vulnerability Assessment and the MIT Flood Vulnerability Study, sea level rise, flooding, higher temperatures, hurricanes, extreme rainfall, and other sources of disruption are likely to pose serious threats to MIT land, buildings, and operations in the coming decades. Administrators may be forced to retrofit facilities and manage infrastructure disruptions. Instead of facilitating such injuries, the Corporation should be doing everything in its power to prevent them.

The Corporation is bound by an additional legal duty: the requirement to manage MIT's assets with prudence. Prudent investment practice cannot be squared with the ownership of fossil

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[5] Fast Forward: MIT's Climate Action Plan for the Decade, MIT Climate Portal, Massachusetts Institute of Technology (May 2021).

[6] *Id.*

fuel assets. Investment in the oil, gas, and coal sectors has become excessively risky thanks to increased government regulation and the fossil fuel industry's own failure to diversify its operations and avoid capital-intensive extraction. Fossil fuel stocks have performed significantly worse than market averages in recent years. The domestic coal sector has nearly collapsed, and natural gas likewise stands to lose much of its value as cheaper, more sustainable energy sources become more readily available. For any prudent investor, these signs clearly indicate that continued investment in fossil fuels is a losing proposition.

Exacerbating the industry's poor financial performance is a well-documented pattern of alleged fraud. A number of leading fossil fuel companies have allegedly misled investors by concealing the anticipated impact of climate change and energy regulation on the value of assets such as untapped oil reserves. Despite its legal duty to exercise care and prudence in avoiding dangerous securities, however, the Corporation continues to invest in the fossil fuel sector.

The Corporation cannot plead ignorance of its duty to divest. For years, MIT students and faculty have pushed for investment practices that align with the Institute's mission. This pressure was instrumental in the Corporation's decision in 2007, during the violence in Darfur, to withdraw investments from companies doing business with the Sudanese government: an acknowledgment that its investment activity must comport with the University's missions and values. In recent years, the MIT student body has expressed overwhelming support for fossil fuel divestment, and MIT Divest's petition calling for fossil fuel divestment has received nearly 1,300 signatures from the MIT community. Repeated rallies, reports, and requests for negotiation have alerted the Corporation to its fiduciary responsibility.

It is too late for the Corporation to deny the relation between its investments and climate change. Its obligations under Massachusetts law and its own governing documents are clear, and fossil fuel investment is incompatible with those obligations.

We have included below a fuller description of the Corporation's violations, along with documents and reports supporting the claims made in this complaint. Under the statutes governing charitable corporations, your office may investigate violations of Massachusetts's charitable contribution laws. We would appreciate the opportunity to have members of our group meet with your staff to discuss legal avenues to address this matter.

Sincerely,

Concerned students, faculty, alumni, financial and political leaders, scientists, civic groups, and community members (listed on the pages that follow):

MIT Divest

For individual signatories, affiliations are for identification purposes only.

Elected Officials
Tania Fernandes Anderson, *Boston City Councilor District 7*
Ricardo Arroyo, *Boston City Councilor District 5*
Burhan Azeem *B.S. MIT '19, Cambridge City Councilor*
Dennis Carlone, *City Councilor, Cambridge*
Mike Connolly, Massachusetts State Representative
Jesse Clingan, *Somerville City Councilor, Ward 4*
Ben Ewen-Campen, *Somerville City Councilor*
Julia Mejia, *Boston City Councilor At-Large*
Councilor Judy Pineda Neufeld, *Ward 7, City of Somerville*
Patricia Nolan, *City Councilor, Cambridge*
Councilor Ruthzee Louijeune, *At-Large, City of Boston*
JT Scott, *Somerville Ward 2 City Councilor*
Sumbul Siddiqui, *Mayor of Cambridge*
Kristen Strezo, *City Councilor at-Large, Somerville MA*
Erika Uyterhoeven, *State Representative of the 27th Middlesex District*
Jake Wilson, *City Councilor-At-Large, Somerville*
Quinton Zondervan, *MIT EECS SM '95, City Councilor, Cambridge*

Climate Science and Policy Community
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Dr. Alyssa Battistoni, *Assistant Professor of Political Science, Barnard College*
Dr. Jason Box, *Professor in Glaciology at the Geological Survey of Denmark and Greenland*
Dr. Robert Brulle, *Visiting Professor of Environment and Society, Brown University*
Dr. Holly Jean Buck, *Assistant Professor of Environment & Sustainability, University of Buffalo College of Arts and Sciences*
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Dr. Noam Chomsky, *Institute Professor Emeritus, Massachusetts Institute of Technology; Laureate Professor, University of Arizona*
Dr. Daniel Aldana Cohen, *Assistant Professor of Sociology and Director, Socio-Spatial Climate Collaborative, University of California, Berkeley*
Judith Enck, *former Regional Administrator, US Environmental Protection Agency; Senior Fellow and Visiting Faculty Member, Bennington College*
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Dr. Peter H. Gleick, *Member US National Academy of Sciences, MacArthur Fellow*
Dr. Jessica F. Green, *Associate Professor, Political Science & School of the Environment, University of Toronto*
Dr. Jade d'Alpoim Guedes, *Associate Professor in the Department of Anthropology and the Scripps*

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Organizations
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Center for Biological Diversity
DivestEd
Divest Princeton
Dores Divest, Vanderbilt University
Fossil Fuel Divest Harvard
Greater Boston Physicians for Social Responsibility
Interfaith Power and Light
MIT Divest
Mothers Out Front
Yale Endowment Justice Coalition
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Prepared with assistance from attorneys at Climate Defense Project.

cc:

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SUPPORTING DOCUMENTATION

Table of Contents

I. The MIT Corporation's violation of Massachusetts law

The Corporation of the Massachusetts Institute of Technology ("the MIT Corporation") is a charitable corporation organized under Massachusetts General Law Chapter 180, section four. Its charter was granted by the General Court of the Commonwealth of Massachusetts in 1861 "for the purpose of instituting and maintaining a society of arts, a museum of arts, and a school of industrial science, and aiding generally, by suitable means, the advancement, development and practical application of science in connection with arts, agriculture, manufactures, and commerce."[7] Subsequent Acts authorized the MIT Corporation to "hold real and personal estate to any amount, such estate and the income therefrom to be devoted exclusively to the purposes and objects set forth in its act of incorporation and all acts in addition thereto or in amendment thereof"[8] and "to receive real and personal property by gift, devise or bequest."[9]

The MIT Corporation, in the words of its webpage, "holds a public trust: to see that the Institute adheres to the purposes for which it was chartered and that its integrity and financial resources are preserved for future generations as well as for current purposes."[10] According to the Corporation's bylaws, "[t]he members of the Corporation constitute the government of MIT. As such, they hold a fiduciary duty to govern MIT, to oversee the stewardship of MIT's assets for MIT's present and perpetual well-being and stability, and to ensure that MIT adheres to the purposes for which it was established. The Corporation also has broad responsibility for the generation of new funds and assets."[11]

The MIT Corporation is empowered to establish and oversee the MIT Investment Management Company (MITIMCo),[12] whose mission is to "deliver outstanding long-term investment returns for MIT."[13]

- Continued investment in fossil fuels by the MIT Corporation ***violates the fiduciary duties spelled out in the Massachusetts Uniform Prudent Management of Institutional Funds Act (UPMIFA)*** and in Massachusetts common law.
    - UPMIFA states that, "[s]ubject to the intent of a donor expressed in a gift instrument, an institution, in managing and investing an institutional fund, shall consider the charitable purposes of the institution and the purposes of the institutional fund."[14] The model UPMIFA drafting committee describes consideration of "charitable purposes" as a "fundamental duty,"[15] and this requirement distinguishes charitable investors like the MIT Corporation from other entities such as pension funds.

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[7] Charter of the Massachusetts Institute of Technology (Comprised of the Acts and Resolves of the General Court of the Commonwealth of Massachusetts concerning the Massachusetts Institute of Technology and related materials), Acts of 1861, Chapter 183, § 1 (Jan. 2000).
[8] *Id.*, Acts of 1905, chapter 412, §1.
[9] *Id.*, Acts of 1912, chapter 681, § 1.
[10] About the Corporation, MIT Corporation (last visited Feb. 3, 2022).
[11] Bylaws of MIT, § 1.1 (amended as of Mar. 5, 2021).
[12] *Id.* at § 16.1.
[13] MITIMCo (last visited Feb. 3, 2022).
[14] M.G.L. c. 180A § 2(a).
[15] National Conference of Commissioners on Uniform State Laws at 15, Uniform Prudent Management of Institutional Funds Act, with Prefatory Notes and Comments (2006).

- ○ UPMIFA further requires that, "[i]n addition to complying with the duty of loyalty imposed by law other than this chapter, each person responsible for managing and investing an institutional fund shall manage and invest the fund in good faith and with the care that an ordinarily prudent person in a like position would exercise under similar circumstances."[16]
- ○ UPMIFA lists several factors that must be considered in managing and investing an institutional fund, including: "general economic conditions . . . the role that each investment or course of action plays within the overall investment portfolio of the fund . . . the expected total return from income and the appreciation of investments . . . [and] an asset's special relationship or special value, if any, to the charitable purposes of the institution."[17]
- ○ The Supreme Judicial Court has written that "[t]hose entrusted with the management of funds dedicated to charitable purposes and donated out of a sense of social or moral responsibility owe an especially high degree of accountability to the individual donors as well as to the community" (noting that the law requires "heightened scrutiny of the management of nonprofit corporations").[18]
- ○ Although the directors of charitable institutions may delegate investment authority to an external agent,[19] such delegation does not suspend the duty of each director to act "in good faith and in a manner he reasonably believes to be in the best interests of the corporation, and with such care as an ordinarily prudent person in a like position with respect to a similar corporation organized under this chapter would use under similar circumstances."[20] When reliance upon the advice of an external agent produces results adverse to the mission of the institution, a director "shall not be considered to be acting in good faith if he has knowledge concerning the matter in question that would cause such reliance to be unwarranted."[21]

- The MIT Corporation has ***failed to consider the charitable purposes of the institution and the purposes of the institutional fund*** by financially supporting the degradation of the climate, widespread damage to ecological and human health, and massive injuries to environmental and social equity. The duty to consider the charitable purposes for which MIT was established distinguishes the MIT Corporation from other investors, imposing a special legal responsibility to screen assets for their possible interference with the university's goals. Yet the outcomes of the MIT Corporation's fossil fuel investments are directly contrary to MIT's mission to "advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the twenty-first century"[22] and its acknowledged "greater responsibility – as professionals, citizens, community members, and consumers – to act to reverse [climate change's] course."[23] The well-known scientific misinformation campaigns of the fossil fuel industry likewise contravene MIT's mission to "the advancement, development, and

[16] M.G.L. c. 180A § 2(b).
[17] M.G.L. c. 180A § 2(e)(2).
[18] Boston Athletic Assn. v. International Marathons, Inc., 392 Mass 356, 366 and 366, n. 12 (1984).
[19] M.G.L. c. 180A § 4.
[20] M.G.L. c. 180 § 6C.
[21] *Id.*
[22] Policies and Procedures: 1.1: Mission and Objectives, MIT Corporation (April 19, 2007).
[23] What Can Be Done About Climate Change, MIT Climate Portal (last visited Feb. 3, 2022).

practical application of science"[24] and "generating, disseminating, and preserving knowledge, and to working with others to bring this knowledge to bear on the world's great challenges."[25] As such, continued investment in fossil fuel holdings ***violates the MIT Corporation's duty to consider an asset's special relationship or special value, if any, to the charitable purposes of the institution.***

- The MIT Corporation has ***violated its duty of loyalty*** to the MIT community by funding activity that directly imperils the lives and prospects of young people and that poses a physical threat to MIT property, thus failing to act in the best interests of the institution. Members of the MIT Corporation have also violated their duty of loyalty by indulging conflicts of interest with the fossil fuel industry, maintaining personal, professional, and financial ties to oil, gas, and coal companies even as these companies harm MIT .
- The MIT Corporation has ***violated its duty to act in good faith*** by refusing to abide by their previous commitments to socially responsible investing; by ignoring the warnings of students, faculty, alumni, and the Attorney General that investments in fossil fuel companies are immoral, financially risky, and based on fraudulent information; and by spurning efforts by campus groups to push the university's investment practices toward a more consistent and sustainable approach.
- The MIT Corporation has ***violated its duty of care*** by investing the university's endowment in financially risky fossil fuel stocks, which have underperformed for years and are currently at risk of a general collapse in value. This violation is exacerbated by the MIT Corporation's failure to follow the lead of peer institutions who, in a like position under similar circumstances, have recognized the prudence of divestment.
- Former Securities and Exchange commissioner Bevis Longstreth, whose scholarship on non-profit investment helped inform the drafting of the original UPMIFA, has called for the application of the prudence standard to the threats of climate change. As Longstreth writes, the risks posed by fossil fuel investments are so serious that institutional investors will be hard-pressed to justify continued holdings in the industry: "The prudence standard of the Act can easily support a decision not to continue to hold or invest in fossil fuel companies. The risks and rewards now offered by such securities are asymmetric, in the sense that the foreseeable rewards are not likely to be equal to the foreseeable risks. The risk that, at some unknown and unknowable, yet highly likely, point in the future, markets will begin to adjust the equity price of fossil fuel company securities downward to reflect the swiftly changing future prospects of those companies, is as serious as it is immense. Moreover, the possibility of that adjustment being a swift one is also a serious risk. A decision to linger in an investment with such an overhanging risk, and expect to time one's exit before the danger is recognized in the market, is a strategy hard to fit within the concept of prudence."[26]
- In a report analyzing fiduciary duties owed by public pension funds, the Center for International Environmental Law concludes that "climate change should be considered an independent risk variable when making investment decisions, and it will trigger the obligations of pension fund fiduciaries . . . If pension fund fiduciaries do not take the financial risks posed by climate change seriously, they may be subject to liability. A

[24] Charter of the Massachusetts Institute of Technology, Acts of 1861, Chapter 183, § 1 (last visited Feb. 15, 2022).
[25] Policies and Procedures: 1.1: Mission and Objectives, MIT Corporation (last visited Feb. 15, 2022).
[26] Bevis Longstreth, Outline of Possible Interpretative Release by States' Attorneys General Under The Uniform Prudent Management of Institutional Funds Act (Jan. 26, 2016).

failure to properly consider climate change as a risk factor could result in lawsuits under various theories of liability for breaches of fiduciary duties."[27]

  - The report identifies four categories of risk to the value of fossil fuel assets: 1) impact risk (the risk of loss due to the physical effects of global warming, such as sea level rise and wildfires); 2) carbon asset risk (the risk that fossil fuel reserves will never be exploited and remain unprofitable; 3) transition risk (the risk that regulation and the growth of renewable energy will render fossil fuel products too expensive for or unappealing to consumers); and 4) litigation risk (the risk of financial penalties from lawsuits and other legal actions, such as the Attorney General's action against ExxonMobil).
  - As a result of these risks, the report concludes that fossil fuel investments may violate the fiduciary duties of inquiry, monitoring, loyalty, diversification, impartiality, and acting with reasonable care. The report concludes that "[t]he cleanest and simplest way to avoid climate vulnerability in a portfolio is to divest or, at minimum, dramatically reduce exposure to fossil fuel and other highly climate-vulnerable holdings."[28]

- The public benefit purpose of non-profits like MIT distinguishes charitable corporations from private trusts and makes the fiduciary duties of loyalty and care more tailored and specific. As the Restatement of the Law for Charitable Nonprofit Organizations states: ". . . in the case of a private trust, property is devoted to the use of specified or described persons who are designated as beneficiaries of the trust, whereas in the case of a charitable trust, property is devoted to purposes the law deems appropriately beneficial to the public . . . unlike in the case of a private trust in which fiduciary duties are owed to the beneficiaries, *in the case of a charity, fiduciary duties are owed to the charity's purposes rather than to a specific person or persons* . . . the fiduciaries of a charity owe the duty of loyalty to the charity's purposes rather than the entity."[29]
- In the context of investment, the standard prudent investor rule carries the additional burden of considering charitable purposes. "[T]he test of prudence evaluates the care, diligence, and skill demonstrated by the actor considering the relevant circumstances, as well as whether the person acted in good faith . . . *In the case of charities, however, the most relevant circumstance is the purpose to which the funds must be devoted*."[30]
- MIT's fossil fuel holdings are conservatively estimated at 274 million dollars.[31]

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[27] Trillion Dollar Transformation, Center for International Environmental Law at 1-2 (Dec. 2016).
[28] *Id.* at 5-7, 12-17, 19.
[29] Restatement of the Law for Charitable Nonprofit Organizations, § 2.02, cmt. (2021) (emphasis added).
[30] Id. at § 2.04 ("Management, Investment, and Expenditure of a Charity's Assets), cmt. (emphasis added).
[31] MIT has never confirmed the value of its holdings in fossil fuel companies, so this figure is only a rough estimate. Publicly available data from other prominent research universities and peer schools suggest that MIT has hundreds of millions of dollars invested in the industry. Harvard, whose $53.2 billion endowment in FY 2021 was higher than MIT's $27.4 billion, disclosed in February 2021 that its investments in fossil fuels made up less than two percent of its total portfolio, down from eleven percent in 2008. Rutgers University, whose endowment of $1.6 billion as of March 2021 was much lower than MIT's, disclosed in its divestment announcement that it had "approximately five percent" of its portfolio invested in fossil fuels. Using a conservative estimate of one percent, MIT's fossil fuel holdings would be $274 million. The actual value may be much higher.

II. MIT's social and environmental commitments

In addition to their general duties to the public as managers of a charity, the MIT Corporation is legally bound to uphold the particular *charitable purposes* and values of MIT, which include commitments to social justice and environmental well-being. The MIT Corporation has clearly acknowledged in the past that this legal duty extends to the manner in which it invests the university's assets.

