

THE INFLUENCE OF FOSSIL FUEL FUNDING ON CLIMATE RESEARCH



Authors/Researchers

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"WE STRONGLY URGE COLUMBIA UNIVERSITY TO TAKE IMMEDIATE ACTION TO RESTORE TRUST IN ITS CLIMATE RESEARCH." This report examines the alarming influence of fossil fuel funding on climate research at Columbia University, one of the world's leading academic and research institutions. We focus on money coming into the university through grants/donations, not our endowment investments. This report comes as Columbia recently announced the Committee on Research Funding from Fossil Fuel Companies.

Our research revealed numerous conflicts of interest. Between 2005 and 2024, the university accepted at least \$43.7 million from fossil fuel companies, over \$16 million of which went to our premier energy research hub, the Center on Global Energy Policy (CGEP). This financial relationship has been associated with a sentiment bias in Columbia's climate research that aligned research outcomes with the interests of oil and gas donors. Additionally, we identified 784 specific studies funded by fossil fuel companies, and many of the funded studies published by CGEP lacked external peer review. For interactive visualizations of our quantitative results, please visit ffrresearch-visualization.streamlit.app.

Of further concern, we found that several of Columbia's influential program directors and researchers actively maintain close relationships within the fossil fuel industry. Many serve on corporate boards or directly advise energy executives. The quantity and nature of these entanglements raise serious concerns about conflicts of interest; we present significant evidence that these relationships allow fossil fuel companies to shape research priorities at Columbia and government policy. In particular, we show that oil industry connections at CGEP have concretely influenced pro-fossil fuel US government measures, directly compromising the university's influence on our society as a whole.

One of Columbia's most prominent climate research centers, the Lamont-Doherty Earth Observatory, has already significantly reduced its dependence on fossil fuel funding, a path that policy research should follow. To preserve the integrity of its research and uphold its reputation as a leader in climate science, we ultimately recommend that the university:

- Cease Acceptance of Fossil Fuel Funding
- 2. Implement Comprehensive Transparency Measures
- 3. Establish Strict Criteria for Future Donations
- 4. Set a Strict Timeline for Transitioning to Fossil-Free Climate Research
- 5. Increase Inclusion of Affiliates in Dialogue and Decision Making

We strongly urge Columbia University to take immediate action to restore trust in its climate research, eliminate corporate influence, and reinforce its commitment to developing impartial, high-quality solutions to the global climate crisis. We also urge the new Committee to engage with our research as they make decisions on this topic.

"BEHIND THE SCENES,
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CHANGE/ACTION."

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LAND ACKNOWLEDGEMENT

We, Sunrise Columbia, acknowledge and recognize the Lenni Lenape and Wappinger peoples, whose original nations comprise the lands upon which Columbia University is built. As we fight for climate justice, we must first recognize the ways in which we have benefited from and are complicit in settler colonialism, and we reaffirm our commitment to stand in solidarity with Indigenous communities and elevate their voices and leadership in this movement.

THE FOSSIL FUEL INDUSTRY'S CLIMATE CRISIS

Unequivocal evidence compounds by the day — the persistent and disastrous climate crisis is here. Climate change, most clearly articulated by the 1.1°C temperature increase in 2011-2020 above 1850-1900 levels, has had and continues to have staggering impacts worldwide.¹ Catastrophic events such as heatwaves, floods, storms, and fires, the spread of disease and direct health damage, food and water scarcity, and mass displacement are increasing in frequency exponentially around the world.² These crises disproportionately impact the most vulnerable communities but ultimately reach every region, including New York City.

The most recent 2023 **Intergovernmental Panel on Climate** Change (IPCC) report reaffirmed that it is precisely "human activities, principally through emissions of greenhouse gases, [that] have unequivocally caused global warming."3 They also concluded in 2001 that about 75% of the anthropogenic emissions leading to this temperature increase stemmed from the burning of fossil fuels such as oil, coal, and natural gas.4 Therefore, the actions of the fossil fuel industry have critical implications for the future of our planet as we attempt to mitigate the emergent climate disaster.

It is known that the fossil fuel industry produces and sells nonrenewable energy products. Behind the scenes, the industry uses public relations schemes to obscure the climate catastrophe they perpetuate and intentionally inject doubt into the public sphere about climate change/action. By now, it is no secret that climate science — both global warming and impacts was not discovered recently but by ExxonMobil in the 1970s and 1980s. An eight-month investigation by InsideClimate News revealed stunningly accurate predictions made in July 1977 of the temperature impacts of CO₂ in the atmosphere. Over the following ten years, Exxon predicted even greater levels of warming than initially anticipated and a written internal acknowledgment of "catastrophic and

irreversible consequences."5 The investigation found that Exxon deliberately positioned itself at the center of policy discussions to manage potential regulations on fossil fuel emissions beginning as early as the 1980s. As the decades went on, Exxon collaborated with Bush-era officials to remove officials from the IPCC. emphasized the uncertainty of climate science through speeches and media, created organizations such as the Global Climate Coalition and the Global Climate Science Team to lobby and launch campaigns preventing climate action, hired a worker at the White House Council on Environmental Quality who had edited scientific reports with the same aim, successfully lobbied for withdrawal from the global Kyoto protocol, and spent at least 16 million dollars to at least 39 organizations involved in spreading misinformation.6

The trend of performative and underhanded corporate involvement in global climate discussions extends beyond Exxon. Following an investigation in 2022, the House Committee on Oversight and Accountability released a memo revealing the following patterns by fossil fuel corporations:^{7,8}

 Consistently making public pledges to reduce emissions while internally disregarding those goals

- 2. Attempting to promote the use and research of carbon capture and storage with the specific purpose of justifying the continued use of fossil fuels
- 3. Publicly flaunting donations to renewable or climate-forward projects only to pull back funding quietly
- 4. Acknowledging public "gaslighting"
- 5. Consistently resisting and lobbying to block regulations
- 6. Divesting fossil fuel assets for public image, knowing that they would not lead to a decrease in emissions
- 7. Obstructing investigations, going as far as to make baseless claims against potentially harmful journalism

While some (including the industry) may argue that fossil fuel companies play an essential role in investing in the transition to renewable energy, the evidence does not add up. A 2023 report from the International Energy Agency (IEA) found that, in 2022, the oil and gas industry invested 2.5% of its total capital spending into clean energy.9 The same report found that oil and gas companies account for only 1% of global clean energy investment, with the authors writing that the "oil and gas industry as a whole

is a marginal force in the world's transition to a clean energy system."¹⁰

Resounding evidence points to the fossil fuel industry's complacency—and even commitment—to exacerbating the climate crisis. On top of this, fossil fuel companies attempt to censor and control the source of climate science: climate research. How? Through the influence and power that comes from funding it.

TARGETING THE UNIVERSITY

The job of a university is to "discover and invent the future," says John Hennessy, former president of Stanford and current chairperson of Alphabet Inc.¹¹ This is especially true for well-regarded institutions, such as Columbia University, which are considered beacons of intellectual thought and discovery. Fossil fuel companies know that maintaining their social license to operate is crucial; public and stakeholder acceptance of the industry's operations is paramount as global awareness of climate change grows. By embedding themselves in prestigious academic institutions, fossil fuel companies capitalize on a university's reverence to simultaneously increase their social capital and influence the narrative surrounding their operations, positioning themselves as essential partners in the global energy transition rather than as primary

contributors to the climate crisis.¹² The numbers are staggering: between 2010 and 2020, ExxonMobil, BP, Chevron, Shell, ConocoPhillips, and Koch Industries collectively contributed or pledged over \$677 million to 27 universities.¹³ They also maintain social influence by naming institutions or centers, hosting events or professorships, and sponsoring equipment.¹⁴

One of the most troubling aspects of fossil fuel funding is its impact on the objectivity of academic research. A comprehensive sentiment analysis conducted on 1.7 million sentences across 1,706 reports from 26 universities revealed that research centers heavily funded by the fossil fuel industry, particularly those dependent on natural gas industry donations (including Columbia University - read more in "Findings"), exhibited a statistically significant bias in favor of natural gas over renewable energy sources.¹⁵ At the Regulatory Studies Center at George Washington University, an American Petroleum Institute (API) representative was allowed to proofread research before publication to ensure that findings did not undermine the interests of the fossil fuel industry, showcasing an egregious example of industry influence over the presentation of research results.16

But even more broadly, beyond the outcomes of published reports, fossil fuel funding profoundly shapes the questions that researchers are encouraged or discouraged from pursuing. The ability to direct funding translates to the power to set research agendas, a dynamic that has farreaching implications for the scope and direction of academic inquiry. As researchers Connor Chung and Jake Lowe argue in a 2022 op-ed, the entities that control funding streams effectively control the research process itself, determining which topics receive attention and which are sidelined.¹⁷ This dynamic fosters an environment where researchers may consciously or subconsciously avoid exploring questions or drawing conclusions that could threaten the possibility of future funding. This creates a subtle yet alarming form of censorship, where the pursuit of knowledge is constrained by financial and external considerations rather than academic curiosity or public interest, as is the intended role of universities' research pursuits.

