

# Advancing Brown's Response to the Climate Emergency

Scholars at Brown for Climate Action  
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## Summary

This discussion paper was prepared by an independent group of faculty, students, staff, and alumni to articulate how Brown University can become a true global leader in responding to the climate change crisis. Failing to act on the climate crisis will endanger human lives as well as the systems that support human society. Thus, in this paper, for each of these domains, we consider: “What would it look like to respond to an emergency?”. Commensurate with the degree of crisis that we face, we advance a bold and broad vision for Brown's response.

The discussion paper begins in Section 1 with a review of the climate crisis and its political drivers. We then argue in Section 2 that Brown's current commitment to reducing its campus footprint should be seen as a foundation for greatly expanded efforts across the range of our operations. Section 3 reviews current programs addressing the climate crisis (or lack thereof) across the full scope of the University and outlines a series of ambitious changes to be made over the next several years, *beginning with the above reforms to our business relations*. These proposals include:

- Implementing **minimum standards** which aim to insulate Brown from the influence of businesses, foundations and other organizations with a history of systematically denying the reality of climate change and undermining efforts to adequately and democratically address it. See Appendix 1 for the full motion.
- Engaging and leading in our city, state, and country — particularly by devoting more resources to programs in support of Providence's Climate Justice Plan.
- Devoting significant funds to new research and curriculum on climate crisis solutions.
- Hiring 10-20 new faculty members who research the climate crisis across university departments, with a particular focus on the humanities, political science and economics.
- Helping faculty and staff to reduce the University's travel footprint and increase energy efficiency.
- Creating paid oversight positions and a staff-elected committee to develop these changes.

We intend this letter as the start of an evolving plan for community action and progress over the next several years. We hope such plans will move forward with the assistance of the University Administration. However, the intended audience for this letter is as much staff, undergraduates, graduate students, researchers and faculty as it is administrators or Corporation members — and we welcome any response or feedback from members of the Brown community. The climate crisis demands action from all of us, and Brown is a better place to start than most.

*“If universities and colleges do not lead in taking on this responsibility [to confront the climate crisis], we will miss this epochal opportunity to serve the planetary interest.”*

*- President Christina Paxson*

## I. Introduction

As we write, the most recent spate of environmental disasters includes devastating wildfires in Australia, the Amazon, Siberia, and Central Africa; a summer and winter that broke heat records across much of the world; continued ocean heating and mass coral bleaching; and all of the accompanying disruption, insecurity, and suffering for humans and wildlife. Anyone reading this document will likely feel this disruption in their lifetime. The worst burdens, however, will fall on the most marginalized members of Brown's students' generation and those that follow. The recent global pandemic has been a preview of the significant disruptions and burdens that the climate crisis will only exacerbate. It also demonstrates that global society is capable of mounting rapid and large-scale responses to existential crises — and the danger in failing to act quickly in such situations.<sup>1</sup> The climate emergency demands similar, urgent action. A ruined planet is surely one of the most unjust inheritances in history.

This discussion paper was prepared by faculty, students, staff, and alumni who believe that Brown University must commit all the resources at its disposal to address the climate crisis. We write for the entire community of people whose lives intersect with the University, and particularly those with the power and legitimacy to change Brown's practices. As more people wake up to the need for urgent emergency-level action on climate change, Brown is positioned to become a global leader in this effort. Failing to respond would constitute not only a grave moral lapse, but also a failure to fulfill Brown's official mission: “to serve the community, the nation and the world by discovering, communicating and preserving knowledge and understanding in a spirit of free inquiry, and by educating and preparing students to discharge the offices of life with usefulness and reputation.” The struggle for climate justice is a struggle to protect and communicate knowledge. To “educate and prepare” our students we must support them in facing the defining threat of their generation.

Fulfilling Brown's mission in the context of the climate crisis requires efforts far beyond those we have undertaken or currently plan to take on. Brown has led on campus energy efficiency for decades, and the University is developing a Sustainability Plan to further reduce the environmental impact of the campus operations.<sup>2</sup> We applaud those efforts but argue that Brown must go further and tackle the climate crisis in ways that extend beyond our campus. This paper outlines a multi-year path for doing so, beginning with a call to reform our business and community relations and sever ties with organizations who promote climate misinformation or delay. A fully mobilized Brown would furthermore advance new research and teaching on climate crisis solutions, engage local government including the City of Providence on policy development and program implementation, support student and faculty initiatives on climate change, and reduce emissions from travel associated with University business.

## II. The Climate Crisis and Climate Misinformation

To understand what our university must do about the climate crisis we need to understand the basic scientific and political facts about climate change. We must also understand how misinformation and climate science denial campaigns have worked to prevent the world from addressing these problems — in large part by undermining or mis-portraying research at universities like ours.

The world is entering a climate crisis due to greenhouse gas pollution from burning fossil fuels and industrial agriculture. These emissions are warming the Earth, heating and expanding the oceans, causing ice sheets to melt, and threatening species extinction and the global food supply. Moreover, greenhouse gases emitted today will continue warming the planet for centuries, and feedback loops such as thawing permafrost and larger wildfires threaten to accelerate warming within the next several decades to rates that human societies will be hard-pressed to withstand.<sup>3</sup> The most important point is this: the climate crisis poses a systemic and possibly existential threat to the stability of all human societies, while its vastly unequal effects across time and space also make it a grave injustice.<sup>4</sup>

In the face of an existential threat, one might expect the world's most powerful nation to mobilize its vast resources in search of solutions, but key parts of the U.S. federal government have actively undermined even inadequate global responses to this emergency. The current administration has eliminated fundamental efforts to reduce emissions from power plants, cars, and trucks, and sought to roll back efficiency requirements for appliances and buildings — even in the midst of the coronavirus pandemic.<sup>5</sup> Due in part to U.S. intervention, three decades of negotiations by the United Nations have not produced a treaty capable of halting or even slowing emissions. The much-acclaimed 2015 Paris Agreement imposes non-binding emissions reduction targets, which would in any case fail to keep the world within the stated goal of 2°C of warming above pre-industrial levels even if they were enforced.<sup>6</sup> Instead, the world will probably pass 3°C of warming.<sup>7</sup> While substantially better than the worst-case projections, 3°C of warming will likely leave many currently settled areas underwater or uninhabitable. Even 2°C of warming—a near certainty—will cause increased heat waves, droughts, crop failures, flooding and collapse of key fisheries, and will force tens of millions of people from their homes.<sup>8</sup>

The reason for this failure is clear: extensive networks of think tanks, PR firms, university programs, and political organizations supported by the fossil fuel industry and its allies have very effectively blocked efforts by the U.S. clean energy policies and similar efforts abroad.<sup>9</sup> For example the Heritage Foundation, one of the most influential think tanks in America,<sup>10</sup> celebrates the booming fracked gas industry and calls environmental activists “extremists,” while claiming that there is no climate crisis.<sup>11</sup> Household-name corporations such as ExxonMobil have contributed to organized climate denial efforts in the U.S. However, that list of climate denial funders includes many from outside the fossil fuel industry. Two recent reports by Brown faculty and undergraduates described a series of leading coalitions built to block climate action, and helped unearth a coalition of railroad, utility and coal companies that have contributed millions to climate denial organizations.<sup>12</sup>