- The MIT Corporation's 1861 Charter commits the institution to "the purpose of instituting and maintaining a society of arts, a museum of arts, and a school of industrial, and aiding generally, by suitable means, the advancement, development, and practical application of science in connection with arts, agriculture, manufactures, and commerce."[32] The Corporation recognizes its duty to "to see that the Institute adheres to the purposes for which it was chartered and that its integrity and financial resources are preserved for future generations as well as for current purposes."[33]
- The MIT Corporation's mission is "advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the twenty-first century."[34] The Corporation's official Policies and Procedures supplement this mission with several recognized objectives, including:
    - ". . . generating, disseminating, and preserving knowledge, and to working with others to bring this knowledge to bear on the world's great challenges. MIT is dedicated to providing its students with an education that combines rigorous academic study and the excitement of discovery with the support and intellectual stimulation of a diverse campus community. We seek to develop in each member of the MIT community the ability and passion to work wisely, creatively, and effectively for the betterment of humankind;"
    - ". . . to provide a liberal as well as professional education so that each student acquires a respect for moral values, a sense of the duties of citizenship, and the basic human understanding and knowledge required for leadership; and thereby to send forth men and women of the highest professional competence, with the breadth of learning and of character to deal constructively with the issues and opportunities of our time;" and
    - ". . . an inherent obligation to serve its students, its alumni and alumnae, the professions, the world of scholarship, and society. As part of this obligation, the Institute seeks to serve the community and the nation directly through its faculty and through the use of its facilities and administrative resources whenever there is a compelling need to which it can respond without impairing its primary function."[35]
- The MIT Corporation has explicitly acknowledged its duty to lead in the effort against climate change.
    - The mission of the MIT Office of Sustainability is "to transform MIT into a powerful model—that generates just, equitable, and scalable solutions for

[32] Charter of the Massachusetts Institute of Technology, Acts of 1861, Chapter 183, § 1.
[33] About the Corporation, MIT Corporation (last visited Feb. 15, 2022).
[34] Policies and Procedures: 1.1: Mission and Objectives, MIT Corporation (last visited Feb. 15, 2022).
[35] *Id.*

responding to the unprecedented challenges of a changing planet" and to "[c]ontribute to the mission of MIT by serving our campus, community, and the world."[36]

  - MIT has acknowledged a special duty in fighting the climate crisis: "We, those who are affiliated with MIT and those who live in developed countries, are often among those whose activities have historically had a disproportionate impact on climate change. Therefore, we see that we have a greater responsibility – as professionals, citizens, community members, and consumers – to act to reverse its course."[37]
  - In announcing MIT's most recent climate action plan, MIT President Rafael Reif stated that "MIT is in an extraordinary position to make a difference — and to set a standard of climate leadership. With this plan, we commit to a coordinated set of leadership actions to spur innovation, accelerate action, and deliver practical impact . . . This plan aims to produce positive consequences for the whole human family – and we recognize that it has special significance for the generation that includes our students."[38]
    - This climate plan, Fast Forward, enjoins MIT to "[g]o as far as we can, as fast as we can, with the tools and methods we have now. These include science and technology, policy, markets, infrastructure, and levers for behavioral and cultural change."[39]
    - The plan's "fundamental purpose is to marshal all of MIT's capabilities: to make the greatest possible contribution to decarbonizing the global economy and its energy systems; to increase humanity's capabilities to adapt to the climate changes that will certainly occur; and to build greater resilience into all of our activities, infrastructure, and systems."[40]
    - The plan recognizes the disparate impact of climate change — effects caused by the fossil fuel companies in which MIT invests — and notes that "[a]s difficult as it will be to reach net-zero carbon emissions by mid-century, the world must meet this challenge, and it must do so fairly . . . Attending to these issues of fairness and justice is both morally and politically necessary; the world will not solve the climate problem without solving the intertwined problems of equity and economic transition."[41]
- The MIT Corporation recognizes its duty to align these institutional values with MIT's financial holdings. Describing its approach to environmental, social, and governance [ESG] investing, MITIMCo states that "[b]ecause investment returns accrue to the sole benefit of MIT's mission . . . [i]n our search for high returns, we restrict ourselves to investment choices that comport with MIT's values."[42]
- The MIT Corporation has recognized that divestment is at times necessary to satisfy its legal obligation to invest in ways consistent with its charitable purposes. In 2007, in

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[36] About Us, MIT Office of Sustainability (last visited Feb. 15, 2022).
[37] What Can Be Done About Climate Change, MIT Climate Portal (last visited Feb. 15, 2022)..
[38] Fast Forward: MIT's Climate Action Plan for the Decade, MIT Climate Portal (May 2021).
[39] *Id.*
[40] *Id.*
[41] *Id.*
[42] MIT's Environmental, Social, and Governance (ESG) Investment Framework, MITIMCo (last visited Feb. 15, 2022).

response to violence in Darfur, the MIT Corporation divested from certain companies doing business with the Sudanese government. In a statement, the Executive Committee declared that "MIT will not invest in a company whose actions or expressed attitudes are abhorrent to MIT," and would act to "exclude securities that would violate MIT's investment principles" from their portfolios.[43]

III. The scientific reality and risks of climate change

The current and future effects of climate change jeopardize the physical integrity of MITs campus and the safety of its students, faculty, and staff, undermining the MIT Corporation's *charitable purposes.* By investing in companies disproportionately responsible for the climate crisis, the MIT Corporation exposes the MIT community and society at large to severe injury, thus failing to act in the best interests of the institution and violating its *duty of loyalty.*

- Statistically significant, historically unprecedented, and potentially irreversible changes are taking place in the Earth's oceans, atmosphere, and biospheres. These changes are collectively known as climate change. Such changes are "unequivocally" the result of human activities — primarily carbon dioxide emissions resulting from extraction and combustion of fossil fuels including but not limited to coal, oil, and fracked gas — according to the Sixth Assessment Report Summary for Policymakers by the Intergovernmental Panel on Climate Change (IPCC), the leading global authority responsible for synthesizing and producing much of the scientific research on climate change across the globe.[44]
- A small number of fossil fuel producers have been disproportionately responsible for greenhouse gas emissions since the Industrial Revolution: twenty companies account for nearly thirty percent of all emissions between 1751 and 2010.[45] A 2017 report by the Carbon Disclosure Project found that seventy-one percent of all global greenhouse gas emissions since 1988 "can be traced to just 100 fossil fuel producers."[46]
- There is a near-linear relationship between the cumulative amount of carbon dioxide emitted and the amount of global warming it causes.[47] Every one-half degree Celsius of further global warming results in discernible increases in intensity and frequency of temperature extremes, heavy precipitation and agricultural, hydrological and ecological droughts in some regions.[48]
- The Fourth National Climate Assessment, released in 2018 by thirteen federal agencies comprising the U.S. Global Change Research Program (USGCRP), noted that "[t]he impacts of climate change are already being felt in communities across the country. More

[43] MIT rejects abhorrent acts in Darfur, will divest as necessary, MIT News (May 14, 2007).
[44] *See* "Summary for Policymakers" at 7, in Climate Change 2021: The Physical Science Basis, Working Group I Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (Aug. 2021).
[45] Richard Heede, Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010, 122 Climatic Change 229, 234 (2014). These companies include Chevron, ExxonMobil, BP, Shell, ConocoPhillips, and Peabody. *Id.* at 237.
[46] New report shows just 100 companies are source of over 70% of emissions, Carbon Disclosure Project (July 2017).
[47] IPCC, Summary for Policymakers, *supra* at note 44, at 37.
[48] *Id.* at 19.

frequent and intense extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems, and social systems that provide essential benefits to communities. Future climate change is expected to further disrupt many areas of life, exacerbating existing challenges to prosperity posed by aging and deteriorating infrastructure, stressed ecosystems, and economic inequality."[49] The USGRCP report concluded that, as a result of climate change, "annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century — more than the current gross domestic product (GDP) of many U.S. states."[50]

- The global mean water level in the ocean rose by 0.14 inches (3.6 millimeters) per year from 2006–2015, which was 2.5 times the average rate of 0.06 inches (1.4 millimeters) per year throughout most of the twentieth century. By the end of the century, global mean sea level is likely to rise at least one foot (0.3 meters) above 2000 levels, even if greenhouse gas emissions follow a relatively low pathway in coming decades.[51]
- According to the Environmental Protection Agency, climate change effects in Massachusetts will include: sea level rise; increased precipitation, especially from extreme weather events; erosion of wetlands; increased temperatures; disruptions in ecosystems and wildlife populations; and increased incidence of respiratory diseases such as asthma.[52]
- Climate change will continue to cause severe problems in Boston and Cambridge, where MIT is located, with more severe impacts expected under the high-emissions scenarios that will result from the planned business activities of fossil fuel companies in which the MITCorporation invests. While many projections of harm extend only to 2100, MIT, as an institution founded over 160 years ago, must consider the dramatic and unavoidable climate harms that will extend beyond this date.
    - As a result of climate change, the Boston area is expected to experience dramatic increases in sea level rise, coastal storms, extreme precipitation events, and extreme heat over the next century.[53]
    - Over the past century, sea level rise in Boston has averaged 0.11 inches per year. By 2100, the sea level is expected to be 2.5 to 7.4 feet higher than in 2000, with the rate of rise strongly conditioned by emissions of carbon dioxide.[54]
    - According to the City of Cambridge Climate Change Vulnerability Assessment, climate change presents various challenges to human and environmental health whose severity will increase over the course of the coming century.
        - The Assessment notes that "[h]eat stress on human health is very likely to become much more severe. By 2030, annual days over ninety degrees Fahrenheit may triple. By 2070, Cambridge may experience nearly three months over ninety degrees Fahrenheit, compared with less than two weeks in the present day. The heat index, which represents the 'feels like'

[49] Fourth National Climate Assessment, Volume II at 25, U.S. Global Change Research Program (Mar. 2021).
[50] *Id.* at 26.
[51] Rebecca Lindsey, Climate Change: Global Sea Level, Climate.gov (Jan. 25, 2021).
[52] What Climate Change Means for Massachusetts, Environmental Protection Agency (Aug. 2016).
[53] Boston Research Advisory Group, Climate Change and Sea Level Rise Projections for Boston, Climate Ready Boston (June 1, 2016).
[54] *Id.*

temperature for people, will also increase and exacerbate the likelihood of heat stress."[55]

    - The Assessment predicts that "[e]conomic losses from a flood event or an area-wide power loss would be significant. A citywide event shutting down Cambridge is estimated to cause at least forty-three million (in current dollars) in daily economic losses."[56]
    - Such flooding is extremely likely in the coming decades. Two dams that protect Cambridge, the Amelia Earhart Dam and the Charles River Dam, will both likely be surpassed by floodwaters by 2055. "By 2070," the Assessment concludes, "storm surge modeling shows that large swaths of the Alewife-Fresh Pond area could be subject to annual probabilities of flooding up to twenty percent or once every five years. The volume of flood water associated with a storm surge would be immense. Conventional flood management techniques, such as storage basins and tanks, would be insufficient to deal with the problem."[57]
  - John Borduc, the environmental planner for the City of Cambridge, has noted that dams on the Charles River are not adequately equipped to deal with the challenges of sea level rise and increased storm activity: "The dams start to become compromised probably around the 2045 to 2055 timeframe, where a one-percent annual probability event, like a big hurricane or a big Nor'easter, could send a storm surge past the dams . . . By 2070, with 3.4 feet of sea level rise, what would happen is that storm surges would go around the dams before they go over the top."[58]
  - The MIT Office of Sustainability acknowledges that climate change may cause MIT to face "potential impacts [including] flooding from more frequent and extreme rains, flooding from storm surges and rising sea-levels, [and] extreme heat events."[59] The Office particularly stresses the increased threat of flooding to the campus, noting that "recent disruptive weather events — both localized and regional — have helped to raise the awareness of and vulnerability to flooding in the region" and that "to build a climate resilient MIT, we seek to understand and prepare for the flood risk to campus as well as extreme heat events."
  - The MIT Flood Vulnerability Study, conducted in 2018 by the MIT Joint Program on the Science and Policy of Global Change and the MIT Office of Sustainability, concluded that "the MIT campus is vulnerable to four types of flooding risk in the present climate with greater flooding risk under future climate conditions."[60]
    - The study noted that "the existing capacity of the MIT campus stormwater pipe infrastructure and site flood retention function is limited in its ability

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[55] Climate Change Vulnerability Assessment, Part 1 at 6, City of Cambridge (Nov. 2015).
[56] *Id.* at 7.
[57] Climate Change Vulnerability Assessment, Part 2 at 5, City of Cambridge (Feb. 2017).
[58] A. Motoy Kuno-Lewis & Phelan Yu, Climate Change Comes to Cambridge, The Harvard Crimson (Dec. 14, 2016).
[59] Layers of Resiliency, MIT Office of Sustainability (last visited Feb. 5, 2022).
[60] Kenneth Strzepek, Charles Fant, Matthew Preston, Kerry Emanuel, & Brian Goldberg, MIT Climate Resilience Planning: Flood Vulnerability Study at 11, MIT Joint Program (Mar. 2018).

to absorb and convey stormwater from both current and future rain events."[61]

    - "Buildings located along the northern half of the mid-east zone of campus framed by Ames St, Main St, Vassar St and Mass Ave" were found to be at risk for flooding in both moderate-frequency rain events and low-frequency "extreme rainfall" events. Notably, "future 1% probability extreme rain events impacted by climate change" are predicted to cause "even greater flood water exposure."[62]

  - These estimates of risk to MIT's campus are likely conservative. Boston could face comparatively more sea level rise than the global average through the twenty-first century due to the physical and gravitational effects associated with ice sheet melt.[63]

IV. The societal effects of climate change and fossil fuel extraction

Mounting evidence demonstrates that fossil fuel investments create disproportionate burdens on people of color, Indigenous communities, and low-income communities. Fossil fuel investments also harm the public health and property of Massachusetts residents, including those in the MIT community, violating the MIT Corporation's duties to *consider the charitable purposes* of MIT and to act with *loyalty* toward its community and property.

- Climate change heavily impacts so-called frontline communities, including communities of color and Indigenous communities, with their disproportionate exposure to air pollution, sea level rise, drought, and other consequences of climate change.[64] In general, those who have contributed the least to the climate crisis by virtue of their economic position stand to suffer the most from dislocation and natural disasters caused by increased warming.
  - Climate change exacerbates racial inequality by focusing health and economic injuries on people of color, who tend to have fewer economic resources to adjust to rising temperature and tend to receive less government assistance to deal with emergencies.[65]
  - According to a study from the Program for Environmental and Regional Equity at the University of Southern California, racial minorities will disproportionately suffer from an inability to pay for basic necessities and from decreased job

[61] *Id.*
[62] *Id.*
[63] Carling C. Hay, Eric Morrow,, Robert E. Kopp, & Jerry X. Mitrovica, Probabilistic reanalysis of twentieth-century sea-level rise, Nature (Jan. 14, 2015) (see maps on pages 9 and 10).
[64] The Geography of Climate Justice, Mary Robinson Foundation (last visited Feb. 10, 2021).
[65] Steven Hiseh, People of Color Are Already Getting Hit the Hardest by Climate Change, The Nation *(*Apr. 22, 2014); Office of Health Equity's Climate Change and Health Equity Program, Racism Increases Vulnerability to Health Impacts of Climate Change, California Department of Public Health (Aug. 17, 2020).

    - prospects in sectors such as agriculture and tourism as the climate crisis accelerates.[66]
    - According to the United Nations, "[c]limate change exacerbates the difficulties already faced by Indigenous communities, including political and economic marginalization, loss of land and resources, human rights violations, discrimination and unemployment."[67] Indigenous communities are also vulnerable to climate change impacts because of the enduring legacy of colonialism, forced relocations, the loss of cultural practices, and other harms, which create health burdens.[68]
    - Throughout the world, migration due to climate change has increased in recent years and is anticipated to increase further as many areas of the globe become inhospitable to agriculture and human habitation, leading to political and social instability.[69]
- Fossil fuel emissions are directly responsible for nearly one-fifth of all deaths globally. Particulate matter spread by fossil fuel combustion killed eight million people in 2018, about eighteen percent of total deaths that year.[70]
- In September 2021, The Lancet published a Comment co-signed and co-published by the editors of more than 200 leading medical journals worldwide.[71] The authors noted that "[h]ealth institutions have already divested more than $42 billion of assets from fossil fuels" and urged others to join them, since "[t]he greatest threat to global public health is the continued failure of world leaders to keep the global temperature rise below 1.5°C and to restore nature."[72]
- Children bear especially heavy burdens from the impacts of climate change and fossil fuel extraction.