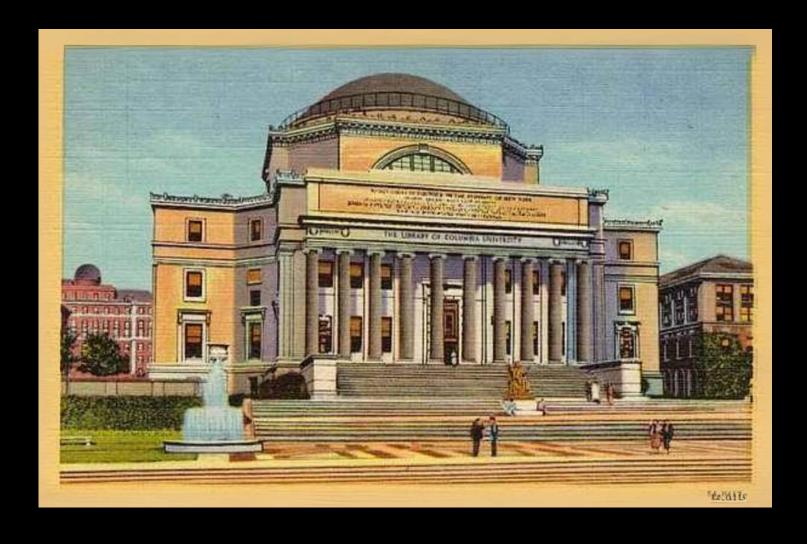
Evidence collected by the Oversight Committee in 2023 revealed how, these relationships serve as a strategic component of the industry's broader efforts to influence policy and shape public discourse.

Numerous internal emails and documents, such as one by then head of U.S. policy at BP, Robert Stout, reveal long-term plans for these university partnerships: he noted that BP's relationship with Princeton was becoming "increasingly synergistic" with BP's objectives, "as of course... planned," allowing them to potentially see "some of our friends in senior government policymaking roles." Another internal BP document noted that the company's policy programs at Harvard and Tufts provided BP with the ability to "shape international policy thinking in low carbon energy discussions."

The following report will prove how the fossil fuel industry has deliberately attempted and succeeded in leveraging Columbia University's reputation for its financial gain. This is perhaps best summarized by a 2019 email, where then-BP Vice President Robert Stout wrote: "[Relationships with Columbia] are key parts of our long-term relationship building and outreach to policymakers and influencers in the US and globally... [we] are able to tell the story of what we are doing and why in a more personal and compelling way."20

In the words of Columbia
President Emeritus Lee Bollinger, "At
Columbia, we have long understood the
profound threat climate change poses to
the future of our planet and the role our
community should play in confronting
it."²¹ Now is the time to act on those
words.

RESEARCH **B**METHODOLOGY



We have chosen to define the fossil fuel industry as the corporations and actors involved in extracting, distributing, and enabling the mass consumption of fossil fuels, including oil, gas, and coal. To limit our research, we focused only on the fossil fuel corporations in Urgewald's Global Oil and Gas Exit List (GOGEL)22 and Global Coal Exit List (GCEL),23 with the exception being the Charles Koch Foundation, GOGEL and GCEL are widely acknowledged as thorough public databases on coal, oil, and gas companies. They provide information on the scale and composition of a company's gas and oil operations and their expansion efforts. The oil and gas companies on these lists account for around 95% of global oil and gas production.²⁴ These records are updated yearly to help hundreds of financial institutions implement meaningful divestment criteria. Our addition to these lists is the Charles Koch Foundation because it is operated by multi-billionaire Charles G. Koch,²⁵ whose money stems from Koch Industries Inc., a corporation that is heavily invested in the fossil fuel industry²⁶ and climate denial.²⁷ There are also many individuals with vested interests in the fossil fuel industry, such as oil executives, who have donated large sums of money to Columbia. However, we did not include any of these numbers in our research. Some

examples are Scott Sheffield, former CEO of Pioneer Natural Resources, having donated over a million dollars to CGEP²⁸ and Arjun Murti, who is both a Director of ConocoPhillips and an Advisory Board member for CGEP, having donated over \$500,000.²⁹ Columbia does not comprehensively disclose the money it receives, whether unrestricted general funds or funding for research projects. All the data compiled in this report was found using publicly available information, so we expect Columbia's undisclosed funding to raise our numbers dramatically.

The 2012 Columbia University Policy on Financial Conflicts of Interest and Research³⁰ is the only policy addressing these concerns, though Columbia does not seem to enforce it. The policy states that "it is not ordinarily allowable for an Individual who has a Significant Financial Interest in an **Interested Business to Conduct** Research involving that Interested Business,"31 and the policy requires individuals to "disclose outside financial interests that relate to any of their research, including unfunded research, to peers and members of the public."32 However, the University administration reserves the right to determine what constitutes a conflict of interest, allowing them to disregard the policy at their discretion.

An example of this is Paul Dabbar, a CGEP researcher who held investments in Conoco and Chevron³³ and has received financial compensation from fossil fuel companies, including Sempra Energy and TC Energy.34 On November 1st, 2023, Dabbar testified to Congress as a Columbia researcher about the nexus between climate change and the intensification of extreme weather events.35 Despite Columbia's aforementioned policy, Dabbar did not disclose any financial interests when testifying.36 When Sunrise Columbia opened an inquiry into Dabbar's lack of transparency, the Office of Research determined there was no violation of the policy.³⁷ The process of managing FCOIs is opaque, and it is unclear how the policy is being enforced regarding fossil fuel companies.

Many of the numbers in this report are conservative estimates; whenever specific funding amounts were disclosed in ranges, we always pulled the minimum. For example, the School for International and Public Affairs (SIPA) website lists several "corporate partners" as financial donors. On this webpage, they are categorized into "Annual Circles" based on how much money that company has donated.38 For example, BP is listed as within the "Transformative Circle," having made an annual commitment of \$250,000 or more. The next circle, the "Visionary Annual Circle," is for corporations donating \$1,000,000 or more. This means that BP may donate between

\$250,000 and \$999,999 annually, though we have chosen the lower bound (in this case, \$250,000). Increased transparency on the part of the University would significantly raise the numbers and accuracy of our findings.

The quantitative research used in this report was compiled using a range of public databases, Columbia websites, annual reports, and IRS 990 forms. Taxexempt non-profit organizations are required to fill out 990 tax forms, which make their finances public and transparent.³⁹ We searched for donations, grants, gifts, sponsored projects, scholarships, and other funds awarded to any Columbia-affiliated school, research employee, or trustee.

One of the databases we used was published by Little Sis (also known as the Public Accountability Initiative), a non-profit research organization that keeps corporations and governments accountable by making visible their networks of power and influence.40 We used Little Sis to find donations and grants awarded to CGEP. Candid's Foundation Directory was another resource we used. This directory tracks the grants that nonprofits take, helps nonprofits find funding, and checks the validity of other organizations.⁴¹ Candid gave us the donation amounts given to Columbia University, Barnard College, the Trustees of Columbia, and the Columbia Irving Medical Center.

Additionally, we used ProPublica to find donations given to Columbia Trustees and the Mailman School of Public Health. ProPublica is a news site dedicated to exposing institutional abuses of power,42 and ProPublica's Nonprofit Explorer is a database showing millions of 990 forms from different non-profits.43 Using the Web of Science Core Collection database, the oldest research and citation database in the world, we searched academic articles with funding disclosures.44 This database was trickier to use than most. and we had to individually go through it multiple times and verify that the donation was from the correct subsidiary of the corporation we were investigating. Sumitomo is an example of a company that has fossil fuel industry subsidiaries and non-fossil fuel-related subsidiaries. For the Web of Science, we used the GOGEL and GCEL lists, which include 2,928 companies, using an open-source scraper written by one of our authors.45

We also studied The Charles Koch Foundation 990 tax forms from 2015 to 2019 and found considerable donations made to the trustees of Columbia.

