Ending ExxonMobil Sponsorship of the American Geophysical Union

How ExxonMobil's past and present climate misinformation violates the AGU's Organizational Support Policy and scientific integrity



The Natural History Museum

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Lastly, we express our sincere thanks to the 271 fellow members of the Earth science community worldwide who share our concerns for the climate crisis and ExxonMobil's past and present perpetuation of climate science misinformation. Thank you for readily joining our call in asking the AGU to reject sponsorship from ExxonMobil in order to protect our scientific integrity.

The opinions expressed in this document do not necessarily reflect those of the individuals acknowledged here. The authors bear sole responsibility for the report's content.

SUMMARY: The case for ending ExxonMobil sponsorship

Since our Feb 22, 2016 letter, co-signed by more than 100 geoscientists, calling for the American Geophysical Union to reject sponsorship from ExxonMobil, over 160 additional geoscientists from around the world have signed on (an updated list of signatories is attached and available online). In this report, we present our case, given ExxonMobil's past - and notably present - involvement in climate misinformation.

AGU's Organizational Support Policy states "AGU will not accept funding from organizational partners that promote and/or disseminate misinformation of science, or that fund organizations that publicly promote misinformation of science," and that Organizational Partners are bodies that "do not harm AGU's brand and reputation, and that share a vested interest in and commitment to advancing and communicating science and its power to ensure a sustainable future" [1]. President Leinen has also written to the AGU's membership to, "assure you that if verifiable information becomes available that proves ExxonMobil is currently engaging in the promotion of misinformation about science or adopting positions that are in conflict with AGU's own, or supporting groups that do, we will end the relationship, as dictated by our policy – at least until the company is able to demonstrate that such actions have ceased" [2].

As this report evidences, ExxonMobil is in clear violation of these principles because it has been - and still is - a leading sponsor of think tanks, advocacy groups, and trade associations that promote climate science misinformation. Moreover, ExxonMobil financially supports more than 100 climate-denying members of Congress and continues to generate its own misinformative comments about climate science.

There is overwhelming evidence of ExxonMobil's historical complicity in the orchestration, funding, and perpetuation of climate science misinformation; documented by numerous studies and investigative journalists, and acknowledged by President Leinen as not "in keeping with [AGU's] policy" [2]. The burden of proof therefore ultimately rests with ExxonMobil to satisfactorily demonstrate that it has ended its support of climate science misinformation, not with scientists such as ourselves.

We therefore strongly urge the AGU board to look beyond ExxonMobil's public statements on climate change. To limit our investigation only to this source is to virtually guarantee a proof-texted judgment, insensitive to ExxonMobil's diverse and broad spheres of influence, and naïve to its shrewd and undeniable past efforts to misinform.

To this end, we here present a spectrum of evidence derived from multiple lines of inquiry: distribution of scientifically false or misleading information by ExxonMobil itself; membership in and/or financial support of climate-denying organizations; donations to climate-denying politicians; and past misinformation campaigns. Most of this evidence relates to ExxonMobil's support of climate misinformation since 2007, after it publicly pledged to end such support [3]. Where possible, we focus on the period between 2013-2016, noting that these data reflect the most up-to-date information that is publicly accessible, and therefore the most contemporary evidence of ExxonMobil's "ongoing" support of misinformation. All of this evidence points to a singular conclusion: while ExxonMobil does today acknowledge the reality of anthropogenic climate change in its public statements, it also continues to support and perpetuate climate science misinformation through a variety of increasingly veiled initiatives. We fully acknowledge that our investigations are not exhaustive, but as with the science of climate change itself, the consilience of evidence points only one way.

The AGU leadership must decide whether ExxonMobil has truly and effectively reversed its position on climate change as a condition for accepting the company's continued sponsorship, which ExxonMobil uses to secure its legitimacy in the public's eye. This is not purely cynicism: within the past year, ExxonMobil has repeatedly cited its affiliations with institutions such as MIT and Stanford as an excuse for inaction and as a distraction to avoid accountability for its record of misinformation [4,5]. As one of the world's most highly respected organizations of Earth scientists, the AGU should seriously consider how its ongoing affiliation with ExxonMobil contradicts its own standards and undermines the scientific integrity of our community.

SUMMARY & KEY FINDINGS

AGU's Organizational Support Policy states "AGU will not accept funding from organizational partners that promote and/or disseminate misinformation of science, or that fund organizations that publicly promote misinformation of science," and that Organizational Partners are bodies that "do not harm AGU's brand and reputation, and that share a vested interest in and commitment to advancing and communicating science and its power to ensure a sustainable future."