Many actors implicated in this network now publicly proclaim their commitments to fighting climate change. For example, ExxonMobil touts its research on algae-based fuels as a zero-carbon alternative to oil or natural gas. At the same time, the “oil majors” of the biggest extraction and refining companies are spending thirty times as much on exploring for new oil deposits than they are at developing alternative fuels.<sup>13</sup> Evidence abounds of ongoing denial efforts which have a serious impact upon America's ability to act on climate change, and which continue

to undermine the status of climate research and science-based public policy.<sup>14</sup> Consider recent reports that the Environmental Protection Agency and the Department of the Interior are systematically excluding references to climate change in their publications, and are trying to lower the overall importance of science in their administration.<sup>15</sup>

These efforts cannot be attributed solely to the current President: many of the ideas and staffers responsible for implementing them can be traced back to think tanks and networks built for obstruction of climate action. For example, a leader of the Trump 2016-17 transition team at the EPA was on loan from the Competitive Enterprise Institute, a central climate counter-movement organization (and which has received grants from ExxonMobil).<sup>16</sup> This staffer was key in President Trump's subsequent decision to withdraw the United States from the Paris Agreement.<sup>17</sup> Other Administration officials have multiple past relationships with different organizations in the denial network, such as the core person responsible for altering language on climate change from Department of the Interior publications.<sup>18</sup> Influence efforts target key members of Congress and representatives at the state level. Other ongoing initiatives have disseminated material questioning the scientific consensus on climate change to thousands of K-12 school science teachers across the nation.<sup>19</sup> The speed and facility with which the current administration has moved to dismantle the role of environmental science in federal policy — while publicly dismissing that science — stems in large part from the consistent, long-term support of these climate-denying organizations.

All of the efforts to undermine climate policy efforts have relied centrally on attempts to undermine the credibility of scientists and policy experts from universities like ours. Meanwhile, many of the same fossil fuel interests that fund denial efforts also fund important research across nearly all of the sciences and spend lavishly on political theory and economics departments. It is in part the widespread acceptance of these actors and the funding they offer which allows them to retain public legitimacy and evade serious consequences.<sup>20</sup> We therefore propose that Brown adopt minimum standards to preclude financial relationships with institutions that support climate change denial (See Appendix 1).

In sum, the world is disastrously far from responding adequately to the climate emergency. This is not a coincidence. Given the scale of the crisis and the rate at which it is accelerating, we should be deeply skeptical of techno-fixes and other supposedly easy solutions. Addressing the crisis will require serious response, by all hands. Brown can be an important leader in this response.

### III. The Moral Imperative for Brown

The moral case for action on climate change rests on an uncontroversial, basic commitment to preventing a large, prolonged increase in suffering and instability. The complexity lies in translating this ethical commitment into a course of action for Brown.<sup>21</sup> To be clear, it is not our intent to assign blame — it is rather to reassess our past actions and current plans with a sober acknowledgement of the depth of the current crisis, and the responsibilities that it entails.

While the moral case for action on the climate crisis is clear, we must not delude ourselves that such action can be confined to the bounds of our campus footprint. Overcoming the climate change countermovement described above and beginning a real global response to the climate crisis is more of a political and cultural task than a scientific one.<sup>22</sup> The world cannot rely on existing treaties or techno-fixes to solve the climate crisis, and the scientific research conducted so far has proven unable to drive an adequate societal response. Only global participation will prevent truly catastrophic climate change, but such cooperation relies on productive engagement by the United States. We therefore need to ask: what tools does Brown have at hand to bring about this leadership? Our proposals assume that the answer to this question has more to do with Brown's status in Providence and Rhode Island, and its core functions of education and creating knowledge, than our campus footprint.

Moreover, because the Brown community has disproportionately benefited from the activities that have caused climate change, our obligation to act is greater. Brown University sits on the traditional homelands of the Narragansett and Wampanoag peoples; the buildings and history of our institution are imposed on cultures which value reciprocal and complex relationships with nature.<sup>23</sup> Brown's acknowledgement of these legacies of displacement, exploitation, violence, and settlement, must then be inextricably linked with action regarding stewardship, sustainability, and integrated education.<sup>24</sup> Furthermore, the region's subsequent economic successes were predicated on the labor of millions of enslaved people whose forced labor transformed diverse and distant ecosystems into plantations funneling profits to New England landowners, as well as by underpaid immigrants working in New England's coal-powered mills.<sup>25</sup> Elite universities like Brown have participated actively in the creation of a deeply unjust global economic system that now threatens all of us, and thus bear a disproportionate share of the responsibility for solving it.

Because the impacts of our research, teaching, and purchases have global reach, we must think globally in our response to the climate crisis. The symbolic, educational, political, and cultural power of prestigious universities like Brown can spur progress beyond the Van Wickle gates. Following from our mission, Brown should be outspoken in cutting business ties with companies, groups, and individuals who actively spread climate change disinformation and undermine science's role in informing public policy. We should assist other communities and institutions in achieving a just post-carbon transition, not merely our own, and we should ensure that the Brown community understands and is prepared to face this global historic crisis.

Brown has a role to play in the Providence community at large. While most of Brown's official income derives from a global network of students,<sup>26</sup> alumni, and donors, the land, infrastructure, and people of Providence are equally important in sustaining the University. Brown therefore benefits from the unique privileges afforded to it in a city otherwise prone to environmental racism. Providence's aging housing stock often fails to provide safe and warm residences; the utilities that Brown's campus and staff rely upon not only leak methane and burn fossil fuels, but also disproportionately situate their infrastructure in poor neighborhoods home to people of color.

Given that Brown has already achieved impressive levels of energy efficiency on campus, we argue that more of Brown's resources, expertise and human energy should be directed toward the reduction of emissions and pollution across the city of Providence. As Brown pays no taxes to the city, despite being among its largest landholders and employers, fulfilling a reciprocal relationship with Providence means that Brown's commitment to sustainability and equity must have an outward-facing component. The City already has a pioneering Climate Justice Plan in place, as the result of a three-year process led by residents of color.<sup>27</sup> By lending our support to climate action and justice in Providence, the University would advance many of its own goals, including addressing historical and current injustices. Supporting the City, as a whole, would directly benefit our own workers and our relationship with our home community.

Simultaneously, Brown's potential to serve as a global leader should not be underestimated. Other schools, communities, organizations, governments, and individuals are seeking models for a bold and just transition away from fossil fuels. Many people at Brown place ethical considerations at the center of their work; their desire to improve lives is a large part of what calls them here. But if Brown is to continue to attract, inspire, and serve new generations as a center of engaged scholarship, its exercise of moral leadership must be continually and courageously renewed in the face of the climate and other crises. Every step towards acting conscientiously is an opportunity to elevate our actions and make impactful changes possible.