The dedicated websites of the Columbia Climate School, the Lamont-Doherty Earth Observatory, and SIPA were thoroughly swept for information, as well as the annual reports for Lamont (2012, 2016, 2017, 2018) and SIPA (2013-2014, 2014-2015, 2016-2017,

2017-2018, 2018-2019). Lamont also had a 70th-anniversary publication that listed donations, which we included. Additionally, ExxonMobil's Worldwide Giving Reports for 2017-2022 were used. These annual reports were found on the organizations' websites and other sources, including the Internet Archive's Wayback Machine⁴⁶ – a digital library of websites and cultural artifacts - and Issuu, a digital publishing platform.⁴⁷ We also searched archived versions of CGEP's website from 2018 until 2024. Despite seeing many oil and gas companies listed, we could not discern the amount each company donated. Companies were either listed in the "Leadership Annual Circle" or "Sustaining Annual Circle," which, like the aforementioned BP example, means our figures are at the lowest bound of fossil fuel funding at Columbia. Another gap is that until 2020, there was no mention of how much the "Sustaining Annual Circle" members donated. In 2020, the page clarified that sustaining members made an "annual commitment of \$1,000 or more."48

Whenever we found multiple donations for a single year from a company, either on Little Sis, through the SIPA annual reports, or the CGEP annual reports, we always chose the CGEP report's number for consistency and to avoid any chance of overcounting. In multiple instances, the SIPA website noted that a company had

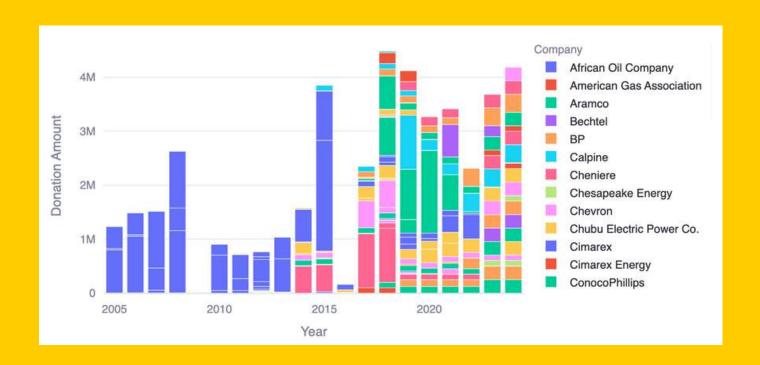
donated more than a million dollars. Still, that same year, CGEP reported that the company had committed to donating 200,000 or an aggregate of 500,000. In instances where we did not know whether yearly donations were made or one aggregate donation, we always chose the one that would result in a lower number – for example, counting a \$500,000 aggregate donation over four years instead of \$200,000 per year for the years that the company was listed in that funding tier. This counting mechanism omitted significant donations, including two one-milliondollar donations from Cheniere and Tellurian in 2019.

We also created a visualization tool to showcase all quantitative data, which is how we produced the presented graphs and statistics.⁴⁹

The qualitative research this report used was found on Columbia websites, Columbia blogs, interviews with Columbia and Barnard professors, and other news sites and online resources. We interviewed two professors: Jerry McManus and Robert McCaughey. Jerry McManus is a professor in the Department of Earth and Environmental Sciences as well as at the Lamont Doherty Earth Observatory.50 Robert McCaughey is a Barnard history professor and the Janet H. Robb Chair in the Social Sciences.⁵¹ These interviews were conducted to gain additional context regarding Columbia's

history and affiliations with fossil fuel companies. We also extensively investigated CGEP, which is one of the most fossil-fuel-funded research units at Columbia. CGEP reports and the surrounding media coverage and mentions in the US Government about CGEP were analyzed thoroughly. The CGEP advisory board, the Columbia board of trustees, the Business School board, and the faculty profiles at Lamont were scanned for people with ties to the fossil fuel industry. We also looked at past CGEP events that prominently featured fossil fuel voices without having legitimate opposing voices. We examined any magazine or news article that mentioned a Lamont or Columbia-affiliated researcher engaged in climate research. Finally, we searched through recent House subpoenaed documents from a recent Joint Bicameral Staff Report titled "Denial, Disinformation, and Doublespeak: Big Oil's Evolving Efforts to Avoid Accountability for Climate Change." A Joint Bicameral is when the Senate and the House of Representatives must work together to pass the same bill. More than 4,000 documents were analyzed to find references to Columbia or CGEP.52

FINDINGS



"THE CENTER ON GLOBAL ENERGY POLICY AT COLUMBIA RECEIVED \$15,711,997 FROM THE FOSSIL FUEL INDUSTRY SINCE THEIR FORMATION IN 2013"

QUANTITATIVE FINDINGS

From 2005-2024, Columbia
University has accepted **at least**\$43,712,333 from 44 corporations
associated with the fossil fuel industry
for research. This sum is likely a drastic
underestimation of total donations, as
our methodology uncovered only
publicly accessible data on donations
and consistently prioritized minimums
when specifics were unclear. With a lack
of transparency in the funding sources
for research studies, the actual sum
received by Columbia University from
fossil fuel corporations is unknown to
the public and likely significantly higher.

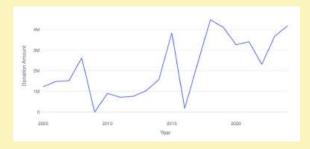


Figure 1. Total funding from the fossil fuel industry from 2005-2024.

Fossil fuel research funding at Columbia University has dramatically increased since 2005, with some variation between 2015 and 2024 (Figure 1). This general trend could be explained by a lack of publicly available data on funding sources from 2005-2014. In 2016, fossil fuel funding dropped to \$178,450 (Figure 1). This is likely because, in our research, we could

not locate the 2016 SIPA annual report where funding sources were disclosed. Fossil fuel funding peaked in 2018 and 2024, with \$4,475,865 and \$4,187,333 accepted within each respective year (Figure 1).

FUNDERS

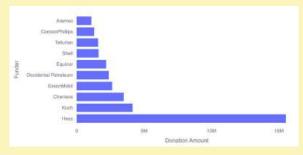


Figure 2. Donation sums from the top 10 funders associated with the fossil fuel industry from 2005 to 2024.

Of the total \$43,712,333 received by Columbia University, \$36,068,085 came from these top 10 funders (Figure 2), many of which are big names within the fossil fuel industry. Columbia University's top fossil fuel funder is Hess Corporation, an oil and gas company acquired by Chevron in 202353 with \$15,522,500 in donations from 2005-2024 (Figure 2). Koch Family Foundations, which have spent hundreds of millions to finance groups promoting climate denial,54 have also donated \$4,155,139 to Columbia University (Figure 2). Cheniere Energy, a liquefied natural gas company, has donated \$3,500,000 since 2005, followed by other big funders like

Occidental Petroleum (\$2,399,000), ExxonMobile (\$2,641,429), Equinor (\$2,200,000), Shell (\$1,640,018), Tellurian Inc. (\$1,599,999), ConocoPhillips (\$1,310,000), and Aramco (\$1,100,000) (Figure 2).

RECIPIENTS

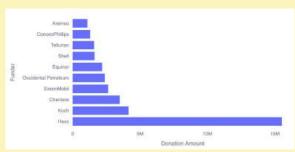


Figure 3. Recipients of fossil-funded donations within Columbia University from 2005-2024.

The top recipient of this fossil fuel funding is the Center on Global Energy Policy (CGEP), the selfproclaimed "premier hub and policy lab for global energy thought leadership."55 CGEP has accepted \$15,711,997 from the fossil fuel industry since its formation in 2013 (Figure 3). Second place among top recipients is the School of International and Public Affairs (SIPA). SIPA claims to "[educate] students to serve and to lead, and to produce and share new knowledge on the critical public policy challenges facing the global community"56 while having accepted a total of \$21,461,997 in funding from oil and gas corporations

since 2005 (Figure 3). Other recipients include the Columbia University Trustees (\$8,299,819), Barnard College (\$5,814,550), the Mailman School of Public Health (\$7,135,000), Columbia University Irving Medical Center (\$32,500), and the Columbia Climate School, which "powers innovative research in the science, consequences, and human dimensions of climate change"57 - the Climate School has accepted \$741,967 from fossil funders since its establishment in **2020** (Figure 3). We are pleased to see that the Lamont-Doherty Earth Observatory, a "leader in the Earth sciences and ... now the scientific research heart of the Columbia Climate School,"58 has only accepted \$126,500 from fossil fuel corporations since 2005 (Figure 3).

We found 141 specific studies funded by the fossil fuel corporations who have given monetary donations and 784 studies funded by any of the companies listed, many of which are related to climate research, including the following:

Guanhe Rim et al.,
"Solvent Impregnated Polymers
Loaded with Liquid-Like
Nanoparticle Organic Hybrid
Materials for Enhanced Kinetics
of Direct Air Capture and Point
Source CO 2 Capture," Advanced
Functional Materials 31, no. 21

(May 2021): 2010047, https://doi.org/10.1002/adfm.20 2010047.