In response to our Feb 22, 2016 letter calling for the AGU to reject sponsorship from ExxonMobil, President Leinen wrote to the AGU membership to, "assure [us] that if verifiable information becomes available that proves ExxonMobil is currently engaging in the promotion of misinformation about science or adopting positions that are in conflict with AGU's own, or supporting groups that do, we will end the relationship, as dictated by our policy – at least until the company is able to demonstrate that such actions have ceased."

This report demonstrates that ExxonMobil is in clear violation of these principles because it continues to generate its own misinformative comments, fund groups that promote climate science misinformation, and financially support more than 100 climate-denying members of Congress. We highlight some key examples below:

- "If you examine the temperature record of the last decade, it really hadn't changed." ExxonMobil CEO Rex Tillerson (2013)
- "We don't really know what the climate effects of 600 ppm versus 450 ppm will be because the models simply are not that good." ExxonMobil CEO Rex Tillerson (2015)
- "...the production and consumption of petroleum fuels is not dangerous and does not pose a risk to human health or safety" ExxonMobil affiliate, Syncrude (2014)
- "Global Climate Change is Inevitable. Climate change is a historical phenomenon and the debate will continue on the significance of natural and anthropogenic contributions." ExxonMobil-funded organization, ALEC (2016)
- "There is no scientific consensus on the human role in climate change." ExxonMobil-sponsored Annual Meeting of ALEC (2014)
- The International Panel on Climate Change (IPCC) "is not a credible source of science or economics." ExxonMobil-sponsored Annual Meeting of ALEC (2014)
- " CO_2 is not a pollutant. It is a benefit. It is the very elixir of life." ExxonMobil-sponsored Annual Meeting of ALEC (2014)
- Climate scientists are biased because they are "deeply invested in the whole industry of global warming. When all of your grants to your university program depend on a state of national and international panic...it's a natural human tendency to, as you business guys say, 'talk your book'." ExxonMobil-funded American Enterprise Institute (2014)
- "Take for example this whole '97% of scientists agree on global warming.' That is an utterly fraudulent number, and it's been looked at, and it's just simply not true." ExxonMobil-funded American Enterprise Institute (2014)
- "No other field of science repeatedly embraces conclusions or seeks policy to be based upon models which have repeatedly delivered inaccurate predictions." ExxonMobil-funded American Enterprise Institute (2015)
- "There is no sound science to support the claims of Global Warming." ExxonMobil-funded National Black Chamber of Commerce (2016)
- "We keep hearing that 2014 has been the warmest year on record, I ask the Chair, "You know what this is?" It's a snowball, from just outside here, so it's very very cold out." ExxonMobil-funded Chairman of the U.S. Senate Environment and Public Works Committee, Senator Jim Inhofe (R-OK) (2014)
- Climate change is "a pseudo-scientific theory". It is "not science, it's a religion." ExxonMobil-funded presidential candidate, Senator Ted Cruz (R-TX) (2015)

ExxonMobil's present (2007-2016) climate misinformation

In September 2006, the Royal Society wrote to ExxonMobil to express "disappointment at the inaccurate and misleading view of the science of climate change" presented by the company's own publications, and "concerns about the support that ExxonMobil has been giving to organizations that have been misleading the public about the science of climate change" [6]. This letter followed a meeting during which the Society raised concerns about Exxon's position on climate change and the company's funding of lobby groups that misrepresented the science. Although at the meeting ExxonMobil indicated that it intended to stop funding these organizations, the company never followed up with an explanation of how and when it would fulfill such a pledge, despite further requests from the Royal Society.

Thereafter, ExxonMobil's 2007 Corporate Citizenship Report announced that the company would "discontinue contributions to several public policy research groups whose position on climate change could divert attention from the important discussion on how the world will secure the energy required for economic growth in an environmentally responsible manner" [7]. This public commitment to stop funding climate denial has been reaffirmed multiple times. "ExxonMobil does not fund climate denial" and "We do not fund or support those who deny the reality of climate change," Exxon spokesman Richard Keil said on two separate occasions in July 2015 [8,9]. However, these claims by ExxonMobil are contradicted by publicly available evidence - some of which we include in this document for the AGU Board's consideration.

