Briefing Note: The Influence of the Fossil Fuel Sector

Workshop held at The Intellectual Forum, Jesus College Cambridge, June 2023

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Executive Summary:

- Firms and trade associations in the fossil fuel sector have worked to block, water down, or delay attempts by governments to implement climate policies
- Fossil fuel lobbying outstrips that of green energy lobbying by a ratio of 10:1
- Recent estimates suggest that among trade associations in the United States, the renewable sector is outspent on lobbying by a ratio of 14 to 1, and by 27 to 1 if total political activities are included
- Significant sums of money are also channelled by trade associations as grants, including research grants to universities
- Industry research has been found to distort research findings and priorities
- The Briefing Note recommends that the higher education sector take steps to protect against industry influence on research practices and findings, including by banning research funding, collaborations, or sponsorships from firms, trade associations, or associated organizations that directly or indirectly engage in efforts toward misinformation, disinformation, delay or obstruction of action on climate change

1. Introduction

In June 2023, the Intellectual Forum at Jesus College, University of Cambridge, hosted a one-day workshop on the influence of the fossil fuel sector and the implications for policymaking and the higher education sector. The workshop brought together leading social scientists who have pioneered research into the role of organisations that represent the fossil fuel industry, their political activities, and the impact they have had on government policy and university research. Researchers attended from Australian National University, Berlin Social Science Center, Brown University, Harvard University, London School of Economics and Political Science, Nottingham Trent University, University of Cambridge, University of Edinburgh, and University of Twente.

The workshop was motivated by a Grace[1] in July 2022 calling on the University of Cambridge not to accept research funding or allow sponsorship or other collaborations with companies engaged in the fossil fuel sector. In the context of the University of Cambridge's ongoing review of its relationship with the fossil fuel sector and similar

[1] A Grace is a formal proposal that can be put before the Regent House (or the Senate) for a vote.

discussions at peer universities, this briefing summarises the discussion at the workshop, which focussed on the political activities of the fossil fuel industry and the implications for university research relationships.

The briefing is structured as follows. Section 2 provides some context about the role of the fossil fuel sector in society and its research relationships. Section 3 explores the implications of university relationships with the fossil fuel sector. Section 4 concludes with some recommendations. This briefing was prepared by Christian Downie, Australian National University, in discussion with workshop participants.

2. The political activities of the fossil fuel sector

If the world is to meet the goals of the Paris Agreement and limit the global temperature increase to 1.5ºC, countries around the world must transform their economies. If they fail, the worst impacts of climate change will quickly become a reality. Already the world is experiencing more severe and frequent storms, droughts, fires, floods, and famines, not to mention widespread species extinctions.[2]

Yet a growing body of research suggests that one of the key barriers to climate action in many countries is the political activities of emissions-intensive incumbent industries that are opposed to climate action – particularly, oil, gas and coal.[3] While some industries have lobbied governments for regulations and policies that help the private sector to advance climate action, such as clean energy industries, many have not. Instead, firms and trade associations in the fossil fuel sector have worked to block, water down, or delay attempts by governments to implement climate policies.[4]

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[2] IPCC, 'Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change', *IPCC*, Cambridge University Press, Cambridge, UK and New York, USA, 2022, p. 3056, https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