While carbon capture and storage, a method of trapping and reducing carbon dioxide emissions from industrial processes, is a strategy to mitigate the effects of global warming, it has historically been used by fossil fuel industries as an alternative to the phasing out of fossil fuel production. Today, over 70% of carbon capture projects are "enhanced oil recovery" projects, where "recovered carbon" is used to produce more oil or gas.⁵⁹ Critics of carbon capture technologies state that the scale at which they can be realistically employed, considering their high costs and excessive consumption of energy, are much too small to make a difference on total emissions⁶⁰ – the world's biggest carbon capture facility will capture just 3 seconds of humanity's current carbon emissions.⁶¹ Not only are these technologies ineffective at carbon mitigation, but nearly 90% of the proposed global carbon capture in the power sector has failed at the implementation stage or was suspended early.62 Vicki Hollub, the CEO of Occidental Petroleum, has claimed that "we believe that our direct capture technology is going to be the technology that helps to preserve our industry over time... This gives our industry a license to continue to operate for the 60, 70, 80

years that I think it's going to be very much needed."63 This Columbia University study on carbon capture technology received \$616,967 from Shell between 2018-2022,64 whose carbon capture plant emits more carbon than it recovers.65 Eight other studies funded by fossil fuel corporations are related to carbon capture and other methods of greenhouse gas reduction. Focusing on these mitigation methods effectively redirects attention away from the transformational change needed within the fossil fuel industry, allowing for business as usual for fossil fuel corporations.

To explore and interact with this data more, visit https://ffr-research-visualization.streamlit.app/.

QUALITATIVE FINDINGS

On top of the presented quantitative findings, our research has found that "soft influence" or informal connections between Columbia and fossil fuel companies are vital to understanding fossil fuel influence on climate research at Columbia.

Columbia's informal fossil fuel influence started at the very top of the institution. William McGill, who began his tenure as University President in 1970, was appointed to the board of Texaco, an oil company now merged with Chevron, in 1983.⁶⁶ A year later, Barnard President Martha Peterson was appointed to the board of Exxon.⁶⁷

According to the Columbia Daily Spectator, Peterson called her Exxon board position "a nice opportunity to make some money for Barnard."⁶⁸

Over the years, Columbia has received donations from various fossil companies to construct and renovate buildings. In October 1975, Columbia received \$500,000 in donations to renovate Havemeyer Hall, including "two \$100,000 gifts from the Exxon Foundation Fund and the DuPont Foundation," according to the Columbia Daily Spectator.⁶⁹ At the Columbia University Irving Medical Center, Columbia received \$5 million from Armand Hammer, chairman of Occidental Petroleum, for construction costs between 1973-76.⁷⁰

In the following sections, we will focus on the most significant areas of fossil-fuel industry influence on climate research – the Columbia Center on Global Energy Policy (and its predecessor), the University and Business School Board of Trustees, and the Columbia Climate School (including the Lamont-Doherty Earth Observatory).

Center on Global Energy Policy

Columbia's Center on Global Energy Policy (CGEP), housed within the School of International and Public Affairs, was founded in 2013 by Jason Bordoff to be a "global leader in advancing evidencebased and actionable energy and climate solutions through research, dialogue, and education."⁷¹ On its website, CGEP claims that it produces "trusted, unbiased knowledge" that aims to advance "actionable energy and climate solutions."⁷² The website also lists the Center's commitment to "independent and nonpartisan research that meets the high standards of academic integrity and quality."⁷³

However, a peek into the money fueling CGEP's endeavors reveals numerous conflicts of interest. The center's top donors are Occidental Petroleum Corporation, Tellurian Inc. (a natural gas company), and Kimberly and Scott Sheffield (the latter recently stepped down as CEO of Pioneer Natural Resources Company) – all of whom have pledged more than \$1,000,000 and are part of the Center's top funding tier.74 The following funding tier (companies who pledge \$250,000 or more a year) includes a comprehensive list of major oil and gas companies: Aramco Services Company (the American subsidiary of Saudi Aramco), BP, Cheniere Energy, ConocoPhillips, Devon Energy, Equinor, ExxonMobil, and Royal Dutch Shell.75 This is of great concern as these corporations are actively invested in the world's continued reliance on fossil fuels and have repeatedly proven a dedication to their preservation.

It seems as though this flow of money has resulted in concrete bias. A

2022 peer-reviewed Nature study conducted by Columbia researchers on the influence of fossil fuel funding in academia describes CGEP as a "fossilfunded centre." The study reveals that CGEP research exhibits a *discernible sentiment bias* by having a "more positive" stance toward natural gas over renewable energy sources, "including solar and hydro power," a tendency not observed in non-fossil-funded research centers.

Checks and balances that might be expected to prevent such a breach of academic integrity are not in place. Eight CGEP reports have been written by experts working concurrently for companies that are using and promoting natural gas.⁷⁷ In a statement to the Columbia Daily Spectator, Doug Almond, the lead author of the Nature study wrote that: "Unlike some other prominent energy centers (cf. the University of Chicago's EPIC), Columbia energy center reports do not typically face peer review by independent, scholarly journals ... This removes a natural check on any pro-funder slant."78 According to Almond's research, between January 2009 and December 2020, only 23% of reports published by the MIT Energy Initiative, CGEP, and Stanford's Natural Gas Initiative included funding acknowledgments.79

It's important to highlight the influence of the work produced at CGEP

and, therefore, how the negative impacts of fossil fuel funding extend to environmental policy. Take, for example, a September 2014 CGEP report titled "American Gas to the Rescue? The Impact of US LNG Exports on European Security and Russian Foreign Policy," which found that U.S. crude oil exports would create a more liquid global gas market, increasing supply options for gas consumers abroad. Like most reports, the funders were not disclosed, and the report did not receive external peer review. 81

This particular report received significant press attention and was at times referred to as "the Columbia University report" without mention of funding.82 A look into the funding reveals that Charif Souki is listed as a part of the "research team" for the report:83 Souki is the executive chairman and co-founder of Tellurian Inc., a natural gas company responsible for producing roughly 79% of U.S. liquified natural gas,84 and sits on the CGEP advisory board.85 A 2023 archived version of the CGEP website shows Tellurian donated more than \$1 million to be part of the "Visionary Annual Circle."

The report was released in the context of a congressional debate on whether the US should lift the crude oil export ban, which had been in place for 40 years.⁸⁶ Jason Bordoff, CGEP's founding director, told Reuters that

"easing U.S. export restrictions would likely lift production and lower gasoline prices."87 Bordoff repeated this sentiment in his testimony to the 114th Congress, in which he said that "on economic, security and geopolitical grounds, [the crude oil export ban] should be lifted."88 Separately, Bordoff argued in a 2013 opinion piece that crude oil and LNG exports are needed to spur job growth and keep America competitive.89 In either case, Bordoff made no mention of the fact that gas exports have been shown to lead fossil fuel companies to build out oil and gas infrastructure, threatening to lock global supply chains into decades more of polluting fossil fuel use.90

Richard Shelby, a U.S. senator for Alabama at the time, cited the 2014 CGEP report in his opening remarks during a full committee hearing on "Lifting the Crude Oil Export Ban" in July 2015.91 A few months later, Congress lifted the ban in December 2015⁹², allowing the free export of U.S. crude oil worldwide. In 2015, the U.S. exported fewer than half a million barrels per day, per the U.S. Government Accountability Office.93 By 2019, that number had grown to almost 3 million barrels per day.94 However, contrary to what Bordoff and co-authors predicted, gas prices still went up after the ban was lifted.95 Thus, it is clear that CGEP's widely cited, industry-funded research contributed to the national

discourse around crude oil exports, ultimately leading to greater proliferation of fossil fuels.

There appears to be a revolving door pattern between industry professionals and CGEP researchers, calling into question the independence and integrity of its research. Aside from Souki's involvement in the abovementioned CGEP report, below is a sampling of CGEP researchers with industry connections:

- Luisa Palacios is a CGEP research scholar and previously served as the chairwoman of Houstonbased Citgo Petroleum Corporation.⁹⁶
- David Banks was hired as an international climate policy expert in 2018.97 Banks is a former Trump administration energy advisor who supports the fossil fuel industry and defended former President Trump's "climate change is a Chinese hoax" tweet at a United Nations panel promoting coal, natural gas, and nuclear energy.98 Banks was also previously the executive vice president of the American Council for Capital Formation, which is funded by ExxonMobil, the Koch family foundations, and the American Petroleum Institute (a trade group for the oil and gas industry).99 Banks no longer works for CGEP.100

- CGEP research fellow Tatiana
 Mitrova is on the board of
 Schlumberger, a global oil service
 company.¹⁰¹ In December 2018,
 Mitrova co-wrote a report titled
 "The Impact of US LNG on
 Russian Natural Gas Export
 Policy."¹⁰²
- Julio Friedmann is a nonresident fellow at CGEP who has worked for five years as a senior research scientist at ExxonMobil.¹⁰³