In this report, we consider "climate (science) misinformation" to be the misrepresentation or mischaracterization of scientific findings about climate change and their degree of uncertainty, and the scientific consensus of human-caused climate change.

1. ExxonMobil's direct involvement

A. Shareholder communications

Over the last two decades, ExxonMobil shareholders sought meetings, sent letters and wrote 62 resolutions asking the company to take action on climate change

[10]. Exxon has rejected all of the proposals [11], often dismissing shareholders' concerns through climate misinformation or offering affiliations with academic institutions as an excuse for inaction:

i) ExxonMobil CEO Rex Tillerson, ExxonMobil
 Corporation Annual Shareholder Meeting, May 29,
 2013 [excerpts from transcript; Ref. 12] –

MISINFORMATION (2013): "...notwithstanding all the advancements that have been made in gathering more data...our ability to project with any degree of certainty the future is continuing to be very limited."

MISINFORMATION (2013): "If you examine the temperature record of the last decade, it really hadn't changed...last 10 years' temperatures had been relatively flat in a period when is [sic] been noted greenhouse gas concentrations have been rising."

FACT CHECK: The first sentence is an unambiguous instance of climate science misinformation. Contrary to Tillerson's claim, the peer-reviewed literature is in unanimous agreement that global warming has not stopped. Specifically, studies have consistently shown that global mean surface temperatures continued to rise over the decade to which Tillerson refers [13].

Tillerson's second sentence requires contextualization. We readily acknowledge that the significant research of warming trends since 2000 has valuably contributed to the scientific community's understanding of decadal-scale variations in the climate. Yet Tillerson's statement lacks any further details or clarifications, and is immediately preceded by his observation that "our ability to project with any degree of certainty the future is continuing to be very limited." As such, his remarks reinforce contrarian narratives by implying an unwarranted level of uncertainty in the ability of climate models to predict long-term global warming and in our understanding of the climate system: a textbook example of the long-established strategy, epitomized by ExxonMobil, of appealing to doubt to confuse society about the realities and seriousness of climate change [14]. Indeed, the framing of global warming as having "paused" appears to have adversely impacted public acceptance of climate

change in the United States [15]. It is in this context that we present five other instances of misinformation from Rex Tillerson, all consistently seeking to sow doubt about the reliability of climate models.

MISINFORMATION (2013): "I can't conclude there is something magical about 350 [parts of million CO2 atmospheric concentration] because that suggests these models are very competent, and our examination about the models are that they're not competent."

MISINFORMATION (2013): "...what's the pathway we should be and how do we mitigate and prepare for the consequences as they present themselves? Because our ability to predict the consequence is simply not that good."

ii) ExxonMobil CEO Rex Tillerson, ExxonMobil Corporation Annual Meeting of Shareholders, May 27, 2015 [extracted from a webcast presentation, duration: 1h 43m 50s; Ref. 16] –

MISINFORMATION (2015): "...It's interesting that if you examine the most recent publication of the United Nations Intergovernmental Panel on Climate Change...one of the things we look into carefully every year is, 'What level of progress has been made in the competency of those models to predict the future?' And if you look at those reports, what you see is an extraordinarily broad range of predictive outcomes."

MISINFORMATION (2015): "We don't really know what the climate effects of 600 ppm versus 450 ppm will be because the models simply are not that good...they will get better...we anticipate, we hope that the competencies of the models begin to close and therefore you can have a higher confidence around the outcome."

FACT CHECK: Tillerson's implication that the climate effects of 450 ppm versus 600 ppm (taken to refer to CO₂-equivalent concentrations in 2100) are essentially unknown, and therefore that these two scenarios and their impacts could be similar, substantially underplays the insights of the international climate science community (and its careful account of model uncertainties). According to the IPCC's latest assessment [17], 450 ppm and 600 ppm CO₂-eq concentrations in 2100 correspond to entirely different Representative Concentration Pathways (RCPs), corresponding to substantially

different likelihoods of staying below 2°C over the twenty first century (Figure 1).

B. Materials on ExxonMobil's website

In response to news coverage about the fact that ExxonMobil, informed by their in-house scientists, has known about the devastating global warming effects of fossil fuel burning since the late 1970s, ExxonMobil Vice President Ken Cohen countered with yet more climate misinformation on Oct 15, 2015 (Figure 2) [18].

MISINFORMATION (2015): "As you can see, the scientific community that contributes to the IPCC report is, even today, still projecting a broad range of potential outcomes."