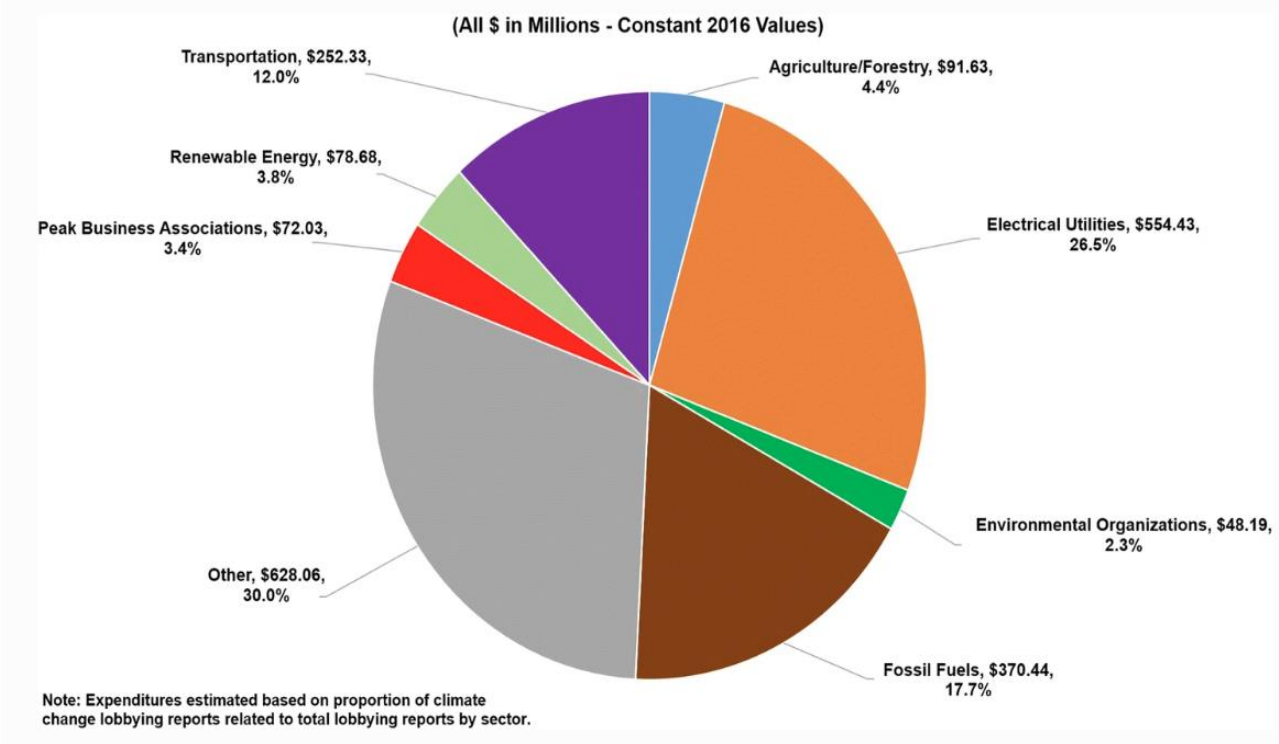
[3] R. J. Brulle, 'Networks of opposition: A structural analysis of US climate change countermovement coalitions 1989–2015', *Sociological Inquiry*, vol 91, no. 3, 202, p. 603-624, https://onlinelibrary.wiley.com/doi/abs/10.1111/soin.12333; M. Aklin and J. Urpelainen, 'Political competition, path dependence, and the strategy of sustainable energy transitions', *American Journal of Political Science*, vol. 57, no. 3, 2013, p. 643-658, https://onlinelibrary.wiley.com/doi/abs/10.1111/ajps.12002; L. Hughes and J.Urpelainen, 'Interests, institutions, and climate policy: Explaining the choice of policy instruments for the energy sector', *Environmental Science & Policy*, vol. 54, 2015, p. 52-63, https://www.researchgate.net/publication/281992953_Interests_institutions_and_climate_policy_Explaining_the_choice_of_policy_instruments_for_the_energy_sector; C. Downie, *Business battles in the US energy sector: Lessons for a clean energy transition*, London, Routledge, 2019, https://www.routledge.com/Business-Battles-in-the-US-Energy-Sector-Lessons-for-a-Clean-Energy-Transition/Downie/p/book/9781138392717

[4] Downie, *Business battles in the US energy sector*; L. C. Stokes, *Short circuiting policy: Interest groups and the battle over clean energy and climate policy in the American States*, Oxford University Press, 2020,

It should be noted that many of the largest firms in these industries have made welcome statements committing to limit their emissions and align their operations with targets of net zero by 2050. However, these same firms continue to engage in commercial activities that are inconsistent with international climate targets, such as exploring for new hydrocarbon reserves, and in political activities that obstruct climate action, such as lobbying against climate policies.[5]

Numerous studies, including research presented in the workshop, highlight the extent of these activities. For example, in the United States more than $2 billion was spent on climate lobbying over a decade and a half, with organizations opposed to climate action outspending the climate movement by a ratio of 10 to 1.[6]

Figure 1 Lobbying spending on climate change in the USA, 2000 to 2016[7]



https://global.oup.com/academic/product/short-circuiting-policy-9780190074265?cc=gb&lang=en&; CSSN, 'The Structure of Obstruction: Understanding Opposition to Climate Change Action in the United States', *CSSN*, Providence, Rhode Island, USA, 2021, https://cssn.org/wp-content/uploads/2021/04/CSSN-Briefing-Obstruction-2.pdf; K. Ekberg et al., *Climate obstruction: How denial, delay and inaction are heating the planet*, London, Routledge, 2022, https://www.routledge.com/Climate-Obstruction-How-Denial-Delay-and-Inaction-are-Heating-the-Planet/Ekberg-Forchtner-Hultman-Jylha/p/book/9781032019475