Another area of fossil fuel influence is CGEP's advisory board. The following is a sampling of CGEP's current and former advisory board members with fossil-fuel connections:

- Cynthia Warner serves on the Board of Directors for Chevron and is the Lead Independent Director for Sempra Energy.
 Warner was previously the President and CEO of Renewable Energy Group (owned by Chevron), Group Vice President at BP, and Executive Vice President at Andeavor (formerly Tesoro Corporation).¹⁰⁴
- Arjun Murti is a Director of ConocoPhillips. 105
- Scott Sheffield is a major individual donor and former CEO of Pioneer Natural Resources Company. Sheffield is also the director of The Williams

- Companies, Inc., which provides large-scale infrastructure for natural gas and natural gas products. In 2013, Sheffield was inducted into the Permian Basin Petroleum Museum Hall of Fame and received the Texas Oil & Gas Association's Distinguished Service Award. In May 2024, FTC alleged that Sheffield colluded with OPEC competitors to inflate energy prices.
- Marianne Kah was a Chief Economist of ConocoPhillips at its Houston headquarters for 25 years and chaired the American Petroleum Institute's Committee on Economics and Statistics.¹⁰⁸
- Al Cook is a former executive vice president at Equinor¹⁰⁹, a petroleum refining company.¹¹⁰
- Jessica Uhl is a former Chief Financial Officer of Shell.^{111, 112}

Given CGEP's corporate and fossil fuel connections, it is no surprise that the Center regularly hosts speakers from the fossil fuel industry, often creating environments where views critical of the fossil fuel industry are not expressed. Industry executives who speak at CGEP events often use Columbia's credibility to promote the narrative that fossil fuel companies are leading the energy transition. For example, then-BP CEO Bernard Looney's remarks at the 2021 Global

Energy Summit about BP's investment in offshore wind were covered by POLITICO's E&E News.¹¹³ In February 2024, BP backed away from its offshore wind investments, indicating it would prioritize oil and gas production.¹¹⁴

The following recent events are just a sampling of CGEP-hosted events featuring members of the fossil fuel industry:

- Student Roundtable with Binaya Srikanta Pradhan in April 2024.¹¹⁵ Pradhan served as Chief of Staff to the Indian Government's Minister of Petroleum & Natural Gas from 2014 to 2019.
- The Global Energy Summit in April 2024¹¹⁶ featured David Foley, managing director at Blackstone and serves on the board of Olympus Energy, a "privately-owned oil and natural gas company that specializes in the upstream development of natural gas resources."

 The Summit also featured Scott Sheffield, former CEO of Pioneer Natural Resources.
- Student Roundtable with Gretchen Watkins in February 2024.¹¹⁸ Watkins is the president of Shell USA.
- Student Roundtable with László Varró in November 2024.¹¹⁹

- Varró is VP of the Shell Scenarios Team.
- The Global Energy Summit in April 2023 featuring executives from TotalEnergies (Patrick Pouyanne), Kuwait Petroleum Corporation (Shaikh Nawaf S.Al-Sabah), and Tellurian (Charif Souki).¹²⁰ During the Summit, questions were sent and filtered beforehand, and there was no time blocked out on the agenda for questions from the general public, preventing critical views from being expressed.¹²¹
- "Zero-C Hydrogen in a Circular Carbon Economy" in August 2021.122 The panel was moderated by Adam Sieminski, senior advisor to the board of trustees for the King Abdullah Petroleum Studies and Research Center. Panelists included Khalid Abuleif, chief negotiator for climate agreements for the Kingdom of Saudi Arabia, and Dr. Agil Jamal, chief technologist for the carbon management research division at Saudi Aramco. The panel did not include any members who were critical of blue hydrogen.123

CGEP's funding model, corporate partnerships, events, and research findings suggest fossil fuel influence permeates the Center's functions. New subpoenaed documents from an investigation and hearing by the House Committee on Oversight and Accountability and the Senate Budget Committee make this conclusion more explicit.

The new documents suggest that Jason Bordoff is a sought-after corporate counselor, likely due to his history of working with industry and credibility from his position at Columbia. One document provided to the House Oversight Committee shows that Bordoff briefed Chevron board members and executives on "his perspective on energy transition and its implications for Chevron" at a July 2021 convening of the board held at a Napa Valley resort.¹²⁴

Another subpoenaed document showed that ahead of a 2019 meeting of the Oil and Gas Climate Initiative, an industry-led environmental group, Bordoff was one of just four attendees — out of more than 100 — that Exxon's public and government affairs team recommended for "DWW engagement," referring to CEO Darren W. Woods. 125 Yet another document showed Bordoff on BP's invite list for a 2018 private reception at CERAWeek, along with the President of the American Petroleum Institute and executives from BP, Chevron, Cheniere, and more. 126

Bordoff's interactions with oil executives extended beyond social situations. An email from July 2019 that

was subpoenaed revealed that Bordoff and other CGEP officials had emailed BP executives a draft of a chapter on carbon capture, utilization, and storage that would be included in a National Petroleum Council report. Gardiner Hill, BP's VP of carbon at the time, emailed back several thoughts.¹²⁷

Even more damning are industry memos that *specifically cite CGEP or Columbi*a as a means for oil companies to influence the public and policymakers.

- In one email, Exxon executive Wayne Lepire suggests spending \$50,000 to fund a study at Columbia or the Health Effects Institute, a research group in Boston, to promote the role of natural gas in the U.S. energy system as an alternative to coal, a known health hazard. Lepire aimed to use the "peer-reviewed publication" for "industry advocacy." 128
- A May 2017 Shell memo titled the "Global Methane Communications Plan" lists Jeffrey Sachs, a Columbia economics professor, and Jason Bordoff as two contacts who "publicly recognises the GHG benefits of gas." Jefferson Edwards, a vice president at Shell, is the listed "relationship owner." 129

- BP's 2018 "Communications
 Strategy And Tactical Plan" lists
 CGEP and Bordoff as 'opinion
 leaders' to "demonstrate that BP
 is a 'trusted voice'" and "illustrate
 BP's energy transition narrative."
 According to the plan, a goal of
 BP's engagement was to "develop
 and reinforce relationships with
 key stakeholder groups,
 positioning BP as a preferred
 partner."130
- A 2021 Shell memo reveals how Shell executives put together a PR response to a study showing that the "greenhouse gas footprint of blue hydrogen is more than 20% greater than burning natural gas or coal for heat" and concluded that "there is really no role for blue hydrogen in a carbon-free future."131 To push back on these claims, the memo outlines media opportunities, including a "Columbia Uni panel on energy infrastructure on 4 Oct [that] will outline case [sic] for hydrogen."132,133

CEMTPP

From 2000 to 2014, Columbia's Center for Energy, Marine
Transportation and Public Policy
(CEMTPP) served as "a focal point for the study of economic, environmental, political, technological and other factors that affect the global production,

transportation and consumption of energy."¹³⁴ The cost of establishing the center was covered by a \$3 million grant from ExxonMobil and a donation from the foundation created by shipping magnate Aristotle Onassis.¹³⁵ Tax records show that CEMTPP was dissolved sometime in 2014 (CGEP was founded in 2013).¹³⁶

It appears that CEMTPP did not try to obfuscate that their research was funded and directed by fossil fuel executives. CEMTPP's first director was Hurst Groves, who had previously worked as managing counsel of Mobil Corporation, where he managed legal support for Exxon's oil and gas projects around the world. TEMTPP's second director, Albert Bressand, headed the Global Business Environment department in Royal Dutch Shell's global headquarters before joining CEMTPP. 138

Given the center's staff makeup, it is no surprise that CEMTPP frequently hosted speakers from companies such as Exxon and Saudi Aramco. 139 Records also indicate the center was heavily funded by fossil fuel companies — a 2010 version of CEMTPP's website lists donors from Exxon, French energy giant Total SA (now TotalEnergies) to Mitsubishi. 140 A year later, CEMTPP stopped disclosing their corporate sponsors. 141

According to a Columbia spokesman, in response to a 2018 Texas

Tribune article about CGEP, there is no relationship between the current Center on Global Energy Policy and CEMTPP.142 However, it is curious that CEMTPP was dissolved shortly after CGEP was created. In a 2015 letter from multiple advocacy groups to then-Columbia president Lee Bollinger, CGEP was referred to as a rebranding of CEMTPP.143 The advocacy groups wrote, "we know that The Center on Global Energy Policy, formerly known as the Center for Energy, Marine Transportation and Public Policy, received at least \$875,000 from ExxonMobil before its rebranding several years ago."144

In a sense, CGEP is the latest iteration of Columbia's long-standing ties with fossil fuel companies. While CGEP might hide behind a facade of being pro-climate (as their mission statement suggests), it's clear that they are deploying the same industry playbook customized for 2024.

