Attorney General Brian Frosh Office of the Attorney General Consumer Protection Division 200 St. Paul Place, Baltimore, MD 21202

Secretary of State John C. Wobensmith Charities Division Attn: Investigator State House Annapolis, MD 21401

Dear Attorney General Frosh —

The Board of Trustees of the Johns Hopkins University, as fiduciary of a non-profit educational institution, is bound by the laws of Maryland to promote the well-being of Johns Hopkins' students and community and to further the University's commitment to "educate its students and cultivate their capacity for lifelong learning, to foster independent and original research, and to bring the benefits of discovery to the world." Under the Maryland Uniform Prudent Management of Institutional Funds Act, the Board of Trustees has a fiduciary duty to invest with consideration for the University's "charitable purposes" — a duty that distinguishes non-profit institutions from other investors. Instead, the Board of Trustees has invested a portion of the University's \$4.3 billion 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 University'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 that you use your enforcement powers to order the Board of Trustees to cease its investments in fossil fuels.

Maryland law provides rules that charitable managers and investors must follow in managing institutional funds. As stewards of the Johns Hopkins endowment, the Board of Trustees is required to act in good faith and with loyalty, taking care that its investments further the purposes of the University. The Board of Trustees may not simply seek profit at any cost: the privileges that Johns Hopkins 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 \$417 million in fossil fuel stocks, the Board of Trustees has violated these duties to Johns Hopkins and the public.

The values that should guide the Board of Trustees' investments are clear. According to the Johns Hopkins charter, the University is established for the purpose of "the promotion of education in the State of Maryland." The Board recognizes its duty to practice "wise stewardship of all its resources for the common good and for generations to come" and has stated that it "is committed to reducing its carbon footprint and embracing environmentally conscious practices, steps that support the advancement of the University's academic mission." In 2020, University President William R. Brody stated: "At the start of this new millennium, it is even more apparent

that how we use the earth and its resources will determine the kind of earth we leave our children and our children's children . . . Universities can help meet these challenges by forging new knowledge and providing the students with the necessary tools to solve problems. [Through sustainability efforts,] we will bring an environmental ethic to the University's operations. The aim will be to create a sustainable future." And yet, despite the demonstrable financial and social benefits of institutional fossil fuel divestment, the Board of Trustees has remained steadfast in its support of an industry whose business model is based on environmental destruction and social injustice.

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 detriments from fossil fuel extraction and combustion. Low-income people bear the brunt of climate-based economic disruption, 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. As a result of the economic precarity and increased burden of care work that results from climate disruptions, women suffer more serious injuries from unabated climate change.

The need to refrain from promoting such outcomes is obvious for any institution that calls itself a charity. Yet the Board of Trustees has repeatedly refused to apply Johns Hopkins' values to its investment activity. This conduct is especially galling for managers of an institution of higher education. 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 undermines the work of Johns Hopkins faculty and students who are researching and 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 it recognizes "the urgent need to act now to avoid irreversible costs to our global community's economic prosperity and public health," the Board of Trustees channels funds to an industry dedicated to winning short-term profits at the expense of the public good.

A similar inversion of values underlies the Board of Trustees' funding of climate degradation despite its duty to protect Johns Hopkins' physical property. As documented in a lawsuit brought by the City of Baltimore against fossil fuel producers, sea level rise, higher temperatures, extreme rainfall, invasive pests, and many other environmental changes will pose serious threats to University land and buildings in the coming decades. Administrators will likely be forced to retrofit facilities and manage infrastructure disruptions, even as air quality on campus deteriorates. Instead of facilitating such injuries, the Board of Trustees should be doing everything in its power to prevent them.

The Board of Trustees is bound by an additional legal duty: the requirement to manage Johns Hopkins' assets with prudence. Prudent investment practice simply cannot be squared with the ownership of fossil 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 to avoid capital-intensive extraction. Fossil fuel stocks have performed significantly worse than market averages in recent years. In the last several months, the oil industry has begun to crumble, with the COVID-19 pandemic adding to already historic losses. 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. Fossil fuel companies such as ExxonMobil 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. The Board of Trustees continues to invest in the sector despite its legal duty to exercise care and prudence in avoiding dangerous securities.

The Board of Trustees cannot plead ignorance of its duty to divest. For years, Johns Hopkins students and faculty have pushed for investment practices that align with the University's mission. This pressure was instrumental in the Board of Trustees' decision in 1986 to partially withdraw investments from companies doing business in apartheid South Africa and its 2001 decision to divest from tobacco companies: acknowledgments that its investment activity must comport with the University's missions and values. In recent years, the Student Government Association has voted for fossil fuel divestment, a position consistently endorsed by majorities in student referenda, and the Johns Hopkins University Public Interest Investment Advisory Committee recommended fossil fuel divestment in 2017. Repeated rallies, reports, and requests for negotiation have alerted the Board of Trustees to its fiduciary responsibility. Nonetheless, the Board has spurned all efforts at persuasion. Such behavior cannot be squared with the duty to manage the University's assets in good faith.

It is too late for the Board of Trustees to deny the relation between its investments and climate change. Its obligations under Maryland 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 Board of Trustees' violations, along with documents and reports supporting the claims made in this complaint. Under Title 6, § 6-205(a), your office may investigate violations of Maryland'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):

Climate Science and Policy Community

Dr. Robert Howarth, David R. Atkinson Professor of Ecology and Environmental Biology at Cornell University

Dr. Nathan Philips, *Professor of Earth and Environment at Boston University*Mr. Bill McKibben, *Founder at 360.org*, *Schumann Distinguished Scholar at Middlebury College*

Alumni

Brian Vandebogert, Bloomberg School of Public Health '13

Katherine Jochim Pope, Bloomberg School of Public Health '13

Clarissa Chen, Johns Hopkins University '18, Baltimore/Maryland Resident

Sumi Kim, Johns Hopkins University '21

Jeremy Berger, Johns Hopkins University '21

Sofia Verheyen, Johns Hopkins University '20

Jon Smeton, Johns Hopkins University '14, Baltimore/Maryland Resident

Maya Spaur, Bloomberg School of Public Health '19

Kushan Ratnayake, Johns Hopkins University B.A. Biophysics '16, MSE Mechanical

Engineering '18, Baltimore/Maryland Resident

Sam Mollin, Johns Hopkins University '21

Ryan Tang, Johns Hopkins University '21

Lara Uthman, Johns Hopkins University '21

Community Members

Ms. Franca Muller Paz, Green Party Candidate for Baltimore City Council District 12 Anne Wilson, Baltimore/Maryland Resident Haley Epping, Baltimore/Maryland Resident

Hopkins Faculty and Staff

Dr. Andrew Daniel, Associate Professor of English

Dr. Benjamin Zaitchik, Professor of Earth and Planetary Sciences

Dr. Emily Riehl, Professor at the KSAS Department of Mathematics

Prof. Claude Hélène Guillemard, Professor of Modern Languages & Literatures

Ms. Lisa Folda, Senior Research Coordinator at Johns Hopkins Center for Communication Programs

For individual signatories, institutional affiliation is for identification purposes only.

Organizations

Real Food Hopkins, *Johns Hopkins University Student Organisation*Compassion Awareness Responsible Eating (CARE), *Johns Hopkins University Student Organisation*

Refuel Our Future, *Johns Hopkins University Student Organisation*Teachers and Researchers United (TRU), *Faculty and Graduate Student Union at Johns Hopkins University*

Zero Hour International Sunrise Movement UMBC Sunrise Movement UMD

Students

Ritvik Gunturu, Undergraduate Student Jessica Lin, Undergraduate Student Aditi Sen, Undergraduate Student Claire Lee, *Undergraduate Student* Rachel Oh, Undergraduate Student Emily Zhang, *Undergraduate Student* Claire Cui, Undergraduate Student Tanisha Tarin, *Undergraduate Student* Cherise Kim, Undergraduate Student Faith McCarthy, *Undergraduate Student* Adham Labwam*Undergraduate Student* Alara Kaplanoglu, *Undergraduate Student* Molly Ervin, *Undergraduate Student* Jacqueline Rakestraw, *Undergraduate Student* Janya Budaraju, Undergraduate Student Helen Lacey, Undergraduate Student Robbie Kuang, Undergraduate Student Daniel Moon, Undergraduate Student Darrel Fan, Undergraduate Student Mary McCormick, Undergraduate Student Sulagna Tripathi, *Undergraduate Student* Iris Lee, *Undergraduate Student* Phoebe Chu, Undergraduate Student Eirnin Mahoney, Undergraduate Student Elly Ren, *Undergraduate Student* Mansha Kapur, *Undergraduate Student* Joseph Alvarez, Undergraduate Student Elmer Hernandez, Undergraduate Student Casey Levitt, Undergraduate Student Ayla Frost, Undergraduate Student Ingrid Villareal, *Undergraduate Student* Carlos Buri-Nagua, Undergraduate Student Sydney Santos, Undergraduate Student Subha Bhatta, *Undergraduate Student*

Arman Jasuja, *Undergraduate Student* Rocco Diaz, *Undergraduate Student*

Shreya Jagtap, *Graduate Student* Jahnavi Gupta, *Graduate Student* Siya Zhang, *Graduate Student* Charlie Nguyen, *Graduate Student*

Prepared with assistance from attorneys at Climate Defense Project.

Ronald J. Daniels

President, Johns Hopkins University

Sunil Kumar

Provost and Senior Vice President for Academic Affairs, Johns Hopkins University

Jason T. Perlioni

Vice President of Investments and Chief Investment Officer, Johns Hopkins University

Maureen S. Marsh

Secretary, Johns Hopkins University Board of Trustees

Johns Hopkins University Board of Trustees



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I. The Board of Trustees' violation of Maryland law

The Johns Hopkins University is a charitable corporation organized under Title 6, section § 6-101(d)(i)(1) of Business Regulation Article of the Maryland Code. Its charter was granted by an act of the General Assembly of Maryland in 1867. Established for the purpose of "the promotion of education in the State of Maryland," the Johns Hopkins University is led by a Board of Trustees, which is "entrusted with the final responsibility for the conduct of the affairs of the University, and [. . .] vested with full authority to discharge that responsibility as the governing body of the University." Under Maryland law, the Board of Trustees "are fiduciaries as to the charitable contributions they collect or spend." The Board of Trustees has established a Committee on Investments, which "shall have the supervision of all securities of the University and of all property held by it as an investment . . . It shall decide upon and direct the investment of the funds of the University, and the action of the Committee on Investments shall be sufficient authority for the purchase, transfer, sale, or exchange of the securities or other investment property of the University and for the execution of any and all instruments necessary to obtain or to pass title thereto. It shall also provide oversight of investment managers of the University's pension funds."