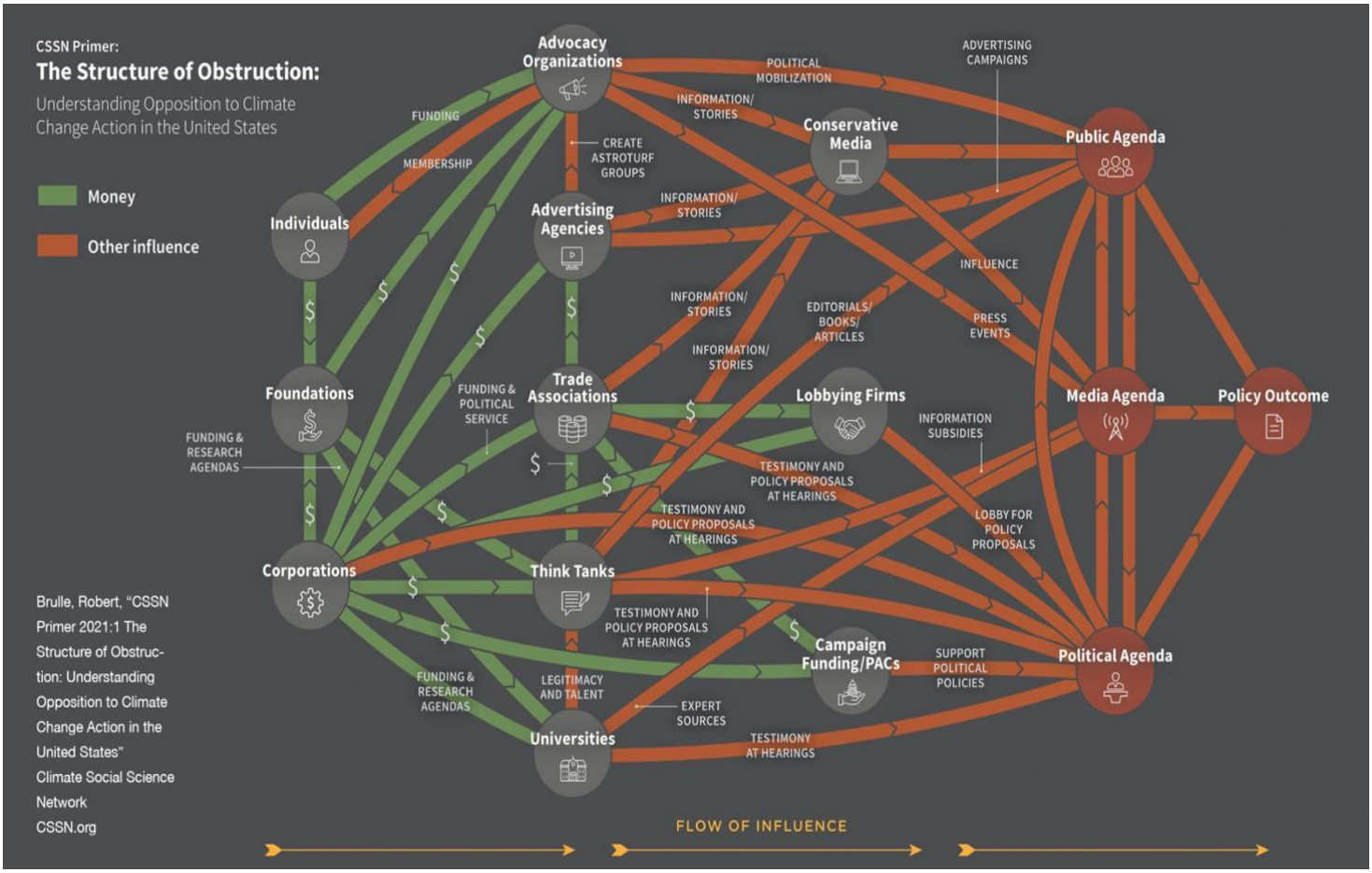
[5] Influence Map, 'Big Oil's Real Agenda on Climate Change 2022', *Influence Map*, 2022, https://influencemap.org/report/Big-Oil-s-Agenda-on-Climate-Change-2022-19585

[6] R. J. Brulle, 'The climate lobby: a sectoral analysis of lobbying spending on climate change in the USA, 2000 to 2016', *Climatic change*, vol. 149, no. 3-4, 2018, p. 289-303, https://link.springer.com/article/10.1007/s10584-018-2241-z

[7] Brulle, *The climate lobby*, p. 289-303.