## **IV. Brown's Path to Leadership**

It will take many years and a great deal of effort for Brown to truly begin equitably addressing the climate crisis. We cannot hope to provide a full plan in this letter. Rather, we outline a preliminary series of steps that Brown ought to take, with the intention of spurring a public conversation among our administrators, departments, staff, and students; and as a means of comparing our present efforts to what they might be. Scholars at Brown for Climate Action will continue to publicize, evolve, and press for progress on all of these demands in the future, taking on board input from all members of the Brown community. We hope to do so arm-in-arm with Brown's administration.

The following sections review Brown's past and current sustainability and climate initiatives throughout our operations, finances, research, teaching, student support, and local and national advocacy. While the University performs well in some places, full confrontation of the climate crisis requires a step-change in ambition across nearly every category. Some of the recommendations we propose will apply to the administration, while others will require action by departments and individual members of the community. This reflects our belief that we must face this crisis together as a community, and that the responsibility for addressing its consequences is shared by all.



## ***Gifts, Finances, and Business Relationships***

On March 4, 2020, Brown announced that 90% of its investments in fossil fuel-producing companies have been sold, with the remainder awaiting liquidation. Brown further announced plans to use future investing opportunities to encourage companies to reduce their own emissions. We are proud Brown is leading this effort nationally, and fully endorse these plans and policies which all institutions should adopt, commensurate with their responsibility to address climate change. We also commend the Brown Divest Coal and Fossil Free Brown campaigns, along with similar campaigns across universities, for keeping finances and investments at the forefront of our discussions surrounding ethical responsibilities.

However, as a leader in socially impactful education and policy development, we believe that Brown can do more, and indeed, has a responsibility to do so. In particular, we suggest that Brown set standards protecting against financial and business relationships with organizations that support and fund climate denial. Our detailed suggestions for minimum standards to govern Brown's financial relationships going forward can be found in Appendix 1.

Many fossil fuel companies that fund denial efforts also fund important, necessary research across much of the sciences. The researchers and departments benefitting from these relationships often use them to do valuable, unbiased work, and very rarely alter their research programs due to this funding source. Yet grants from climate-denying organizations can undermine the freedom of university research without ever straightforwardly manipulating any researcher. For example, one well-documented strategy among members of the "climate change countermovement" is to establish university institutes, hire sympathetic faculty members, and use those institutes to legitimate otherwise-extreme political views. This has been a major strategy for the Charles and David Koch Foundation, which has donated substantially to many U.S. universities. While this funding may not change any one researcher's agenda, it often serves as a filter to selectively promote those voices that are most openly doubtful of climate change science.<sup>28</sup> Second, paying for university programs and research helps climate-denying entities maintain a "social license to operate": the widespread acceptance of these actors which allows them to retain public support and evade serious consequences.

Much of Brown's climate-related research is devoted to understanding the causes of climate change and solutions to combat the repercussions of a warming world, and it is unconscionable for such a prominent research university to receive funds from organizations that propagate climate change denial. We therefore call on the University to follow its laudable divestment from fossil fuel money with a similar distancing from corporations actively supporting climate denial. Further, in order to ensure the fair and consistent application of these policies, we propose the formation of an oversight body to regularly evaluate Brown's financial relationships with climate denial organizations and companies. We propose that Brown make a solid stand against organizations who actively suppress climate change science or fund organizations which do so.

Brown made a bold step in the right direction, well ahead of our peer institutions, by selling our direct fossil fuel investments. It is in this spirit that we propose Brown formally cut ties with all companies, organizations and individuals involved in organized climate change denial, not least because they are working to discredit the work of Brown's own scientists. These actors have played central roles in blocking a global response to climate change and eroding public opinion about expert knowledge. Climate deniers have consistently attacked and harassed university researchers and conducted bad faith attacks on published findings for decades. More insidiously, however, many of these same entities have, at the same time, sought to purchase legitimacy at hundreds of

elite universities. Researchers at Brown and elsewhere have tracked the spending of notorious climate change-denying organizations such as ExxonMobil or Koch Industries, both of which have donated hundreds of millions of dollars to universities across the U.S. and the world — including Brown. Indeed, Brown is the first of the Ivy League to allow a Koch-funded center on campus (the Political Theory Project).<sup>29</sup>

Given the enormous impact climate misinformation has had on the U.S. electorate and government policy, we suggest that by publicly disengaging with climate denial, Brown could make a bigger contribution to reducing global emissions than any improvements it can make to campus infrastructure. Our proposal aims to protect Brown from the influence of actors with a history of undermining science and free inquiry, and to ensure that Brown's financial decisions do not make us complicit in the climate crisis. Brown can achieve these dual goals by adopting a set of **minimum standards** to apply across the full range of our business and financial relations, including investments, gift acceptance, on-campus recruiting, and purchasing.<sup>30</sup>

These minimum standards would protect Brown's researchers and students from the influence of entities with a proven history of climate denial, and they would further signal to the world that universities can and will stand up to their pervasive influence. We also suggest creating an oversight body to ensure that Brown's financial relationships continue to meet these minimum standards. Our proposal is outlined, in full, in Appendix 1.

## Recommendations for Gifts, Finances and Business Relationships

- **Adopt minimum standards**, summarized in the following resolution:  
*Individuals and organizations doing business with Brown University may not knowingly undermine science and science-based climate change policy, or support climate misinformation organizations. This includes but is not limited to:*
  - a. Directly undermining climate change science and science-based public policy, or*
  - b. Funding or supporting known organizations that attack or undermine climate change science and science-based policy, or*
  - c. Receiving such funding.*
- **Develop an oversight body** to regularly evaluate Brown's financial relationships to ensure that they meet these minimum standards.
- **Engage in fundraising** to replace these revenue streams.

## Local Engagement

While many university climate and sustainability plans pay particular attention to on-campus emission and pollution reductions, Brown can become an institutional leader by expanding our scope to the broader community. We believe Brown should transparently engage in local advocacy and work together with local governments and community groups to combat climate change and promote climate justice. Specifically, we believe Brown should help Providence advance its Climate Justice Plan and Rhode Island advance its climate change mitigation and resiliency goals.

Brown wields significant influence over Providence and Rhode Island, at large. Currently, the University participates in a number of business groups and foundations that have a track record of shaping city and state policy. Although the University's positions within these groups are not always made clear to the full Brown community, a number of high-profile policy issues in the past decade have involved University engagement. For example, the University has bought entire

streets from the city, while its leadership has argued in favor of dismantling the Kennedy Plaza bus hub and attempted to buy one of the state's largest hospital networks.<sup>31</sup>

Brown's leaders claim to represent the interests of our community in their interactions with policymakers, and we trust that this is their goal. Nonetheless, they cannot do so in good faith without transparency. Furthermore, our University's power derives from our community's collective financial and scholastic contributions. Students, faculty, staff, and alumni should, at the very least, know for what the University's representatives advocate. Yet Brown has not disclosed the extent of its engagement in the Providence Chamber of Commerce, the Providence Foundation, the Rhode Island Foundation, or the Partnership for Rhode Island. Each of these organizations wields significant influence over the course of development in Rhode Island. The Brown community should be informed of the University's political actions through an empowered Government and Community Relations Office.