Cohen is misrepresenting the facts conveyed in this graph taken from IPCC AR5 Working Group I's Technical Summary (Figure TS.14, p. 55) [19]. The graph shows the projection of 2005-2050 global surface temperature anomalies, relative to 1986-2005, as simulated by the CMIP5 climate models under the full range of Representative Concentration Pathways (RCPs) scenarios. Each RCP defines a specific greenhouse gas emissions trajectory and associated radiative forcing by 2100. However, Cohen does not provide any other context or technical background in his blog post. In particular, by comparing these IPCC projections "even today, still" against his posited lack of consensus about climate change "back in the 1970s and '80s", Cohen implies that the graph's "broad" range of future outcomes is mainly (or entirely) due to scientific (geophysical) uncertainty. He neglects to explain that the RCP scenarios constitute different future greenhouse gas emissions tied to different economic and sociopolitical choices.

MISINFORMATION (2015): "This should refute the claim, central to activists' conspiracy theories, that anyone had reached a firm conclusion about catastrophic impacts of climate change back in the 1970's and 80's."

In the late 1970s, as detailed by the *InsideClimate News* and *LA Times* investigative news reports [20,21], Exxon's own in-house scientists informed its CEOs of the emerging scientific consensus on the devastating impacts of fossil fuel burning. For example, in July 1977, senior ExxonMobil scientist James F. Black said the following during his presentation to ExxonMobil's Management Committee, according to a written version he recorded later: "In the first place, there is general

scientific agreement that the most likely manner in which mankind is influencing the global climate is through carbon dioxide release from the burning of fossil fuels." Likewise, head of theoretical sciences at Exxon Corporate Research Laboratories, Roger Cohen, wrote in September 1982, reporting on Exxon's own analysis of climate models: "Over the past several years a clear scientific consensus has emerged...There is unanimous agreement in the scientific community that a temperature increase of this magnitude would bring about significant changes in the earth's climate."

It was also in the 1980s that then NASA climate chief Dr. James Hansen testified before the United States Congress that "global warming is now large enough that we can ascribe with a high degree of confidence a cause and effect relationship to the greenhouse effect...the greenhouse effect has been detected, and it is changing our climate now" [22].

C. Statements by ExxonMobil's affiliates

In 2014, ExxonMobil affiliate, Syncrude, challenged the right of the Canadian federal government [23] to adopt a regulation designed to substitute fossil fuels with renewable energy technologies by arguing during court proceedings that "that the production and consumption of petroleum fuels is not dangerous and does not pose a risk to human health or safety" [24].

MISINFORMATION (2014): "...the production and consumption of petroleum fuels is not dangerous and does not pose a risk to human health or safety."

Syncrude's statement is grossly misinformative. For example, the U.S. Department of Defense has assessed that "climate change is an urgent and growing threat to our national security" [25] and medical experts have concluded that "climate change is the biggest global health threat of the 21st century" [26].

CO ₂ -eq Con- centrations in			Change in CO ₂ -eq emissions compared to 2010 (in %) ^c		Likelihood of staying below a specific temperature le over the 21st century (relative to 1850–1900) d.e.			
2100 (ppm CO ₂ -eq) f Category label (conc. range)	Subcategories	Relative position of the RCPs ^d	2050	2100	1.5°C	2°C	3°C	4°C
<430		Only a limited	d number of individ	ual model studies h	ave explored levels	below 430 ppm C0	O₂-eq ^j	
450 (430 to 480)	Total range ^{a, g}	RCP2.6	−72 to −41	–118 to –78	More unlikely than likely	Likely		
500	No overshoot of 530 ppm CO₂-eq		−57 to −42	−107 to −73		More likely than not		
(480 to 530)	Overshoot of 530 ppm CO ₂ -eq		−55 to −25	−114 to −90		About as likely as not	Likely	
550	No overshoot of 580 ppm CO₂-eq		−47 to −19	−81 to −59	Unlikely	More unlikely		Likely
(530 to 580)	Overshoot of 580 ppm CO₂-eq		–16 to 7	−183 to −86	,	than likely		,
(580 to 650)	Total range	RCP4.5	-38 to 24	−134 to −50				
(650 to 720)	Total range		–11 to 17	−54 to −21		Unlikely	More likely than not	
(720 to 1000) b	Total range	RCP6.0	18 to 54	-7 to 72	Halilan ha h		More unlikely than likely	
>1000 b	Total range	RCP8.5	52 to 95	74 to 178	Unlikely ^h	Unlikely h	Unlikely	More unlikely than likely

FIGURE 1. Table SPM.1 reproduced from IPCC AR5 Summary for Policymakers. See report for full details of this figure [Ref. 13]. Red boxes have been added to the table to highlight pathways corresponding to 450 ppm and 600 ppm CO_2 -eq.