Firms in the fossil fuel sector also engage other organizations, or third parties, to shape public agendas and policy outcomes, including advocacy organizations, trade associations, think tanks, and universities, as Figure 2 shows.

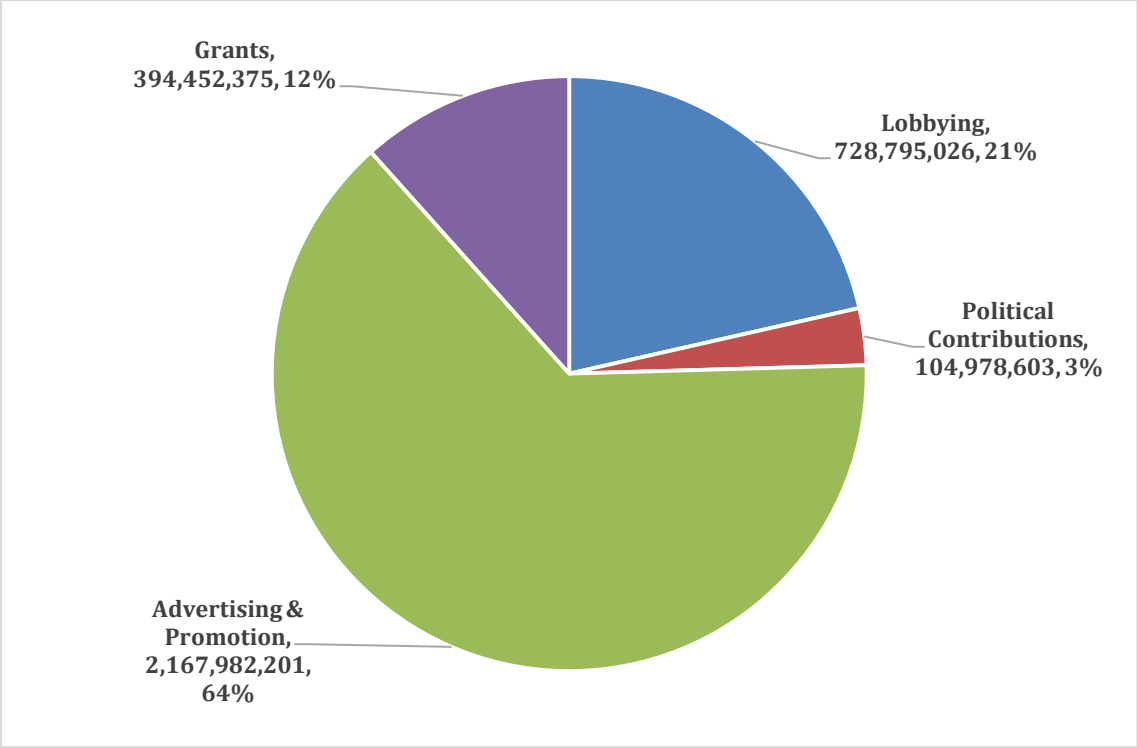
Figure 2 The structure of obstruction



For example, many oil, gas and coal firms use trade associations, such as the American Petroleum Institute, to coordinate and execute their lobbying activities, as well as to run public campaigns and launch legal challenges against climate policies. Recent estimates suggest that among trade associations in the United States, the renewable sector is outspent on lobbying by a ratio of 14 to 1, and by 27 to 1 if total political activities are included.[8] As Figure 3 shows, significant sums of money are also channelled by trade associations as grants, including research grants to universities.