- Continued investment in fossil fuels by the Trustees *violates the fiduciary duties spelled* out in the Maryland Uniform Prudent Management of Institutional Funds Act (MUPMIFA) and in Maryland common law.
 - O MUPMIFA 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." The model UPMIFA drafting committee describes consideration of "charitable purposes" as a "fundamental duty," and this requirement distinguishes charitable investors like Hopkins from other entities such as pension funds.
 - O MUPMIFA further requires that, "[i]n addition to complying with the duty of loyalty imposed by law other than this subtitle, each person responsible for managing and investing an institutional fund shall manage and invest the fund exercising ordinary business care and prudence under the facts and circumstances prevailing at the time of the action or decision."8
 - MUPMIFA 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

³ Governance: By-Laws, Preamble, Johns Hopkins University Board of Trustees (last revised June 25, 2021).

¹ Governance: Certificate of Incorporation, Johns Hopkins University Board of Trustees (2021).

² *Id*.

⁴ Md. Code Ann., Bus. Reg. § 6-508.

⁵ Governance: By-Laws, supra note 3, at Article XII, § 4(a) and (b).

⁶ Md. Code Ann., Est. & Trusts, § 15-402(a) (2016).

⁷ National Conference of Commissioners on Uniform State Laws, <u>Uniform Prudent Management of Institutional</u> <u>Funds Act, with Prefatory Notes and Comments</u> at 15 (2006).

⁸ Md. Code Ann., Est. & Trusts, § 15-402(b) (2016).

- appreciation of investments . . . [and] an asset's special relationship or special value, if any, to the charitable purposes of the institution. 9
- According to the Court of Appeals of Maryland, "[i]t is recognized that when a corporation is organized for charitable purposes, its property is held in trust for the public."¹⁰
- The Trustees have 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. These outcomes of the Trustees' investment practices are directly contrary to Hopkins' mission "[t]o educate its students and cultivate their capacity for lifelong learning, to foster independent and original research, and to bring the benefits of discovery to the world" and its acknowledged commitment "to reducing its carbon footprint and embracing environmentally conscious practices, steps that support the advancement of the university's academic mission." Similarly, the well-known scientific misinformation campaigns of the fossil fuel industry contravene hopkins' mission to educate its students. As such, continued investment in fossil fuel holdings violates the Trustees' duty to consider an asset's special relationship or special value, if any, to the charitable purposes of the institution.
- The Trustees have *violated their duty of loyalty* to the Hopkins community by funding activity that directly imperils the lives and prospects of young people and that poses a physical threat to Hopkins property.
- The Trustees have *violated their 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 Trustees have *violated their duty of care* by investing the University's endowment in financially risky fossil fuel stocks, which have underperformed for years and are currently at the risk of a general collapse in value. This violation is exacerbated by the Trustees' 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 MUPMIFA, 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

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⁹ Md. Code Ann., Est. & Trusts, § 15-402((c)(2)(i, iv, viii) (2016).

¹⁰ Inasmuch Gospel Mission v. Mercantile Tr. Co. of Baltimore, 184 Md. 231, 239 (1945).

¹¹ History & Mission, Johns Hopkins University (2021).

¹² Hub Staff, Going green, Johns Hopkins University (Apr 18, 2017).

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."¹³

- The Restatement of the Law for Charitable Nonprofit Organizations states that "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."¹⁴
- In a report analyzing analogous 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 failure to properly consider climate change as a risk factor could result in lawsuits under various theories of liability for breaches of fiduciary duties." ¹⁵
 - o 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).
 - o 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." ¹⁶
- Hopkins' fossil fuel holdings were estimated at \$417 million in 2017,¹⁷ or roughly ten percent of the endowment at the time. Due to the fact that the specific endowment's composition is not publicly disclosed and JHU partially divested from fossil fuels after the PIIAC report, the precise figure is unknown.

¹³ Bevis Longstreth, "Outline of Possible Interpretative Release by States' Attorneys General Under The Uniform Prudent Management of Institutional Funds Act" (Jan. 26, 2016).

¹⁴ Restatement of the Law for Charitable Nonprofit Organizations, § 2.02, cmt. (2021) (emphasis added).

¹⁵ Trillion Dollar Transformation at 1-2, Center for International Environmental Law (December 2016).

¹⁶ *Id.* at 5-7, 12-17, 19

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¹⁷ Report of JHU Public Interest Investment Advisory Committee in Response to Proposal of Refuel Our Future, Johns Hopkins University (Sep. 2017).

II. Hopkins' social and environmental commitments

In addition to their general duties to the public as managers of a charity, the Trustees are legally bound to uphold the particular charitable purposes and values of Hopkins, which include commitments to social justice and environmental well-being. The Trustees have clearly acknowledged in the past that this legal duty extends to the manner in which they invest the University's assets.

- The Trustees' mission is "[t]o educate its students and cultivate their capacity for lifelong learning, to foster independent and original research, and to bring the benefits of discovery to the world."18 According to the Trustees, they "exercise fiduciary responsibility for advancing Johns Hopkins' mission and goals in a sustainable manner, through wise stewardship of all its resources for the common good and for generations to come. The Board holds a public trust: to guard the University's integrity, to ensure that it fulfills the purposes for which it was established, and to preserve and augment its physical and financial assets."19
- The Trustees have explicitly recognized the connections between its educational mission and fighting the climate crisis.
 - The Trustees claim that the University "is committed to reducing its carbon footprint and embracing environmentally conscious practices, steps that support the advancement of the University's academic mission."20
 - In 2000, University President William R. Brody stated: "At the start of this new millennium, it is even more apparent that how we use the earth and its resources will determine the kind of earth we leave our children and our children's children ... Universities can help meet these challenges by forging new knowledge and providing the students with the necessary tools to solve problems. [Through sustainability efforts,] we will bring an environmental ethic to the university's operations. The aim will be to create a sustainable future."²¹
 - In 2007, President Brody stated: "I am committing the Johns Hopkins University to become a driving force for developing solutions to the climate change problem. It is clear that curbing [greenhouse] emissions poses a significant challenge for future generations. It is also clear that universities must play a central role in meeting this challenge."22
 - In 2010, incoming University President Ronald Daniels stated: "Facing this challenge head-on is our shared responsibility as humans, and especially as residents of the developed world. But universities have a special role in our society and a special responsibility. We are institutions that discover, that educate and that, often, set an example. When it comes to global climate change, Johns Hopkins will be a leader in all three."²³

¹⁸ History & Mission, Johns Hopkins University (2021).

Board of Trustees, Johns Hopkins University (2021).

²⁰ Hub Staff, Going green, supra note 12.

²¹ Report of JHU Public Interest Investment Advisory Committee in Response to Proposal of Refuel Our Future, Johns Hopkins Public Interest Investment Advisory Committee at 13 (Sept. 2017). ²² *Id.* at 14.

²³ *Id*.

- In 2015, Johns Hopkins signed the American Campuses Act on Climate Pledge, committing the University to "increased energy efficiency; conservation of resources; and continued support of research in the fields of climate change, public health, energy, and sustainability." An official University statement on the signing read: "We recognize the urgent need to act now to avoid irreversible costs to our global community's economic prosperity and public health. We believe that research universities play a critical role in developing solutions to climate change and in finding new ways to meet growing energy demands while sustaining the environment. Today, the Johns Hopkins University pledges to accelerate the transition to low-carbon energy while enhancing sustainable and resilient practices across our campuses." ²⁵
- In 2017, President Daniels responded to the Trump Administration's planned withdrawal from the Paris Agreement by stating: "Today we reaffirm that commitment, which is consistent with the Paris Agreement and recognizes the concerted action that is needed at every level to slow, and ultimately prevent, the rise in the global average temperature and to facilitate the transition to a clean energy economy. Universities have a critical role to play in reducing our own greenhouse gas emissions; continuing to advance evidence-based understanding of the causes and effects of climate change on the environment, the economy, and public health; and developing solutions. The scientific consensus is clear that the climate is changing largely due to human activity, that the consequences of climate change are accelerating, and that the imperative of a low carbon future is increasingly urgent. As institutions of higher education, we remain committed to a broad-based global agreement on climate change and will do our part to ensure the United States can meet its contribution."26
- The Johns Hopkins Public Interest Investment Advisory Committee has noted that "[a]s a national leader in research and education, it is important that we show our commitment to our ideals through our actions. We cannot, in good conscience, conduct research and teach classes identifying and quantifying the risks of climate change and the health impacts of fossil fuel combustion, while simultaneously investing in the companies that contribute to these issues the most."²⁷
- The Trustees also have a pronounced commitment to public health dating to the University's founding. Today, the Johns Hopkins Bloomberg School of Public Health claims to have "advanced research, education and practice to create solutions to public health problems around the world" and endorses a vision of "protecting health, saving lives, millions at a time" 28; among its stated values are "social justice, health equity, and engaged citizenship." 29 Similarly, Johns Hopkins Medicine facilities, including Johns

²⁴ *Id.* at 14.

²⁵ *Id.* at 15.

²⁶ *Id*.

²⁷ *Id.* at 32.

²⁸ <u>Johns Hopkins Bloomberg School of Public Health.</u> Johns Hopkins Bloomberg School of Public Health (2021).

²⁹ Vision, Mission, and Values. Johns Hopkins Bloomberg School of Public Health (2021).

Hopkins Hospital, Johns Hopkins All Children's Hospital, the Howard County General Hospital, Johns Hopkins Bayview Medical Center, Sibley Memorial Hospital, Suburban Hospital and Johns Hopins Community Physicians, declare their dedication to "improv[ing] the health of the community and the world by setting the standard of excellence in medical education, research and clinical care." ³⁰

- The Trustees recognizes their duty to align these institutional values with Johns Hopkins' financial holdings.
 - In informal investment guidelines issued in the 1990s to guide the screening of investments, the Trustees acknowledged that there are instances "where the mission of the University calls forth a duty to respond" to conflicts between investment strategy and the University's mission. The guidelines stated that the University is "a corporate citizen within society [and] as ... such cannot remain wholly indifferent to the activities in whose stock the University endowment is invested, specifically as those activities might affect the value of securities ... and ... the academic mission of the University."³¹
- The Trustees have recognized that divestment is at times necessary to satisfy their fiduciary obligations.
 - In 1986, the Board of Trustees voted to partially divest from companies doing business in apartheid South Africa, committing to selling off University assets in companies that did not comply with the Sullivan Principles regarding racial equity in South Africa.³²
 - In 2001, the Board of Trustees voted to fully divest from tobacco companies, selling of \$5.4 million in assets in order to align the University's commitments to public health and battling cancer with its investment strategy.³³
 - The Johns Hopkins Public Interest Investment Advisory Committee has recognized that "[u]niversities are required to be responsible stewards of the resources invested in their work. They must, furthermore, do so in ways that are both consistent with their fiduciary responsibilities and by a means that enables them to maximize their ability to carry out their institutional mission without betraying their core values. Social responsibility is among the many factors to be considered, and historically has been acted upon only sparingly and after much reflection, as in the examples of apartheid in South Africa and more recently regarding tobacco."³⁴

III. The scientific reality and risks of climate change

The current and future effects of climate change jeopardize the physical integrity of Hopkins' campus and the safety of its students, faculty, and staff, undermining the Trustees' *charitable purposes*. The Trustees' investments in companies disproportionately responsible for the climate

³² *Id.* at 20.