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[66] Rachel Morello Frosch, Manuel Pastor, Jim Sadd, & Seth Shonkoff, The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap at 5, University of Southern California Program on Environmental and Regional Equity (May 2009).
[67] United Nations Department of Economic and Social Affairs — Indigenous Peoples, Climate Change (last visited Oct. 5, 2021).
[68] Jantarasami, L.C., *et al.*, Chapter 15: Tribes and Indigenous Peoples at 582. In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II, U.S. Global Change Research Program (2018) ("A number of health risks are higher among Indigenous populations due in part to historic and contemporary social, political, and economic factors that can affect conditions of daily life and limit resources and opportunities for leading a healthy life. Many Indigenous peoples still experience historical trauma associated with colonization, removal from their homelands, and loss of their traditional ways of life, and this has been identified as a contributor to contemporary physical and mental health impacts. Other factors include institutional racism, living and working circumstances that increase exposure to health threats, and limited access to healthcare services. Though local trends may differ across the country, in general, Indigenous peoples have disproportionately higher rates of asthma, cardiovascular disease, Alzheimer's disease or dementia, diabetes, and obesity. These health disparities have direct linkages to increased vulnerability to climate change impacts, including changes in the pollen season and allergenicity, air quality, and extreme weather events. For example, diabetes prevalence within federally recognized tribes is about twice that of the general U.S. population. People with diabetes are more sensitive to extreme heat and air pollution, and physical health impacts can also influence mental health.").
[69] Michael Werz & Laura Conley, Climate Change, Migration, and Conflict: Addressing complex crisis scenarios in the 21st century, at 3-5, 12-14, Center for American Progress (Jan. 2012).
[70] Karn Vohra, Alina Vodonos, Joel Schwartz, Eloise A. Marais, Melissa P. Sulprizio, & Loretta Mickley, Global mortality from outdoor fine particle pollution generated by fossil fuel combustion, 195 Envt'l Res. 110754 (2021).
[71] Lukoye Atwoli, *et al.*, Call for emergency action to limit global temperature increases, restore biodiversity, and protect health, 398 (10304) The Lancet 939 (2021).
[72] *Id.*

    - According to UNICEF, one billion children live at extreme risk of climate and environmental hazards, shocks, and stresses.[73] The United States ranks among the countries in which children face at least five major climate and environmental shocks (extremely high category).[74]
    - Children are more vulnerable than adults to extreme weather. They are less able to regulate their body temperature during heat waves,[75] breathe at twice the adult rate,[76] and are at crucial stages of brain and organ development.[77] Exposure to toxins has more potential to harm their cognitive ability and lung capacity,[78] and they suffer these deficits their entire lives. Climate change-caused disasters, air pollution extremes, and environmental degradation also disrupt education, and excessive heat interferes with learning capacity.[79]
    - UNICEF concludes that "the climate crisis affects or will affect all children, everywhere, in often significant, life-changing ways, throughout their lives" and "undermines the effective enjoyment of the rights enshrined in the Convention on the Rights of the Child."[80]
- The Massachusetts Department of Public Health predicts that state residents will suffer increased exposure to Lyme disease, Salmonella, water-related infections, and mental health stresses as a result of rising global warming.[81]
- Massachusetts businesses and properties are already being impacted by climate change, particularly by flooding, and anticipated sea-level rise will require major changes to Boston-area building infrastructure.[82]
- Damage to state and public infrastructure, such as public transportation and electric utilities, is expected as a result of increased temperatures, affecting the areas where MIT owns property and causing the effects of climate change to be borne by the general public.[83]
- Burning fossil fuels has altered ocean chemistry, making it more acidic.[84] Acidification has caused serious economic harm to the global fishing industry and also threatens coral reefs and other marine ecosystems.[85] Massachusetts stands to be particularly impacted by these harms, with its economic reliance on the seafood industry.[86]

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[73] UNICEF, The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index (Aug. 2021).
[74] *Id.* at 80.
[75] *Id.* at 110.
[76] *Id*.
[77] *Id*. at 20.
[78] *Id*.
[79] *Id.* at 110. *See also* Joshua Goodman, Michael Hurwitz, Jisung Park, & Jonathan Smith, Heat and Learning, National Bureau of Economic Research (May 2018).
[80] *Id*.
[81] Massachusetts Department of Public Health, Climate and Health Profiles (Sept. 24, 2020).
[82] Kathryn Wright, Jeremy Koo, & Andy Belden, Enhancing Resilience in Boston: A Guide for Large Buildings and Institutions, A Better City (Feb. 2015).
[83] City of Newton Climate Change Vulnerability Assessment and Action Plan, City of Newton (Dec. 2018).
[84] Scott Doney, Oceans of Acid: How Fossil Fuels Could Destroy Marine Ecosystems, Public Broadcasting Service (Feb. 12, 2014).
[85] *Id.*
[86] *See* Building the Massachusetts Seafood System at 5, Urban Harbors Institute, University of Massachusetts Boston (Dec. 2017) (noting that, "in 2012, Massachusetts was ranked second in the nation for number of employees in the fishing industry, behind Alaska, and third highest in sales.").

- Plastic waste — a direct by-product of fossil fuel extraction, with ninety-eight percent of plastics made from fossil fuels — further damages marine ecosystems.[87] The United Nations Environment Programme estimates that damage to marine ecosystems from plastic waste causes thirteen billion dollars' worth of damage every year.[88] Fossil fuel companies rely on plastic production to shore up profits.[89]
- Climate change causes an increase in the frequency of pandemics such as COVID-19: according to the Intergovernmental Platform on Biodiversity and Ecosystem Services, climate change will "cause substantial future pandemic risks and other localized disease emergence."[90] A paper published in The New England Journal of Medicine concludes that the climate crisis exacerbates the effects of COVID-19, as high heat, wildfire smoke, and high pollen counts amplify underlying conditions such as pulmonary disease, and as emergency responses to events such as hurricanes and fires reduce the ability to mitigate COVID-19 spread. These effects are felt particularly by the most vulnerable communities.[91]

V. The failure of fossil fuel companies to address climate risks

The fossil fuel industry remains resolutely committed to a business model that produces and exacerbates climate change, and to the suppression of nonviolent protest. MIT's *charitable purposes* are directly contravened by investments that promote this activity.

- Fossil fuel companies knew about the connection between their products and climate change decades before the general public, "as early as the 1950s and no later than 1968."[92]
    - Coal industry publications suggested as early as 1966 that the combustion of fossil fuels could cause "vast changes in the climates of the earth."[93] By 1968, the American Petroleum Institute, an industry trade group, was familiar with a study concluding that the burning of fossil fuels was likely to create significant environmental consequences.[94]

[87] Marty Mulvihill, Gretta Goldenman, & Arlene Blum, The Proliferation of Plastics and Toxic Chemicals Must End, The New York Times (Aug. 27, 2021).
[88] UNEP, Plastic Waste Causes Financial Damage of US$13 Billion to Marine Ecosystems Each Year as Concern Grows over Microplastics (June 23, 2014).
[89] Mulvihill, *et al.*, *supra* at note 87.
[90] Intergovernmental Platform on Biodiversity and Ecosystem Services, IPBES Workshop on Biodiversity and Pandemics: Workshop Report (Oct. 29, 2020).
[91] Renee Salas, James M. Schultz, and Caren G. Solomon, The Climate Crisis and Covid-19 — A Major Threat to the Pandemic Response, New England Journal of Medicine (Sept. 10, 2020).
[92] Brief of Amici Curiae Robert Brulle, Center for Climate Integrity, Justin Farrell, Benjamin Franta, Stephan Lewandowsky, Naomi Oreskes, and Geoffrey Supran in Support of Appellees and Affirmance, County of San Mateo v. Chevron Corporation, et al., County of Imperial Beach v. Chevron Corporation, et al., County of Marin v. Chevron Corporation, et al., County of Santa Cruz, et al., v. Chevron Corporation, et al., Nos. 18-15499, 18-15502, 18-15503, 18-16376 at 2 (9th Cir. 2019).
[93] Elan Young, Exxon knew -- and so did coal, Grist (Nov. 29, 2019).
[94] Oliver Milman, Oil industry knew of 'serious' climate concerns more than 45 years ago, The Guardian (Apr. 13, 2016).

- As early as 1977, Exxon scientists had privately concluded that "there is general scientific agreement that the most likely manner in which [hu]mankind is influencing the global climate is through carbon dioxide release from the burning of fossil fuels."[95]
    - Shell internally reached similar conclusions by at least the 1980s,[96] as did Mobil (then separate from Exxon).[97] By the 1980s, major fossil fuel companies had "internally acknowledged that climate change was real, it was caused by fossil fuel consumption, and it would have significant impacts on the environment and human health."[98]
- A 2017 report by the Carbon Disclosure Project found that seventy-one percent of all global greenhouse gas emissions since 1988 "can be traced to just 100 fossil fuel producers."[99]
- No major fossil fuel company has established itself as a willing participant in the transition to renewable energy.
    - In 2018, all fossil fuel majors approved projects that are noncompliant with the Paris Agreement goals.[100] That same year, the fossil fuel industry as a whole spent only about one percent of capital expenditures on renewable energy initiatives.[101]
    - A study by the London School of Economics found that no fossil fuel major has carbon-reduction plans that are Paris-compliant as of October 2020.[102] A September 2020 report by climate research group Oil Change International concluded that "[n]one of the evaluated oil majors' climate strategies, plans, and pledges come close to alignment with the Paris Agreement."[103]
- Fossil fuel companies continue to bet on long-term fossil fuel reliance.
    - Approximately half of the oil under BP's financial control is excluded from the company's decarbonization commitments.[104] As recently as November 2020, BP was buying up Canadian offshore oil parcels.[105]

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[95] Shannon Hall, Exxon Knew about Climate Change almost 40 years ago, Sci. Am. (Oct. 26, 2015).
[96] John H. Cushman Jr., Shell Knew Fossil Fuels Created Climate Change Risks Back in 1980s, Internal Documents Show, Inside Climate News (Apr. 5, 2018).
[97] Nicholas Kusnetz, Exxon Turns to Academia to Try to Discredit Harvard Research, Inside Climate News (Oct. 20, 2020).
[98] Brief of Amici Curiae Robert Brulle, *et al.* at 15, *supra* at note 92.
[99] New report shows just 100 companies are source of over 70% of emissions, Carbon Disclosure Project (Jul. 2017).
[100] Breaking the Habit - Why none of the large oil companies are "Paris-aligned", and what they need to do to get there, Carbon Tracker Initiative (Sept. 2019).
[101] Ron Bousso, Big Oil spent 1 percent on green energy in 2018, Reuters (Nov. 11, 2018).
[102] Anjli Raval, Big fossil fuel groups all failing climate goals, study shows, Financial Times (Oct. 6, 2020).
[103] Big Oil Reality Check: Assessing Oil and Gas Company Climate Plans, Oil Change International (Sept. 2020).
[104] Kelly Trout, The Loopholes Lurking in BP's New Climate Aims, Oil Change International (Mar. 11, 2020) ("BP's accounting of its production excludes any oil and gas that it produces but does not sell . . . . BP also excludes the production related to its 20% stake in Russia-based oil company Rosneft. We estimate that these accounting loopholes exclude from BP's net zero aim 46% of the total carbon that the company invested in extracting in 2018 . . . .").
[105] Julianne Geiger, From Billions To Millions: Canada's Offshore Oil Disappointment, OilPrice.com (Nov. 5, 2020).

- According to leaked internal documents, ExxonMobil is betting on increases in future carbon emissions.[106] The 2018 investment plan by ExxonMobil, one of the world's largest oil companies, predicted that the firm's expanded oil and gas production would release an additional twenty-one million tons of carbon dioxide annually by 2025. When added to the emissions released by "end uses" of the company's products, the total additional emissions of ExxonMobil's growth strategy would amount to around 100 million tons of carbon dioxide per year. This figure — which represents only the anticipated *expansion* of ExxonMobil's business — is roughly equivalent to the entire annual emissions of the country of Greece.[107]
- Several leading executives from Shell's renewable energy sectors recently quit in response to the company's lackluster efforts to decarbonize.[108] In December 2020, the company was actively engaged in litigation in the Netherlands in which it argued that emissions reduction commitments should not be legally binding.[109] In February 2021, the company revealed that it planned significant expansion of its gas export and production operations.[110]
- Chevron plans to increase spending on exploration and extraction in the Gulf of Mexico and the Lower 48 states in 2021.[111]
- The American Petroleum Institute recently asserted that the oil industry remains essential to the American economy and promised to resist President Biden's climate agenda.[112]

- Given the commitment of the fossil fuel industry to increased emissions, their business practices are incompatible with international targets to reduce greenhouse gas emissions. In a recent report, the International Energy Agency concluded that, in order to reach net zero emissions by 2050, "[t]here is no need for investment in new fossil fuel supply in our net zero pathway."[113]
- The fossil fuel sector continues to undermine climate-friendly policymaking.
    - In the three years following the Paris Agreement, the five largest public fossil fuel companies "invested over $1 [billion] of shareholder funds on misleading climate-related branding and lobbying."[114]

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[106] Kevin Crowley & Akshat Rathi, Exxon Carbon Emissions and Climate: Leaked Plans Reveal Rising CO2 Output, Bloomberg Green (Oct. 5, 2020); Emily Pontecorvo, Exxon's 'emission reduction plan' doesn't call for reducing Exxon's emissions, Grist (Dec. 15, 2020).
[107] Crowley & Rathi, *supra* at note 106. ExxonMobil's growth strategy has since changed in light of the Covid-19 pandemic.
[108] Anjli Raval & Leslie Hook, Shell Executives Quit Amid Discord Over Green Push, Financial Times (Dec. 8, 2020).
[109] Laurel Wamsey, Climate Case Against Shell Begins In The Netherlands, NPR (Dec. 1, 2020).
[110] Jillian Ambrose, Shell to expand gas business despite pledge to speed up net zero carbon drive, The Guardian (Feb. 11, 2021).
[111] Carolyn Davis, Chevron Sharply Reduces '21 Spending, but Permian, Gulf of Mexico Still Priorities - Natural Gas, Natural Gas Intelligence (Dec. 3, 2020).
[112] Nicholas Kusnetz, American Petroleum Institute Chief Promises to Fight Biden and the Democrats on Drilling, Tax Policy, Inside Climate News (Jan. 14, 2021).
[113] International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector at 21 (July 2021).
[114] Big Oil's Real Agenda on Climate Change, InfluenceMap (Mar. 2019).

- Each year, "the world's five largest publicly owned oil and gas companies spend approximately $200 million on lobbying designed to control, delay or block binding climate-motivated policy."[115]
- In 2018, the industry spent nearly 100 million dollars to stymie three proposed climate initiatives in Western states: a carbon emissions fee in Washington, restrictions on hydraulic fracturing in Colorado, and improved renewable energy standards in Arizona.[116]

- As a 2013 article by environmental sociologists explained: "[a]lthough many factors have contributed to the failure to enact strong international and national climate change policies… a powerful and sustained effort to deny the reality and significance of human-induced climate change has been a key factor."[117]
- Finally, the fossil fuel industry has engaged in a sustained effort to silence climate protesters and increase the severity of criminal punishment for their activities.
    - Since 2017, the industry has pushed for the passage of numerous "critical infrastructure" bills in U.S. state legislatures, thirteen of which have become law.[118] Many of the bills are similar or identical to model legislation authored by the corporate lobbying group American Legislative Exchange Council, and at least three were accompanied by political contributions from oil and gas companies to the bills' sponsors.[119]
        - The majority of enacted "critical infrastructure" laws contain provisions for organizational as well as individual criminal liability.[120]
        - A wide range of commentators have criticized "critical infrastructure" laws as unnecessary, vague, and overly punitive, and two of the laws face litigation challenging their constitutionality.[121]
    - The industry has also used lawsuits and subpoenas to accuse environmental advocates of defamation, racketeering, and other crimes, to label advocates as terrorists, and to chill advocacy targeting the industry's activities.[122]

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[115] Niall McCarthy, Oil and Gas Giants Spend Millions Lobbying to Block Climate Change Policies, Forbes (Mar. 25, 2019). BP spends approximately $53 million, Shell $49 million, and ExxonMobil $29 million per year. *Id.*
[116] Amy Harder, With deep pockets, energy industry notches big midterm wins, Axios (Nov. 7, 2018).
[117] Shaun W. Elsasser & Riley E. Dunlap, Leading Voices in the Conservative Choir: Conservative Columnists' Dismissal of Global Warming and Denigration of Climate Science, 57(6) Am. Behav. Scientist 754, 755 (2013).
[118] Institute for Policy Studies, Muzzling Dissent: How Corporate Influence Over Politics Has Fueled Anti-Protest Laws (Oct. 2020). *See* US Protest Law Tracker, International Center for Not-for-Profit Law (last visited Feb. 10, 2022).
[119] New Report Details Impact of Secretive American Legislative Exchange Council on Communities of Color, Center for Constitutional Rights (Dec. 23, 2019); Gabrielle Cochette & Basav Sen, Muzzling Dissent: How Corporate Influence Over Politics Has Fueled Anti-Protest Laws at 8-9 (Oct. 2020).
[120] Namely, those enacted in Kentucky, Mississippi, North Dakota, Ohio, Oklahoma, North Dakota, South Dakota, Tennessee, Texas, and West Virginia. US Protest Law Tracker, *supra* at note 118.
[121] Nicholas Kusnetz, More States Crack Down on Pipeline Protesters, Including Supporters Who Aren't Even on the Scene, Inside Climate News (Mar. 28, 2019); Susie Cagle, 'Protesters as terrorists': growing number of states turn anti-pipeline activism into a crime, The Guardian (Jul. 8, 2019).
[122] *See, e.g.*, Amal Ahmed, Energy Transfer Partners Files Lawsuit Against Greenpeace, Texas Monthly (Dec. 15, 2017); Exxon's Campaign of Intimidation against Climate Defenders Ushers in a New McCarthy Era, EarthRights International (Dec. 21, 2016); Green Group Holdings v. Schaeffer: Defense of Environmental Protesters Against Defamation Lawsuit, American Civil Liberties Union (Feb. 7, 2017). A national coalition of civil rights organizations called Protect the Protest tracks and opposes these tactics.