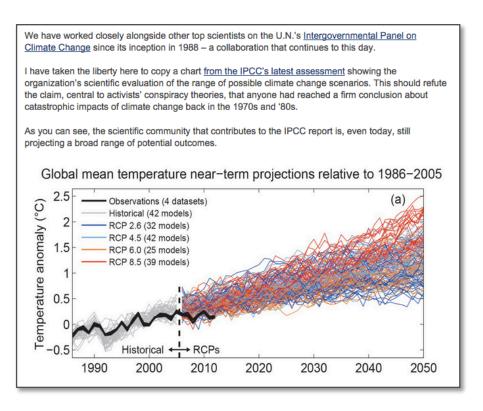


FIGURE 2. Excerpt of blog post by ExxonMobil Vice President Ken Cohen. Posted on Oct 15, 2015. Accessed on Mar 21, 2016. [http://www.exxonmobilperspectives.com/2015/10/15/exxonmobils-commitment-to-climate-science/]

2. ExxonMobil's funding of and/or membership in climate-denying organizations

For decades, ExxonMobil has played a significant role in funding and directing a coordinated strategy of climate misinformation and policy obstruction through a collection of think-tanks, advocacy groups, and trade organizations [27]. As Brulle et al. (2014) concluded, these organizations have "not only played a major role in confounding public understanding of climate science, but also successfully delayed meaningful government policy actions to address the issue."

According to recent publicly available records, some of which are outlined below, ExxonMobil continues to fund organizations that promote climate denial. A full list of climate-denying organizations funded by ExxonMobil between 1998-2014, compiled by Greenpeace and the Union of Concerned Scientists, can be found in Appendix A.

A. American Legislative Exchange Council (ALEC)

The American Legislative Exchange Council, or "ALEC", is an organization of legislators and corporations that continues to serve as an important

conduit for climate misinformation and policy proposals designed to block climate action today. Like other industry groups, ALEC provides a means for major fossil fuel companies to pay lip service to the realities of climate science in their public-facing materials while their behind-the-scenes memberships and sponsorships support misinformation and block climate mitigation policies.

According to ExxonMobil's corporate giving records, ExxonMobil has funded ALEC since at least 1981 and continues to do so today. Between 1998 and 2014, ExxonMobil has given at least \$1,730,200 to ALEC, although the actual total is likely higher [Appendices A-B]. In addition, ExxonMobil is currently represented on the ALEC corporate board by its U.S. Government Affairs Manager, Cynthia Bergman [28]. Records of ExxonMobil's involvement in ALEC's governing corporate board go back to at least 2002 [29].

With ExxonMobil's financial support and leadership, ALEC has adopted resolutions denying the science behind the causes of climate change, promoted legislation to undermine policies aimed at addressing climate change, such as efforts to promote renewable energy or limit carbon emissions, and held workshops for state legislators promoting climate change denial.

i) ALEC's current official position on climate change (one of its "Energy Principles"), which is publicly available on its website, is that [30]:

MISINFORMATION (2016): "Global Climate Change is Inevitable. Climate change is a historical phenomenon and the debate will continue on the significance of natural and anthropogenic contributions."

ii) In 2015, ExxonMobil spent at least \$25,000 to sponsor ALEC's Annual conference (Figure 3; Table 1; Ref. 31). During a session of that conference that was open to select reporters, Stephen Moore, a member of ALEC's Private Enterprise Advisory Board, asserted that [32, 33]:

MISINFORMATION (2015): "The biggest scam of the last 100 years is global warming...It's no surprise that when you give these professors \$10 billion, they're going to find a problem."

iii) ALEC frequently schedules prominent climate change deniers to speak at its conferences [34], which it has described as providing the "motivation" for legislators to promote the ALEC agenda. ExxonMobil funding for ALEC has coincided with the advance of the climate change denial agenda to powerful legislators across the country, arming them with climate misinformation from the ALEC national meetings. For example, in 2014, ExxonMobil disclosed that it gave \$61,500 to ALEC, which included \$25,000 to sponsor ALEC's Annual Conference, \$25,000 to join the 501(c)(4) "Jeffersonian Project," and \$11,500 in "other contributions" [Table 1; Appendix B]. At ALEC's ExxonMobil-sponsored Annual Meeting that year, Heartland Institute President Joseph Bast led an ALEC workshop for state legislators from across the country featuring a presentation claiming [Figure 4]:

MISINFORMATION (2014): "There is no scientific consensus on the human role in climate change."