³⁰ About Johns Hopkins Medicine. Johns Hopkins Medicine (2021).

 $^{^{31}}$ *Id.* at 23.

³³ Associated Press, <u>Johns Hopkins Plans to Sell Holdings in Tobacco Firms</u>, Los Angeles Times (Feb. 23, 1991).

³⁴ Report of JHU Public Interest Investment Advisory Committee, supra note 21, at 6.

crisis exposes the Hopkins community and society at large to severe injury, violating the Trustees' *duty of loyalty*.

- Climate change is a result of global warming, produced primarily by increased anthropogenic releases of carbon dioxide, methane, and other greenhouse gases. The primary contributor to these releases is the combustion of fossil fuels.³⁵
- According to the Intergovernmental Panel on Climate Change (IPCC), the leading global authority on climate science, human-caused emissions of greenhouse gases have unequivocally warmed the climate at a rate that is unprecedented in at least the last 2,000 years.³⁶ In 2019, atmospheric carbon dioxide concentrations were higher than at any time in at least 2 million years, and concentrations of methane and nitrous oxide were higher than at any time in at least 800,000 years.³⁷
 - A small number of fossil fuel producers have been disproportionately responsible for greenhouse gas emissions since the Industrial Revolution for instance, just twenty companies account for nearly thirty percent of all emissions between 1751 and 2010.³⁸ 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."³⁹
 - There is a very nearly one-to-one linear relationship between the cumulative amount of carbon dioxide emitted and the amount of global warming it causes. Every one-half degree Celsius of global warming in models results in "clearly discernible increases in the intensity and frequency of hot extremes, including heat waves . . . and heavy precipitation . . . as well as agricultural and ecological droughts in some regions." 41
- As a result of human-caused warming, climate change is already affecting every inhabited region across the globe, leading to observed changes in weather and climate extremes.⁴²
- 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 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

³⁵ D.R. Reidmiller, *et al.*, eds., <u>Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States at 73, U.S. Global Change Research Program (2018).</u>

³⁶ IPCC, <u>Summary for Policymakers</u> 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). ³⁷ *Id.* at 9.

³⁸ Richard Heede, <u>Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers</u>, <u>1854–2010</u>, 122 Climatic Change 229, 234 (2014). These companies include Chevron, ExxonMobil, BP, Shell, ConocoPhillips, and Peabody. *Id.* at 237.

³⁹ Carbon Disclosure Project, <u>New report shows just 100 companies are source of over 70% of emissions</u> (July 2017).

⁴⁰ IPCC, Summary for Policymakers, *supra* note 36, at 37.

⁴¹ *Id.* at 19.

⁴² *Id.* at 10.

- ecosystems, and economic inequality."⁴³ 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."⁴⁴
- Continued global warming is projected to further intensify the global water cycle, including the severity of wet and dry events. 45 Many changes due to past and future greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets, and global sea level. 46
- Global warming will exceed two degrees Celsius by the end of this century unless drastic reductions in carbon dioxide and other greenhouse gas emissions occur in the coming decades.⁴⁷ To limit warming, cumulative carbon dioxide emissions must reach net zero, along with strong reductions in other greenhouse gases.⁴⁸
- 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.⁴⁹
- According to the Environmental Protection Agency, climate change effects in Maryland will include: sea level rise; increased precipitation, especially from extreme weather events; erosion of wetlands; increased temperatures; disruptions in ecosystems, agriculture, and fisheries; and increased incidence of respiratory diseases such as asthma.⁵⁰
- Climate change will continue to cause severe problems in Baltimore, where Hopkins is located, with more severe impacts expected under high-emissions scenarios.
 - O As a result of climate change, the Baltimore area has experienced extreme flooding exacerbated by outdated infrastructure.⁵¹ Since 1958, significant rainfalls in the Baltimore region have increased by fifty-five percent, with devastating two-day precipitation events increasing up to ninety-two percent.⁵² Given warmer temperatures caused by climate change, water vapor in the atmosphere increases, inducing stronger and more frequent storms.⁵³
 - According to new modeling, the climate of Baltimore in 2080 will be similar to that of Cleveland, Mississippi: seven degrees hotter, with thirty-five percent more rain than today. Cleveland has far more green space and less concrete than

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⁴³ Fourth National Climate Assessment, Volume II, *supra* note 35, at 25.

⁴⁴ *Id.* at 26.

⁴⁵ *Id.* at 25.

⁴⁶ *Id.* at 28.

⁴⁷ *Id*.

⁴⁸ *Id.* at 36.

⁴⁹ Rebecca Lindsey, Climate Change: Global Sea Level, Climate.gov (Aug. 14, 2020).

⁵⁰ What Climate Change Means for Maryland, U.S. Environmental Protection Agency (Aug. 2016).

⁵¹ Ron Cassie, Hell and High Water, Baltimore Magazine (2019).

⁵² *Id*; *see also* The Growing Threat of Urban Flooding: A National Challenge, University of Maryland, College Park & Texas A&M University, Galveston Campus (2018).

⁵³ Cassie, *supra* note 51.

- Baltimore, meaning that, without intervention, Baltimore's frequent flooding will cause even more damage.⁵⁴
- Current estimates project that, by 2050, Baltimore will see fifty days per year with a heat index over 105 degrees.⁵⁵
- According to a 2018 report by researchers at the University of Maryland Center for Environmental Science, sea levels are expected to rise within the range of 4.2-7.9 feet by the year 2100 if emissions continue to grow. In the most likely emissions pathway scenario, sea level is expected to rise 0.4 to 0.9 feet by 2030 and 0.8 to 1.6 feet by 2050.⁵⁶
- Even if the Paris Climate Agreement goals are met a best-case scenario warming is still expected to cause sea level rise of 1.1 to 2.4 feet by 2080.⁵⁷ In this best-case scenario, flooding events that affect city streets will increase from approximately ten days per year in 2020 to approximately 100 days per year in 2050 and approximately 275 days per year by 2100. By 2080, in a worst-case emissions scenario, Baltimore's streets will be flooded every day.⁵⁸

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. Such investments also harm the public health and property of Maryland residents, including those in the Johns Hopkins community, violating the Trustees' duties to *consider the charitable purpose* of the University and to act with *loyalty* toward its community and property.

- Climate change creates heavy burdens on so-called frontline communities, including communities of color and Indigenous communities, which disproportionately experience the effects of air pollution, sea level rise, drought, and other consequences of climate change. ⁵⁹ 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. 60 The effects of climate change are worse in areas that have suffered from racist redlining policies, as in low-income and majority-minority Baltimore

⁵⁴ *Id.*; see also Matt C. Fitzpatrick & Robert R. Dunn, <u>Contemporary climatic analogs for 540 North American urban areas in the late 21st century</u>, Nature Comm. (2019).

⁵⁵ Cassie, *supra* note 51.

⁵⁶ D.F. Boesch, *et al.*, <u>Sea-level Rise: Projections for Maryland 2018</u>, University of Maryland Center for Environmental Science at 12 (2018).

⁵⁷ *Id*.

⁵⁸ *Id.* at 21.

⁵⁹ The Geography of Climate Justice, Mary Robinson Foundation (last visited Feb. 10, 2021).

⁶⁰ Steven Hiseh, <u>People of Color Are Already Getting Hit the Hardest by Climate Change</u>, The Nation (Apr. 22, 2014); Office of Health Equity's Climate Change and Health Equity Program, <u>Racism Increases Vulnerability to Health Impacts of Climate Change</u>, California Department of Public Health (Aug. 17, 2020).

- neighborhoods: residents in such areas are exposed to more episodes of extreme heat and increased risk of flooding.⁶¹
- 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 prospects in sectors such as agriculture and tourism as the climate crisis accelerates.⁶²
- O 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." 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. 64
- 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.⁶⁵
- Baltimore businesses and properties are already being impacted by climate change, particularly by flooding. Flood insurance sometimes provides an incentive to develop vulnerable floodplains, increasing the number of properties damaged by repeated flooding.⁶⁶ Anticipated escalation of floods will thus require major changes to Baltimore infrastructure that have yet to be realized.

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⁶¹ Jeremy S. Hoffman, Vivek Shandas, & Nicholas Pendleton, <u>The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas</u>, 8(1) Climate (2020); Lily Katz, <u>A Racist Past</u>, a Flooded Future: Formerly Redlined Areas Have \$107 Billion Worth of Homes Facing High Flood Risk—25% More Than Non-Redlined Areas, Redfin (June 23, 2021).

⁶² Rachel Morello Frosch, Manuel Pastor, Jim Sadd, & Seth Shonkoff, <u>The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap</u> at 5, University of Southern California Program on Environmental and Regional Equity (May 2009).

⁶³ United Nations Department of Economic and Social Affairs — Indigenous Peoples, <u>Climate Change</u> (2020) (last visited Oct. 5, 2021).

⁶⁴ 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.").

⁶⁵ Michael Werz & Laura Conley, <u>Climate Change</u>, <u>Migration</u>, <u>and Conflict: Addressing complex crisis scenarios in the 21st century</u>, at 3-5, 12-14, Center for American Progress (Jan. 2012).

⁶⁶ See, e.g., Jennifer Wriggins, <u>Flood Money: The Challenge of U.S. Flood Insurance Reform in a Warming World</u>, 119 Penn St. L. Rev. 361, 395 (2014).

- 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 Johns Hopkins owns property and causing the effects of climate change to be borne by the general public.⁶⁷ (See Appendix A for an illustration of flooding damage to the Johns Hopkins Carey School of Business.)
- A 2013 study from researchers at the Massachusetts Institute of Technology estimated that, out of 100,000 Baltimore city residents, 130 people die prematurely each year due to air pollution.⁶⁸
- According to the Mayor and City Council of Baltimore, which in 2018 sued a group of fossil fuel producers and industry groups for public nuisance and other claims related to climate change injuries, "Baltimore is already experiencing a climatic and meteorological shift toward winters and springs with more extreme precipitation events contrasted by hotter, dryer, and longer summers. These changes have led to increased property damage, economic injuries, and impacts to public health. The City must spend substantial funds to plan for and respond to these phenomena. and to mitigate their secondary and tertiary impacts. Compounding these environmental impacts are cascading social and economic impacts, which cause injuries to the City that will arise out of localized climate change-related conditions."
 - O Baltimore's complaint went on to note that "[e]xtreme heat-induced public health impacts in Baltimore will result in increased risk of heat-related illnesses (mild heat stress to fatal heat stroke) and the exacerbation of preexisting conditions in the medically fragile, chronically ill, and otherwise vulnerable . . . In addition, the warming climate system will create disease-related public health impacts in Baltimore, including but not limited to, increased incidence of emerging and vectorborne diseases with migration of animal and insect disease vectors; physical and mental health impacts associated with severe weather events, such as flooding, when they cause population dislocation and infrastructure loss; exacerbation of existing respiratory disease, cardiovascular disease, and stroke as a result of heatwaves and increased average temperature; and respiratory distress, and exacerbation of existing disease. Public health impacts of these climatological changes are likely to be disproportionately borne by communities made vulnerable by their geographic location, and by racial and income disparities." 70
 - The complaint also notes damage to public goods: "Sea level rise endangers City property and infrastructure, causing coastal flooding of low-lying areas, erosion, and storm surges. Several critical City assets and roadways, including highways, rail lines, emergency response facilities, waste water facilities, and power plants, have suffered and/or will suffer injuries due to sea level rise and associated flooding expected by the end of this century. Federal Emergency Management Agency estimates an additional 36 to 58 percent increase in annual storm damage

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⁶⁷ See Timothy Markle, <u>Climate Change: Cost of Inaction for Maryland's Economy</u> at 2-4, Center for Climate and Energy Solutions (Nov. 2015).