- There is mounting evidence of collusion between paramilitary firms hired by fossil fuel companies and local police departments in suppressing climate protest, and the use of heavy-handed tactics to suppress protest against fossil fuel infrastructure projects such as Energy Transfer Partners' Dakota Access pipeline.
    - In response to protests at the Standing Rock reservation in 2016 and 2017, Energy Transfer Partners hired TigerSwan, a military contractor with experience in Iraq and Afghanistan. In collaboration with local police, TigerSwan used legally questionable tactics against protesters, including digital surveillance.[123] Water cannons, tear gas, and rubber bullets were also used, resulting in hundreds of injuries.[124]
    - Energy Transfer Partners also retained TigerSwan to respond to vandalism targeting the Dakota Access pipeline in Iowa in 2017, using scare tactics, residential surveillance, and the hiring of locals to pursue suspects in a wide-ranging operation that swept in dozens of people.[125]
    - A multi-part reporting series by the investigative journalism publication The Intercept concluded that "[l]eaked documents and public records reveal a troubling fusion of private security, public law enforcement, and corporate money in the fight over the Dakota Access pipeline."[126]
    - In 2019, the Canadian pipeline company Enbridge used digital and aerial surveillance, along with embedded informants, against nonviolent protesters targeting the company's Line 3 pipeline in Minnesota, attempting to follow the same playbook used by law enforcement at Standing Rock.[127]
- The militarized response to climate protest by fossil fuel companies is at least a decade old. At a 2011 conference attended by members of the fossil fuel industry, an executive of Anadarko Petroleum recommended military-style tactics against citizen groups protesting hydraulic fracturing (also known as fracking): "I want you to download the US Army/Marine Corps counterinsurgency manual because we are dealing with an insurgency here."[128]

VI. The financial risk of fossil fuel investments

As an asset manager, the Corporation has violated its *duty of care* by failing to adequately consider the risk of continued investment in fossil fuels despite ample evidence of the industry's financial precarity. The untenable value thesis of fossil fuel investments should be especially concerning for investors at charitable institutions. As a public charity that "recognizes an

[123] Antonia Juhasz, Paramilitary security tracked and targeted DAPL opponents as 'jihadists,' docs show, Grist (Jun. 1, 2017).
[124] Alleen Brown, Medics Describe How Police Sprayed Standing Rock Demonstrators with Tear Gas and Water Cannons, The Intercept (Nov. 21, 2016).
[125] Alleen Brown, Will Parrish & Alice Speri, Tigerswan Responded to Pipeline Vandalism by Launching Multi-State Dragnet, The Intercept (Aug. 26, 2017).
[126] *Id.*
[127] Will Parrish & Alleen Brown, How Police Are Preparing for a Standoff Over Enbridge Line 3, The Intercept (Jan. 30, 2019).
[128] Bill McKibben, Shake Harvard Free of Oil Stock, The Boston Globe (Apr. 7, 2015).

inherent obligation to serve its students, its alumni and alumnae, the professions, the world of scholarship, and society,"[129] MIT is ostensibly committed to mitigating the worst effects of climate change. Such mitigation requires government regulation to reduce greenhouse gas emissions and the growth of the green technology sector — developments that pose an existential threat to the fossil fuel industry. Since the Corporation's fiduciary duties oblige it to promote the financial non-viability of the fossil fuel sector, continued investment in the sector is unreasonable on its face.

- Oil, gas, and coal companies face an extremely uncertain financial future due to mismanagement, the failure to prepare for a renewable energy economy, social pressures and unrest created by the unequally distributed health and economic burdens of fossil fuel products, and the pressures of COVID-19.
    - Oil and gas stocks have greatly underperformed other investments over the last ten years. While the S&P 500 has gained approximately 189 percent in value since 2011, the S&P Oil and Gas Exploration and Production Index has lost approximately fifty-six percent of its value and the S&P Oil and Gas Equipment Select Industry Index has lost approximately eighty-six percent of its value.[130] Even prior to the COVID-19 crisis, leading financial analyst Jim Cramer stated that fossil fuel stocks were "just done" as profitable investments, thanks to falling demand and the impact of divestment campaigns.[131]
    - From the fourth quarter of 2019 to August 2020, seven of the world's largest oil companies lost eighty-seven billion in value as a result of increased emissions regulations and collapsing demand during the COVID-19 pandemic.[132]
    - In January 2021, the S&P rating agency warned leading fossil fuel companies that they were at risk of imminent credit downgrades due to economic pressures resulting from the energy transition.[133]
- In August 2020, ExxonMobil was dropped from the Dow Jones stock index, a reflection of the company's rapidly declining business: Since 2008, its market capitalization has shrunk from 500 billion dollars to around 260 billion dollars.[134]
- In February 2021, ExxonMobil reported quarterly losses of 20.1 billion dollars.[135]
- Since 2010, the world's five oil "supermajors" — ExxonMobil, BP, Chevron, Shell, and Total SA — have spent far more on dividends and stock buybacks (556 billion dollars) than they have earned from business operations (340 billion dollars), indicating an unsustainable reliance on borrowing and asset sales to inflate their financial performance.[136]

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[129] 1.1 Mission and Objectives, Massachusetts Institute of Technology (last visited Feb. 15, 2022).
[130] Data from S&P Dow Jones Indices, S&P Global (Dec. 23, 2021).
[131] Kevin Stankiewicz, There's no more money to be made in oil and gas stocks, Jim Cramer says, CNBC (Feb. 3, 2020).
[132] Jillian Ambrose, Seven top oil firms downgrade $87bn in nine months, The Guardian (Aug. 14, 2020).
[133] Ben Butler, Rating agency S&P warns 13 oil and gas companies they risk downgrades as renewables pick up steam, The Guardian (Jan. 27, 2021).
[134] Avi Salzman, Why Exxon Is Being Dropped From the Dow, Barron's (Aug. 25, 2020).
[135] ExxonMobil reports results for fourth quarter 2020 and provides perspective on forward plans, ExxonMobil (Feb. 2, 2021).
[136] Clark Williams-Derry, Tom Sanzillo, & Kathy Hipple, In Q1, Four of Five Oil Majors Paid More Cash to Investors Than They Made From Operations, Institute for Energy Economics and Financial Analysis (May 2020).

- The coal industry, especially in the United States, is collapsing: the share of U.S. electricity produced by coal has declined from forty-five percent in 2008 to twenty-four percent in 2020, while eight coal companies, including the largest private coal firm, declared bankruptcy in 2019.[137]
- As outlined in "The Financial Case for Fossil Fuel Divestment" by the Sightline Institute and the Institute for Energy Economics and Financial Analysis, investment in the fossil fuel sector is now unacceptably risky thanks to price volatility, the rise of renewable energy sources, and government climate regulations. The traditional value thesis that justified investment in the sector — based on the assumptions that demand for oil, gas, and coal will continue to grow and that companies' extensive untapped reserves represent a sure source of future profits — is no longer tenable.[138]
    - There are various reasons for the fossil fuel industry's transformation from a secure source of investment returns to a dangerously speculative risk sector: "The world economy is shifting toward less energy-intensive models of growth, fracking has driven down commodity and energy costs and prices, and renewable energy and electric vehicles are gaining market share. Litigation on climate change and other environmental issues is expanding and campaigns in opposition to fossil fuels have matured. They are now a material risk to the fossil fuel sector and a force for the reallocation of capital to renewable energy and electric vehicles as a source of economic growth. The risks, taken cumulatively, suggest that the investment thesis advanced by the coal, oil and gas sector that worked for decades has lost its validity."[139]
    - The report notes that "[t]he financial case for fossil fuel divestment is strong. Over the past three and five years [prior to 2018], respectively, global stock indexes without fossil fuel holdings have outperformed otherwise identical indexes that include fossil fuel companies. Fossil fuel companies once led the economy and world stock markets. They now lag . . . Fossil fuel stocks, once prime blue-chip contributors to institutional funds, are now increasingly speculative. Revenues are volatile, growth opportunities are limited, and the outlook is decidedly negative."[140]
    - Comparing fossil fuel-free funds to traditional funds, the report concludes that divesting endowments of oil, gas, and coal holdings poses no risk to future returns: "Over the past five years, the MSCI-All Country Global Index without fossil fuels has outperformed the Index that includes fossil fuels."[141]
- The Carbon Tracker Initiative calculates the remaining amount of carbon dioxide that may be released into the atmosphere if international warming limits are to be met. As of November 2019, the world could continue to release carbon dioxide at current rates for only thirteen more years in order to have a fifty percent chance of meeting the 1.5 degree Celsius target. Under this limited "carbon budget," fossil fuel majors would have to reduce emissions from oil and gas production forty percent below 2019 levels by 2040.

[137] Fred Pearce, As Investors and Insurers Back Away, the Economics of Coal Turn Toxic, Yale Environment 360 (Mar. 10, 2020).
[138] Tom Sanzillo, Kathy Hipple, & Clark Williams-Derry, The Financial Case for Fossil Fuel Divestment, Sightline Institute and the Institute for Energy Economics and Financial Analysis (July 2018).
[139] *Id.* at 4.
[140] *Id.* at 1.
[141] *Id.* at 38.

Such reductions — which represent only a moderate chance at avoiding catastrophe — would render the majority of oil and gas reserves unexploitable and unprofitable.[142]

- According to a 2019 study by the Mercer consulting firm, investment portfolios will be greatly affected by future global warming. If warming is held to two degrees Celsius — the target set by the 2015 Paris Agreement and one which will still result in widespread harm — the global economy will suffer significant damage from climate change while also transitioning to a renewable energy base. In this scenario, according to the study, portfolio assets in the coal industry will suffer cumulative impacts of 58.9 percentage points by 2030 and 100 percentage points by 2050, while assets in oil and gas will suffer cumulative impacts of 42.1 and 95.1 percentage points, respectively.[143] Other studies have concluded that major energy companies who continue to rely on fossil fuels would lose between thirty and sixty percent of their value.[144]
- In its 2020 financial stability report, the Federal Reserve reported that "climate change, which increases the likelihood of dislocations and disruptions in the economy, is likely to increase financial shocks and financial system vulnerabilities that could further amplify these shocks."[145]
- A wave of litigation against companies responsible for climate change damages poses an additional risk to investment in the fossil fuel sector. A report from the law firm Clyde & Co LLP concludes that "[o]il majors are currently facing threatened or pending litigation on a number of fronts and across a number of jurisdictions. Their liability insurers and reinsurers will undoubtedly be watching these cases with keen interest . . . Companies in a number of sectors may find themselves exposed not just to damages claims for climate change, but also the cost of defending litigation, the reputational harm of being associated with such litigation and the consequential impacts on operations and value."[146]
- In a sign of the growing consensus that fund managers have a duty to assess climate risks in their portfolios, the multibillion-dollar Australian Retail Employees Superannuation Trust (REST) recently settled a beneficiary lawsuit that faulted the fund for failing to disclose how it would manage the risks posed by climate change and the plummeting value of fossil fuel stocks. REST acknowledged that "climate change is a material, direct and current financial risk" and committed to manage its investments in a way that would support net-zero greenhouse gas emissions by 2050 and the Paris Agreement goal of 1.5 degrees Celsius warming.[147]
- In a 2020 report, the Commodity Futures Trading Commission warned that "[c]limate change poses a major risk to the stability of the U.S. financial system and to its ability to sustain the American economy."[148]
- In an August 2020 open letter, over 100 leading economists, including Nobel Prize laureate Joseph Stiglitz and former Secretary of Labor Robert Reich, identified the

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[142] Carbon Tracker Initiative, Balancing the Budget: Why deflating the carbon bubble requires oil & gas companies to shrink (Nov. 1, 2019).
[143] Mercer LLC, Investing in a Time of Climate Change: The Sequel 2019 at 34 (2019).
[144] European Green Party, The Carbon Bubble: The financial risk of fossil fuels and need for divestment at 7 (2020).
[145] Board of Governors of the Federal Reserve System, Financial Stability Report at 58 (Nov. 2020).
[146] Clyde & Co LLP, Climate change: Liability risks at 37 (Mar. 2019).
[147] Michael Slezak, Rest super fund commits to net-zero emission investments after Brisbane man sues, ABC News (Nov. 2, 2020).
[148] Managing Climate Risk In the U.S. Financial System, Climate-Related Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures Trading Commission at i (Sept. 2020).

continued existence of the fossil fuel economy as "fundamentally incompatible" with long-term social and economic well-being and cited divestment as an essential tactic for bringing about systemic change: "When our largest banks, most influential investors and most prestigious universities place bets on the success of the fossil fuel industry, they provide it with the economic and social capital necessary to maintain the dangerous status quo. Instead, these institutions should divest from fossil fuel companies and end financing of their continued operations while reinvesting those resources in a just and stable future."

VII. The financial prudence of fossil fuel divestment

Despite the frequent claim that removing an asset class like fossil fuels from an endowment would violate the fiduciary duty to maintain a diverse portfolio, fossil fuel divestment poses no risk to a portfolio's diversity and flexibility, nor does it impact returns. The MIT Corporation has violated its *duty of care* and its *duty of loyalty* by failing to embrace a divestment strategy that would both improve the endowment's performance and cure the fiduciary violations created by fossil fuel investment.

- A 2018 London School of Economics analysis led by Jeremy Grantham, one of the world's leading asset managers, concluded that removing any one of ten major asset classes such as technology or utilities from a portfolio produced no discernible impact on overall long-term returns. The analysis states that the purported financial peril of fossil fuel divestment was "mythical," and that "[i]nvestors with long-term horizons should avoid oil . . . on investment grounds."[149]
- Divestment from fossil fuels does not threaten the profitability of invested funds and thus does not violate a fiduciary's duty to ensure the prudent management of an endowment. In recent years, investment portfolios lacking fossil fuel holdings have matched or outperformed funds still containing the risky investments.
    - The most comprehensive study to date of the endowment performance at universities that have divested from fossil fuels concludes that divestment does not have a negative effect on investment returns.[150] Other research indicates that fossil fuel divestment does not significantly limit portfolio diversification opportunities, allowing investors to satisfy their fiduciary duty to maintain balanced holdings even as they avoid the risks posed by stranded assets and the energy transition.[151]
    - A 2019 study of university endowments that adopt "socially responsible investment" [SRI] policies concludes that such policies benefit the universities. Surveying SRI endowment returns from 2010 to 2019, the study reports that "donations are 33.3% per year higher among universities that incorporate SRI policies into their endowments" and that "SRI policies predict greater university

[149] Jeremy Grantham, The mythical peril of divesting from fossil fuels, London School of Economics (June 13, 2018).
[150] Christopher Ryan and Christopher Mariscano, Examining the Impact of Divestment from Fossil Fuels on University Endowments, 17 NYU J. L. & Bus. 95 (2020).
[151] Auke Plantinga & Bert Scholtens, The financial impact of fossil fuel divestment, 21 Climate Policy 1 (2020).

donations, higher student enrollment, and more extensive risk management practices by the endowment fund."[152]

  - In 2020, the financial research agency Morningstar reported that European sustainable investment funds — defined as "funds that use environmental, social, and governance criteria as a key part of their security selection and portfolio-construction process, and/or indicate that they pursue a sustainability-related theme, and/or seek a measurable positive impact alongside financial return" — had outperformed traditional funds over the past ten years, generally posting higher returns and surviving longer than traditional funds.
  - A 2018 analysis concluded that the New York State Common Retirement Fund would have earned an additional 22.2 billion dollars (137 billion dollars versus 114.8 billion dollars) from 2008 to 2018 had it divested from fossil fuels.[153]

VIII. Industry fraud and the fiduciary duty to avoid fraudulent investments

Despite well-known facts regarding the fossil fuel industry's alleged efforts to defraud investors, the MIT Corporation has persisted in buying industry securities, violating its *duty of care*.

- Fossil fuel companies have allegedly long engaged in a fraudulent attempt to hide the financial risks associated with emissions regulations and future fossil fuel extraction. This alleged fraud has been a matter of public record since at least 2015[154] and a matter of common knowledge for investors in Massachusetts since at least 2019.
  - In 2019, the Massachusetts Attorney General sued ExxonMobil, one of the world's leading oil companies, for three alleged violations of the Massachusetts Consumer Protection Act.
    - The state's Second Amended Complaint alleges that "[f]or many years, Exxon Mobil Corporation . . . the world's largest publicly traded oil and gas company, systematically and intentionally has misled Massachusetts investors and consumers about climate change. In order to increase its short-term profits, stock price, and access to capital, ExxonMobil has been dishonest with investors about the material climate-driven risks to its business and with consumers about how its fossil fuel products cause climate change—all in violation of Massachusetts law."[155]
    - According to the Complaint, ExxonMobil scientists in the 1970s accurately predicted the rate of global warming that would be caused by fossil fuel use. The company was well aware of how its business activity would damage the planet; for example, a company scientist told management in 1981 that climate change will "produce effects which will

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[152] George O. Aragon, Yuxiang Jiang, Juha Joenväärä, and Cristian Ioan Tiu, Socially Responsible Investments: Costs and Benefits for University Endowment Funds at 5 (July 21, 2020).
[153] Toby A.A. Heaps, Divestment would have made NY pension fund $22B richer, Corporate Knights (Oct. 4, 2018).
[154] Neela Banerjee, Lisa Song, & David Hasemyer, Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago, Inside Climate News (Sept. 16, 2015).
[155] Second Amended Complaint, Massachusetts v. ExxonMobil, No. 1984-CV-03333-BLS1(Mass. Sup. Ct. June 5, 2020) at 1.

indeed be catastrophic" and that it would be necessary to sharply reduce fossil fuel use.[156]

    - Despite this knowledge, ExxonMobil — like many of its peers in the industry — persisted in a "highly misleading" campaign to spread doubt about climate science and to prevent measures that would decrease the use of fossil fuels. As late as 2015, ExxonMobil's CEO was publicly disputing the scientific consensus that rising atmospheric carbon dioxide levels produce catastrophic warming.[157]
    - The Attorney General concluded that ExxonMobil's value will fall precipitously in coming years, thanks in large part to an expected transition to renewable energy that will make the companies' oil and gas reserves valueless: "When those reserves cease to have future value, other things being equal, ExxonMobil securities are likely to decline in value as well, perhaps dramatically, much as the market value of coal companies has collapsed in recent years as the deployment of cleaner, more efficient fuel sources has reduced expected future coal demand."[158]
    - According to the Complaint, "[t]he systemic risk climate change poses to the world's financial markets is comparable to, and could well exceed, the impact of the 2008 global financial crisis . . . The risks of climate change and regulatory responses to it pose an existential threat to [the company's] business model and therefore to investments in ExxonMobil securities, including by Massachusetts investors."[159]
    - The Attorney General explicitly stated that investment in companies like ExxonMobil puts investors like the MIT Corporation in danger of serious financial damage: "ExxonMobil's omissions and misrepresentations put its Massachusetts investors at increased risk of losses in the future, as greater recognition of the physical and transition risks of climate change to ExxonMobil, other fossil fuel companies, and the global economy increasingly diminishes the market valuation of ExxonMobil securities, potentially under sudden, chaotic, and disorderly circumstances."[160]
  - In September 2020, the State of Connecticut sued ExxonMobil for violations of the state's Unfair Trade Practices Act, alleging that the company has for decades "misled and deceived Connecticut consumers about the negative effects of its business practices on the climate."[161]
    - The lawsuit alleges that, beginning in the 1980s, ExxonMobil defied its own scientists' warnings dating back to the 1950s and "began a systematic campaign of deception to undermine public acceptance of the scientific facts and methods relied upon by climate scientists who knew that anthropogenic (human-caused) climate change was real and dangerous to humanity."[162]