Board of Trustees

Ultimately, all power in the University flows through the Board of Trustees, who "elect the president, oversee all faculty and senior administrative appointments, monitor the budget, supervise the endowment, and protect University property." According to a March 2024 report published by the Public Accountability Initiative (also known as LittleSis), 32%

of Columbia board members have recent ties to fossil fuel companies. 146

In particular, the following Trustees have ties to the fossil fuel industry:



Jeh Johnson is a former Secretary of Homeland Security and is a partner at the law firm Paul, Weiss, Rifkind, Wharton &

Garrison, LLP. He also serves on the boards of Lockheed Martin, U.S. Steel, and MetLife. 147

The firm in which he is a partner, Paul, Weiss, Rifkind, Wharton & Garrison, LLP, received an 'F' grade from Law Students for Climate Accountability for the firm's work on lawsuits exacerbating climate change and on fossil fuel transactions.148 From 2017-2021 the firm worked on 33 cases exacerbating climate change and on fossil fuel transactions worth \$7.6 million.149 Paul Weiss has represented ExxonMobil in several cases, including successfully defending the oil and gas corporation from a suit brought by New York State, accusing ExxonMobil of misleading investors about climate change.150

Along with being a partner, Johnson is on the board of Lockheed Martin, the largest contractor to the United States Department of Defense. ¹⁵¹ The U.S. military is the world's largest institutional consumer of petroleum and the single largest institutional producer of greenhouse gasses in the world, according to a paper published at Brown University. ¹⁵²



Dean Dakolia is the Co-Chief Investment Officer of the Fortress Credit Funds. In addition to serving on the Board,

Dakolias serves on the Board of Visitors for the School of Engineering and Applied Science and the Athletic Leadership Committee.¹⁵³

Fortress Credit Funds is part of Fortress Investment Group, a large investment management firm. Fortress is a major oil and gas investor through financing and investing in fossil fuel companies as well as through its New Fortress Energy subsidiary, which builds and operates gas infrastructure, including gas-fueled power plants, infrastructure, and LNG terminals.¹⁵⁴



Li Lu is the Founder and Chairman of Himalaya Capital Management, an investment management company. Lu is also

on the board of the California Institute of Technology. Lu's mentor is Warren Buffett, and he has invested \$245 million in Buffett's firm, Berkshire Hathaway. Berkshire Hathaway is a large oil and gas investor with a 25% stake in Occidental Petroleum, and ownership of BNSF Railway, which transports fracked oil from Western shale plays.

Business School Board

The Columbia Business School Board of Trustees "is an active body that supports and extends Columbia Business School's unique brand of education."¹⁵⁹ The following members of the board have ties to the fossil fuel industry:

 Board Chair James Gorman is Chairman and CEO of Morgan Stanley¹⁶⁰, one of the world's top fossil financers.¹⁶¹ Lihong Wang was an executive director at Morgan Stanley from 2005-2006, and Charles Tate was a managing director for 19 years. Tate was also at Bank of America, which

- ranks third on Forbes 2023 list of worst fossil fuel funders. 162
- Henry Kravis is the co-founder and co-executive Chairman of the private equity firm KKR¹⁶³, which has a significant fossil fuel portfolio and is the top stakeholder in the controversial Coast GasLink Pipeline.¹⁶⁴ Kravis has made considerable donations to Columbia and has a building at the business school named after him.¹⁶⁵
- Sheldon Stone is the principal and co-portfolio manager of Oaktree Capital Management,¹⁶⁶ which has significant fossil fuel investments,¹⁶⁷
- Marie Ffolkes, a member of the Global Advisory Board of the Chazen Institute for Global Business at Columbia Business School, sits on the Valero Energy board of directors.¹⁶⁸
- William A. von Mueffling was
 Managing Director of Lazard
 Asset Management, which is 25%
 (\$4.33 billion) invested in fossil
 fuel stocks across 20 equity funds
 as of August 19, 2024.¹⁶⁹

Climate School

The Columbia Climate School was established in 2020 as the nation's first climate school and encompasses the Earth Institute, Lamont-Doherty Earth Observatory, and more than 20 other

centers and programs.¹⁷⁰ The Climate School's December 2023 Strategic Framework defines the School's mission to "[further] knowledge and educates leaders to achieve equitable and just solutions to the changing climate and related sustainability challenges."171 Jason Bordoff, CGEP founder, was one of four co-founding deans from the School's inception to July 2023.¹⁷² In its brief history, at least three projects¹⁷³ at the Climate School have been funded by fossil fuel companies, most notably a study on direct air capture that received \$616,967 from Shell between 2018-2022 (see "Quantitative Findings" for more information on this).174

Lamont-Doherty Earth Observatory

The Lamont-Doherty Earth Observatory (LDEO), located on an 189-acre campus in Palisades, New York, is one of the leading earth science research centers. Among other achievements, LDEO researchers coined the term "global warming" ¹⁷⁵ and provided the first evidence to support the theory of plate tectonics and continental drift. ¹⁷⁶ Lamont is part of the Columbia Climate School, and research scientists and professors at Lamont often also work for the Department of Earth and Environmental Science (DEES).

Corporate influence has been present at Lamont since the research institution's founding. Lamont was founded in 1949 as the "Lamont

Geological Observatory" on the estate of Thomas W. Lamont, a banker at J.P. Morgan.¹⁷⁷ In 1969, the observatory was renamed "Lamont-Doherty" after a substantial gift from the Henry L. and Grace Doherty Charitable Foundation.¹⁷⁸ Henry Doherty was an oilman who founded the Cities Service Company (now Citgo).¹⁷⁹ Concerning DEES, their website lists the "Chevron Student Initiative Fund," supported by "gift funds" from Chevron.¹⁸⁰

Over the years, many faculty members have been funded by or affiliated with oil companies. One professor was a Research Geologist with the Exxon Production Research Company¹⁸¹ who came to Lamont and continued writing papers (with Exxon collaborators) relevant to oil exploration.¹⁸² In an interview we conducted for this report, a current Lamont and DEES professor who worked with this professor stated that in the past, they had students working on basin formation and other issues relating to petroleum exploration.

Another more recent example is a professor who, before coming to Lamont, worked for BP America as an Upstream Structural Geologist from 2020-22, as well as working for BGP Inc., China National Petroleum Corporation, as an "on-site QC seismologist" from 2010-14.¹⁸³

Both professors were members of the American Association of Petroleum Geologists, whose mission includes advancing "the science of geology, especially as it relates to petroleum, natural gas, other subsurface fluids, and mineral resources."¹⁸⁴

While researchers who worked for or received funding from the fossil fuel industry do not inherently cause pro-industry research bias, funding contributes to sponsorship bias and opens up the possibility that Columbia researchers contributed to the efforts of fossil fuel companies to obfuscate the truth on climate change.

One important nuance is the temporal aspect of climate change research as it relates to industry sponsorship. During the 1970s and 1980s, Exxon was widely credited with funding climate science that accurately predicted the effects of anthropogenic global warming. A 2023 review published in Science found that "63 to 83% of the climate projections reported by ExxonMobil scientists were accurate in predicting subsequent global warming."185 After learning that this research posed an existential threat to their business models, and while privately acknowledging the reality of global warming, they publicly denied and obfuscated the reality.186

Lamont affiliates worked closely with ExxonMobil during the 1970s and 1980s when climate science was relatively undeveloped. An investigation by the *Columbia Daily Spectator* found