More broadly, Brown should use its influence to work with Providence and Rhode Island to act on climate change, most notably by participating in the programs the State and City are already developing. As a civic leader, Brown has a unique opportunity to bridge the divide between public and private stakeholders. Brown should facilitate a dialogue between the City, the State, and the business community to find mutually beneficial policies to address climate change. The University should work with grassroots climate change advocates and urge the City and State to do so as well. Climate policy must reflect the needs of local communities, especially those that have been historically marginalized and ignored by policymakers. Rather than pursuing narrow, self-interested policy goals, Brown should embrace its role as a civic leader and use its power to amplify the voices of historically disenfranchised and climate change-vulnerable communities.

In the near term, Brown should openly support Providence's Climate Justice Plan. Adopted in 2019, the Climate Justice Plan acknowledges that solutions to climate change must positively invest in historically marginalized communities.<sup>32</sup> These communities will bear the brunt of climate change yet are among the least-well connected to public resources. Providence has long accepted high levels of social inequality, including, but not limited to, racial and institutional segregation, health inequalities,<sup>33</sup> and education and employment gaps.<sup>34</sup> Climate change threatens to worsen this divide. Furthermore, these social inequalities interact with the histories of land use and ownership to unequally expose frontline communities to the burdens of environmental hazards. As a critical institution in the city, Brown has the opportunity to simultaneously combat these inequalities while promoting a just transition to a more socio-ecologically sustainable Providence.

The following recommendations would help Brown support climate justice in Providence by fostering deep, sustainable relationships with government and frontline communities. Both the Office of Government and Community Relations (GCR) and the Swearer Center have important roles to play in the process of developing long-term and collaborative community relationships to promote climate justice, mitigation, and adaptation. In line with GCR's recent report on community engagement activities,<sup>35</sup> we recommend establishing a Climate Justice Coordinator to oversee current relationships and partnerships between campus units working with the local community on sustainability and climate justice. The Coordinator would be responsible for mapping all current relationships, partnerships, and coordination among the different campus units working on community issues with relevance to sustainability and climate justice.

Brown should provide increased funding for programs that engage and support community sustainability projects. This includes funding for the Office of Sustainability to connect with local organizations, the City, and the State. Actions should also include support for local emissions

reductions programs like Arcadia Power and Green Energy Consumers Alliance, and incentivizing employee adoption of sustainable home improvements. Further, graduate students often live in the most energy inefficient housing units around the University, and Brown should actively work with them to decrease their environmental footprint and financial burden. In terms of transportation, the average ride hailing trip, often used by undergraduates, emits far more greenhouse gases than a traditional car ride<sup>36</sup>. Brown should support the city's efforts to provide scooters and e-bikes. Rather than investing in private shuttles that are often empty and do not benefit the wider community, Brown should use these resources to help RIPTA improve its service in the areas currently covered by the shuttles.

### **Recommendations for Community Leadership/Engagement**

- **Support local environmental justice efforts**, such as the Providence Climate Justice Plan, and apply Brown's resources to advancing them. Review ways in which our expertise might help develop climate policies in New England and provide resources, including meeting space on campus, to local advocacy groups.
- **Establish a Community Climate Advocacy Coordinator** to improve transparency of our engagement with the climate crisis in our community, tasked with reporting on Brown's engagements in local climate politics and fostering coordination with groups representing Providence residents.
- **Push for climate change initiatives in state politics** and work with state agencies to advance those goals. Leverage our representation on Rhode Island councils, committees and foundations, as well as our status as one of the state's largest employers and landowners.

### ***Campus Operations***

The University is currently reviewing a draft Strategic Sustainability Plan,<sup>37</sup> which aims at reducing campus emissions and other pollutants. The Plan builds on Brown's history of leadership in these areas. Campus energy efficiency programs date back to the 1970s. The Urban Environmental Laboratory was a 1982 student/faculty adaptive reuse project pioneering energy efficiency and renewable energy technologies. In 1990, Brown announced the "Brown is Green" initiative to link campus operations with academic 'campus-as-lab' projects, significantly increasing energy efficiency programs through lighting and motor retrofits. The program became a model that led to the development of campus environmental stewardship programs at many colleges and universities.

In 2007, Brown established a carbon reduction target of 42% by 2020—the equivalent of 1990 emissions levels for Scope 1 and Scope 2 emissions (burning fossil fuels on campus and using electricity from burning them elsewhere, respectively).<sup>38</sup> As of 2019, Brown has achieved a 30% reduction and is on track to approach its target with the implementation of the Thermal Energy Efficiency Project. In 2019, Brown committed to a 75% reduction of campus greenhouse gas emissions by 2025, and to achieving net-zero emissions from campus operations (Scope 1 and 2) by 2040. The University signed two renewable power purchase agreements that will provide 100% of campus electricity use by 2025.

Brown established standards for new construction and major renovation projects in support of the 2007 emissions reduction goals. High-performance design goals for all new constructions,

major renovations, and acquired facilities are a minimum certification of Leadership in Energy and Environmental Design (LEED) Silver and modeled energy utilization performance at least 25 percent better than code requirements. To date, over 10 buildings have achieved LEED certification, most at the level of Gold.<sup>39</sup>

We fully support the major steps Brown has taken to reduce on-campus greenhouse gas emissions and other pollutants. In addition, we believe that Brown's path to leadership should include reducing our Scope 3 emissions (indirect emissions, mostly associated with travel and procurement) by providing support to community members in reducing their environmental impact while performing university-related activities off-campus. Given that air travel is one of the largest sources of greenhouse gas emissions at Brown, the University should work on installing top-notch teleconferencing facilities across the campus and train faculty, staff, and students to use them.

In adapting to the COVID-19 pandemic, Brown (along with most institutions around the globe) moved all but its most essential operations off-campus to function almost entirely via teleconferencing. The tools and support that the University rapidly developed to address this immediate crisis should be maintained going forward as we continue to address the ongoing climate crisis. In particular, the University should improve and sustain its capacity to organize, host, and participate in virtual workshops and conferences. Many peer institutions across the US and Europe had already ramped up their teleconferencing capabilities prior to the pandemic,<sup>40</sup> and strengthening this capacity going forward is a necessary step towards incentivizing the Brown community to reduce air travel. Furthermore, Brown attracts many scholars from distant locations to give talks and workshops in person when equally qualified candidates live closer and could come by land, or when such talks could be given remotely. Brown should also place less emphasis on activities that require long-distance travel during faculty promotion decisions. Members of Brown should be given as much support as possible to live by the sustainable values we hope the institution will adopt.