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[156] *Id.* at 5.
[157] *Id.* at 9, 50-51.
[158] *Id.* at 8.
[159] *Id.* at 65, 80-81.
[160] *Id.* at 138.
[161] Complaint, Connecticut v. ExxonMobil, No. HHDCV206132568S (Conn.. Super. Ct. Spe. 14, 2020) at 1.
[162] *Id.*

        - The complaint goes on to note that "ExxonMobil's strategy to create uncertainty about climate science successfully kept consumers purchasing ExxonMobil products by deceiving consumers about the serious harm caused by ExxonMobil's industry and business practices."[163]
    - Also in September 2020, Hoboken became the first New Jersey City to sue fossil fuel companies for climate change damages. Hoboken "seeks to recover the cumulative cost of hundreds of millions of dollars to compensate the city for past, current and future costs associated with climate change adaptation, remediation, and economic losses." Hoboken alleges violations of the New Jersey Consumer Fraud Act and claims for negligence and common law remedies "to prevent and abate hazards to public health, safety, welfare and the environment."[164]
    - In January 2021, a former senior accounting analyst for ExxonMobil alleged in a whistleblower complaint to the Securities and Exchange Commission that the company has repeatedly overstated the value of its U.S. oil and gas assets — which will likely prove unprofitable due to the collapse of the fracking boom — fraudulently inflating the company's worth to investors by as much as fifty-six billion dollars.[165]
    - In April 2021, neighboring New York City sued Exxon Mobil, Royal Dutch Shell, and the American Petroleum Institute (an industry trade association) for systematically and intentionally deceiving consumers.[166] A former senior accounting analyst for ExxonMobil has alleged in a whistleblower complaint to the Securities and Exchange Commission that the company has repeatedly overstated the value of its U.S. oil and gas assets — which will likely prove unprofitable due to the collapse of the fracking boom — fraudulently inflating the company's worth to investors by as much as fifty-six billion dollars.[167]
    - In June 2021, an Exxon lobbyist admitted that ExxonMobil was engaged in a concerted effort to block climate change and deceive the public.[168] This revelation led the House Oversight Committee to ask the chief executives of Exxon Mobil, Chevron, BP, and Shell, along with the American Petroleum Institute and the Chamber of Commerce, to appear at a hearing and provide emails and documents about whether the industry led an effort to mislead the public and prevent action to fight climate change.[169]
- Despite the revelation of this alleged fraudulent behavior, and in the face of existential threats to their business models, oil companies continue to refuse to provide investors with any assurances that they are preparing for the effects of

[163] *Id.* at 2.
[164] Hoboken becomes first NJ city to sue Big Oil companies, American Petroleum Institute for climate change damages, Hoboken City Hall (Sept. 2, 2020).
[165] Nick Cuningham, Exclusive: Whistleblower Accuses Exxon of 'Fraudulent' Behavior for Overvaluing Fracking Assets For Years, Desmog Blog (Feb. 2, 2021).
[166] New York City Sues ExxonMobil, Shell, BP, and The American Petroleum Institute for Systematically and Intentionally Deceiving New Yorkers, The Official Website of the City of New York (Apr. 22, 2021).
[167] Nick Cuningham, Exclusive: Whistleblower Accuses Exxon of 'Fraudulent' Behavior for Overvaluing Fracking Assets For Years, Desmog Blog (Feb. 2, 2021).
[168] Hiroko Tabuchi, In Video, Exxon Lobbyist Describes Efforts to Undercut Climate Action, The New York Times (June 30, 2021).
[169] Timothy Gardner, U.S. House panel to probe oil companies over climate disinformation, Reuters (Sept. 16, 2021).

climate change. ExxonMobil and Chevron, for example, have blocked shareholder proposals that ask the companies to describe how they will adjust their operations to satisfy the warming targets established under the Paris Agreement.[170]

IX. The fossil fuel industry's scientific misinformation campaigns and attacks on academia

Fossil fuel companies have engaged in decades-long efforts to obscure scientific reality and undermine academic research. These anti-academic activities have been undertaken in bad faith and cannot be attributed to intellectual disagreement. By funding this activity, the Corporation contravenes MIT's core *charitable purposes* as an educational institution and violates its *duty of loyalty*.

- Beginning in the 1980s, in response to mounting evidence of climate risks, fossil fuel companies halted their climate research and "began a campaign to discredit climate science and delay actions perceived as contrary to their business interests."[171] This campaign was multi-pronged, consisting of the development of internal policies to suppress the companies' own knowledge, public communications to sow doubt about the dangers of fossil fuels, and the funding of organizations and research to undermine climate science.[172]
    - In 2005, Chris Mooney, a Knight Science Journalism fellow at MIT, documented how ExxonMobil had spent more than eight million dollars on forty different organizations that challenged the scientific evidence of climate change within just a few years.[173]
    - In 2007 testimony to the U.S. House of Representatives Committee on Science and Technology, Dr. James McCarthy described a network of organizations funded by ExxonMobil whose goal was to "distort, manipulate and suppress climate science, so as to confuse the American public about the reality and urgency of the global warming problem, and thus forestall a strong policy response."[174]
    - Between 1998 and 2005, ExxonMobil alone spent nearly sixteen million dollars funding groups that promote climate denial, according to a report by the Union of Concerned Scientists, an MIT offshoot.[175]
    - Since 1997, Koch Industries, through its various foundations and institutes including the Koch Family Foundation, has donated more than 145 million dollars

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[170] Dana Drugman, Exxon, Chevron, Chase Reject Shareholder Requests to Address Climate Risk, The Climate Docket (Jan. 29, 2020).
[171] Brief of Amici Curiae Robert Brulle, Center for Climate Integrity, Justin Farrell, Benjamin Franta, Stephan Lewandowsky, Naomi Oreskes, and Geoffrey Supran in Support of Appellees and Affirmance at 17, County of San Mateo v. Chevron Corporation, et al., County of Imperial Beach v. Chevron Corporation, et al., County of Marin v. Chevron Corporation, et al., County of Santa Cruz, et al., v. Chevron Corporation, et al., Nos. 18-15499, 18-15502, 18-15503, 18-16376 (9th Cir. 2019).
[172] *See generally id.*
[173] Chris Mooney, Some Like It Hot, Mother Jones (May/June 2005).
[174] Second Amended Complaint, Massachusetts v. ExxonMobil, *supra* at note 155, at ¶195.
[175] Union of Concerned Scientists, Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco's Tactics to Manufacture Uncertainty on Climate Science at 5 (Jan. 2007).

from 1997 to 2018, financing ninety organizations that attack climate science and policy solutions.[176]

  - Over about the last three decades, "five major U.S. oil companies have spent a total of at least $3.6 [billion] on advertisements."[177] These ads, along with other public communications, have promoted narratives the companies know to be false: In the case of ExxonMobil, for example, between 1977 and 2014, only twelve percent of ads acknowledged that anthropogenic climate change is real, compared to eighty percent of internal documents.[178] ExxonMobil nonetheless boasts on its own website that the company has supported "four decades of climate science research," stating that such support includes "funding climate modeling at MIT."[179]

- These activities were summarized in an amicus brief by academics and researchers as part of the ongoing tort litigation by California counties against fossil fuel companies,[180] and by this office's complaint against ExxonMobil in its deceptive advertising litigation.[181]
- MIT has received in excess of 185 million dollars from alumni Charles and David Koch of Koch Industries.[182] The financial incentive for the Koch brothers' opposition to climate regulations was and is well known: Koch Industries, which deals in oil, gasoline, and other fossil fuels. The Koch brothers helped found and fund numerous think tanks and other organizations that have actively worked for decades to spread disinformation and block action on climate change. Among these organizations are the Cato Institute and the Reason Foundation, both of which were called out by U.S. Senators in 2016 for their actions against climate legislation.[183] A 2010 Greenpeace report revealed that Koch Industries had eclipsed ExxonMobil in funding climate change disinformation.[184] Nonetheless, David Koch was designated as a lifetime member of the MIT Corporation until his passing in 2019.[185]
- Academic research has confirmed that the fossil fuel industry's "major tactic was and continues to be manufacturing uncertainty . . . [and] constantly asserting that the evidence is not sufficient to warrant regulatory action. Historically these efforts focused on specific problems such as secondhand smoke, acid rain, and ozone depletion, but in the case of [climate change] they have ballooned into a full-scale assault on the multifaceted field of climate science, the IPCC, scientific organizations endorsing [climate change], and even individual scientists."[186]

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[176] Koch Industries: Secretly Funding the Climate Denial Machine, Greenpeace (last visited Jan. 31, 2022).
[177] Emily Holden, How the oil industry has spent billions to control the climate change conversation, The Guardian (Jan. 8, 2020).
[178] Geoffrey Supran & Naomi Oreskes, Assessing ExxonMobil's climate change communications (1977–2014), 12(8) Envtl. Res. Letters (Aug. 2017).
[179] ExxonMobil's four decades of climate science research, ExxonMobil (last visited Jan. 27, 2022).
[180] *See* Brief of Amici Curiae Robert Brulle, et al., *supra* at note 171.
[181] *See* Second Amended Complaint, Massachusetts v. ExxonMobil, *supra* at note 155, at Part IV.B.
[182] Evan Sparks, The Team Builder, Philanthropy (2012).
[183] Senators Call Out Web of Denial Blocking Action on Climate Change, Sheldon Whitehouse, United States Senator for Rhode Island (July 15, 2016).
[184] Koch Industries: Secretly Funding the Climate Denial Machine, Greenpeace USA (last visited Jan. 27, 2022).
[185] Former Corporation Members, The MIT Corporation (last visited Jan. 31, 2022).
[186] Riley E. Dunlap & Peter J. Jacques, Climate Change Denial Books and Conservative Think Tanks: Exploring the Connection, 57(6) Am. Behav. Scientist 699, 700 (2013) (internal citations omitted).

- Undermining the work of academics and scholars has been another key tactic of the fossil fuel industry, and MIT researchers have been among those targeted.
    - MIT Professor Judith Layzer has described the Global Climate Coalition as an "…amalgamation of fifty-four industry and trade association members representing [among others] oil and coal producers. In hopes of defusing public concern about global warming the GCC launched an attack on the scientific basis for the global warming hypothesis: coalition members financed the publication and distribution of books, pamphlets, and articles by a handful of skeptics who challenged the scientific understanding of the climate and the evidence for asserting that humans were having an impact on it."[187]
    - Following publication of his famous "hockey stick graph," climate scientist Michael E. Mann faced years of efforts to discredit him and his work, and "many [of these] attacks . . . trace directly to involvement by the fossil fuel industry."[188] One of the main perpetrators of such harassment was a Koch-funded think tank.[189]
    - In 2012, Kerry Emanuel, a current MIT professor of atmospheric science who has published research on the connections between climate change and tropical cyclone intensity, received emails containing threats to harm him and his family after his personal email was exposed by the website Climate Depot.[190] Climate Depot is a self-described "special project" of Committee for a Constructive Tomorrow, an organization that previously received over 500,000 dollars in funding from ExxonMobil and several other organizations with connections to various fossil companies as well as Charles Koch.[191]
    - ExxonMobil has repeatedly sought to portray the Intergovernmental Panel on Climate Change — a coordinating body of respected scientists and academics, including MIT scholars, who publish periodic reports on climate science to aid policymakers — as biased and untrustworthy.[192]
    - In 2014, Harvard professor Naomi Oreskes participated in a documentary film based on the 2010 book she authored with Erik Conway, *Merchants of Doubt*. Climate denialists associated with the fossil fuel industry coordinated an effort to file complaints with her employer and alma mater and discussed ways to block screenings of the film.[193]
    - In 2015, an industry-funded group sought to win access to the private correspondence of University of Arizona climate scientists in order to cast doubt on their work.[194]

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[187] Judith Layzer, *Deep freeze: How business has shaped the global warming debate in Congress*, In Business and Environmental Policy (Kraft, M. E. & Kamieniecki, S., eds., 2007).
[188] How the Fossil Fuel Industry Harassed Climate Scientist Michael Mann, Union of Concerned Scientists (Oct. 12, 2017).
[189] *See id.*
[190] James West, US climate scientis's wife suffers email 'frenzy of hate,' The Guardian (Jan. 13, 2012).
[191] Committee for a Constructive Tomorrow (CFACT), DeSmog (last visited Jan. 27, 2022).
[192] David Hasemyer & John H. Cushman, Jr., Exxon Sowed Doubt About Climate Science for Decades by Stressing Uncertainty, Inside Climate News (Oct. 22, 2015).
[193] Email from Marc Morano Regarding the New Warmist Film, UCSF Library Fossil Fuel Industry Documents (June 24, 2019).
[194] Michael Halpern, Arizona Superior Court Protects Academic Freedom in Climate Email Disclosure Case, Union of Concerned Scientists (Mar. 30, 2015).

    - In 2017, Geoffrey Supran, a Harvard researcher who formerly led Fossil Free MIT as a PhD student, and professor Naomi Oreskes published a peer-reviewed study analyzing ExxonMobil's climate communications.[195] Exxon's response included commissioning and paying for a (non-peer-reviewed) academic analysis that accused Supran and Oreskes of bias,[196] running a Twitter ad calling its conclusions "manufactured,"[197] urging the European Parliament to ignore the study's conclusions,[198] and suggesting on a website known to take editorial direction from Exxon[199] that the study was written for the purpose of "suppressing free speech."[200]
- The fossil fuel industry has also sought to legitimize its policy positions by funding research, programming, and infrastructural projects at MIT, calling into question the intellectual independence of those activities and the balance of perspectives within the academy.[201]
    - The MIT Energy Initiative, the Institute's "hub for energy research, education, and outreach,"[202] lists Exxon, Shell, Eni, Chevron, ConocoPhillips, and other fossil fuel giants as "founding members," "sustaining members," or "associate members" on its website.[203] The Initiative has funded over twenty-six million dollars' worth of energy research at MIT since 2008.[204]
    - The MIT Center for Energy and Environmental Policy Research (MIT CEEPR) states that its Associates are responsible for "providing both financial and intellectual support to CEEPR's research work."[205] Associates listed on CEEPR's website include ExxonMobil, ConocoPhillips, Duke Energy, Dominion Energy, TransCanada, Washington Gas, and other fossil fuel and pipeline companies.[206]
    - The MIT Energy and Climate Club, MIT's largest student club and the organization widely responsible for facilitating connections between the energy industry and MIT students, is sponsored by Shell.[207]
    - The MIT Joint Program on the Science and Policy of Global Change, a program responsible for communicating findings based on scientific research in conjunction with policy analyses, is sponsored by Chevron, ExxonMobil, Shell, Murphy Oil Corporation, and other fossil fuel companies.[208]

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195 Geoffrey Supran & Naomi Oreskes, Assessing ExxonMobil's climate change communications, *supra* at note 178.
196 Nicholas Kusnetz, Exxon Turns to Academia to Try to Discredit Harvard Research, Inside Climate News (Oct. 20, 2020).
197 Just today, @exxonmobil ran Twitter ads, Fossil Fuel Divest Harvard (June 16, 2020).
198 ExxonMobil refused to attend a hearing, Food & Water Action Europe (Mar. 21, 2019).
199 Hiroko Tabuchi, How One Firm Drove Influence Campaigns Nationwide for Big Oil, The New York Times (Nov. 11, 2020).
200 Spencer Walrath, Activists Admit Climate Campaign Is About Attacking Free Speech, Energy In Depth (Aug. 22, 2017).
201 These funding relationships are not unique to MIT. *See* Benjamin Franta & Geoffrey Supran, The fossil fuel industry's invisible colonization of academia, The Guardian (Mar. 13, 2017).
202 About the MIT Energy Initiative, MIT Energy Initiative (last visited Jan. 27, 2022).
203 Membership, MIT Energy Initiative (last visited Jan. 27, 2022).
204 Kelly Travers, MIT Energy Initiative awards seven Seed Fund grants for early-stage energy research, MIT Energy Initiative (Oct. 18, 2021).
205 Associates, MIT Center for Energy and Environmental Policy Research (last visited Jan. 27, 2022).
206 *See id.*
207 Sponsors, MIT Energy Club (last visited Jan. 27, 2022).
208 Our Sponsors, MIT Joint Program on the Science and Policy of Global Change (last visited Jan. 27, 2022).