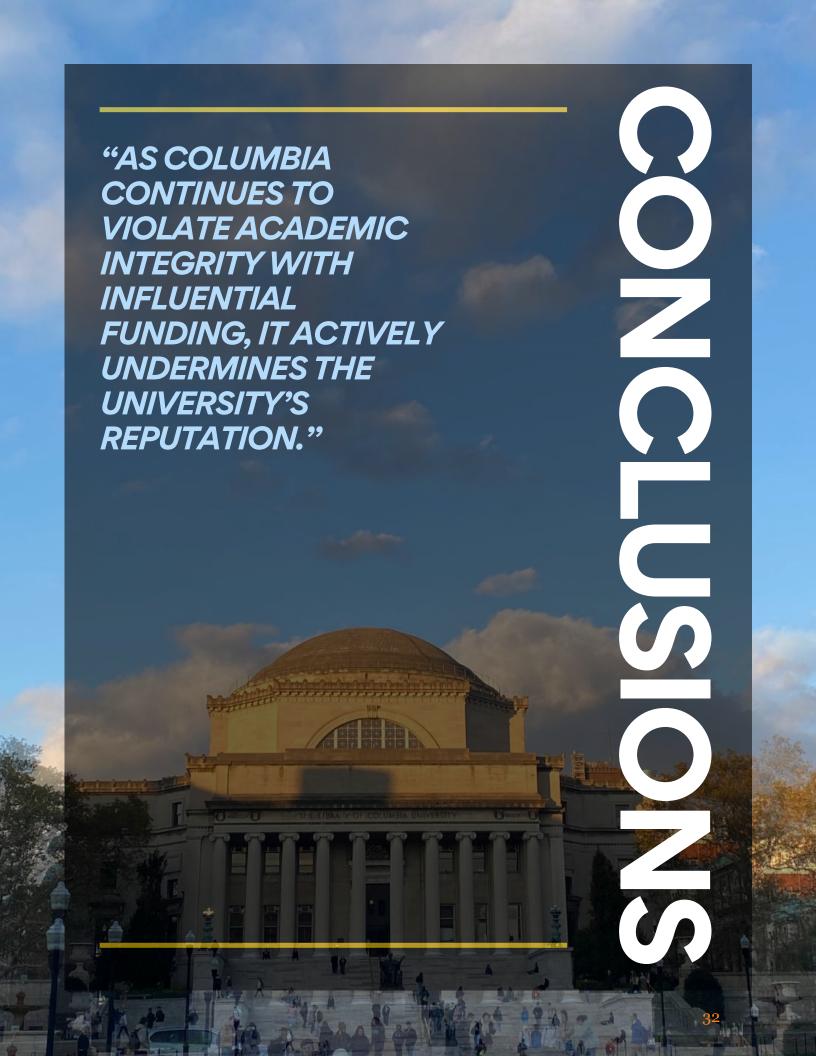
that Exxon funded at least twelve
Columbia research projects from 1987 to
1993.¹⁸⁷ Edward Garvey, a current
School of Professional Studies lecturer
and adjunct research scientist at Lamont
began his career working for Exxon,
conducting greenhouse gas research
with Columbia scientists.¹⁸⁸ In
September 1979, Garvey enrolled in a
doctoral program in geochemistry at
Columbia, paying tuition with the help
of the employee tuition reimbursement
program at Exxon.¹⁸⁹

Around the same time, Exxon tapped Wallace Broecker, a Lamont scientist credited with popularizing the term 'Global Warming,' and Lamont Oceanographer Taro Takahashi to work on their climate change investigations alongside Garvey.190 In an interview published in the Columbia Daily Spectator, Garvey said Takahashi and Broecker "only agreed to be consultants [for Exxon] if they had free access to the data and no limitations on whatever they wanted to say anytime, anywhere, any place."191 Interviews we conducted for this report confirmed this, with one Lamont affiliate telling us that Broecker "was a very strong-minded individual" who could hold his own against industry influences. Shortly after that, in July 1982, Exxon made significant cuts to its climate research program. 192

While Broecker and Takahashi, both internationally renowned scientists, could resist industry influence, not all Lamont researchers did. In a 1979 paper co-authored by George Kukla, Lamont research scientist, he wrote that while it "has been calculated that the increase in CO2 levels should lead to global warming," CO2 emissions would result in global cooling.193 In 1994, Kukla presented evidence at an Air & Waste Management Association conference suggesting that burning fossil fuels may help maintain an essential atmospheric balance and cutbacks in burning fossil fuel may increase the GHG effect. 194,195 Even when the scientific consensus coalesced around global warming, Kukla continued advocating for his global cooling theory. In a 2007 magazine profile, Kukla stated: "The only thing to worry about global warming is the damage that can be done by worrying. Why are some scientists worried? Perhaps because they feel that to stop worrying may mean to stop being paid."196 In 2010, Kukla was a speaker at the Heartland Institute's Fourth **International Conference on Climate** Change titled "Reconsidering the Science and Economics."197 19 of the 65 sponsors of the conference (including the Heartland Institute) have received a total of over \$40 million since 1985 from ExxonMobil, Koch family foundations, or Scaife family foundations. 198 Despite being debunked,199 Kukla's work continues to be cited by climate deniers seeking to delay climate action.200

Even if the peer-reviewed research published by industry-funded scientists is sound, oil and gas companies can still influence the research agenda to their benefit. The corrupting influence of such industry funding is not hypothetical. A 2022 article published in the peer-reviewed medical journal *The BMJ* examined how fossil fuel companies strategically funded university research. The author concludes that "after learning from Exxon scientists that governments would regulate oil and gas companies to halt global warming, the French fossil fuel industry began funding studies on carbon uptake by oceans at Columbia University in the early 1990s research that could make climate change seem less alarming."201

Despite working closely with the oil industry in the 1970s, 1980s, and 1990s, publicly available information shows that recent fossil fuel donations Lamont has received are negligible. Lamont received \$126,500 from fossil fuel companies (mainly from Chevron) between 2012 and 2022.202 During fiscal year 2022, Lamont received \$1,000 from Chevron while receiving over \$67 million in research funding in 2022 predominantly from the National Science Foundation.²⁰³ We believe that all Columbia climate researchers should follow Lamont-Doherty in reducing fossil-funded research and committing to research integrity.



Our research results strongly demonstrate that the fossil fuel industry has influenced Columbia University's climate policy and economics research and compromised its commitment to academic integrity. Columbia University's research programs have received over \$43.7 million from fossil fuel companies,

\$36.1 million coming directly from ten of the most prominent industry players, all of whom are known to promote disinformation. At least 784 Columbia studies were funded by a company on GOGEL (Global Oil & Gas Exit List) or GCEL (Global Coal Exit List). These figures are also likely a gross underestimation due to Columbia's limited public disclosure of funding sources, differences between our research sources, and our intentional use of minimum estimates in available data. Despite the true scale being unknown, this is a colossal monetary figure for published research without disclaimers or disclosure requirements. It is a stunning figure to receive from corporations that consistently prove their specific vested interests in particular research outcomes.

CGEP, the Climate School, and Columbia repeatedly claim to produce unbiased, reputable research to advance climate solutions. Many of our findings directly contradict these missions; from Columbia being named explicitly by a BP VP as essential for their outreach and influence to being

specifically mentioned as a producer of biased research, Columbia has fallen short. Alarmingly, this biased research has also been directly linked to significant policy decisions, such as lifting the U.S. crude oil export ban in 2015. We are also disappointed by the depth of administrative connections to the fossil fuel industry, with at least 3 CGEP researchers, 6 CGEP advisory board members, 3 Trustees, and 5 **Business School Board members** maintaining significant ties including board and advisory positions. While the specific extent to which research agendas were shaped through conscious or subconscious adjustment of grant applications can never be discovered, we see the numerous deep connections and the industry-requested focus on strategies like carbon capture as clear examples of an impure basis for research. We see Lamont's journey from a historically heavily fossil-funded center to accepting marginal donations as a clear precedent for climate policy and economics research to follow; it is possible.

Columbia University has a strong reputation as a beacon of academic excellence and future innovation. As Columbia continues to violate academic integrity with influential funding, it actively undermines the university's reputation. Polling from Data for Progress found that the net favorability towards Columbia University dropped by 17 percentage points when survey respondents were informed about

Columbia's fossil fuel ties.²⁰⁴ As more information comes to light about the unreliability of data uncovered by fossil fuel funding, public opinion is shifting. In response, many universities are adapting by creating a new system.

A prime example is Princeton University, which instated a fossil fuel disassociation policy in 2022 and complete financial disclosure transparency.²⁰⁵ Princeton University cut funding ties with about 90 fossil fuel companies, including a longstanding partnership with ExxonMobil, over specific criteria, including engaging in climate disinformation and extracting thermal coal and tar.206 In 2023, VU Amsterdam announced that it would reject collaborations and funding with fossil fuel companies that fail to demonstrate a commitment to the Paris Climate Accords.207

Similar to the fossil fuel industry, the tobacco industry has historically funded research meant to purposely confuse the public and aggressively market cigarettes. With this knowledge, 19 schools of public health in the US and Canada signed a joint statement rejecting funding from an organization created by a prominent tobacco company, Philip Morris International.²⁰⁸ Like the Princeton and VU Amsterdam policies, these 19 schools made an informed decision to prioritize ethical and uninfluenced research over financial gain. Columbia must choose to adapt along with its peer institutions by upholding its reputation and exemplifying values of academic integrity and unbiased research.

The University Trustees have already determined the endowment should not be invested in fossil fuel companies due to their role in the climate crisis.²⁰⁹ The same logic should be applied when considering the money flowing into the University; it is time to cut ties with the fossil fuel industry.

RECOMENDATIONS

1. Cease Acceptance of Fossil Fuel Funding

We urge Columbia University to stop accepting funding from fossil fuel companies for climate research. Reliance on fossil fuel industry money compromises the integrity of our climate science research by perpetuating climate disinformation and delaying meaningful action on the environmental catastrophe. Given the magnitude of the climate emergency, it is imperative for Columbia to elevate its standards and fortify a commitment to integrity; in fact, it is essential if the university wishes to maintain its stature as a reputable and innovative research institution.