[8] R. J. Brulle and C. Downie, 'Following the money: trade associations, political activity and climate change', *Climatic Change*, vol. 175, no. 3-4, 2022, p.11, https://link.springer.com/article/10.1007/s10584-022-03466-0

Figure 3 Distribution of Political Activity Spending by Trade Associations in the US, 2008-2018[9]



3. The implications for university research relationships

Research on the political activities of these industries also raises concerns about the effects of their research relationships with universities. Studies have shown that since the 2000s funding from the oil and gas sector, in particular for climate- and energy-related research, has become pervasive.[10] While the full extent of fossil fuel funding is unknown, in part because many universities do not disclose their research relationships, investigative reporting suggests that British universities have received around £90m in funding from major oil companies since 2017, with Imperial College London, the University of Cambridge and the University of Oxford the largest recipients.[11]

[9] Brulle and Downie, *Following the money*, p.11.
[10] B. A. Franta, *Big Carbon's Strategic Response to Global Warming, 1950-202*0, PhD diss., Stanford University, 2022, https://searchworks.stanford.edu/view/14316826
[11] J. Corderoy, 'British universities slammed for taking £90m from oil companies in four years', openDemocracy, 2021, https://www.opendemocracy.net/en/dark-money-investigations/british-universities-slammed-for-taking-90m-from-oil-companies-in-four-years/

Internal industry documents provide a record of the use of this funding as part of a long-term strategy to block, dilute and delay attempts to regulate fossil fuels by influencing the mainstream scientific community and shaping public opinion. For instance, internal documents released by the US House Committee on Oversight and Reform in 2023 show that firms such as BP view relationships with universities and academics as part of their long-term strategy to shape policy and public opinion.[12] This has a long history in the oil industry. For example, in 1998 the American Petroleum Institute formulated a plan to support academics whose research supported the industry's objectives, including those who suggested that more research was needed before fossil fuels could be phased out.[13]

The effects of these efforts on university research are well-documented. First, industry funding has been found to generate biased research results. A recent study in *Nature Climate Change* suggests that energy research centres at elite US universities, including MIT and Stanford, that receive fossil fuel funding are "more favourable in their reports towards natural gas than towards renewable energy". Research centres less dependent on fossil funding show a reversed pattern.[14] This is not unique to the domain of climate change or energy. Industry-funded research has consistently been found to generate biased results in relation to the tobacco, pharmaceuticals[15], sugar[16], pesticides[17], and meat and dairy industries, among many others.[18] Analyses have, for instance, found that systematic reviews on the association between sugary beverages and weight gain

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[12] BP Confidential, 'Issues Management Working Group: IMWG Meeting Notes', UK, 2017, p. 98, https://oversightdemocrats.house.gov/sites/democrats.oversight.house.gov/files/2022/BP_Redacted-Final-1.pdf

[13] Franta, *Big Carbon's Strategic Response to Global Warming, 1950-2020.*

[14] D. Almond, D. Xinming, and A. Papp, 'Favourability towards natural gas relates to funding source of university energy centres', *Nature Climate Change,* vol. 12, no. 12, 2022, p. 1122-1128, https://www.nature.com/articles/s41558-022-01521-3#Abs1

[15] E.g., S. Swaroop Vedula et al., 'Outcome reporting in industry-sponsored trials of gabapentin for off-label use', *New England Journal of Medicine,* vol. 361, no. 20, 2009, p. 1963-1971, https://www.nejm.org/doi/full/10.1056/NEJMsa0906126; F. E. Vera-Badillo et al., 'Bias in reporting of end points of efficacy and toxicity in randomized, clinical trials for women with breast cancer', *Annals of Oncology*, vol. 24, no. 5, 2013, p. 1238-1244, https://doi.org/10.1093/annonc/mds636

[16] M. Nestle, 'Sugar industry funding of research, 1967 style (with many lessons for today)', Food Politics, 2016, https://www.foodpolitics.com/2016/09/sugar-industry-funding-of-research-1967-style-with-many-lessons-for-today/;
M. Nestle, *Unsavory truth: how food companies skew the science of what we eat*, New York, Hachette Book Group, 2018, https://www.hachettebookgroup.com/titles/marion-nestle/unsavory-truth/9781541697119/

[17] L. Bero et al., 'The relationship between study sponsorship, risks of bias, and research outcomes in atrazine exposure studies conducted in non-human animals: Systematic review and meta-analysis', *Environment international*, vol. 92, 2016, p. 597-604, https://www.sciencedirect.com/science/article/pii/S0160412015300775?via%3Dihub

[18] White, J., and Bero, L. A. 'Corporate manipulation of research: strategies are similar across five industries.', *Stanford Law and Policy Review,* vol. 21, no. 1, p. 105-134, https://heinonline.org/HOL/P?h=hein.journals/stanlp21&i=107

that declare a conflict of interest with the food industry were five times more likely to find no association.[19]