### **Recommendations for Campus Operations**

- **Institute the steps proposed in the 2019/2020 Sustainability Plan** put forward by Associate Vice Provost for Sustainability Stephen Porder.
- **Establish mechanisms to address Scope 3 emissions** in the near future, especially those related to air travel. For example, the University should disincentivize air travel and work with departments to reduce long-haul flights of faculty and invited scholars.

### ***Teaching and Research***

Climate change results from biophysical and socio-political forces, and course offerings need to reflect this complexity by approaching climate issues through a variety of lenses. Accordingly, the breadth of courses offered on climate change should expand to include social sciences and humanities as well as natural sciences. Moreover, because climate change will affect people unevenly, we need to advance climate and environmental justice pedagogy, and not just within its traditional subject areas.

The Institute at Brown for Environment and Society, the Department of Earth, Environmental and Planetary Sciences, and the Sociology department currently offer the most courses on the climate crisis.<sup>41</sup> Students who want to get involved in projects addressing the climate crisis have valuable but limited options, including working with faculty members from the Climate Science group<sup>42</sup> or contributing to the Climate and Development Lab.<sup>43</sup> The IBES Environmental

Studies & Sciences program offers engaged scholarship courses that facilitate students' active involvement with local and regional policy and programs, and connection with community networks. Through Brown's partnerships, undergraduate students have access to a number of summer internships as well.<sup>44</sup> Departments and institutes that contribute their expertise to research on climate change or the post-carbon transition include the Department of Earth, Environmental and Planetary Sciences; the School of Engineering; the Department of Ecology and Evolutionary Biology; the Sociology Department; the Departments of History, Anthropology, and the Joukowsky Institute for Archaeology; and Brown's Division of Applied Mathematics and Physics Department. Collectively, these growing research fields span much of the overall research profile of sciences at Brown and represent a potentially important nexus for growth in climate change science and study.

However, important gaps remain. For example, few scholars in the departments of Political Science and Economics work on climate change, even though the methods of those fields are important to solving climate problems. Students grappling with the philosophical, ethical and religious implications of the environmental crisis will not find much guidance at Brown, because very few faculty members in any of Brown's twenty-two arts and humanities departments focus on these questions.<sup>45</sup> Recognizing the enormous interest in environmental topics among students in the humanities and social sciences, a group composed of one faculty member in religion as well as several others from social science departments (four in history and one in political science) founded the Environmental Humanities Initiative at Brown last year, supported by the Cogut Institute for the Humanities.<sup>46</sup> While this group has organized a successful speaker series and reading group, it suffers from a lack of broader faculty interest, which contrasts with enthusiastic interest from a growing number of students. We thus suggest that Brown hire faculty in these domains, perhaps through IBES, which, as yet, lacks significant representation in the humanities.

Because climate change will affect all spheres of life, students should learn about climate issues regardless of their concentrations, and a CLIM designation could help students choose courses that focus on climate issues in any department. With the goal of developing more CLIM-designated courses, new courses will need to be created in the humanities, as well as through team-teaching across disciplines and divisions (Arts and Science, BioMed, Engineering, and Public Health). We will also need to develop more solution-based courses that are engaged with leading research institutions, government agencies, non-profits, and corporations addressing different elements of the climate crisis. These could include, for example, courses working with the City of Providence Sustainability Office in operationalizing the Climate Justice Plan, working with top architecture and building firms to develop innovative design solutions, working with journalist groups to identify knowledge gaps, and working with civic organizations and think tanks to develop public policy proposals. Brown should also offer a teaching practicum course for students to learn how to teach climate change issues effectively.<sup>47</sup> Faculty enthusiasm for developing these courses exists, but doing so requires time, resources and institutional leadership. Accordingly, Brown should provide more support in the form of course development funds and other incentives for the development of interdisciplinary classes focused on or around the climate crisis.

Brown can learn from peer institutions who have taken the lead in these regards. For example, the University of California, Santa Barbara has over 70 faculty (90% of whom are tenured or tenure-track) who perform research in environmental humanities. UCSB offers graduate degrees which integrate science, management, law, economics and policy for an interdisciplinary approach to environmental problem solving.<sup>48</sup> Princeton University offers both undergraduate and graduate certificates in environmental studies. It also hosts the Princeton Environmental Institute

which offers awards for faculty and students to encourage innovative research and training. A grants program for environmental humanities brings leading scholars to the University, supports course development and faculty-led research in environmental humanities. The Institute at Brown for Environmental and Society exists to foster interdisciplinary research and teaching on environmental issues and has the potential to be a leader if Brown had faculty working on climate issues in a greater diversity of fields.

### **Recommendations for Teaching and Research**

- **Create 10-20 faculty positions across the University** in diverse areas of climate change science, solutions, economics, policy, humanities, arts, communications, and environmental justice.<sup>49</sup> We recommend combining these positions with Brown's diversity and fundraising objectives by targeting more junior candidates and combining hires with diversity and inclusion initiatives.<sup>50</sup>
- **Support faculty research with seed grants and summer salary.** Provide course development funds for courses on or closely related to the climate crisis in underrepresented fields.
- **Establish a CLIM designation** to highlight courses involving climate change across the University curriculum, so that any student can take a course on the climate crisis in many different fields.

### ***Support of Brown Community Members***

The climate crisis affects Brown's community members in terms of mental and physical health, through disruptions caused by extreme weather, and social and economic upheaval. As members of the Brown community, we can and should do more to support each other. Brown has previously stepped up to support its community in times of crisis,<sup>51</sup> and we should expect more opportunities to help our community, in a similar vein, as the climate crisis escalates. Some of these changes can come from decisions by our administrators, and others will rely on direct cooperation among students, faculty and staff.

Feelings of eco-anxiety,<sup>52</sup> or fear about the climate crisis, are becoming increasingly widespread at Brown, as elsewhere. Students at Brown often feel alone in their experiences of eco-anxiety and find a lack of institutional support. Organizations like the Swearer Center for Community Engagement have shown interest in this issue,<sup>53</sup> and some researchers at Brown are working on this topic, but there are no centralized sources of support. Moreover, it is also important to develop environmental justice peer-group support systems to empower students that are particularly affected by the negative effects of climate change. For this purpose, a closer collaboration between sustainability initiatives and groups promoting equality and diversity on campus is essential.

Many other support structures need to be reassessed and developed to prepare students for a life in a rapidly warming world. Brown's CareerLAB offers initiatives that facilitate employment choices in the areas of environmental careers and careers in the common good more broadly.<sup>54</sup> These efforts should receive significantly more financial and personnel support so that no students have to settle for jobs that they feel implicate them in the climate crisis. Moreover, Brown's support structures for incoming students can play a vital role in fostering sustainable behavior patterns.

The Office of Sustainability already offers a few orientation events and some materials about sustainable lifestyles, but the impact is nowhere near the level that could be achieved.