- In August 2019, the administration announced plans to rename a prominent Earth, Atmospheric, and Planetary Sciences (EAPS) lecture hall "Shell Auditorium,"[209] after receiving approximately three million dollars from the oil giant to fund renovations.[210] The news prompted backlash from many students and faculty.[211] In November, members of the EAPS department hosted a teach-in focusing on greenwashing in response.[212] The administration eventually back-pedaled and announced a naming contest to be administered by the EAPS department.[213] The contest rules provided for "evaluation and final ranking" of submissions by a "panel of EAPS and Shell representatives."[214]

- According to Robert Brulle, a sociologist at Drexel University, "[T]he financial steering of intellectual inquiry is a big issue. . . . The academy is really dependent on external funding sources, and it drives a certain research agenda. I'm not saying that the people they fund are dishonest or illegitimate. But this has a systematic effect, in that it heightens certain voices and leaves others invisible, or reduces their staying power, within the academy. And so you end up with a biased system."[215]
- ExxonMobil, a sponsor of multiple programs and research centers at MIT, has sought to influence the outcome of ongoing litigation by funding academic research at a number of universities.
  - In 1989, the Exxon Valdez oil spill led to a 5.3-billion-dollar verdict against the oil giant by an Alaskan jury in *In re Exxon Valdez*. By the 1980s Exxon had embraced an aggressive form of philanthropy known as "venture philanthropy,"[216] and rather than simply appeal the award, the company undertook to fund academic research that might undermine the verdict. As one Exxon official opined, "With the judges, there's at least a reasonably good chance that they'll be able to see things as they ought to be . . . ."[217]
  - The upshot of the funded research was that juries' punitive damage awards in cases that involve "normative judgments" are "arbitrary," "unpredictable," "erratic," and "incoherent," and ought to be replaced with a schedule-based

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[209] A major expansion for the Green Building, MIT News (Aug. 22, 2019)
[210] Deidre Fernandes, At MIT, a new name (Shell Auditorium) for an old standby (54-100) fuels outrage, The Boston Globe (Nov. 24, 2019).
[211] *See id.*
[212] Kristina Chen, EAPS community gathers at teach-in to discuss Shell donations to Green Building, The Tech (Nov. 26, 2019).
[213] MIT Earth, Atmospheric and Planetary Sciences, 54-100 Naming Contest Guidelines and Rules | MIT Department of Earth, Atmospheric and Planetary Sciences (last visited Jan. 27, 2022).
[214] *Id.*
[215] Wen Stephenson, Other Universities Are Divesting From Fossil Fuels—but Harvard Is Doubling Down on Them, The Nation (May 4, 2016).
[216] Lee Smith, The Unsentimental Corporate Giver, Fortune (Sept. 21, 1981). ("With relatively few employees and correspondingly little need to support local institutions that employees depend upon, Exxon [could] concentrate its charity on projects remote from immediate concerns, such as interdisciplinary studies at universities.") Exxon's charity program director at the time was Stephen Stamas, who was also on the Harvard Board of Overseers. *Id.*
[217] Stephanie Mencimer, Blocking the Courthouse Door: How the Republican Party and its Corporate Allies Are Taking Away Your Right to Sue 231 (2006) (quoting Freudenberg notes from conversation with Exxon official). "The authors of the studies have insisted they were given complete autonomy in pursuing their work. One academic who took Exxon money, however, was fired after he produced an article that conflicted with the company's political agenda." *Id*. at 230.

system of fines.[218] One professor called for the total abolishment of punitive damages.[219]
    - A comparison of industry-funded law review articles on punitive damages with those supported by universities "found that the former were uniformly critical of punitive damages and jury awards, while the latter overwhelmingly defended them."[220] The same study found that courts cited industry-funded studies more often.[221]
- The MIT Corporation's mission is "to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the twenty-first century."[222] Its objectives state MIT's commitment "to generating, disseminating, and preserving knowledge, and to working with others to bring this knowledge to bear on the world's great challenges."[223] The fossil fuel industry undermines scientific knowledge, compromises the integrity of MIT's own research, and fails to work in good faith to address the challenge of climate change. Continued investment in this industry runs directly contrary to MIT's mission.

X. Divestment by peer institutions

Hundreds of large institutional investors have opted in recent years to divest from fossil fuel producers, including many universities situated similarly to MIT. Their reasoning applies to MIT's circumstances as well as their own, and thus the MIT Corporation has failed to *invest with the care that an ordinarily prudent person in a like position would exercise under similar circumstances.*

- Institutional divestment from the fossil fuel industry has become increasingly common. Many institutions have pointed to the moral and financial imperative of abandoning

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[218] Mencimer at 230; Thomas O. McGarity, A Movement, A Lawsuit, and the Integrity of Sponsored Law and Economics Research, 21(1) Stan. L. & Pol'y Rev. 51, 52, 55-56 (2010); Cass Sunstein, Daniel Kahneman, & David Schkade, Assessing Punitive Damages (With Notes on Cognition and Valuation in Law), 107 Yale L.J. 2071 (1998); Cass Sunstein, Daniel Kahneman, et al, Predictably Incoherent Judgments, 54 Stanford L. Rev. 1153 (2002); Cass R. Sunstein, Reid Hastie, John W. Payne, David A. Schkade, & W. Kip Viscusi, Punitive Damages: How Juries Decide (University of Chicago Press 2002). In Exxon Shipping Co. v. Baker, the U.S. Supreme Court substantially reduced the damage award against Exxon, holding that punitive damages may not exceed actual damages in maritime cases. 554 U.S. 471, 513 (2008). The Court declined to rely on the funded studies but was aware of their existence. *Id.* at 501 n. 17.

[219] McGarity, *supra* at note 218, at 55-56 (citing W. Kip Viscusi, The Social Costs of Punitive Damages Against Corporations in Environmental and Safety Torts, 87 Geo. L.J. 285 (1998)).

[220] McGarity, *supra* at note 218, at 56 (citing Shireen A. Barday, Note, Punitive Damages, Remunerated Research, and the Legal Profession, 61 Stan. L. Rev. 711, 713 n. 9, app. A (2008)). Beyond power to control research, sponsorship can compromise research integrity by coloring peer evaluation and through the implicit threat of funding termination. *Id.* at 53. McGarity writes, "Since it is normally impossible to know whether a sponsor has in fact determined the outcome of research . . . it may be appropriate to conclude that sponsorship undermines the integrity of sponsored research when the researchers behave as if the sponsor controlled the research." *Id.*

[221] *Id.* at 56.

[222] 1.1 Mission and Objectives, MIT Policies (last visited Jan. 27, 2022).

[223] *Id.*

holdings in oil, gas, and coal, and there is broad consensus that fossil fuel divestment is both necessary and effective as a means of mitigating climate disaster.[224]

- Institutional investment in fossil fuel firms "provid[es] [them] with the capital to continue oil and gas production, to persuade members of Congress to provide industry-specific tax breaks and other favors, and to thwart carbon taxes and new public-transportation projects and other policies — actions that ultimately delay the transition from the greenhouse gas-emitting fuels."[225]
- In its lawsuit against ExxonMobil, the Massachusetts Attorney General concluded that institutional divestment is effective in reducing the fossil fuel industry's harmful effects on the climate: "Insofar as they damage companies' reputations for their social responsibility and environmental stewardship, and thus their societal 'license to operate,' divestment efforts pose an additional climate-related risk to oil and gas companies. In 2018, an oil major that competes with ExxonMobil acknowledged that divestment campaigns and related efforts pose a material risk to its business and the price of its securities."[226]
  - The Attorney General was referencing an investor disclosure by Shell, in which the company stated that the divestment movement "could have a material adverse effect on the price of our securities and our ability to access equity capital markets . . . other financial institutions also appear to be considering limiting their exposure to certain fossil fuel projects. Accordingly, our ability to use financing for future projects may be adversely impacted."[227]
  - Other fossil fuel companies have likewise acknowledged the effects of investors' decisions to pull their funds: Prior to its bankruptcy declaration, for example, Peabody Energy stated in SEC filings that "[t]here have also been efforts in recent years affecting the investment community, including investment advisors, sovereign wealth funds, public pension funds, universities and other groups, promoting the divestment of fossil fuel equities and also pressuring lenders to limit funding to companies engaged in the extraction of fossil fuel reserves. The impact of such efforts may adversely affect the demand for and price of securities issued by us, and impact our access to the capital and financial markets."[228]
- In addition to "hasten[ing] the [fossil fuel] industry's decline," divestment commitments from large institutions create pressure on governments to take action and make political space for the shift away from fossil fuels."[229]

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[224] *See, e.g.*, How falling demand for oil is set to transform international relations, World Economic Forum (Aug. 20, 2019) (citing the "global campaign in support of divestment from fossil fuels" as one of the key factors in the ongoing energy transition worldwide); Gunther Thallinger, The zero that every investment portfolio needs, World Economic Forum (Jan. 14, 2021) ("To address climate change effectively, investors must steer their entire portfolios towards climate neutrality. . . . [I]t could become necessary to reduce assets with a non-satisfactory sustainability approach. In the extreme case of non-existence of such approaches, divestment is the ultima ratio.").
[225] Prem Thakkar, Reading the Fine Print of University Fossil Fuel Divestment Pledges, The American Prospect (Mar. 1, 2021).
[226] Second Amended Complaint, Massachusetts v. ExxonMobil, *supra* at note 155, at 108-09.
[227] Royal Dutch Shell PLC, Annual Report and Form 20-F 2017 — Strategic Report at 13 (2017).
[228] Peabody Energy Corporation, Form 10-K: Annual Report at 30 (2014).
[229] Emma Howard, A beginner's guide to fossil fuel divestment, The Guardian (Jun. 23, 2015) (quoting Jamie Henn, of 350.org, who explains that institutional divestment commitments "hasten the [fossil fuel] industry's decline and

- MIT's peer institutions in the Boston-Cambridge area and elsewhere have pledged to abandon their fossil fuel assets, citing the financial and ethical obligation to divest. Such institutions have often chosen divestment *in addition* to a suite of other policies, including producing climate- and sustainability-related research, reducing on-campus environmental impact through emissions reductions and other measures, and engaging in shareholder advocacy with companies that have demonstrated their real commitment to the goals of the Paris Agreement and whose core business model is not at odds with those goals.
    - In March 2020, Brown University made public that it had begun selling its investments in fossil fuel extraction companies in October 2017, arguing that the climate crisis called for serious action beyond teaching and research. "The urgency of the situation calls for additional action," Brown's president Christina Paxson wrote in a letter to the Brown community.[230] Paxson explained the move as aligning with "the view that, as the world shifts to sustainable energy sources, investments in fossil fuels carry too much long-term financial risk."[231]
    - On May 22, 2020, the Cornell University Board of Trustees announced a moratorium on new private investments focused on fossil fuels and a phase-out of existing investments in that area, effectively divesting the endowment from the fossil fuel industry.[232] Like many investors, when Cornell's Trustees announced their moratorium on fossil fuel investments, they cited the financial imperative behind their actions: "We're doing the right thing from an investment perspective, particularly for an endowment with a perpetual time horizon" said Ken Miranda, the university's chief investment officer, in a Cornell press release.[233]
    - On October 1, 2020, the University of Cambridge announced plans to divest all direct and indirect holdings from the fossil fuel industry.[234]
        - As of December 2020, the university had already withdrawn investments in "conventional energy-focused public equity measures," and planned to divest from "all meaningful exposure in fossil fuels" by 2030.
        - Cambridge's announcement was justified on moral grounds. "The University is responding comprehensively to a pressing environmental and moral need for action with an historic announcement that demonstrates our determination to seek solutions to the climate crisis," said Stephen Toope, the university's vice-chancellor.[235]
        - In addition to leveraging the university's endowment, Cambridge also made clear its continued commitment to research and teaching, emphasizing that all research funding and donations will now be

help push governments to take action," while also serving to stigmatise fossil fuel companies in order to "make the space for progress" and reduce those companies' corrupting influence on politics).

[230] Christina Paxson, Letter from President Paxson: Brown's actions on climate change, Brown University, (Mar. 4, 2020).

[231] *Id.*

[232] Kathryn Stamm, Cornell to Effectively Divest from Fossil Fuels, Trustees Vote, Cornell Daily Sun (May 22, 2020).

[233] James Dean, Cornell announces moratorium on fossil fuel investments, Cornell Chronicle (May 22, 2020).

[234] Matthew Taylor, Cambridge University to divest from fossil fuels by 2030, The Guardian (Oct. 1, 2020).

[235] Cambridge to divest from fossil fuels with 'net zero' plan, University of Cambridge (Oct. 1, 2020).

scrutinized against the university's goal of reducing greenhouse gas emissions "before any funding is accepted."[236]

- In April 2020, the University of Oxford announced plans to divest its endowment from fossil fuel companies.[237]
  - Oxford's divestment decision was made in accordance with its Oxford Martin Principles for Climate-Conscious Investment, a set of guidelines that led the university to determine that fossil fuel investments "hinder" worldwide efforts to (1) bring CO2 emissions to zero and (2) limit global warming to 1.5 degrees Celsius.[238]
  - While some universities have insisted on "shareholder engagement" *instead of* divestment, Oxford chose to pursue both strategies, divesting from fossil fuel companies while also pledging to work with companies around the world, "helping them assess whether investments are compatible with transition to a more stable climate and the goals of the Paris Agreement on climate change." Oxford also plans to engage with fund managers "to request evidence of net-zero carbon business plans across their portfolios."[239]
  - Oxford's divestment pledge was seen as consistent with the university's academic and teaching mission, and administrators did not see divestment as precluding climate- and sustainability-related research or efforts to promote sustainable campus operations.
- In May 2016, the University of Massachusetts system announced the divestment of its endowment from all fossil fuel assets.[240]
  - University of Massachusetts President Marty Meehan stressed the need to align their investments with institutional values, writing that the move "reflects our commitment to take on the environmental challenges that confront us all."[241]
  - Fund managers also stressed the compatibility of moral and fiduciary duties in divesting, with UMass Foundation Treasurer and Investment Committee Chair Edward H. D'Alelio stating that the fact "we took this step reflects not just our comfort as fiduciaries but the seriousness with which we see climate change."[242]
- On September 9, 2021, Harvard University divested from fossil fuels.[243]
  - Harvard's President Lawrence Bacow stated: "Given the need to decarbonize the economy and our responsibility as fiduciaries to make

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236 *Id.*
237 University of Oxford cuts ties to fossil fuels industry, BBC News (Apr. 28, 2020).
238 Oxford Martin Principles for Climate-Conscious Investment, Oxford Martin Net Zero Carbon Investment Initiative (Feb. 2018) (adapted from R.J. Millar, C. Hepburn, J. Beddington, J., & M.R. Allen, Principles to guide investment towards a stable climate, 8 Nature Climate Change 2-4 (2018)).
239 Oxford announces historic commitment to fossil fuel divestment, University of Oxford (Apr. 27, 2020).
240 UMass Becomes First Major Public University to Divest from Direct Fossil Fuel Holdings., University of Massachusetts (May 25, 2016).
241 *Id.*
242 *Id.*
243 Anemona Hartocollis, Harvard Says It Will Not Invest In Fossil Fuels, The New York Times (Sept. 10, 2021).

long-term investment decisions that support our teaching and research mission, we do not believe such investments are prudent."[244]

- President Bacow also noted that "[c]limate change is the most consequential threat facing humanity… without concerted action, this dire situation is only going to get worse."[245]

- Boston University also announced its decision to divest from the fossil fuel industry in September 2021.
    - Emphasizing the practical and moral value of divestment, Boston University President Robert Brown described divestment "a necessary step toward mitigating global warming and the devastating impacts of climate change" and as a choice that "will put the University on the right side of history."[246]
    - Both Brown and Richard Reidy, leader of the Advisory Committee on Socially Responsible Investing for the Boston University Board of Trustees, acknowledged the urgency of effective climate action, with Brown stating that "we face the challenge of changing our way of life at unprecedented speed if we are going to preserve the Earth's environment as we know it" and Reidy acknowledging that "climate change is moving much more rapidly than we thought even five years ago—it's not something our great-grandchildren are going to deal with, it's here and something we're worrying about now."[247]
    - Reidy highlighted the power of divestment, calling it a "vehicle to hasten fossil fuel extractors to transition to renewable energy."[248]

- Aside from peer universities, many other large-scale charitable funds with analogous fiduciary duties have divested.
    - Pension funds that have divested from fossil fuels include the California Public Employees' Retirement System (coal), the California State Teachers' Retirement System (coal), the country of Ireland, the New York City Employees Retirement System, the New York State Common Retirement Fund, the Teachers Retirement System of the City of New York, and the City of Providence, Rhode Island (partial).[249] In September 2021 the Caisse de dépôt et placement du Québec — Canada's second-biggest pension fund at 310 billion dollars — announced it was divesting from oil production investments by the end of 2022.[250]
    - Other major funds that have divested include the five-billion-dollar Rockefeller Foundation,[251] Norway's 1.1 trillion dollar sovereign wealth fund (oil and gas

[244] Harvard Office of the President, Harvard University (last visited Feb. 4, 2022).
[245] *Id.*
[246] Board of Trustees Approves Fossil Fuel Divestment, Boston University Office of the President (last visited Feb. 4, 2022).
[247] Jessica Colarossi, Boston University to Divest from Fossil Fuel Industry, BU Today (Sept. 23, 2021).
[248] *Id.*
[249] 1000+ Divestment Commitments, GoFossilFree.org (updated Dec. 9, 2020).
[250] CDPQ announces its new climate strategy, Caisse de dépôt et placement du Québec (Sept. 28, 2021).
[251] *Id.*

exploration and production)[252] and the ninety-billion Storebrand hedge fund (ExxonMobil, Chevron, and other environmental bad actors).[253]

XI. The Corporation's ties to the fossil fuel industry and conflicts of interest

MIT Corporation members maintain significant professional or financial ties to the fossil fuel industry. These apparent conflicts of interest violate the Corporation's *duty of loyalty* because fossil fuel companies' business models are in fundamental tension with MIT's espoused values and commitment to decarbonization.