2. Implement Comprehensive Transparency Measures

COLUMBIA UNIVERSITY MUST ADOPT FULL TRANSPARENCY REGARDING ALL SOURCES OF CLIMATE RESEARCH FUNDING. THIS SHOULD INCLUDE:

- 1. Public Disclosure of Donors: Columbia must disclose the names, affiliations, and contributions of all donors to climate research programs, including the Center on Global Energy Policy (CGEP), the Climate School, and related initiatives.
- 2. Donor Disclaimers on Research: For any climate research project or report, Columbia must issue public disclaimers when publishing research outcomes, outlining the donor's business interests and any potential conflicts of interest. This disclaimer should accompany all research publications and public communications to ensure transparency for stakeholders and the public.

3. Establish Strict Criteria for Future Donations

THE FOLLOWING CONDITIONS MUST BE MET BEFORE ACCEPTING ANY DONATIONS FOR CLIMATE RESEARCH:

- 1. The company must not financially benefit from the extraction, production, or mass consumption of fossil fuels.
- 2. The company must not have a history of or currently engage in the spread of climate disinformation. This includes public statements, funding organizations that deny climate change, obstructing climate policy through lobbying efforts, or participation in trade groups such as the American Petroleum Institute, which consistently lobbies the US government to delay climate progress.

4. Set a Strict Timeline for Transitioning to Fossil-Free Climate Research

Columbia University must set a timeline for compliance with the 4 listed recommendations. This should include specific deadlines for milestones, along with annual progress reviews that publicize the university's progress in meeting its transition milestones.

5. Increase Inclusion of Affiliates in Dialogue and Decision Making

As Columbia University works to address this issue, there must be an open dialogue between administrators and researchers, students, and faculty. In particular, the new Committee on Research Funding from Fossil Fuel Companies should prioritize including diverse perspectives.

This ensures that the priorities of Columbia affiliates with entanglements in the fossil fuel industry are not the only ones being considered.

"COLUMBIA CANNOT
CLAIM TO BE A BEACON
OF SCIENTIFIC
PROGRESS IF
DESTRUCTIVE AND
DEADLY INDUSTRIES
FUND OUR RESEARCH,
BE IT THE FOSSIL FUEL
INDUSTRY OR THE
MILITARY-INDUSTRIAL
COMPLEX."

The scope of this report is limited to the impact of the fossil fuel industry's relationship with Columbia's research. However, we felt it necessary to identify additional connecting issues, such as Department of Defense research funding and the push for divestment from the military-industrial complex, fossil fuels, and apartheid.

The fight for fossil-free research is based on the belief that our research should not be bought and sold by an invested party, the fossil fuel industry, which then presents the research as an unbiased fact. This logic also applies to other funders of our climate, energy, and environmental research that have a stake in their outcomes, including the US Department of Defense (DOD).

Further, the Fossil Free Research movement aims to hold our universities to the ethical and moral standards expected of the institution, students, and faculty alike. Divestment movements have similarly been a principal method for student organizers to hold universities accountable, be it demanding universities stop funding apartheid in South Africa and Palestine, private prisons, or fossil fuels.

DEFENSE FUNDING

The DOD is responsible not only for staggering human loss and destabilization across the globe but also for shocking amounts of carbon

emissions. The Costs of War project at the Watson Institute of International and Public Affairs at Brown University writes, "An estimated 3.6-3.8 million people have died indirectly in post-9/11 war zones, bringing the total death toll to at least 4.5-4.7 million and counting."210 This figure includes neither people killed before 2001 nor people who died from the climate impacts of DOD and the United States military operations. The Costs of War project also found that "The post-9/11 wars have involved major human rights and civil liberties violations, including detention without trial, torture, expanded U.S. government surveillance and racial profiling."211 Columbia aligns itself with these violations of people's most basic rights each time it accepts DOD funding. We believe it is a serious ethical conflict to receive funding from an institution responsible for the deaths of millions.

The DOD estimated in a report that outlines its plans to reduce greenhouse gas emissions: "In FY 2021, DOD Scope 1 and Scope 2 emissions totaled 51 million metric tons of carbon dioxide equivalent." 212 Similar to fossil fuel companies funding climate research, there is a practical contradiction in the US military funding climate and environmental research when it is such a drastically large emitter.

Climate researchers across
Columbia departments work with the
DOD, from the Lamont-Doherty Earth
Observatory (LDEO) to the Applied
Math and Physics Department. The
DOD works closely with earth and
environmental scientists, including
those at the LDEO.

Climate and environmental research must consider climate justice and how climate change exacerbates social, economic, and racial inequity. This research's central mission, therefore, is put in jeopardy when it is funded by an institution that regularly occupies, bombs, and kills people who are overwhelmingly living in poorer, predominantly Black and brown countries. Columbia cannot claim to be a beacon of scientific progress if destructive and deadly industries fund our research, be it the fossil fuel industry or the military-industrial complex.

DIVESTMENT

For years, Columbia University students, including those in the now-dissolved Extinction Rebellion chapter and Sunrise Columbia, have been at the forefront of a powerful divestment movement from fossil fuels. Their coordinated efforts—ranging from hunger strikes to sit-ins outside President Bollinger's office—culminated in the University's formal commitments to divest from thermal coal in 2017 and

to adopt a broader non-investment policy for oil and gas companies in 2020.²¹³ The ethical questions here parallel the concerns raised in this paper about financial ties with fossil fuel companies that influence scientific and academic institutions. How can Columbia continue to invest in and directly support companies that not only profit from environmental degradation but also promote disinformation, hinder meaningful climate action, and compromise scientific progress? By continuing to engage with fossil fuel companies, Columbia undermines its own research and academic integrity.

The current divestment policy at Columbia, while a small win for a climate-forward Columbia, leaves wide gaps that drastically hinder the intended progress. These loopholes allow indirect investment in fossil fuel companies, for example, through banks, securities, or mutual funds, and grant the University leeway in evaluating companies' commitments to net-zero emissions.214 Without clear definitions for terms like "primarily" or "credible" in relation to investment in oil and gas companies, there is a severe lack of transparency that allows Columbia to profit from industries at the heart of the climate crisis while still claiming alignment with climate goals. Moreover, the sheer lack of transparency around investment listings means there's no practical way to hold the institution accountable for

its investment decisions. Additionally, the omission of Scope 2 and Scope 3 emissions from Columbia's divestment policy means that while the University is committed to divesting from direct investments in fossil fuel companies, it does not address the broader carbon footprint associated with the energy it consumes (Scope 2) or the emissions generated by the broader network of activities linked to its operations (Scope 3).²¹⁵

Sunrise Columbia continues to actively work on this campaign, along with numerous other groups at Columbia, including the Columbia Policy Institute's Energy and Environment Center, which most recently filed a legal complaint to the New York State Attorney General over fossil fuel investments in the endowment.²¹⁶

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About Sunrise Columbia

Sunrise Columbia is a climate action and environmental group of Columbia University and Barnard College students. We are a part of the broader Sunrise Movement and share its goal of promoting "access to clear air and water, full pantries of food, affordable housing, free public transportation, good and meaningful jobs, vibrant community centers, and lives filled with joy" for all communities.²¹⁷ As an environmental political action group, our club focuses on fighting the climate crisis through institutional change, primarily through holding Columbia accountable for its influence on the climate crisis.

We also aim to promote the ideals of environmental justice in the broader New York region. Sunrise Columbia has historically and continues to fight for full divestment of the university's endowment away from fossil fuels and achieved a milestone victory with the University's first divestment policy in 2021. We reject the use of our tuition money to fund our community and the earth's destruction and continue to advocate for an even better policy. In that spirit, we stand in solidarity with other groups on campus fighting for divestment from different systems of oppression, from private prisons to apartheid in Palestine and South Africa or the military-industrial complex at large.

As we enter Fall 2024, we are focusing on our Fossil-Free Research campaign. We launched this campaign in Fall 2023 and have been research since then. We are taking a stand against blatant fossil fuel bias in our climate research outcomes and demanding that Columbia be radically transparent with fossil fuel donations. Columbia claims to be a sustainability leader and innovator and capitalizes on this image. We aim to make them turn this image into a reality.



Funding

We received \$1,500 from Campus Climate Network (CCN), an international organization that provides student organizers worldwide with skills and resources to run environmental justice campaigns on campus. They "strive for a world free from the influence of the fossil fuel industry and its enablers, where universities can become true climate leaders."218 CCN is funded by 128 Collective, Broad Reach Fund, Brown University Climate and Development Lab, Energy Transition Fund, KR Foundation, The Sunrise Project, Wallace Global Fund, Winslow Foundation, and Youth Climate Justice Fund. Their website provides an upto-date document with their yearly financials.²¹⁹