⁶⁸ Fabio Caiazzo, *et al.*, <u>Air pollution and early deaths in the United States. Part I: Quantifying the impact of major sectors in 2005</u>, 79 Atmospheric Env't 198, 205 (2013).

⁶⁹ Complaint at 6, Mayor and City Council of Baltimore v. BP PLC et al., No. 24-C-18-004219 (Baltimore Cty. Cir. Ct., July 20, 2018).

⁷⁰ *Id.* at 46-47.

costs for every one-foot rise in sea level and a 102 to 200 percent increase in damage costs for a three-foot increase."⁷¹

- Burning fossil fuels has altered ocean chemistry, making it more acidic.⁷² Acidification has caused serious economic harm to the global fishing industry and also threatens coral reefs and other marine ecosystems.⁷³ Maryland stands to be particularly impacted by these harms, with its economic reliance on the seafood industry.⁷⁴
- Plastic waste a direct by-product of fossil fuel extraction, with ninety-eight percent of plastics made from fossil fuels further damages marine ecosystems.⁷⁵ The United Nations Environment Programme estimates that damage to marine ecosystems from plastic waste causes thirteen billion dollars' worth of damage every year.⁷⁶ Fossil fuel companies rely on plastic production to shore up profits.⁷⁷
- Children bear especially heavy burdens from the impacts of climate change and fossil fuel extraction.
 - According to UNICEF, one billion children live at extreme risk of climate and environmental hazards, shocks, and stresses.⁷⁸ The United States ranks among the countries in which children face at least five major climate and environmental shocks (extremely high category).⁷⁹
 - Children are more vulnerable than adults to extreme weather. They are less able to regulate their body temperature during heat waves, ⁸⁰ breathe at twice the adult rate, ⁸¹ and are at crucial stages of brain and organ development. ⁸² Exposure to toxins has more potential to harm their cognitive ability and lung capacity, ⁸³ 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. ⁸⁴
 - 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."85
- Finally, climate change causes an increase in the frequency of pandemics such as COVID-19: according to the Intergovernmental Platform on Biodiversity and Ecosystem

⁷¹ *Id.* at 101.

⁷² Scott Doney, <u>Oceans of Acid: How Fossil Fuels Could Destroy Marine Ecosystems</u>, Public Broadcasting Service (Feb. 12, 2014).

 $^{^{73}}$ *Id*.

⁷⁴ World Atlas, What Are the Biggest Industries in Maryland? (last visited Oct. 11, 2021).

⁷⁵ Marty Mulvihill, Gretta Goldenman, & Arlene Blum, <u>The Proliferation of Plastics and Toxic Chemicals Must End</u>, The New York Times (Aug. 27, 2021).

⁷⁶ UNEP, Plastic Waste Causes Financial Damage of US\$13 Billion to Marine Ecosystems Each Year as Concern Grows over Microplastics (June 23, 2014).

⁷⁷ Mulvihill, *et al.*, *supra* note 75.

⁷⁸ UNICEF, The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index (Aug. 2021).

⁷⁹ *Id.* at 80.

⁸⁰ *Id.* at 110.

⁸¹ *Id*.

⁸² *Id.* at 20.

⁸³ Id

 ⁸⁴ *Id.* at 110; Joshua Goodman, Michael Hurwitz, Jisung Park, & Jonathan Smith, <u>Heat and Learning</u>, National Bureau of Economic Research (May 2018).
 ⁸⁵ *Id.*

Services, climate change "will likely cause substantial future pandemic risk by driving movement of people, wildlife, reservoirs, and vectors, and spread of their pathogens . . . "86 A recent 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 worsen underlying health 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 underserved communities. 87

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 violent suppression of protest against the industry. Hopkins' *charitable purposes* are directly contravened by investment in the fossil fuel industry. By funding the industry's activities, the Trustees expose the Hopkins community and society at large to severe injury, violating its *duty of loyalty*.

- 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."88
 - Coal industry publications suggested as early as 1966 that the release of fossil fuels could cause "vast changes in the climates of the earth." 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. 90
 - 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." 91

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⁸⁶ Intergovernmental Platform on Biodiversity and Ecosystem Services, <u>IPBES Workshop on Biodiversity and Pandemics</u>: Workshop Report at 3 (Oct. 2020).

⁸⁷ Renee Salas, James M. Schultz, & Caren G. Solomon, <u>The Climate Crisis and Covid-19 — A Major Threat to the Pandemic Response</u>, New England J. Med. (2020).

⁸⁸ 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 2, <u>County of San Mateo v. Chevron Corporation</u>, et al., <u>County of Imperial Beach v. Chevron Corporation</u>, et al., <u>County of Marin v. Chevron Corporation</u>, et al., <u>County of Santa Cruz</u>, et al., <u>v. Chevron Corporation</u>, et al., <u>Nos. 18-15499</u>, 18-15502, 18-15503, 18-16376 (9th Cir. 2019).

⁸⁹ Elan Young, Exxon knew -- and so did coal, Grist (Nov. 29, 2019).

⁹⁰ Oliver Milman, <u>Oil industry knew of 'serious' climate concerns more than 45 years ago</u>, The Guardian (Apr. 13, 2016).

⁹¹ Shannon Hall, Exxon Knew about Climate Change almost 40 years ago, Sci. Am. (Oct. 26, 2015).

- Shell internally reached similar conclusions by at least the 1980s, 92 as did Mobil (then separate from Exxon). 93 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."94
- As the City of Baltimore noted in its lawsuit against members of the fossil fuel industry, these companies "have known for nearly a half century that unrestricted production and use of their fossil fuel products create greenhouse gas pollution that warms the planet and changes our climate. They have known for decades that those impacts could be catastrophic and that only a narrow window existed to take action before the consequences would be irreversible. They have nevertheless engaged in a coordinated, multi-front effort to conceal and deny their own knowledge of those threats, discredit the growing body of publicly available scientific evidence, and persistently create doubt in the minds of customers, consumers, regulators, the media, journalists, teachers, and the public about the reality and consequences of the impacts of their fossil fuel pollution. At the same time, Defendants have promoted and profited from a massive increase in the extraction and consumption of oil, coal, and natural gas, which has in turn caused an enormous, foreseeable, and avoidable increase in global greenhouse gas pollution and a concordant increase in the concentration of greenhouse gases . . . in the Earth's atmosphere."95
- A 2017 report by the Carbon Disclosure Project found that "71% of all global [greenhouse gas] emissions since 1988 can be traced to just 100 fossil fuel producers." 96
- No major fossil fuel company has established itself as a willing participant in the transition to renewable energy.
 - o In 2018, all fossil fuel majors approved projects that are noncompliant with the Paris goals. 97 That same year, the fossil fuel industry as a whole spent about one percent of capital expenditures on renewable energy initiatives. 98
 - 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. 99 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." 100
- Fossil fuel companies continue to bet on long-term fossil fuel reliance.

⁹² John H. Cushman Jr., <u>Shell Knew Fossil Fuels Created Climate Change Risks Back in 1980s</u>, <u>Internal Documents Show</u>, <u>Inside Climate News (Apr. 5, 2018)</u>.

⁹³ Nicholas Kusnetz, Exxon Turns to Academia to Try to Discredit Hopkins Research, Inside Climate News (Oct. 20, 2020).

⁹⁴ Brief of Amici Curiae Robert Brulle, et al., supra note 88, at 15.

⁹⁵ Complaint, Mayor and City Council of Baltimore v. BP PLC et al., supra note 69, at 1.

⁹⁶ New report shows just 100 companies are source of over 70% of emissions, Carbon Disclosure Project (July 2017).

⁹⁷ 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).

⁹⁸ Ron Bousso, Big Oil spent 1 percent on green energy in 2018, Reuters (Nov. 11, 2018).

⁹⁹ Anjli Raval, <u>Big fossil fuel groups all failing climate goals, study shows</u>, Financial Times (Oct. 6, 2020).

¹⁰⁰ Big Oil Reality Check: Assessing Oil and Gas Company Climate Plans, Oil Change International (Sept. 2020).

- Approximately half of the oil under BP's financial control is excluded from the company's decarbonization commitments.¹⁰¹ As recently as November 2020, BP was buying up Canadian offshore oil parcels. 102
- According to leaked internal documents, Exxon is betting on increases in future carbon emissions. 103 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 21 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. 104
- Several leading executives from Shell's renewable energy sectors recently quit in response to the company's lackluster efforts to decarbonize. ¹⁰⁵ 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. ¹⁰⁶ In February 2021, the company revealed that it planned significant expansion of its gas export and production operations. 107
- Chevron plans to increase spending on exploration and extraction in the Gulf of Mexico and the Lower 48 states in 2021. 108
- 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. 109
- In May 2021, the Hague District Court ordered Shell to reduce its emissions by forty-five percent by 2030, finding that the company had violated its standard of care by allowing its business to contribute to dangerous climate change. 110

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¹⁰¹ 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...").

¹⁰² Julianne Geiger, From Billions To Millions: Canada's Offshore Oil Disappointment, OilPrice.com (Nov. 5,

¹⁰³ 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).

¹⁰⁴ Crowley & Rathi, supra note 103. ExxonMobil's growth strategy has since changed in light of the Covid-19

¹⁰⁵ Anjli Raval & Leslie Hook, Shell Executives Quit Amid Discord Over Green Push, Financial Times (Dec. 8,

¹⁰⁶ Laurel Wamsey, Climate Case Against Shell Begins In The Netherlands, NPR (Dec. 1, 2020).

¹⁰⁷ Jillian Ambrose. Shell to expand gas business despite pledge to speed up net zero carbon drive. The Guardian (Feb. 11, 2021).

¹⁰⁸ Carolyn Davis, Chevron Sharply Reduces '21 Spending, but Permian, Gulf of Mexico Still Priorities - Natural Gas, Natural Gas Intelligence (Dec. 3, 2020).

¹⁰⁹ Nicholas Kusnetz, American Petroleum Institute Chief Promises to Fight Biden and the Democrats on Drilling, Tax Policy, Inside Climate News (Jan. 14, 2021).

110 Milieudefensie, et al. v. Royal Dutch Shell plc., Hague Dist. Ct., Netherlands, No. C/09/571932 / HA ZA 19-379

⁽May 26, 2021).