MISINFORMATION (2014): "There is no need to reduce carbon dioxide emissions and no point in attempting to do so."

MISINFORMATION (2014): "Carbon dioxide has not caused weather to become more extreme, polar ice and sea ice to melt, or sea level rise to accelerate. These were all false alarms."

MISINFORMATION (2014): The International Panel on Climate Change (IPCC) "is not a credible source of science or economics."

MISINFORMATION (2014): "The likely benefits of manmade global warming exceed the likely costs."

Additionally, at that same ExxonMobil-funded meeting, the Committee for a Constructive Tomorrow (CFACT) handed legislators a worksheet called "Climate change talking points 2014" that coached ALEC legislative members on how to talk about "manmade climate fears." In that worksheet, legislators were told to respond to the question "how can you deny global warming?" by stating:

MISINFORMATION (2014): "We inhale oxygen and exhale CO₂" and that "higher atmospheric CO₂ levels cannot possibly supplant the numerous complex and interconnected forces that have always determined Earth's climate."

These arguments were echoed at ALEC's December 2014 meeting, when Craig Idso of the Center for the Study of Carbon Dioxide and Global Change led a workshop telling state legislators that:

MISINFORMATION (2014): "CO₂ is not a pollutant. It is a benefit. It is the very elixir of life."

iv) ExxonMobil has publicly indicated that it supports a carbon tax [35]. However, in 2013, the ALEC "Energy, Environment and Agriculture Task Force" and the "Tax and Fiscal Policy Task Force" jointly adopted a resolution at ALEC's Annual Meeting declaring the organization "opposes all Federal and state efforts to establish a carbon tax on fuels for electricity and transportation" [36]. That same year, ExxonMobil disclosed that it gave \$49,000 to ALEC, which included \$15,000 to sponsor the 2013 Annual Meeting and \$34,000 towards the ALEC "Energy, Environment and Agriculture Task Force" and the "Tax and Fiscal Policy Task Force" [Table 1; Appendix B]. Companies that fund ALEC task forces become members of that task force and are given a vote on bills and resolutions. In other words, the ALEC "Resolution in Opposition to a Carbon Tax" was adopted by the same ALEC task forces funded by ExxonMobil, and at the same Annual Meeting sponsored by ExxonMobil, even as Exxon Mobil told its shareholders and the public that it supports a

carbon tax. During this same period an ExxonMobil representative was also on the ALEC corporate board.

v) ALEC has also aimed to promote climate change denial among school children. ALEC's "Environmental Literacy Improvement Act" requires that all environmental education programs and activities "provide a range of perspectives presented in a balanced manner" and "provide instruction in critical thinking so that students will be able to fairly and objectively evaluate scientific and economic controversies." Yet because there is a strong scientific consensus that anthropogenic global warming presents significant risk, mandating a "balanced" approach to educating children about the issue has the effect of misleading students about the extent and reality of the problem. ALEC adopted this bill in 2000, the same year that Exxon Mobil reported giving \$70,000 to ALEC and the ExxonMobil Education Foundation reported giving \$10,000. ALEC re-approved the bill in 2013, the same year that ExxonMobil disclosed that it gave \$49,000 to the organization [Appendix B].

Given ExxonMobil's stated acknowledgement of anthropogenic climate change and its support for a carbon tax, its ongoing financial support for influential misinforming groups such as ALEC demonstrates that such statements are extremely disingenuous. For example, ExxonMobil asserts that it "engage[s] with policymakers directly and through trade associations around the world to encourage sound policy solutions for addressing the risks of climate change" [37]. Do such associations include ALEC?

ExxonMobil's funding of ALEC and leadership role within ALEC suggest that the company may be working behind-the-scenes to oppose policies that it tells the public and its shareholders that it supports — namely, the science behind climate change and policies aimed at addressing it, such as regulation of carbon emissions or a carbon tax. Moreover, the company has directly funded ALEC's work on climate change, and at times has concealed this information from shareholders.