Staff and faculty are no less affected by climate-related stressors, and Brown should do its part to support these members of its community. Furthermore, we recognize that many of the staff will be the ones on the ground implementing many of the practical changes enforced within these and the sustainability plan recommendations, thus we encourage the University to acknowledge the knowledge, perspectives, and labor of staff in the design as well as the implementation and enforcement of associated actions. The University should thus form and consult with staff and faculty-led advisory groups on matters of operations and policy. The mental, physical, and economic well-being of staff and faculty should be supported through, for example, orientations for new hires, staff development days, and climate-related offerings through Wellness at Brown.

### **Recommendations for Support of Brown Community Members**

- **Launch an eco-anxiety group** to develop a comprehensive strategy to address the challenge of eco-anxiety, in collaboration with CAPS, for students, staff, and faculty.
- **Community education programs should include segments on climate change.** These could include mandatory orientation, websites, and staff development days that would outline the ways university members can get involved in initiatives and find support.
- **Expand career resources with a focus on environmental justice and social change;** promote and improve existing initiatives with CareerLAB.
- **Form a staff-led advisory group** to consult on the design, implementation, and enforcement of these recommendations in the day-to-day operation of our University as well as the longer-term transition towards equitable sustainability.

### ***Accountability and Governance***

The climate crisis calls for institutions to revise their financial and business relationships to move away from groups and corporations that fund climate misinformation. This requires increasing transparency and accountability of holdings and revenue. Currently, the opaque nature of Brown's financial and business relationships prevents accountability.

We propose that Brown adopt a similar accountability and governance strategy to the model proposed at the University of Exeter.<sup>55</sup> The University of Exeter model includes multi-level integration of sustainability concerns into all strategic decisions through the establishment of numerous sustainability-focused positions at the administration, college, contingency, advisory, professional services, and student levels guided by a core set of values including democratization, transparency, and equity, among others. Their governance structure strives for sustained change through accountability with an intentional balance of economic, environmental, and social standards in the implementation of its response to the climate crisis. In particular, it will be critical for Brown to support staff and administrators given their vital roles in overseeing long-term, complex changes to our operations and university policies.

Brown should establish and support institutions that can effectively quantify and reduce carbon emissions in the most transparent and accountable way possible. However, it is also clear that many of the metrics by which leaders in sustainability are measured involve swiftly moving goalposts. For example, goals have shifted from carbon neutrality, to net zero carbon, to negative emissions over the span of a few decades. We therefore need a governance structure that can effectively cater to these moving targets. Moreover, while quantifiable goals remain critical and



central components of any climate plan, Brown can and should also take the lead in key components of sustainability, including a commitment to equity (as outlined in sections above). Accountability mechanisms must be in place to track how equity questions are addressed as part of climate actions at Brown, particularly as these may be harder to quantify. Considering its existing strengths and expertise, Brown could easily become a leader in this field. An empowered official position, a faculty-elected committee and a staff-elected advisory board will be critical in transparently overseeing the changes detailed in this document.

### **Recommendations for Accountability and Governance**

- **Increase transparency** about Brown's financial and business relationships, requiring portfolio managers to document that their holdings do not include corporations that fund climate denial organizations.
- **Establish a permanent Assistant Provost for Sustainability, overseen by a diverse Climate Emergency Committee** encompassing staff, faculty, postdocs, and students. The committee shall be chaired by a faculty member elected by the full faculty, and the Chair shall have the authority to call meetings and set the agenda. Together, the Assistant Provost and the Committee will establish, oversee the implementation of, and monitor the University's response to the climate crisis, including by developing clear and measurable targets for all quantifiable goals, and a set of guiding values for their implementation, as well as regular institutional reports on qualitative priorities and compliance.
- **Establish a staff-elected advisory board** which would work with the Assistant Provost for Sustainability and Climate Emergency Committee to consult on the design and enforcement of transitions in practice in Hospitality and Dining, Facilities Management, Grounds Management, etc.

## V. Conclusion

Climate change is a defining issue of our time. The scale of the threat to the biosphere and to the continued stability of human society constitutes an undeniable emergency and demands an urgent and robust response. Anything short of that would be disastrous: it would incur enormous costs, far exceeding the cost of the response itself in economic, ecological, and social terms. A failure to respond would not only be impractical but would constitute a great moral failure.

Brown University is a world leader in higher education and research. As faculty, students, staff, and alumni, we are keenly aware of the potential our institution has to respond. We see clearly the numerous domains in which Brown can and should act, from establishing principled terms for financial and business relationships, to taking leadership in research and teaching, to establishing mechanisms for self-governance and accountability to ensure a robust response. Moreover, we are individually and collectively committed to our common mission: “to serve the community, the nation and the world by discovering, communicating and preserving knowledge.” Our commitment to these principles underlies our conclusion that Brown University has a moral imperative to act. We hope that this paper awakens others to this imperative and we invite the entire community to join us in charting a path forward.

# **Appendix 1. No Support of Climate Change Misinformation: The Brown Minimum Standards for Business and Financial Relations**

Proposed by Scholars at Brown for Climate Action

## ***Introduction***

The manipulation of academic institutions by outside private interests directly undermines the University's mission, which is to “to serve the community, the nation and the world by discovering, communicating and preserving knowledge and understanding in a spirit of free inquiry, and by educating and preparing students to discharge the offices of life with usefulness and reputation.” Billions of dollars have been spent in the United States by corporations, foundations, and individuals to undermine the role of science in informing public policy, on a series of issues. In the case of climate change, these efforts are undermining the impact of Brown's own research. These efforts attempt to create uncertainty and undermine the ability of citizens and public servants to make informed decisions about the risks and choices they face. Universities across the country are the targets of interventions by fossil fuel interests, who seek to influence campus discourse and student beliefs. (For example, The Charles and David Koch Foundation, funded by natural gas and pipeline corporations, has funded over 300 universities in the U.S., including Brown.) Other universities, financial institutions and corporations have taken the lead by ending their investments in fossil fuels, which are known to be destabilizing the global climate, and Brown recently announced its divestment is nearly complete. Yet relatively few universities have addressed the impact of public misinformation campaigns on the interests of higher education, leaving a space in need of leadership.

Brown can become a leader in addressing organized climate change denial by establishing minimum guidelines that would apply to its business and financial partners, to ensure its mission of free inquiry and service to the nation and the world. This document proposes the following minimum standards for business and financial relations for adoption by Brown University and its governing board, ‘The Corporation.’ The purpose of these standards is to provide a framework for ethical action by Brown's extended community, protecting the University from the political and financial powers of organizations involved in furthering climate misinformation and delay, and to assure that we are not enabling and legitimating efforts which directly undermine our own interests. This is a critical near-term step for securing Brown's ability to be a part of an effective response to the climate crisis, and to fulfill its purpose as a university, as outlined in *Advancing Brown's Response to the Climate Emergency*.