- 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."¹¹¹
- Shareholder engagement has not been an effective tactic for changing the industry's core business model, with recent attempts by shareholders to persuade fossil fuel companies to address climate risks going largely unheeded.
 - The Interfaith Center on Corporate Responsibility found that "150 requests from various responsible shareholders asking fossil fuel companies to evaluate financial risk from climate change regulation [between 1992 and 2015] were ignored or met with a dismissive reply," with leaders of companies including ExxonMobil and Shell explicitly stating their intentions to continue producing fossil fuels without interruption.¹¹²
 - O Shareholder engagement group As You Sow noted in a 2018 report that, although oil and gas companies are disproportionate targets of shareholders' attempts to engage and intervene, the companies have been singularly unresponsive to requests to reduce greenhouse gas emissions.¹¹³
- The fossil fuel sector continues to undermine climate-friendly policymaking.
 - o In the three years following the Paris agreement, for example, the five largest public fossil fuel companies "invested over \$1 [billion] of shareholder funds on misleading climate-related branding and lobbying."¹¹⁴
 - 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 pollution, traffic emissions, and higher temperatures which exacerbates asthma and other illnesses."
 - o In a leaked interview, an ExxonMobil lobbyist admitted that the company continues to use scientific misinformation and political pressure to undermine efforts to address climate change, including targeting the current administration's efforts to reduce greenhouse gas emissions. The lobbyist stated: "Did we aggressively fight against some of the science? Yes. Did we hide our science, absolutely not. Did we join some of these 'shadow groups' to work against some of the early efforts? Yes, that's true. But there's nothing illegal about that. You know, we were looking out for our investments, we were looking out for our shareholders." 116

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¹¹¹ Net Zero by 2050: A Roadmap for the Global Energy Sector at 21, International Energy Agency (July 2021).

¹¹² Taavi Tillmann, Jonny Currie, Alistair Wardrobe, & David McCoy, <u>Fossil fuel companies and climate change:</u> the case for divestment, 350 Brit. Med. J. (June 2015).

^{113 2020:} A Clear Vision for Paris-Compliant Shareholder Engagement, As You Sow (Sept. 2018). The report urges fiduciaries to divest from the oil and gas sector so as to "protect their beneficiaries" if the companies do not adopt Paris-compliant plans by the close of the 2020 proxy season. *Id.* at 25. That deadline has now passed without any meaningful change of course by the industry. Raval, <u>Big fossil fuel groups all failing</u>, *supra* note 99.

¹¹⁴ Big Oil's Real Agenda on Climate Change, InfluenceMap (Mar. 2019).

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 Lawrence Carter, <u>Inside Exxon's playbook: How America's biggest oil company continues to oppose action on climate change</u>, Unearthed (June 30, 2021).

- 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 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
 - 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

Studies (Oct. 2020). The states in which bills have passed into law are Indiana, Kentucky, Louisiana, Mississippi, Missouri, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Texas, West Virginia, and New Mexico. <u>US</u> Protest Law Tracker, International Center for Not-for-Profit Law (last visited Feb. 10, 2021).

¹¹⁷ Shaun W. Elsasser & Riley E. Dunlap, <u>Leading Voices in the Conservative Choir: Conservative Columnists'</u>
<u>Dismissal of Global Warming and Denigration of Climate Science</u>, 57(6) Am. Behav. Scientist 754, 755 (2013).

118 <u>Muzzling Dissent: How Corporate Influence Over Politics Has Fueled Anti-Protest Laws</u>, Institute for Policy
Studies (Oct. 2020). The states in which hills have passed into law are Indiana. Kentucky Louisiana Mississippi

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* note 118.

¹²¹ Nicholas Kusnetz, <u>More States Crack Down on Pipeline Protesters, Including Supporters Who Aren't Even on the Scene</u>, Inside Climate News (Mar. 28, 2019); Susie Cagle, <u>'Protesters as terrorists': growing number of states turn anti-pipeline activism into a crime</u>, The Guardian (July 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.

- 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 "[1]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
- O 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 asset managers, the Trustees have violated their *duty of care* by failing to divest from fossil fuels despite ample evidence of the industry's financial precarity. The untenable value thesis of fossil fuel investments is especially concerning for investors at charitable institutions. As a public charity that "exercise[s] fiduciary responsibility for advancing Johns Hopkins' mission and goals in a sustainable manner, through wise stewardship of all its resources for the common good and for generations to come," the Board of Trustees 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. In other words, the Trustees' fiduciary duties oblige them to promote the financial non-viability of the fossil fuel sector, making any continued investment in the sector unreasonable on its face.

¹²³ Antonia Juhasz, <u>Paramilitary security tracked and targeted DAPL opponents as 'jihadists,' docs show,</u> Grist (June 1, 2017).

¹²⁴ Alleen Brown, <u>Medics Describe How Police Sprayed Standing Rock Demonstrators with Tear Gas and Water Cannons</u>, The Intercept (Nov. 21, 2016).

¹²⁵ Alleen Brown, Will Parrish & Alice Speri, <u>Tigerswan Responded to Pipeline Vandalism by Launching Multi-State Dragnet</u>, The Intercept (Aug. 26, 2017).

¹²⁷ Will Parrish & Alleen Brown, <u>How Police Are Preparing for a Standoff Over Enbridge Line 3</u>, The Intercept (Jan. 30, 2019).

¹²⁸ Bill McKibben, Shake Harvard Free of Oil Stock, The Boston Globe (Apr. 7, 2015).

¹²⁹ Board of Trustees, Johns Hopkins University (2021).

- 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 Index has increased approximately 366 percent in value since 2011, the S&P Oil & Gas Exploration & Production Index has lost approximately thirty-two percent of its value over the same time period, ¹³⁰ and the S&P Oil & Gas Equipment & Services Select Industry Index has lost approximately forty-seven percent of its value. ¹³¹ 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. ¹³²
 - From the fourth quarter of 2019 to August 2020, seven of the world's largest oil companies lost \$87 billion in value as a result of increased emissions regulations and collapsing demand during the COVID-19 pandemic.¹³³
 - 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.¹³⁴
- 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 to around \$175 billion. 135
- In February 2021, ExxonMobil reported quarterly losses of \$20.1 billion. 136
- Since 2010, and the midst of this financial crisis, the world's five oil "supermajors" ExxonMobil, BP, Chevron, Shell, and Total SA have spent far more on dividends and stock buybacks (\$556 billion) than they have earned from business operations (\$340 billion), indicating an unsustainable reliance on borrowing and asset sales to inflate their financial performance. ¹³⁷
- The coal industry, especially in the United States, is collapsing: the share of U.S. electricity produced by coal has declined from 45% in 2008 to 24% in 2020, while eight coal companies, including the largest private coal firm, declared bankruptcy in 2019. ¹³⁸
- 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

¹³⁰ Data from S&P Dow Jones Indices (S&P Global, Oct. 16, 2021).

¹³¹ Data from <u>S&P Dow Jones Indices</u> (S&P Global, Oct. 16, 2021).

¹³² Kevin Stankiewicz, <u>There's no more money to be made in oil and gas stocks</u>, <u>Jim Cramer says</u>, CNBC (Feb. 3, 2020).

¹³³ Jillian Ambrose, Seven top oil firms downgrade \$87bn in nine months, The Guardian (Aug. 14 2020).

¹³⁴ Ben Butler, <u>Rating agency S&P warns 13 oil and gas companies they risk downgrades as renewables pick up steam</u>, The Guardian (Jan. 27 2021).

¹³⁵ Avi Salzman, Why Exxon Is Being Dropped From the Dow, Barron's (Aug. 25 2020).

¹³⁶ ExxonMobil reports results for fourth quarter 2020 and provides perspective on forward plans, ExxonMobil (Feb. 2, 2021).

 ¹³⁷ Clark Williams-Derry, Tom Sanzillo, and Kathy Hipple, <u>In Q1, Four of Five Oil Majors Paid More Cash to Investors Than They Made From Operations</u>, Institute for Energy Economics and Financial Analysis (May 2020).
 ¹³⁸ Fred Pearce, <u>As Investors and Insurers Back Away</u>, the <u>Economics of Coal Turn Toxic</u>, Yale Environment 360 (Mar. 10, 2020).

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 — are no longer tenable. 139

- 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." 140
- 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." 141
- 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." 142
- 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 need to reduce emissions from oil and gas production forty percent below 2019 levels by 2040. Such reductions would render the majority of oil and gas reserves unexploitable and unprofitable. 143
- 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

¹³⁹ Tom Sanzillo, Kathy Hipple, and Clark Williams-Derry, <u>The Financial Case for Fossil Fuel Divestment</u>, Sightline Institute and the Institute for Energy Economics and Financial Analysis (July 2018).

¹⁴⁰ *Id.* at 4.

¹⁴¹ *Id*. at 1.

¹⁴² *Id.* at 38.

¹⁴³ Carbon Tracker Initiative, <u>Balancing the Budget: Why deflating the carbon bubble requires oil & gas companies to shrink</u> (Nov. 1, 2019).

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. ¹⁴⁴ 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. ¹⁴⁵

- In its most recent 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." ¹⁴⁶
- 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." 147
- 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. 148
- On October 4, 2021, the Mayor of Baltimore signed into law a measure requiring the Employees' Retirement System fund to cease new investments in fossil fuel companies and to divest all fossil fuel holdings by 2026. 149
- In an August 2020 open letter, over 100 leading economists (including Nobel Prize laureate Joseph Stiglitz, former Secretary of Labor Robert Reich, and Hopkins faculty members Dani Rodrik, Richard Parker, Stephen Marglin, and John Womack) identified the 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

¹⁴⁴ Investing in a Time of Climate Change: The Sequel 2019 at 34, Mercer LLC (2019).

The Carbon Bubble: The financial risk of fossil fuels and need for divestment at 7, European Green Party (2020).

¹⁴⁶ Investing in a Time of Climate Change: The Sequel 2019 at 34, Mercer LLC (2019).

¹⁴⁷Climate change: Liability risks at 37, Clyde & Co LLP (Mar. 2019).

¹⁴⁸ Michael Slezak, <u>Rest super fund commits to net-zero emission investments after Brisbane man sues</u> ABC News (Nov. 2, 2020).

¹⁴⁹ City of Baltimore Council Bill 21-0066 (signed into law Oct. 4, 2021).

financing of their continued operations while reinvesting those resources in a just and stable future."¹⁵⁰

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

Despite well-known facts regarding the fossil fuel industry's efforts to defraud investors, the Trustees have persisted in buying industry securities, violating their *duty of care*.

- Fossil fuel companies have long engaged in a fraudulent attempt to hide the financial risks associated with emissions regulations and future fossil fuel extraction. This fraud has been a matter of public record since at least 2015¹⁵¹ and a matter of common knowledge for investors in Massachusetts since at least 2019, when the Attorney General sued ExxonMobil for misleading consumers and investors.
 - 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 ("ExxonMobil" or the "Company"), 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." 152
 - 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 indeed be catastrophic" and that it would be necessary to sharply reduce fossil fuel use. 153
 - 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

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¹⁵⁰ Jeffrey Sachs, Joseph Stiglitz, Mariana Mazzucato, Clair Brown, Indivar Dutta-Gupta, Robert Reich, Gabriel Zucman, et al, <u>Letter from economists: to rebuild our world, we must end the carbon economy</u>, The Guardian (Aug. 4, 2020).