We note that there exist other organizations providing equivalent services to ALEC in terms of access to lawmakers, business networking, and lobbying etc., but whose activities do not include spreading climate misinformation. The National Conference of State Legislatures is one such example.

Finally, we also note that another sponsor of the AGU 2015 Fall Meeting, Chevron, is also known to be a current member of ALEC [31]. As of December 2015, at least 108 companies – including Shell, BP and Google – discontinued their ALEC membership [38], and many have cited ALEC's climate change denial as the primary reason; Shell explained that ALEC's "stance on climate change is clearly inconsistent with our own," [39] and Google's Eric Schmidt reflected, "Everyone understands climate change is occurring and the people who oppose it are really hurting our children and our grandchildren and making the world a much worse place. And so we should not be aligned with such people – they're just, they're just literally lying" [38].



FIGURE 3. Left – AGU 2015 Fall Meeting sponsors; Right – ALEC 2015 Annual Conference sponsors (original photo accessed from http://www.prwatch.org/files/alec_am_2015_sponsors.jpg).

TABLE 1. ExxonMobil's Funding of ALEC between 2007-2015 and the stated purpose, if disclosed [see Appendix B for details].

Year	Amount	Stated purpose	Source
2015	At least \$25,000	"Annual Conference" - \$25,000	Surgey 2015 [Ref. 31]
2014	\$61,500	"Annual Conference" - \$25,000; "Private Sector-Jefferson Club Membership" -\$25,000; "Other Contributions" - each under \$5,000 - \$11,500	2014 Worldwide Giving Report
2013	\$49,000	"2013 Annual Conference" - \$15,000; "Private Sector, Energy and Tax Task Forces" - \$34,000	2013 Worldwide Giving Report
2012	\$59,000	"2012 Annual Conference" - \$25,000; "Private Sector and Energy and Tax Task Force" - \$34,000	2012 Worldwide Giving Report
2011	\$86,500	(Undisclosed)	2011 Worldwide Giving Report
2010	\$64,000	"General Support" - \$39,000; "National Chairman's Reception" - \$25,000	2010 Worldwide Giving Report
2009	\$47,500	"Annual Conference" - \$15,000; "General Support" -\$31,000; Other - \$1,500	2009 Worldwide Giving Report
2008	\$56,000	(Undisclosed)	2008 Worldwide Giving Report
2007	\$31,000	(Undisclosed)	2007 Worldwide Giving Report

B. American Enterprise Institute (AEI)

From 1998-2014 (the latest year for which public records are available), ExxonMobil provided a total of \$3.77M to the American Enterprise Institute, including \$310,000 in 2014 [Ref. 40; Appendix A]. AEI has consistently contributed to climate misinformation, undermining the science and impugning the motives of scientists. In 2007, AEI offered payments of \$10,000 to scientists and other experts in exchange for articles critical of the IPCC's fourth assessment report [41]. In the solicitation, AEI asserted that [42]:

MISINFORMATION (2007): "The IPCC is susceptible to self-selection bias in its personnel, resistant to reasonable criticism and dissent, and prone to summary conclusions that are poorly supported by the analytical work of the complete Working Group reports."

More recently, in 2014, AEI Fellow Jonah Goldberg argued [43] that:

MISINFORMATION (2014): Climate scientists are biased because they are "deeply invested in the whole industry of global warming.
When all of your grants to your university program depend on a state of national and

international panic...it's a natural human tendency to, as you business guys say, 'talk your book'."

MISINFORMATION (2014): "Take for example this whole '97% of scientists agree on global warming.' That is an utterly fraudulent number, and it's been looked at, and it's just simply not true...The whole point of this is to get one side to simply shut up, and that's what is so disgusting about this notion of settled science. Science by definition cannot be settled...To say that settled science [sic]; that is basically a subsidy for a certain group of rent-seeking group of people who are looking to profit off of government action."

The Fox news report where Goldberg made those arguments did not disclose ExxonMobil's support for the organization, so ExxonMobil was able to maintain the illusion of support for climate science while AEI undermined the reputation of scientists and misrepresented the state of science. As if these examples of attacks on science and scientists were not sufficiently direct, in 2015 AEI maligned the validity of climate models by stating [44]:

MISINFORMATION (2015): "No other field of science repeatedly embraces conclusions or

seeks policy to be based upon models which have repeatedly delivered inaccurate predictions."