- Leo Rafael Reif is the current President of MIT, an *ex officio* member of the Corporation and *ex officio* director of the investment management company.[254]
    - In addition to his leadership roles at MIT, Reif serves as Independent Director of Schlumberger Ltd.,[255] an oilfield services company that "engages in the provision of technology for reservoir characterization, drilling, production, and processing to the oil and gas industry."[256] Reif has served as the Independent Director of Schlumberger Ltd. since 2007.[257]
    - According to proxy statements filed for the 2019 fiscal year alone, Reif made 357,265 dollars in total compensation as a board member of Schlumberger Ltd.[258] According to proxy statements from the 2020 fiscal year, Reif made 294,162 dollars in total compensation as the Independent Director of Schlumberger Ltd. according to proxy tax statements from the 2020 fiscal year.[259] Reif owns approximately 1,000,000 dollars in Schlumberger Ltd. stock.[260]
- Denis A. Bovin is a member of the MIT Executive Committee and chair of the MIT Investment Management Company. Bovin also serves as a Senior Advisor at Evercore, an investment banking firm with several notable ties to the fossil fuel industry.[261]
    - The following are Evercore's 2021 transactions involving fossil fuel firms:[262]
        - Advised CIMAREX on its twenty billion dollar all-stock combination with Cabot Oil and Gas.
        - Advising the Board of Directors of Canadian Pacific on its acquisition of Kansas City Southern.
        - Advised Equinor on the sale of oil and gas assets to Grayson Mill Energy, a portfolio company of EnCap Investments L.P.

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[252] Terje Solsvik, Norway sovereign wealth fund to divest oil explorers, keep refiners, Reuters (Oct. 1, 2019).
[253] Jillian Ambrose, Major investment firm dumps Exxon, Chevron and Rio Tinto stock, The Guardian (Aug. 24, 2020).
[254] *See* Bylaws: Section 9, The MIT Corporation (last visited Feb. 11, 2022).
[255] Executive Compensation: Leo Rafael Reif, Salary.com (last visited Feb. 11, 2022).
[256] Schlumberger Ltd., StatInvestor (last visited Feb. 11, 2022).
[257] Leo Reif Net Worth, Wallmine (last visited Feb. 11, 2022).
[258] Executive Compensation: Leo Rafael Reif, *supra* at note 255.
[259] Leo Reif, Economic Research Institute (last visited Feb. 11, 2022).
[260] Leo Reif, SEC Form 4: Statement of Changes in Beneficial Ownership, United States Securities and Exchange Commission (May 1, 2019).
[261] Denis Bovin, Evercore (last visited Feb. 11, 2022).
[262] Our Transactions, Evercore (last visited Feb. 11, 2022).

        - Advised TietoEVRY Oyj on the sale of its oil and gas software business to Quorum Software.
        - Advising the Conflicts Committee of the Board of Directors of Capital Product Partners L.P. on exercising its option to acquire LNG Carriers from Capital Gas L.L.C.
        - Advised GasLog Ltd. on its merger with BlackRock Global Energy & Power Infrastructure Fund.
- Wesley G. Bush is a Term Member of the MIT Corporation (2019-2025). Bush currently sits on the Board of Directors at General Motors (GM) and Cisco Systems. He previously served as Chair and Chief Executive Officer at Northrop Grumman Corporation from 2012 to 2019 and on the DowDuPont Materials Advisory Committee from 2018 to 2019.[263]
    - GM, Dow and Dupont were all members of the Global Climate Coalition (GCC), an organization that sought to disparage the Kyoto Protocol and convince Americans that lowering greenhouse gas emissions was not in their best interest. Documents released in 2019 indicate that GCC sought to manipulate the IPCC and undertook climate denial campaigns to lobby the UN to accept industry language in their findings.[264]
    - Bush owns over 29,473 shares of Dow Inc. stock worth over two million dollars, and over 10,000 shares of General Motors Co. stock worth over 660,850 dollars.[265]

XII. The Corporation's refusal to consider divestment from fossil fuels

The MIT Corporation has failed to act in *good faith* or with *due care* by ignoring repeated efforts by MIT students, faculty, and other community members to align the university's investment practices with its charitable mission. Members of the MIT community have consistently argued that investment in fossil fuels is inconsistent with the university's values and with its mission as a public charity, a research center, and an institute of higher education. Despite the strong support for fossil fuel divestment among members of the MIT community, MIT Corporation members have refused to engage with the question in good faith.

- In 2013, Fossil Free MIT (FFMIT) was founded by students inspired by Bill McKibben's "Do the Math" tour.
- In the fall of 2013, FFMIT released a petition for divestment. On December 3, 2013, FFMIT presented the petition with over 2,000 signatories to President Reif.[266] The MIT administration gave no public response, and did not convene the Advisory Committee on Shareholder Responsibility (ACSR).
- In January 2014, FFMIT met with Vice President Kolenbrander, who told the group that he and the Executive Committee of the MIT Corporation believed divestment to be

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[263] Board of Directors, Dow Corporate (last visited Jan. 5, 2022).
[264] Mat Hope & Karen Savage, Global Climate Coalition: Documents Reveal How Secretive Fossil Fuel Lobby Group Manipulated UN Climate Programs, DeSmogBlog (Apr. 25, 2019).
[265] Bush, Wesley G., Gurufocus (last visited Feb. 11, 2022).
[266] Fossil Free MIT History, on file with Fossil Free MIT (last visited Jan. 13, 2022).

"impossible."[267] Kolenbrander used this stance to defend the decision not to convene the ACSR, saying that it would be immoral to convene a committee for something that is impossible.[268]

- Throughout spring 2014, FFMIT activists met with various administration members to push for the idea of a Climate Action Plan that would incorporate divestment with other potential actions MIT could take.[269] Student activists envisioned a plan that would be action-oriented, efficient, timely, transparent, inclusive, additive, and collaborative.
- In May 2014, in connection with the sixth annual MIT Sustainability Summit, FFMIT covered the campus with a global warming floodline. President Reif praised the group for "opening a serious discussion" with their demonstration.
- In May through December 2014, FFMIT continued to meet regularly with MIT administration members including Dr. Maria Zuber (VP of research), Diana Walsh (Head of MITIMCO), and Martin Schmidt (Provost). These administrators met FFMIT's efforts by questioning the effectiveness of divestment, encouraging a "conversation," and otherwise avoiding action.
- In September 2014, Vice President of Research Maria Zuber announced the creation of the MIT Climate Change Conversation Committee (The Conversation), tasked with conducting a "conversation" in the MIT community regarding how the institute can confront climate change.[270] This committee had no decision making power.
- In June 2015, seventy-nine faculty members sent a letter calling for divestment to President Reif.[271] By November 2015, the letter had 124 faculty signatures.[272]
- In June 2015, eighteen MIT student groups and organizations signed an open letter to President Reif urging MIT to take "courageous" climate actions including divestment.[273]
- In June 2015, The Conversation presented their report.[274] It stated that there was "support by a (three-quarter) majority of the committee for targeted divestment from companies whose operations are heavily focused on the exploration for and/or extraction of fossil fuels that are least compatible with mitigating climate change, for example, coal and tar sands."[275] The Conversation also recommended the creation of an Ethics Advisory Council.[276]
- In September 2015, thirty-three prominent climate scientists and activists wrote an open letter to President Reif urging divestment and citing The Conversation's recommendation to divest from carbon-intensive fossil fuel companies.[277]
- In October 2015, President Reif revealed the initial Climate Action Plan (CAP).[278]

[267] Kolenbrander Meeting Notes, on file with Fossil Free MIT (last visited Jan. 29, 2022).
[268] *Id.*
[269] The History of Fossil Free MIT, on file with Fossil Free MIT (last visited Feb. 11, 2022).
[270] MIT Climate Change Conversation Committee, MIT and the Climate Challenge, MIT.edu (June 2015).
[271] Katherine Nazemi, Faculty urge divestment in open letter to Reif, The Tech (June 5, 2015).
[272] MIT Faculty for Divestment, Open Letter to President Reif (last visited Jan. 29, 2022).
[273] Open Letters to President L. Rafael Reif, The Tech (Jun. 5, 2015).
[274] MIT and the Climate Challenge, *supra* at note 270.
[275] *Id.*
[276] *Id.*
[277] Open Letter to President Reif, MIT Climate Countdown (Sept. 16, 2015).
[278] Rafael Reif, Martin Schmidt, Maria Zuber, Cynthia Barnhart, and Israel Ruiz, A Plan for Action on Climate Change, MIT.edu (Oct. 21, 2015).

- In the document, President Reif stated that the CAP was a response to the petition brought by FFMIT, which had 3,400 signatures at the time.[279]
- President Reif indicated that the university would not divest.[280]
- Instead, the CAP focused heavily on the need for "engagement" with the fossil fuel industry.[281] However, none of the administration's plans for direct action mentioned industry engagement whatsoever.[282]

- On October 22, 2015, FFMIT initiated a sit-in outside of President Reif's office.[283] The sit-in was motivated by widespread dissatisfaction with the 2015 CAP, which was inspired by the divestment movement but did not include divestment.[284] Protesters demanded that the administration 1) Divest from coal and tar sands companies, 2) Establish an Ethics Advisory Committee, and 3) Pledge to make MIT's campus carbon-neutral before 2040.[285]
- In November 2015, ninety-three MIT Faculty members signed a response to the CAP.[286] This response endorsed FFMIT's sit-in and criticized CAP on three major grounds: 1) Failing to include key recommendations made by The Conversation, 2) Prioritizing "engagement" with fossil fuel companies, and 3) Setting a "weak goal" of only thirty-two percent on-campus emissions reductions by 2030.[287]
- On March 1, 2016, the 116-day sit-in concluded with a joint statement from FFMIT and the administration.[288] The administration did not agree to divest.[289] The administration also did not commit to campus carbon neutrality by 2040, instead saying that the previously-conceived plan of thirty-two percent reduction by 2030 would be viewed as "a floor, not a ceiling."[290] The administration created the Climate Action Advisory Committee, which would "advise and consult with [Vice President of Research Maria Zuber] on the implementation and ongoing assessment of MIT's Plan for Action" and "provide advice to identify, develop, and publish engagement strategies and benchmarks."[291] The administration also agreed to "convene a forum to explore ethical dimensions of the climate issue."[292]
- In September 2019, a new divestment group, MIT Divest, formed and launched a divestment petition.[293] As of January 2022, the petition has received over 1,280 signatures from members of the MIT community.[294]

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[279] *Id.*
[280] *Id.*
[281] *Id.*
[282] *Id.*
[283] MIT Students: We're Sitting-In at President Reif's Door Until He Divests From Fossil Fuels, EcoWatch (Oct. 22, 2015).
[284] *Id.*
[285] Vivian Zhong, Fossil Free MIT ends sit-in after agreement, The Tech (Mar. 3, 2016).
[286] MIT Faculty for Divestment, A response from 93 Faculty to the MIT Climate Action Plan (Nov. 3, 2015).
[287] *Id.*
[288] David Chandler, Agreement on climate-related action reached by MIT administration and student-led group, MIT News (Mar. 3, 2016).
[289] *Id.*
[290] *Id.*
[291] *Id.*
[292] *Id.*
[293] Petition for MIT to Divest from Fossil Fuels, MIT Divest (last visited Jan. 29, 2022).
[294] *Id.*

- In November 2019, MIT Divest sought a meeting with President Reif but were told to speak with Vice President of Research Maria Zuber instead. Vice President Zuber indicated that she was opposed to divestment.
- In February 2020, MIT Divest submitted an information request to Vice President Zuber regarding the university's strategy of engagement and their financial involvement with the fossil fuel industry.[295]
- In May 2020, Vice President Zuber responded to the information request filed by MIT Divest.[296]
- In June 2020, MIT Divest published an evaluation of Zuber's response, stating that "[A]lthough we are pleased that some partnerships with fossil fuel companies have driven sustainability-oriented research, we are extremely disappointed to see that MIT's partnerships have not created important change regarding climate policy and disinformation. It is clear that MIT has not done well in holding fossil fuel companies accountable for their anti-climate lobbying, greenwashing, climate disinformation campaigns, and other climate policy mechanisms."[297]
- In January 2021, MIT Divest released a study titled "Standards for Investments in the Fossil Fuel Industry."[298] The study was inspired by "repeated questioning during conversations with the MIT administration about specific reasons for targeting companies chosen in MIT Divest's petition" and found that none of the companies evaluated met all defined standards.[299]
- In January 2021, the MIT Undergraduate Association Committee on Sustainability released a report on their Undergrad Sustainability Survey.[300] The survey found that eighty-two percent of respondents supported divestment from fossil fuels, and only 6.5 percent of respondents disagreed with divestment.[301]
- In February 2021, MIT Divest published the results of an institute-wide faculty survey which gauged opinions on divestment.[302] The survey, developed with guidance from MIT Institutional Research, showed that 54.0 percent of faculty respondents were in favor of divestment, while 35.4 percent were against and 10.5 percent had no opinion.[303]
- In February 2021, the Student Sustainability Coalition (SSC), a coalition of student groups created by the Climate Action Advisory Committee (CAAC) in 2020 to provide proposals for the Climate Action Plan, provided a report to the CAAC recommending transparent investment standards and full divestment from fossil fuels.[304]

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[295] Request for information to the MIT Administration regarding the institute's relations to fossil fuel companies, on file with Divest MIT (last visited Jan. 19, 2022).
[296] Maria Zuber, Response to "Request for information to the MIT Administration regarding the Institute's relations to fossil fuel companies," MIT Climate Portal (May 16, 2020).
[297] MIT Divest, Evaluating Dr. Maria Zuber's Response to MIT Divest's Information Request, MIT Climate Portal (June 27, 2020).
[298] MIT Divest, Standards for Investments in the Fossil Fuel Industry (last visited Jan. 29, 2022).
[299] *Id.*
[300] 2020 MIT Undergraduate Sustainability Survey: Data Report, MIT Undergraduate Association Committee on Sustainability (last visited Jan. 29, 2022).
[301] *Id.*
[302] MIT Divest, MIT Divest Faculty Survey on Opinions of Fossil Fuel Divestment (last visited Jan. 29, 2022).
[303] Kristina Chen, 54% of faculty survey respondents believe MIT should divest from fossil fuel companies, The Tech (Feb. 4, 2021).
[304] 2021 Climate Action Plan Student Reports - Executive Summaries, on file with MIT Divest (last visited Jan. 29, 2022).

- In April 2021, the Undergraduate Association unanimously voted to endorse a resolution calling upon MIT to divest from fossil fuels.[305] In addition to elected Undergraduate Association members, the vote included representatives from MIT dormitory communities, the Interfraternity Council, the Panhellenic Association, and the Living Group Council.[306]
- In May 2021, MIT administrators released the second Climate Action Plan.[307] Despite the strong showings of community support for divestment outlined above, administrators once again failed to include divestment and instead doubled down on "engagement."[308] In the "background" section, the new CAP included a brief overview of accomplishments made since the 2015 CAP, none of which involved industry engagement.[309] Administrators only made one commitment involving industry engagement in the new CAP: for MIT to participate in an investor initiative known as Climate Action 100+.[310] The CAP did not include details of what MIT's participation would include and, as of January 2022, administrators have not provided this information.[311]
- Administrators stated in the 2015 CAP that "We are engaged in candid conversations with industry allies, and we will continue to advocate frankly with them as we all work together for systemic solutions to climate change, including a price on carbon."[312] While MIT has published research on carbon pricing,[313] the university has shown no evidence of carbon pricing conversations with fossil fuel companies. The 2021 CAP made no mention of pursuing carbon pricing with fossil fuel companies.[314]
- In June 2021, MIT Divest released two pledges that community members could sign: one to not work for the fossil fuel industry, and one to withhold donations to MIT until MIT divests.[315] As of January 2022, over 240 MIT community members have signed at least one pledge.[316]
- In October 2021, MIT Divest participated in a protest hosted by Extinction Rebellion Youth Boston. The protest made a stop outside the MIT student center, where an MIT Divest member spoke.
- In October 2021, MIT Divest received over thirty endorsements from local politicians, including from Boston Mayor Michelle Wu (at the time a mayoral candidate) and Cambridge Mayor Sumbul Siddiqui.[317]
- In October 2021, MIT Divest presented their study on Standards for Investments in the Fossil Fuel Industry at MIT's Energy Night and hosted a banner drop outside of the Energy Night venue.[318]

[305] Kristina Chen, UA Council votes in favor of divestment in consensus decision, The Tech (May 6, 2021).
[306] *Id.*
[307] Fast Forward: MIT's Climate Action Plan for the Decade, MIT Climate Portal (last visited Jan. 30, 2022).
[308] *Id.*
[309] *Id.*
[310] *Id.*
[311] *Id.*
[312] A Plan for Action on Climate Change, *supra* at note 278.
[313] Emil Dimanchev and Christopher Knittel, Trade-Offs in Climate Policy: Combining Low-Carbon Standards with Modest Carbon Pricing, MIT Center for Energy and Environmental Policy Research (Nov. 16, 2020).
[314] Fast Forward: MIT's Climate Action Plan for the Decade, *supra* at note 307.
[315] MIT Divest, Climate Conscious Pledges (last visited Jan. 30, 2022).
[316] *Id.*
[317] MIT Divest, Endorsements (last visited Jan. 30, 2022).
[318] Presenters 2021, MIT Energy Night (last visited Feb. 11, 2022).

- In November 2021, the Cambridge City Council voted unanimously on a resolution to endorse MIT Divest.[319] The council sent a notification of their decision to President Reif.[320]
- In November 2021, MIT Divest hosted a climate march across MIT's campus featuring speeches by two members of the Cambridge city council.[321]
- In December 2021, MIT Divest was featured in the Sloan School of Management's "My Idea Made to Matter" series.[322]

Conclusion

The Non-Profit Organizations/Charities Division is responsible for ensuring that charitable assets are allocated appropriately and for investigating charitable managers' violations of fiduciary duties. We ask that you investigate the violations described above and that you take action to ensure that the investment activity of the MIT Corporation no longer harms the MIT community, the Commonwealth, and the public.