¹⁵¹ Neela Banerjee, Lisa Song, and David Hasemyer, <u>Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago</u>, Inside Climate News (Sept. 16, 2015).

^{152 &}lt;u>Second Amended Complaint</u>, <u>Massachusetts v. ExxonMobil</u>, No. 1984-CV-03333-BLS1(Mass. Sup. Ct. June 5 2020) at 1.

¹⁵³ *Id.* at 5.

- the scientific consensus that rising atmospheric carbon dioxide levels produce catastrophic warming. 154
- O 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." 155
- O According to the Complaint, "The 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." 156
- The Attorney General explicitly stated that investment in companies like ExxonMobil puts investors like the Trustees 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." 157
- 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' worth to investors by as much as \$56 billion.¹⁵⁸
- An ongoing lawsuit against accounting firm KPMG alleges that the firm assisted Miller Energy in fraudulently inflating the value of its fossil fuel holdings, in a pattern of "oil reserves fraud" common across the industry.¹⁵⁹
- Despite the revelation of this 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 climate change. ExxonMobil and Chevron, for example, have blocked shareholder proposals that ask the companies to

¹⁵⁶ *Id.* at 65, 80-81.

¹⁵⁴ *Id.* at 9, 50-51.

¹⁵⁵ *Id.* at 8.

¹⁵⁷ *Id.* at 138.

¹⁵⁸ Nick Cuningham, Exclusive: Whistleblower Accuses Exxon of 'Fraudulent' Behavior for Overvaluing Fracking Assets For Years, Desmog Blog (Feb. 2, 2021).

¹⁵⁹ Justin Mikulka, How Third-Party Auditors Make Oil Industry Fraud Possible, DeSmog Blog (June 3, 2021).

describe how they will adjust their operations to satisfy the warming targets established under the Paris Agreement. ¹⁶⁰

VIII. 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 in fact poses no risk to a portfolio's diversity and flexibility, nor does it impact returns. The Trustees has violated its *duty of care* by failing to embrace a divestment strategy that would both improve the endowmnet's performance and cure the fiduciary violations produced 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 10 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." 161
- 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. ¹⁶² 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. ¹⁶³
 - 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 donations, higher student enrollment, and more extensive risk management practices by the endowment fund." 164

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¹⁶⁰ Dana Drugman, Exxon, Chevron, Chase Reject Shareholder Requests to Address Climate Risk, The Climate Docket (Jan. 29, 2020).

¹⁶¹ Jeremy Grantham, <u>The mythical peril of divesting from fossil fuels</u>, London School of Economics (June 13, 2018).

¹⁶² Christopher Ryan and Christopher Mariscano, <u>Examining the Impact of Divestment from Fossil Fuels on University Endowments</u>, 17 NYU J. L. and Business, Roger Williams Univ. L. Studies Paper No. 195 (June 23, 2020).

¹⁶³ Auke Plantinga & Bert Scholtens, The financial impact of fossil fuel divestment, 21 Climate Policy 1 (2020).

¹⁶⁴ George O. Aragon, Yuxiang Jiang, Juha Joenväärä, & Cristian Ioan Tiu, <u>Socially Responsible Investments: Costs and Benefits for University Endowment Funds</u> at 5 (July 21, 2020).

- o 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 (\$137 billion versus \$114.8 billion) from 2008 to 2018 had it divested from fossil fuels.¹⁶⁵

IX. Divestment by peer institutions

In light of divestment by hundreds of large institutional investors, including many universities like Hopkins, the Trustees have 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 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. ¹⁶⁶
 - 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."¹⁶⁷
 - o In its lawsuit against ExxonMobil, the Massachusetts Attorney General concluded that institutional divestment is an effective means of 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." ¹⁶⁸
 - The Attorney General was referencing an investor disclosure by Shell, in which the company stated that the divestment movement "... could have a

¹⁶⁵ Toby A.A. Heaps, <u>Divestment would have made NY pension fund \$22B richer</u>, Corporate Knights (Oct. 4, 2018).

¹⁶⁶ 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.").

¹⁶⁷ Prem Thakkar, Reading the Fine Print of University Fossil Fuel Divestment Pledges, The American Prospect

⁽Mar. 1, 2021).

¹⁶⁸ Second Amended Complaint, Massachusetts v. ExxonMobil, *supra* note 152, at 108-09.

- 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."¹⁶⁹
- Other fossil fuel companies have likewise acknowledged the risk of divestment: 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." ¹⁷⁰
- o 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."¹⁷¹
- Hopkins' peer institutions 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. Many of Hopkins' peer institutions have also disclosed estimated percentages of their endowments invested in the fossil fuel industry, and they have committed to meaningful climate action on a much more rapid timescale.
 - O 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.¹⁷²
 - 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." ¹⁷³
 - 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

Annual Report and Form 20-F 2017 — Strategic Report at 13, Royal Dutch Shell PLC (2017).

¹⁷⁰ Peabody Energy Corporation, Form 10-K: Annual Report at 30, Securities and Exchange Commission (2014).

¹⁷¹ Emma Howard, A beginner's guide to fossil fuel divestment, The Guardian (June 23, 2015) (quoting Jamie Henn, of 350.org); *see also* Naomi Oreskes, Harvard and Other Schools Make a Choice on Fossil Fuels, The New York Times (Oct. 2, 2021) ("Where investors put their money reflects their expectations of how the future will unfold, and those expectations, when acted upon, shape our future.").

¹⁷² Christina Paxson, <u>Letter from President Paxson: Brown's actions on climate change</u>, Brown University (Mar. 4, 2020).

¹⁷³ *Id*.

existing investments in that area, effectively divesting the endowment from the fossil fuel industry. 174

- 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. ¹⁷⁵
- Cornell also released information about the estimated percentage of its investments in fossil fuels, stating that "the moratorium applies to new private equity and bond vehicles focused on fossil fuels, a category that makes up about 4.2% of Cornell's long-term investments." ¹⁷⁶
- On October 1, 2020, the University of Cambridge announced plans to divest all direct and indirect holdings from the fossil fuel industry and to achieve net-zero greenhouse gas emissions by 2038 commitments that are more ambitious than Hopkins' in both their scope and timescale.¹⁷⁷
 - 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. It now aims to achieve net-zero greenhouse gas emissions across its entire investment portfolio by 2038 12 years before Hopkins' 2050 deadline. 178
 - 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. 179
 - 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 scrutinized against the university's goal of reducing greenhouse gas emissions "before any funding is accepted." ¹⁸⁰
 - Cambridge also released an estimate of the percentage of its investments placed in the energy industry: 2.8 percent, which includes energy services as well as fossil-fuel producers, but still represents a greater disclosure than Hopkins has agreed to. ¹⁸¹

¹⁷⁴ Kathryn Stamm, <u>Cornell to Effectively Divest from Fossil Fuels, Trustees Vote</u>, Cornell Daily Sun (May 22, 2020).

¹⁷⁵ James Dean, <u>Cornell announces moratorium on fossil fuel investments</u>, Cornell Chronicle (May 22, 2020).

¹⁷⁷ Matthew Taylor, <u>Cambridge University to divest from fossil fuels by 2030</u>, The Guardian (Oct. 1, 2020).

¹⁷⁹ Cambridge to divest from fossil fuels with 'net zero' plan, University of Cambridge (Oct. 1, 2020).

¹⁸¹ Paulina Pielichata, <u>Cambridge University to divest endowment fossil-fuel holdings</u>, Pensions & Investments Online (Oct. 1 2020).

- In April 2020, the University of Oxford announced plans to divest its endowment from fossil fuel companies. 182
 - 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 C.¹⁸³
 - Oxford has made public the estimated percentage of its endowment invested in fossil fuels, as well as the percent change over time. "Since 2007, OUem [Oxford University Endowment Management] investment in the energy sector has declined from an estimated 8.5% of the endowment to 2.6%," the university disclosed. "This includes renewable energy and just 0.6% of the endowment is now in fossil fuel extractors." 184
 - While Hopkins has insisted on "shareholder engagement" *instead of* divestment, Oxford has chosen 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." ¹⁸⁵
 - The Oxford Martin Principles for Climate-Conscious Investment inform the university's engagement tactics. Meanwhile, Hopkins has made public no such guidelines for engagement, nor have the Trustees produced any evidence that their efforts can change the fossil fuel industry's core business model.
 - 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 fall 2020, months after announcing its divestment pledge, Oxford released drafts of a sustainability plan to achieve net-zero carbon and biodiversity net gain by 2035¹⁸⁶ 15 years before Hopkins has committed to neutralize its greenhouse gas emissions.
- In September 2019, the University of California system announced divestment of its over \$83 billion endowment and pension fund from fossil fuels.¹⁸⁷
 - In an op-ed in the *Los Angeles Times*, fund managers cited their fiduciary duty to the long-term financial wellbeing of the institution, writing that

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¹⁸² University of Oxford cuts ties to fossil fuels industry, BBC News (Apr. 28, 2020).

¹⁸³ Oxford Martin Principles for Climate-Conscious Investment at 2-4, Oxford Martin Net Zero Carbon Investment Initiative (Feb. 2018) (adapted from R.J. Millar, C. Hepburn, J. Beddington, J. and M.R. Allen, <u>Principles to guide investment towards a stable climate</u>, Nature Climate Change 8, (2018).

¹⁸⁴ Oxford announces historic commitment to fossil fuel divestment, University of Oxford (Apr. 27, 2020).

185 Id.

¹⁸⁶ Aiming for zero carbon and biodiversity net gain by 2035, University of Oxford (Nov. 20, 2020).

¹⁸⁷ Jagdeep Singh Baccher and Richard Sherman, <u>Opinion: UC investments are going fossil free. But not exactly for the reasons you may think</u>, Los Angeles Times (Sept. 17, 2019).

- "[t]he reason we sold some \$150 million in fossil fuel assets from our endowment was the reason we sell other assets: They posed a long-term risk to generating strong returns for UC's diversified portfolios." ¹⁸⁸
- The fund managers also pledged to take the opportunity to reinvest in climate change solutions, writing that "[w]e have been looking years, decades and centuries ahead as we place our bets that clean energy will fuel the world's future. That means we believe there is money to be made."¹⁸⁹
- o In May 2016, the University of Massachusetts system announced the divestment of its endowment from all fossil fuel assets. 190
 - 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." ¹⁹¹
 - Fund managers also stressed the compatibility of moral and fiduciary duties in divesting, with UMass Foundation Treasurer and Investment Committee Chairman 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." ¹⁹²
- In February 2020, Georgetown University announced the divestment of its endowment from all public and private fossil fuel assets. 193
 - In its announcement, Georgetown stressed the financial risk of continued investment, with Michael Barry, Georgetown's chief investment officer, noting that "climate change, in addition to threatening our planet, is increasing the risk of investing in oil and gas companies, as we expect a more volatile range of financial outcomes." ¹⁹⁴
 - Georgetown President John J. DeGioia also identified moral concerns as important to the decision, nothing that "caring for our environment is one of the most urgent moral and practical concerns of our time." ¹⁹⁵
- 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

¹⁸⁹ *Id*.