Industry funding can also distort research agendas. Indeed, there is evidence that funding influences not only academic findings, but that entire research programs are framed in ways that are consistent with the interests of funders.[20] This is a longstanding strategy used by various industries to avoid regulation and steer researchers away from work that might threaten their industry.[21] The result is that many important topics go unstudied. For example, much of the research supported by the oil and gas industry around climate change over recent decades has focussed on promoting solutions that continue the use of fossil fuels rather than replacing them, such as carbon capture, "natural" gas, hydrogen fuels, and reforestation, among others.[22] Similarly, health research funded by food multinationals has highlighted in particular the role of physical activity in obesity, thus shifting attention (and agendas) away from diets.[23] This mirrors well-documented historical efforts by the tobacco industry to deny the health impacts of its product and divert attention from smoking as a cause of ill-health to other factors such as indoor air quality.[24]

4. Recommendations

There is a widespread consensus across the Higher Education sector regarding the urgency of climate change and the necessity to use its unique role in the world to do as much as possible to reduce emissions and to ensure that both research and education are aligned with the values of staff and students. Many universities from around the world have already taken important steps towards dissociating from the fossil fuel industry through divestment commitments. Some leading universities, such as Brown and Princeton, have begun to take measures to disassociate research

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[19] M. Bes-Rastrollo et al., 'Financial Conflicts of Interest and Reporting Bias Regarding the Association between Sugar-Sweetened Beverages and Weight Gain: A Systematic Review of Systematic Reviews', *PLoS Medicine*, vol. 10, no. 12, e1001578, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3876974/

[20] N. Oreskes, *Science on a Mission*, Chicago, The University of Chicago Press, 2021, https://press.uchicago.edu/ucp/books/book/chicago/S/bo59258933.html

[21] White, J., and Bero, L. A. 'Corporate manipulation of research: strategies are similar across five industries', *Stanford Law and Policy Review,* vol. 21, no. 1, p. 105-134, https://heinonline.org/HOL/P?h=hein.journals/stanlp21&i=107

[22] Franta, *Big Carbon's Strategic Response to Global Warming, 1950-2020,* p. 218.

[A]. Fabbri, J. T. Holland, and L. A. Bero, 'Food industry sponsorship of academic research: investigating commercial bias in the research agenda', *Public Health Nutrition*, vol. 21, no. 18, 2018, p. 3422-3430, https://www.cambridge.org/core/journals/public-health-nutrition/article/food-industry-sponsorship-of-academic-research-investigating-commercial-bias-in-the-research-agenda/

[24] A. M. Brandt, 'Inventing conflicts of interest: a history of tobacco industry tactics', *American journal of public health*, vol. 102, no. 1, 2012, p. 63-71, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3490543/; L. A. Bero, 'Tobacco industry manipulation of research', *Public health reports*, vol. 120, no. 2, 2005, p. 200, https://www.jstor.org/stable/20056773.

activities from the fossil fuel sector because of the risks it poses to the mission of universities and the public trust in their research and teaching.

In this context, it is recommended that higher education institutions take the following actions to mitigate the risks of receiving any further funding from the fossil fuels sector:

1. Convene as soon as possible an international congress of higher education leaders to examine an appropriate and credible policy to address the risks posed from fossil fuel research funding.

2. Research funding policies should include:
    a. Mandatory continuous disclosure guidelines for all research funding, gift donations, and professional associations, including consultancies and remunerated board/committee roles. This should be a requirement for each administrative level of the university. This is a frequent requirement for other civil society organizations, such as think tanks, to ensure trust in their research and findings.
    b. A ban on research funding, collaborations, or sponsorships from firms, trade associations, or associated organizations that directly or indirectly engage in efforts toward misinformation, disinformation, delay or obstruction of action on climate change. Such political activities include lobbying, political contributions, advertising, grants, and memberships in relevant third-party organisations (such as trade associations), among others.
    c. The creation of an international higher education unit to monitor the political activities of firms and trade associations in the fossil fuel sector. The unit will assist universities to develop, implement, and audit the policy.

The public's trust in the higher education sector is based on its reputation for academic rigor and independence. To ensure that universities continue to be held in the highest regard they must ensure that their policies and procedures accord with the values of their community members.

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interdisciplinary centre, interested in the broadest range of issues. It focuses on bringing people together in person or virtually to discuss important topics.