These minimum standards apply to all business and financial relations of Brown University, including but not limited to: purchasing, gifts, restricted gifts, donor-driven programs, indirect costs, centers, institutes, research funding, consortiums, special initiatives, partnerships, investments, strategic corporate alliances, and programming. When seen as crucial for student experience, the University shall endeavor to raise funds to replace excluded funding with monies from other internal and external sources. These minimum standards establish a code of conduct for all individuals and organizations wishing to continue or enter business relations with Brown University.

## ***Resolution***

Therefore, be it resolved that Brown University adopt **The Brown Minimum Standards for Business and Financial Relations**, which holds that:

*Individuals and organizations doing business with Brown University may not knowingly undermine science and science-based climate change policy, or support climate misinformation organizations. This includes but is not limited to:*

- a. Directly undermining climate change science and science-based public policy, or*
- b. Funding or supporting known organizations that attack or undermine climate change science and science-based policy, or*
- c. Receiving such funding.*

Brown should provide sustained support for the research needed to document actors and financial flows supporting climate denial and delay, and transparently make the results of that research public for use by other institutions. If a business relation does not meet these minimum standards, the University and its Corporation will provide a limited period of time for a firm or organization to come into compliance (a maximum of one year), after which the University will suspend further engagement until they provide evidence that they have addressed the areas of concern. ACCRIP (Advisory Committee on Corporate Responsibility in Investment Policies) or its successor ACURM (Advisory Committee on University Resources Management) will oversee and maintain the list of firms understood to be supporting climate denial in the ways mentioned, and review appeals of firms and organizations to be removed from this list.

These standards shall not infringe upon independent research and teaching and freedom of speech at Brown, but such shall not knowingly utilize deception to undermine climate change science and science-based public policy. Additional minimum standards and conflict of interest policies should be developed for other specific subgroups and portions of the Brown community.

## ***Execution of this Resolution***

This resolution proposes the addition of one line of text to three University policies. To each of the University's Policy on Business Ethics, Conflict of Interest in Research Policy, and ESG guidelines (see links below), this motion will add text consistent with the resolution above, of the spirit that "Organizations doing business with Brown University may not knowingly undermine science and science-based climate change policy, or support climate denial organizations, including directly and indirectly funding or receiving such support."

### **Policy on Business Ethics**

<https://www.brown.edu/about/administration/purchasing/about/procurement-standards/business-ethics>

Under "Sound business ethics include the following elements:" add the text: "Not knowingly undermine science and science-based climate change policy, or support climate misinformation and delay organizations, including directly and indirectly funding or receiving such support."

### **Conflict of Interest in Research Policy**

<https://www.brown.edu/research/COIpolicy>

Add a line or short section 3.7 prohibiting "the receiving of funding from organizations that knowingly undermine science and science-based public policy on climate change."

### **ESG Guidelines**

This language is still to be determined, with the publication of Environmental, Social and Governance standards for the University.

***The Brown Report on Companies' Support of Climate Misinformation and Delay*** is being researched at the University in partnership with leading national organizations in this area, and a draft will be released in Fall, 2020. We are open to collaboration with other universities and institutions in developing this list and the research background files to support it.

## Notes

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- <sup>2</sup> Brown University. (2019a). Brown FY19 Sustainability Report.pdf. Retrieved January 29, 2020, from [https://drive.google.com/file/d/1eIBqTUYdz8wzyL8HOo5aNpKBKUpYqW7\\_/view](https://drive.google.com/file/d/1eIBqTUYdz8wzyL8HOo5aNpKBKUpYqW7_/view). Brown University. (2019). Energy | Office of Sustainability. Retrieved January 29, 2020, from <https://www.brown.edu/sustainability/initiatives/energy>
- <sup>3</sup> Timothy M. Lenton et al., "Climate Tipping Points — Too Risky to Bet Against," *Nature* 575, no. 7784 (November 2019): 592–95, <https://doi.org/10.1038/d41586-019-03595-0>.  
IPCC, 2018: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. <https://www.ipcc.ch/sr15/>, accessed March 16, 2020.
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- <sup>5</sup> Lisa Friedman, "E.P.A., Citing Coronavirus, Drastically Relaxes Rules for Polluters," *The New York Times*, March 26, 2020, <https://www.nytimes.com/2020/03/26/climate/epa-coronavirus-pollution-rules.html?searchResultPosition=1>.
- <sup>6</sup> Raymond Cléménçon, "The Two Sides of the Paris Climate Agreement: Dismal Failure or Historic Breakthrough?," *The Journal of Environment & Development* 25, no. 1 (2016): 3–24, <https://doi.org/10.1177/1070496516631362>.
- <sup>7</sup> United Nations Environment Programme, *The Emissions Gap Report 2019*, 2019, <https://www.unenvironment.org/resources/emissions-gap-report-2019>.
- <sup>8</sup> Hoegh-Guldberg, O., D. Jacob, M. Taylor, M. Bindi, S. Brown, I. Camilloni, A. Diedhiou, R. Djalante, K.L. Ebi, F. Engelbrecht, J. Guiot, Y. Hijikata, S. Mehrotra, A. Payne, S.I. Seneviratne, A. Thomas, R. Warren, and G. Zhou, 2018: Impacts of 1.5°C Global Warming on Natural and Human Systems. In: *Global Warming of 1.5°C. An IPCC sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press.
- <sup>9</sup> Brown is emerging as a leader in research on this network. The Climate and Development Lab in the Institute at Brown for Environment and Society is actively working with top research institutes to explore the influence of these groups at the state, national and international level. See [climatedevlab.brown.edu](http://climatedevlab.brown.edu) and research by visiting professor Robert Brulle.
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- <sup>11</sup> Nicolas Loris, "A Major Threat to Our Economy – Environmental Extremism | The Heritage Foundation," The Heritage Foundation, October 7, 2019, and Tiffany Roberts, "Millennial Myths: Climate Change—Are We on the Brink of a Mass Extinction? | The Heritage Foundation," Millennial Myths, accessed February 18, 2020.
- <sup>12</sup> Robinson Meyer, "Freight Railroads Funded Climate Denial for Decades - The Atlantic," *The Atlantic*, December 13, 2019, <https://www.theatlantic.com/science/archive/2019/12/freight-railroads-funded-climate-denial-decades/603559/>. Robert J. Brulle, "Institutionalizing delay: foundation funding and the creation of US climate change counter-movement organizations." *Climatic change* 122, no. 4 (2014): 681-694. For a compelling account of the powerful entrenched opposition to climate action and its origins, see: Naomi Klein, *This Changes Everything : Capitalism vs. the Climate* (New York: Simon & Schuster, 2014).