¹⁸⁸ *Id*.

¹⁹⁰ <u>UMass Becomes First Major Public University to Divest from Direct Fossil Fuel Holdings</u>, University of Massachusetts (May 25, 2016).

¹⁹¹ *Id*.

¹⁹² *Id*.

¹⁹³ Fossil Fuels Divestment Continues Georgetown's Commitment to Sustainability, Georgetown University (Feb. 6, 2020).

¹⁹⁴ *Id*.

¹⁹⁵ *Id*.

- System of the City of New York, and the City of Providence, Rhode Island (partial). 196
- Other major funds that have divested include the \$5 billion Rockefeller Foundation (full), ¹⁹⁷ Norway's \$1.1 trillion sovereign wealth fund (oil and gas exploration and production) ¹⁹⁸ and the \$90 billion Storebrand hedge fund (ExxonMobil, Chevron, and other environmental bad actors). ¹⁹⁹

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

Hopkins' *charitable purposes* are directly contravened by the decades-long efforts of fossil fuel companies to obscure scientific reality and discredit academic research. These efforts have been undertaken in bad faith, and cannot be attributed to intellectual disagreement. By funding this activity, the Trustees exposes the Hopkins community and society at large to severe injury, violating its *duty of loyalty*.

- In response to mounting evidence of climate risks, ²⁰⁰ fossil fuel companies "stopped funding climate research, and began a campaign to discredit climate science and delay actions perceived as contrary to their business interests." ²⁰¹ This campaign was multipronged, 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. ²⁰²
 - O In 2007 testimony to the U.S. House of Representatives Committee on Science and Technology, Dr. James McCarthy described a network of 43 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."²⁰³
 - Between 1998 and 2005, ExxonMobil alone spent nearly \$16 million funding groups that promote climate denial, according to a report by the Union of Concerned Scientists.²⁰⁴
 - Over about the last three decades, "five major U.S. oil companies have spent a total of at least \$3.6 [billion] on advertisements." These ads, along with other public communications, have promoted narratives the companies know to be

¹⁹⁶ 1000+ Divestment Commitments, GoFossilFree.org (updated Dec. 9, 2020).

¹⁹⁷ Id

¹⁹⁸ Terje Solsvik, Norway sovereign wealth fund to divest oil explorers, keep refiners, Reuters (Oct. 1, 2019).

¹⁹⁹ Jillian Ambrose, <u>Major investment firm dumps Exxon, Chevron and Rio Tinto stock</u>, The Guardian (Aug. 24, 2020).

²⁰⁰ See supra at Part III.

²⁰¹ Brief of Amici Curiae Robert Brulle, et al., supra note 88, at 17.

²⁰² Id.

²⁰³ See Second Amended Complaint, Massachusetts v. ExxonMobil, supra note 152, at ¶193.

²⁰⁴ Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco's Tactics to "Manufacture Uncertainty" on Climate Change, Union of Concerned Scientists (July 16, 2007).

²⁰⁵ Emily Holden, <u>How the oil industry has spent billions to control the climate change conversation</u>, The Guardian (Jan. 8, 2020).

false: In the case of ExxonMobil, for example, between 1977 and 2014, only 12% of ads acknowledged that anthropogenic climate change is real, compared to 80% of internal documents.²⁰⁶

- 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, ²⁰⁷ and by the Massachusetts Attorney General's complaint against ExxonMobil in its deceptive advertising litigation. ²⁰⁸
- 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."²⁰⁹
- As the City of Baltimore noted in its lawsuit against members of the fossil fuel industry, "[a] key strategy in Defendants' efforts to discredit scientific consensus on climate change and the IPCC was to bankroll scientists who, although accredited, held fringe opinions that were even more questionable given the sources of their research funding. These scientists obtained part or all of their research budget from Defendants directly or through Defendant-funded organizations like [the American Petroleum Institute], but they frequently failed to disclose their fossil fuel industry underwriters." 210
- Shaping the work of academics and scholars through the funding of research and programming has featured among the industry's tactics.²¹¹ Some fossil fuel companies have attempted to discredit or intimidate academic researchers whose work they found threatening.²¹²

²⁰⁶ Geoffrey Supran & Naomi Oreskes, <u>Assessing ExxonMobil's climate change communications (1977–2014)</u>, 12(8) Envtl. Res. Letters (Aug. 2017).

²⁰⁷ See 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, <u>County of San Mateo v. Chevron Corporation</u>, et al., <u>County of Marin v. Chevron Corporation</u>, et al., <u>County of Santa Cruz</u>, et al., <u>v. Chevron Corporation</u>, et al., <u>Nos. 18-15499</u>, 18-15502, 18-15503, 18-16376 (9th Cir. 2019).

²⁰⁸ See Complaint, Commonwealth of Massachusetts v. Exxon Mobil Corporation, Superior Court Civil Action No. 19-3333 at ¶¶ 187-196 (Oct. 24, 2019).

²⁰⁹ Riley E. Dunlap & Peter J. Jacques, <u>Climate Change Denial Books and Conservative Think Tanks: Exploring the Connection</u>, 57(6) Am. Behav. Scientist 699, 700 (2013) (internal citations omitted).

²¹⁰ Complaint, Mayor and City Council of Baltimore v. BP PLC et al., supra note 69, at 83.

²¹¹ See Benjamin Franta & Geoffrey Supran, <u>The fossil fuel industry's invisible colonization of academia</u>, The Guardian (Mar. 13, 2017).

²¹² For an incomplete list of such attempts, *see*, *e.g.*, Union of Concerned Scientists, How the Fossil Fuel Industry Harassed Climate Scientist Michael Mann (Oct. 12, 2017); John Krohn, Four Things to Know about the Harvard FracFocus Study, Energy in Depth (April 25, 2013) (describing, on an industry-funded website, a Harvard Law School study as "fundamentally and transparently flawed"); Michael Halpern, Arizona Superior Court Protects Academic Freedom in Climate Email Disclosure Case, Union of Concerned Scientists (Mar. 30, 2015) (explaining that 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); Nicholas Kusnetz, Exxon Turns to Academia to Try to Discredit Harvard Research, Inside Climate News (Oct. 20, 2020).

- At least one fossil fuel company has actively sought to influence the outcome of ongoing litigation by funding academic research, again undermining the institutional integrity of universities.
 - o In 1989, the Exxon Valdez oil spill led to a \$5.3 billion 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," ²¹³ 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..."214
 - The upshot of the 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 system of fines. 215 One professor called for the total abolishment of punitive damages.²¹⁶
- Hopkins College's mission is "[t]o educate its students and cultivate their capacity for lifelong learning, to foster independent and original research, and to bring the benefits of discovery to the world."²¹⁷ Its charter tasks it to "the promotion of education in the State of Maryland."218 Continued investment in an industry that threatens young people's future, attacks and undermines scientific knowledge, and compromises the integrity of Johns Hopkins' own research runs directly contrary to this mission.

XI. The Trustees' refusal to consider divestment from fossil fuels

The Trustees have failed to act in *good faith* by ignoring repeated efforts by Hopkins students and faculty to align the university's investment practices with its charitable mission.

²¹⁸ Certificate of Incorporation, Johns Hopkins University Board of Trustees (last visited Oct. 25, 2021).

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²¹³ Lee Smith, <u>The Unsentimental Corporate Giver</u>, 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.")

²¹⁴ 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.

²¹⁵ Mencimer at 230; Thomas O. McGarity, <u>A Movement, A Lawsuit, and the Integrity of Sponsored Law and</u> 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.

²¹⁶ McGarity, supra note 215, 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)). ²¹⁷ History & Mission, Johns Hopkins University (last visited Oct. 25, 2021).

- Members of the Hopkins 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.
 - o In 2011, Refuel our Future (RoF) was formed at the Bloomberg School of Public Health.
 - o In 2013, RoF relaunched on the Homewood Campus.
 - o In February 2014, RoF delivered a petition calling for divestment from fossil fuels with over 1,500 signatures to the President's Office. ²¹⁹
 - In December 2015, RoF submitted a proposal for fossil fuel divestment to the Johns Hopkins University Public Interest Investment Advisory Committee (PIIAC).²²⁰ This proposal calls on the university to divest its endowment from fossil fuel companies for social, environmental, and fiscal reasons.²²¹
 - In November 2016, RoF held a peaceful protest and sit-in outside Garland Hall, the main campus administrative building, demanding a decision on fossil fuel divestment by PIIAC after PIIAC failed to respond for 11 months.²²²
 - In February 2017, Johns Hopkins' Student Government Association passed a resolution in support of RoF's call for fossil fuel divestment. 223
 - On April 20, 2017, the Johns Hopkins University News-Letter Editorial Board released a statement in support of fossil fuel divestment.²²⁴
 - On April 21, 2017, RoF held a sit-in inside Garland Hall, calling on the University and PIIAC to make a decision on their fossil fuel divestment proposal before the end of the academic year. ²²⁵
 - In September 2017, PIIAC published its report on RoF's proposal and recommended full divestment from fossil fuels.²²⁶
 - o In December 2017, JHU Board of Trustees announced that they voted to divest JHU from thermal coal, a decision that ignored the majority of PIIAC's recommendations.²²⁷
 - o In February 2018, RoF held a rally in front of Gilman Hall calling on Hopkins to divest from all fossil fuels.²²⁸

²²² Ashley Kim and Sam Fossum, Refuel Our Future protests University's investments in fossil fuels, Johns Hopkins University News-Letter (Nov. 25, 2016).

²¹⁹ Sari Amiel, Day Without Oil urges fossil fuel divestment, Johns Hopkins News-Letter (Oct. 3, 2013).

²²⁰ PIIAC Proposal Arguing for Fossil Fuel Divestment, Johns Hopkins University Refuel Our Future (Dec. 2015).

²²³ Karen Sheng, SGA votes to support fossil fuel divestment, Johns Hopkins University News-Letter (Feb. 23, 2017).

²²⁴ Editorial: The University should divest from fossil fuels, Johns Hopkins University News-Letter (Apr. 20, 2017).

²²⁵ Sherry Kim, Refuel Our Future stages sit-in for fossil fuel divestment, Johns Hopkins University News-Letter (Apr. 27, 2017).

²²⁶ Report of JHU Public Interest Investment Advisory Committee in Response to Proposal of Refuel Our Future, Johns Hopkins University (Sept. 2017).

²²⁷ Alyssa Wooden and Jacob Took, <u>University announces it will divest from thermal coal companies</u>, Johns Hopkins University News-Letter (Dec. 12, 2017).