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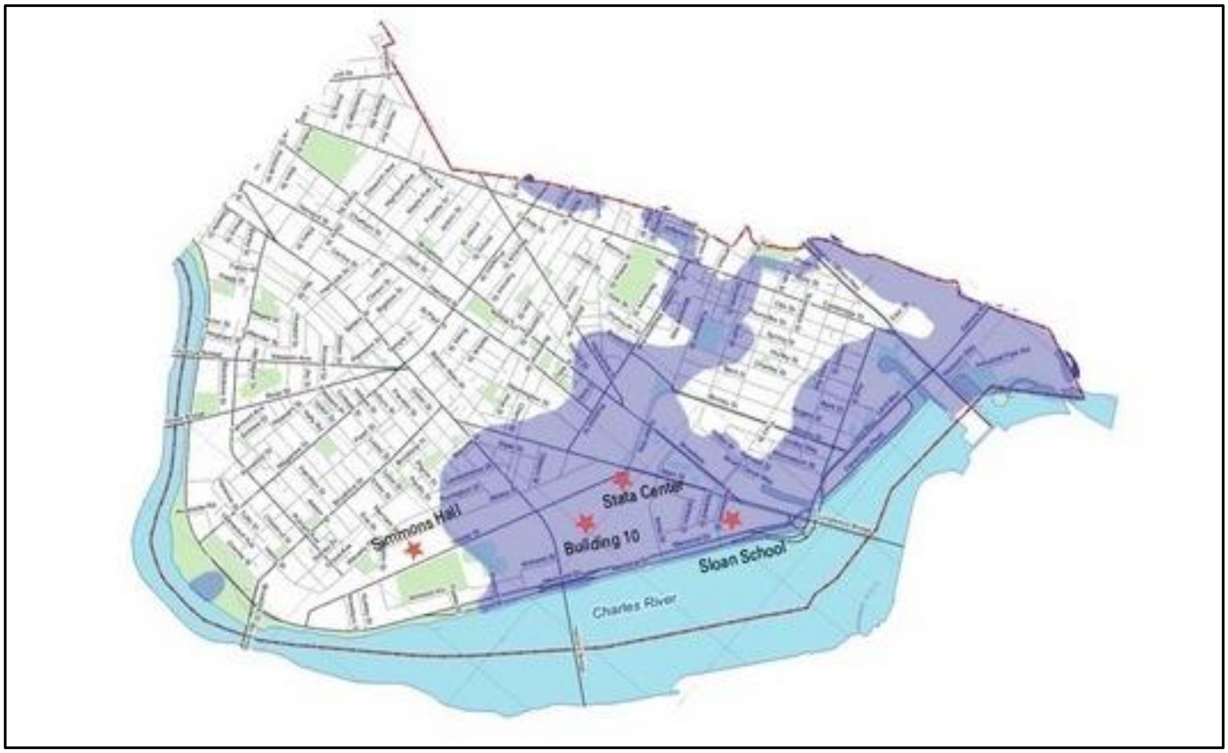
[319] Kristina Chen, Cambridge City Council passes resolution in support of MIT Divest, The Tech (Nov. 3, 2021).
[320] *Id.*
[321] Alexa-Rae Simao, Cambridge City Councilor Burhan Azeem '19 speaks at MIT Divest's rally Tuesday, The Tech (Nov. 18, 2021).
[322] Zach Church, At MIT Divest, all ideas welcome in pursuit of one big goal, MIT Sloan School of Management (Dec. 8, 2021).

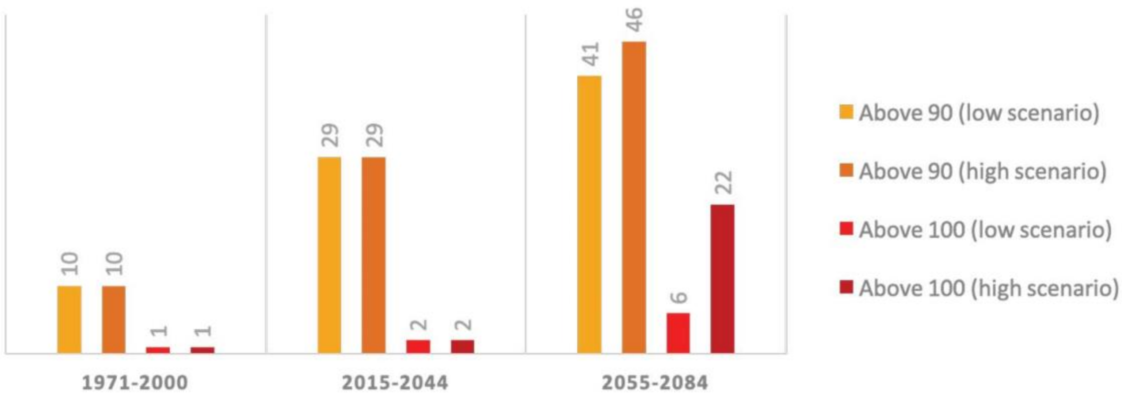
Appendix A-1



Map of flooding along Charles River near MIT campus. As reprinted in [Extent of flooding in 100–300 years, according to The New York Times. Blue areas would be submerged if oceans rise five feet, covering MIT](), The Tech (May 9, 2016). Source: The New York Times.

Appendix A-2

Heat Risks



Cambridge Exposure to Heat Risk

More Hot Days

More days of extreme heat- Research predicts an accelerated rate of increase to average temperatures, with more days of extreme heat. Compared to the period from 1971 to 2000, when an average of 11 days per year were over 90 degrees, there may be as many as 40 days over 90 degrees by 2030 and 90 days by 2070

Heat Risks. As reprinted in The impact of climate change on the campus, MIT Sustainability (last visited Feb. 15, 2022). Source: City of Cambridge Climate Vulnerability Assessment 2015.

Appendix B

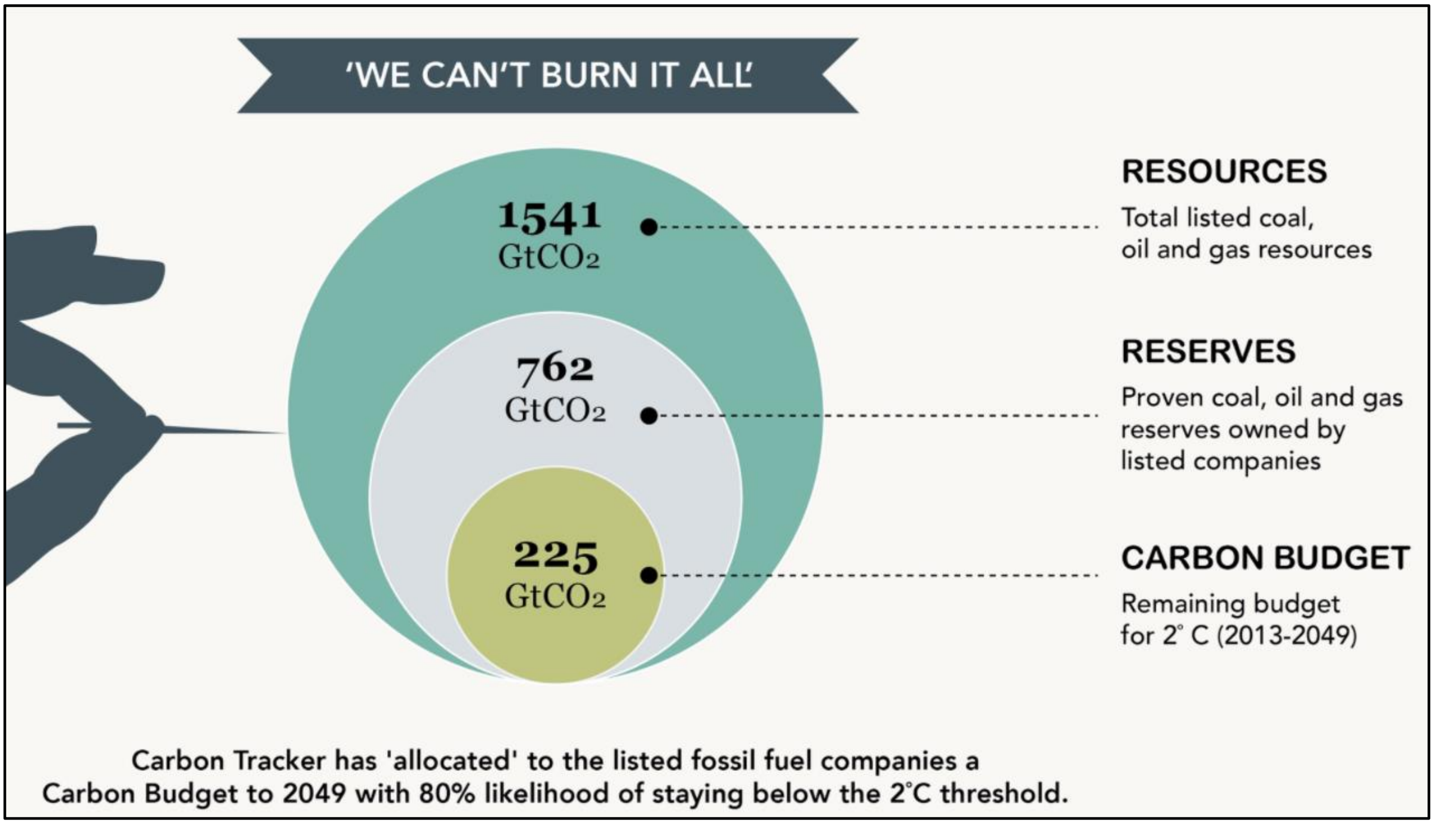


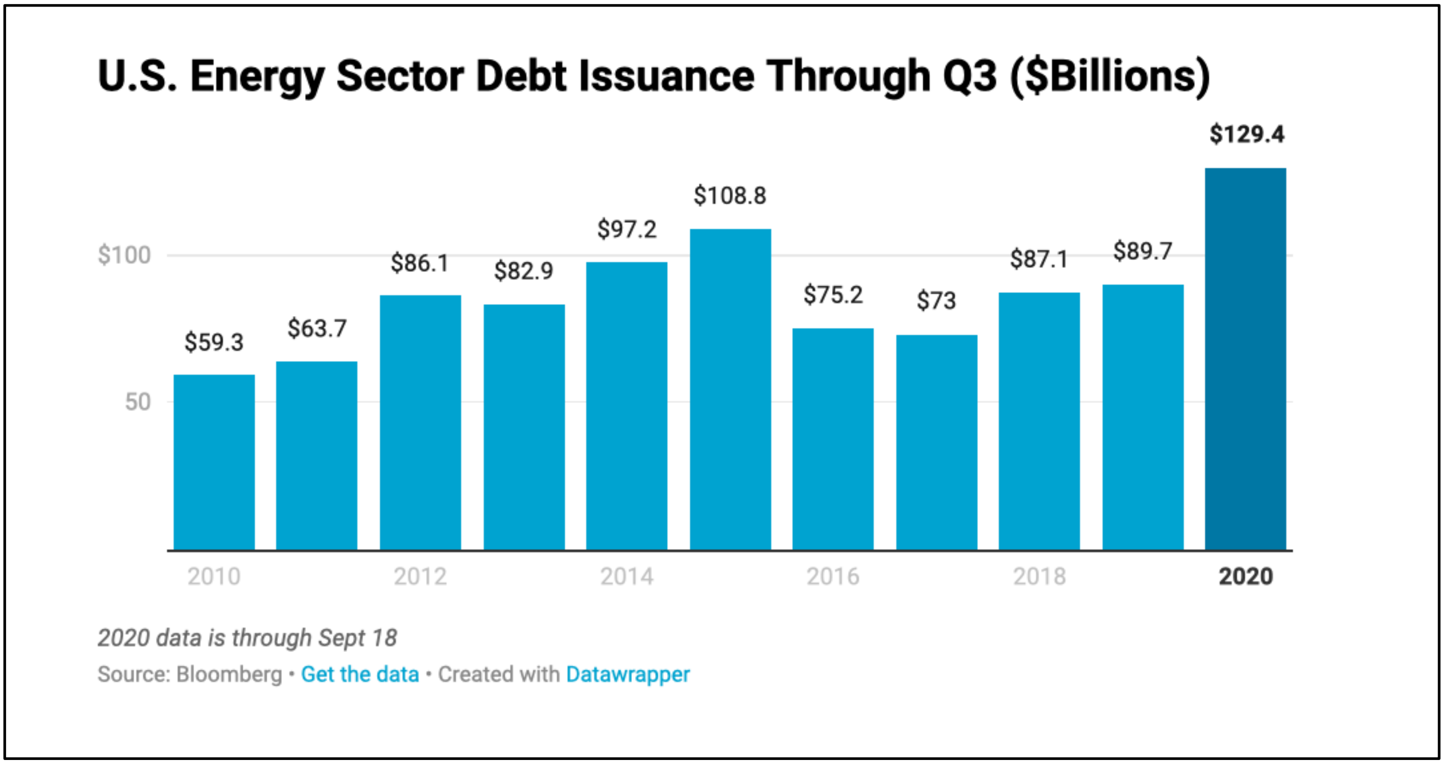
Illustration of carbon bubble, as reprinted in Katharine Earley, Carbon Tracker measures oil and coal risk for investors, The Guardian (Apr. 30, 2015). Source: Carbon Tracker Initiative.

Appendix C

Comparison of ten-year performance of S&P 500 Energy Index[323] (white) with S&P 500 Index (blue).[324] Created using comparison tool at S&P 500 Dow Jones Indices (as of Jan. 3, 2022).

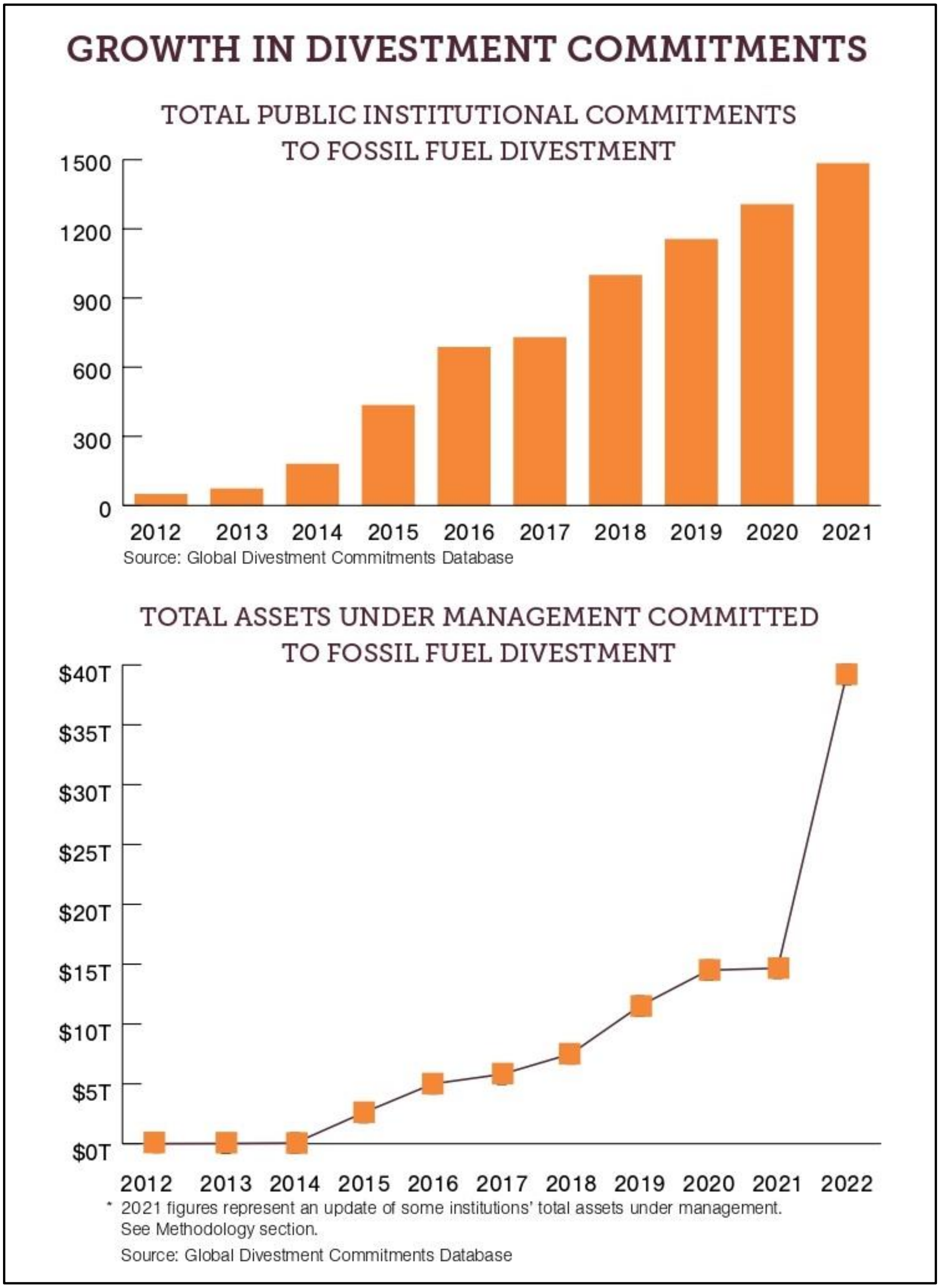
[323] The S&P 500 Energy Index includes only fossil fuel companies and does not encompass renewable energy.
[324] The energy sector's recovery in late 2020 came in part thanks to a large bailout of corporate debt markets by the federal government. *See* Lukas Ross, Alan Zibel, Dan Wagner & Chris Kuveke, Big Oil's $100 Billion Bender, Public Citizen (Sept. 30, 2020).

Appendix D



U.S. Energy Sector Debt Issuance Through Q3 ($Billions), as reprinted in Lukas Ross, Alan Zibel, Dan Wagner & Chris Kuveke, Big Oil's $100 Billion Bender, Public Citizen (Sept. 30, 2020). Source: Bloomberg.

Appendix E



Growth in Divestment Commitments. Source: [A Decade of Progress Towards a Just Climate Future](), Institute for Energy Economics and Financial Analysis, Stand.earth, C40, & Wallace Global Fund (2021).