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- 17 Myron Ebell, personal communication with the Climate and Development Lab, October 2019, Washington, DC.
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- 19 Emily Atkin, "The Fossil Fuel Industry's Public School Takeover," *Heated* (blog), accessed March 12, 2020, <https://heated.world/p/the-fossil-fuel-industrys-public>; Neela Banerjee, "Science Teachers Respond to Climate Materials Sent by Heartland Institute," *InsideClimate News*, December 22, 2017, <https://insideclimatenews.org/news/22122017/science-teachers-heartland-institute-anti-climate-booklet-survey>.
- 20 For examples, see Jane Mayer, *Dark Money: The Hidden History of the Billionaires behind the Rise of the Radical Right* (New York: Doubleday, 2016); Nancy MacLean, *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America* (New York, New York: Viking, an imprint of Penguin Random House LLC, 2017).
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- 25 On slavery, see the Brown University Steering Committee on Slavery and Justice's *Slavery and Justice* report: [https://www.brown.edu/Research/Slavery\\_Justice/documents/SlaveryAndJustice.pdf](https://www.brown.edu/Research/Slavery_Justice/documents/SlaveryAndJustice.pdf)
- 26 On the geographic origins of Brown's students: <https://www.brown.edu/about/administration/institutional-research/factbook/enrollment>
- 27 Providence's climate justice plan, which details the disproportionate impact of climate change on low-income communities: <http://www.providenceri.gov/wp-content/uploads/2019/10/Climate-Justice-Plan-Report-FINAL-English-1.pdf>
- 28 See Mayer, *Dark Money*; and Brulle and Aronczyk, *Environmental Countermovements*.

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<https://brownwarwatch.com/2018/02/07/brown-universitys-koch-connection-under-the-microscope/>. Accessed March 10th, 2020.

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<https://www.brown.edu/sustainability/initiatives/energy>

38 "Greenhouse Gases at EPA | Greening EPA | US EPA," accessed March 31, 2020,

<https://www.epa.gov/greeningepa/greenhouse-gases-epa>.

39 <https://www.usgbc.org/leed>

40 At the University of California Santa Barbara (UCSB), the director of the Environmental Humanities Initiative has written a practical guide for how to coordinate a nearly carbon neutral conference:

<http://hiltner.english.ucsb.edu/index.php/ncnc-guide/>

41 Some of the courses that deal centrally with climate change during the fall 2019 and spring 2020 semester include courses in environmental studies (ex. Glaciers and Climate Change, Climate Futures and Sociology of Just Transitions, Engaged Climate Policy in the US), geology (ex. Principles of Planetary Climate, Weather and Climate), sociology (ex. An Environmental Sociology for a Rapidly Warming World), anthropology (ex. Reimagining Climate Change), economics (ex. Economics of Global Warming), modern culture and media (ex. Data Visceralization and Climate Change), and public health (ex. Climate Change and Human Health), to name a few. Many other courses engage questions of climate change as one of the components of the course. For example, in anthropology (ex. Energy and Power), ethnic studies (ex. Treaty Rights and Food Fights), public health (ex. Current Topics in Env. Health), and environmental studies (ex., Humans, Nature, and the Environment: Addressing Environmental Change in the 21st Century, Political Ecology, Environmental Stewardship and Resilience, Sustainable Design in the Built Environment).

42 <https://www.brown.edu/academics/institute-environment-society/climate-science>

43 <http://www.climatedevlab.brown.edu/about.html>. Applications for the CDL routinely outnumber spaces by a factor of 4 or 5 to 1.

44 These include with the RI Department of Environmental Management, RI Chapter of The Nature Conservancy, Grow Smart Rhode Island, The City of Providence Office of Sustainability, the RI Audubon Society, and Palmyra Research Institute with the Nature Conservancy. In addition, Juniors who will be conducting a thesis in their senior year can apply for a Voss Undergraduate Fellowship, which provides a summer stipend, funding for research expenses, and training on environmental research communication. Graduate students who choose to affiliate with IBES are offered some funding, opportunities to collaborate, as well as the ability to apply for research, training or travel awards.



<sup>45</sup> The departments in the Arts and Humanities at Brown are Africana Studies, American Studies, Classics, Comparative Literature, East Asian Studies, Egyptology and Assyriology, English, French Studies, German Studies, Hispanic Literatures and Culture, History of Art and Architecture, Italian Studies, Judaic Studies, Literary Arts, Modern Culture and Media, Music, Philosophy, Portuguese and Brazilian Studies, Religious Studies, Slavic Studies, Theatre Arts and Performance, Visual Art. History and Political Science are placed in the social sciences. In these departments only Mark Cladis in Religion and Elizabeth Hoover in American Studies regularly research and teach on environmental issues. Sharon Krause in Political Science also teaches environmental humanities.

<sup>46</sup> <https://www.brown.edu/academics/humanities/environmental-humanities>

<sup>47</sup> This course could follow the model of GEOL 1960G, which teaches students how to teach geology.

<sup>48</sup> UC Santa Barbara also offers an 'Emphasis in Environment and Society' PhD that provides an interdisciplinary training in environmental studies. It also offers a graduate program in Strategic Environmental Communication & Media that teaches students to use media to communicate strategically about environmental issues.

<sup>49</sup> The economic crisis caused by COVID 19 will certainly reduce hiring for the near future, however we anticipate that the current hiring freeze is an opportunity for departments to prioritize putting forward candidates who focus on global crises in their future hiring decisions. We thus encourage the University not to put off a formalized and explicit commitment inline with this recommendation and thus to take advantage of the mounting social recognition that climate change is the most pervasive global threat.

<sup>50</sup> e.g. those built from the 2016 Pathways to Diversity and Inclusion addendum to Brown's strategic plan Building on Distinction <http://brown.edu/web/documents/diversity/actionplan/diap-full.pdf>; <https://distinction.brown.edu/strategic-plan>; or hires potentially associated with a new concentration for Native American and Indigenous Studies.

<sup>51</sup> E.g. President Paxson's commitment to the community after the 2018 Executive Order restricting the mobility of individuals from several countries (letter <https://www.brown.edu/news/2018-06-27/travel> and subsequent advocacy); the university's commitment to undocumented and DACA students, staff, and faculty from admittance and tuition (<https://www.brown.edu/news/2016-09-12/undocumented>) to legislative advocacy (<https://www.brown.edu/ufl/programs-and-services/undocumented-student-program/daca-repeal-qa>) and the establishment of the Undocumented, First-Generation College and Low-Income Student Center in 2016.

<sup>52</sup> Ciara Nugent, "How Eco-Anxiety Exploded Across the Western World | Time," Time, November 21, 2019, <https://time.com/5735388/climate-change-eco-anxiety/>.

<sup>53</sup> Julie Plaut, personal communication

<sup>54</sup> <https://www.brown.edu/campus-life/support/careerlab/ccg>

<sup>55</sup> "Environment and Climate Emergency Working Group White Paper" [http://www.exeter.ac.uk/media/universityofexeter/campusservices/sustainability/climateemergency/documents/Full-EnvClimE-White-Paper-11\\_11\\_19.pdf](http://www.exeter.ac.uk/media/universityofexeter/campusservices/sustainability/climateemergency/documents/Full-EnvClimE-White-Paper-11_11_19.pdf). Accessed 20 Feb. 2020.