²²⁸ Sarah Y. Kim. Refuel continues fight for full fossil fuel divestment, Johns Hopkins University News-Letter (Feb. 15, 2018).

- In November 2018, RoF launched an alternative Senior Class Gift Campaign calling on seniors and alumni to withhold donations to Hopkins until they divest.²²⁹
- Beginning in the fall of 2019, RoF and other Hopkins students and faculty gathered each week on the steps of Gilman Hall for Fossil Free Fridays, prodivestment demonstrations held in conjunction with other fossil fuel divestment groups.²³⁰
- In May 2019, the Student Government Association released the results of an omnibus referendum in which seventy-nine percent of the polled students voted in favor of full divestment by the Board of Trustees (surpassing the binding threshold of over one third of the student body).²³¹
- On Fossil Fuel Divestment Day in February 2020, RoF hosted an action during which students wrote letters urging the Hopkins administration to divest. ²³²
- Despite the strong support for complete divestment among students, community stakeholders, and the University's own advisory personnel, Trustees members have refused to adequately engage with the question of fossil fuel divestment in good faith.
 - On April 17, 2017, the Office of the Provost responded to RoF's divestment proposal to PIIAC by hosting a forum on divestment.²³³
 - In particular, the University's Board of Trustees has not adequately acted on PIIAC's recommendation that the University fully divest from all fossil fuel holdings.²³⁴
 - The University published PIIAC's recommendations online to collect feedback from the Hopkins community, and this feedback largely supported full fossil fuel divestment as outlined by PIIAC.²³⁵
 - In response to these recommendations, the University's Board of Trustees agreed in 2017 to a severely restricted form of divestment, implementing PIIAC's recommendations only for companies that derive over thirty-five percent of their revenues from the production of thermal coal.²³⁶
 - Since this announcement, the University has failed to provide updates on the status of its divestment efforts or on the amounts of money being divested.
 - The primary response by the Trustees to the efforts and recommendations listed above has been a refusal to meaningfully engage. The University has instead taken non-substantive, largely symbolic actions in an attempt to placate divestment advocates.

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²²⁹ Sam Mollin and Clarissa Chen, <u>To fight climate change</u>, <u>donate \$0 to our senior class gift</u>, Johns Hopkins University News-letter (Nov. 29, 2018).

²³⁰ Ananta Srivastava, Refuel Our Future holds first Fossil Free Friday, Johns Hopkins University News-letter (Nov. 21, 2018).

²³¹AJ Tsang, <u>Report on the 2018/2019 SGA Omnibus Referendum</u> at 2-3, Johns Hopkins Student Government Association (May 8, 2019).

²³² Jackie Rittenhouse, <u>Refuel Our Future calls for climate change action</u>, Johns Hopkins University News-Letter (Feb. 20, 2020).

²³³ Katie Pearce, <u>Johns Hopkins forum explores the pros and cons of fossil fuel divestment</u>, Johns Hopkins University Hub (Apr. 18, 2017).

²³⁴ See Report of JHU Public Interest Investment Advisory Committee, supra note 226.

²³⁵ See PIIAC Proposals and Reports to Divest From Fossil Fuels, Johns Hopkins University (Dec. 2017).

²³⁶ Message From Committee on Investments to PIIAC, Johns Hopkins University (Dec. 2017).

Conclusion

The Attorney General 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 Trustees no longer harms the Hopkins community, the Commonwealth, and the public.

$Appendix\ A$

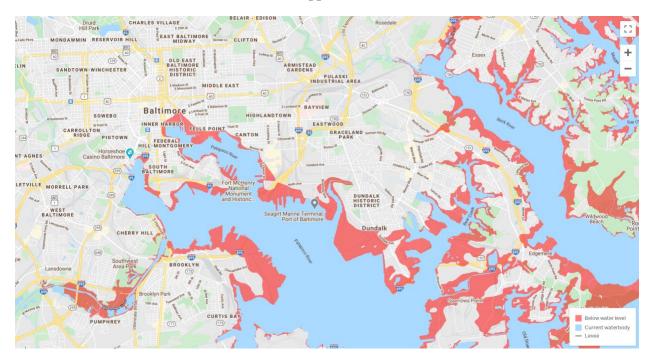
Report on the 2018/2019 SGA Omnibus Referendum — 3

RESULTS — SUMMARY

Question	Yes (%)	No (%)	Status with regard to the binding threshold
Should the University create a private police force?	688 (28.93%)	1690 (71.07%)	Not binding. The SGA is not specifically bound to this outcome.
Should the University construct a student center?	1917 (80.61%)	461 (19.39%)	Outcome is binding. The SGA is bound to this outcome until and unless reversed by a future referendum.
Should the Board of Trustees fully divest from all remaining holdings in fossil fuels?	1879 (79.02%)	499 (20.98%)	Outcome is binding. The SGA is bound to this outcome until and unless reversed by a future referendum.

Results from the 2019 Johns Hopkins Student Government Association Referendum.

Appendix B



Map showing flooding in the Baltimore area in 2100 under an "unchecked pollution" and "bad luck" scenario. The Johns Hopkins Carey Business School, located on the Patapsco River, is entirely under the annual flood line. Created using the <u>Climate Central Coastal Risk Screening Tool</u>, based on data from Robert E. Kopp et al., <u>Probabilistic 21st and 22nd century sea level projections at a global network of tide-gauge sites</u>. Earth's Future, 2(8), 383-406 (2014).

Appendix C

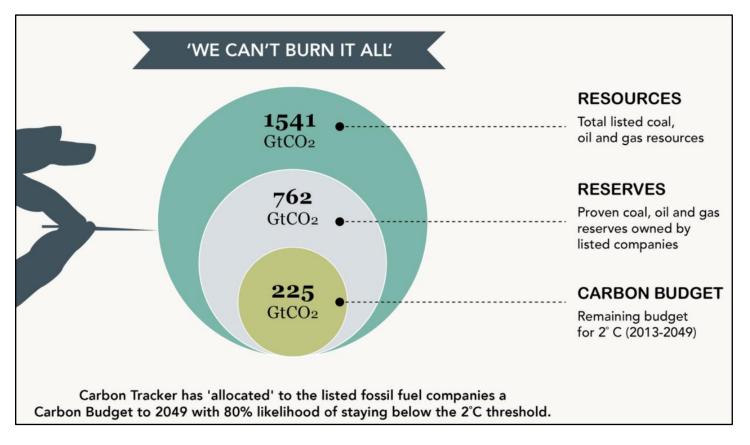
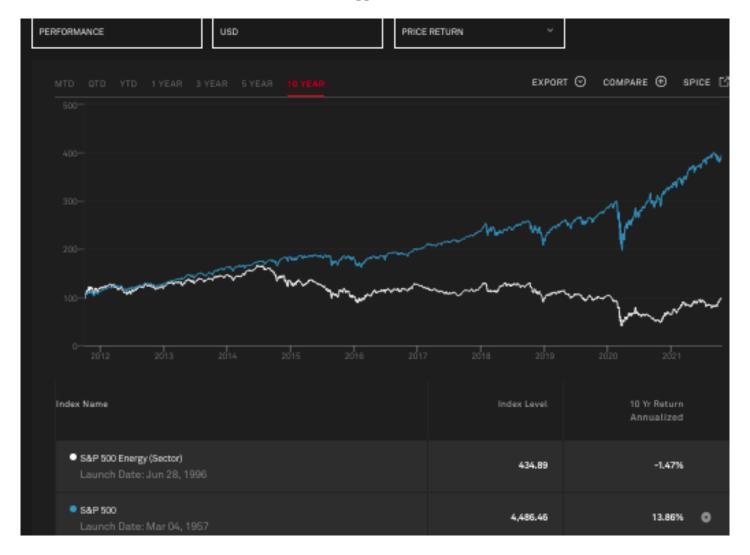


Illustration of Carbon Bubble, as reprinted in Katharine Earley, <u>Carbon Tracker measures oil and coal risk for investors</u>, The Guardian (Apr. 30, 2015). Source: Carbon Tracker Initiative.

Appendix D

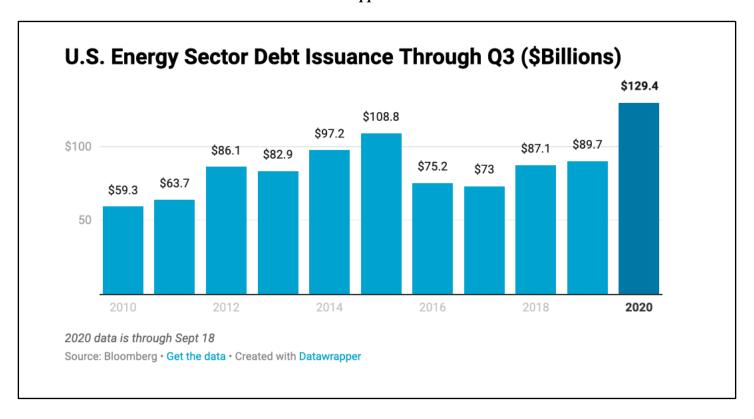


Comparison of ten-year performance of S&P 500 Energy Index²³⁷ (white) with S&P 500 Index (blue).²³⁸ Created using comparison tool at <u>S&P 500 Dow Jones Indices</u> (last visited Oct. 19, 2021).

²³⁷ The S&P 500 Energy Index includes only fossil fuel companies and does not encompass renewable energy.

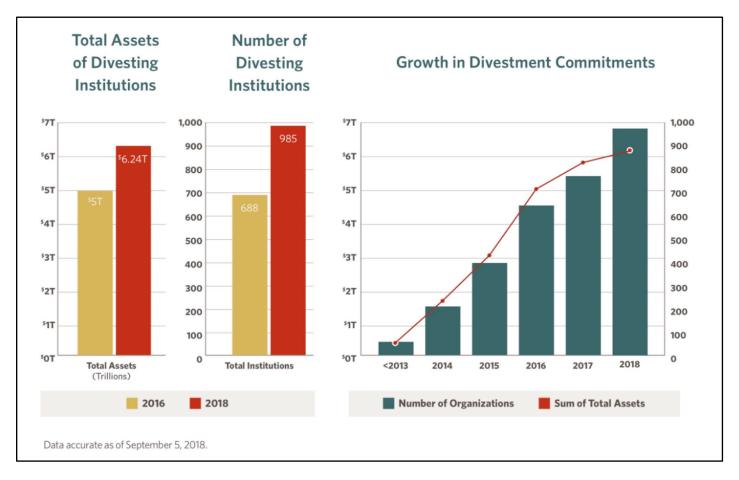
²³⁸ The energy sector's recovery in late 2020 came in part thanks to a large bailout of corporate debt markets by the federal government. *See* Lukas Ross, Alan Zibel, Dan Wagner & Chris Kuveke, <u>Big Oil's \$100 Billion Bender</u>, Public Citizen (Sept. 30, 2020).

Appendix E



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

Appendix F



Institutional Divestment Pledges as of 2018. Source: <u>The Global Fossil Fuel Divestment and Clean Energy Investment Movement</u> (2018 Report), Arabella Advisors.