C. National Black Chamber of Commerce (NBCC)

The NBCC is a small organization that holds conferences and produces reports purporting to represent the interests of African Americans, though it is primarily run by founder Harry Alford and his partner, Kay Debow Alford [45]. It has received upwards of \$1 million in support from ExxonMobil since 1998, including \$75,000 in 2014 [40,46]. The group publicly portrays climate change as a purely political issue, declaring on its website that [47]:

MISINFORMATION (2016): "There is no sound science to support the claims of Global Warming."

MISINFORMATION (2016): "Certainly the climate changes as time goes on - sometimes for the better and sometimes for the worse. So

far, there is no pattern that seems to be very detrimental to our earth."

While recent "dark money" channels have made it increasingly difficult to trace monetary contributions, in the past, it can be seen that ExxonMobil has specified that their funding be used explicitly to address climate issues. For example, in 2005 it specified that the George Marshall Institute, a well-chronicled climate-denying organization, should use \$90,000 for "Climate Change" (as noted on the IRS Form 990; Ref. 48). At the same time, it masked this condition in its published 2005 Worldwide Giving report [49], which lists the \$90,000 as "General Operating Support" [Figure 5].

In addition, even when ExxonMobil does not necessarily specify how its monetary contributions should be directed, recent research has shown that funding from fossil fuel companies impacts the content of information that these recipient organizations produce, and that the new ideas become more prevalent in the public discourse [50].

ExxonMobil Foundation Schedule of 2005 Appropriations and Payments - by Program Area December 31, 2005						
Payee Organization	Tax Status	Beginning Balance	New Allocations	Amended	Amount Paid	Ending Balance
2005 George C. Marshall Institute 1625 K Street, NW, Suite 1050 Washington, DC 20006 Climate Change \$90,000.00 2005	501c(3)	\$0.00	\$90,000.00	\$0.00	\$90,000.00	\$0.00
George Mason University Foundation, Inc. 4400 University Drive, MS 1A3 Fairfax, VA 22030-4444 Law & Economics Center \$30,000.00 2005	501c(3)	\$0.00	\$30,000.00	\$0.00	\$30,000.00	\$0.00

George C. Marshall Institute, Washington, D.C.	
Awards Dinner and General Operating Support*	25,000
General Operating Support	90,000
George Mason University Foundation, Inc., Fairfax, Virginia	
Law & Economics Center	30,000
Georgetown University, Center Contemporary Arabic Studies, Washington, D.C.	30,000
Heartland Institute, Chicago, Illinois	
General Operating Support*	90,000
General Operating Support	29,000

FIGURE 5. Top - excerpt from ExxonMobil's 2005 IRS Form 990 showing funds targeted for "Climate Change". Bottom - excerpt from ExxonMobil's 2005 Worldwide Giving report, which lists the \$90,000 donation simply as "General Operating Support."



FIGURE 6. A leaked slide from a 2014 presentation by the President of the WSPA reveals the group's strategy, on behalf of its member fossil fuel companies - including ExxonMobil - to create "astroturf" organizations whose purpose is to derail climate and energy legislation (reproduced from UCS, 2015; Ref. 52).

3. ExxonMobil's funding of and/or membership in organizations that block climate legislation

As previously mentioned, President Leinen has stated, in response to our open letter, that "if verifiable information becomes available that proves ExxonMobil is currently...adopting positions that are in conflict with AGU's own, or supporting groups that do, we will end the relationship, as dictated by our policy – at least until the company is able to demonstrate that such actions have ceased" [2].

AGU's Organizational Support Policy also states that Organizational Partners are bodies that "share a vested interest in and commitment to advancing and communicating science and its power to ensure a sustainable future" [1]. Yet while science informs, in the words of AGU's Position Statement on Climate Change, a clear imperative for "urgent action" on climate change [51], ExxonMobil is moving in the opposite direction through its political spending and lobbying efforts to derail legislation for climate

mitigation commensurate with the scientific consensus of human-caused climate change.

For example, internal documents show that a key component of the major fossil fuel companies' climate deception campaigns, including that of ExxonMobil, is the cultivation of so-called "astroturf" organizations; groups created to falsely represent grassroots opposition to forward-looking policy on climate change and renewable energy [52].

ExxonMobil is a member of the Western States
Petroleum Association (WSPA) [53], one of the most
powerful oil and gas lobbies in the United States.

Publicly available lobbying disclosure reports
indicate that WSPA has spent \$59.4 million on
lobbying in California between 2005-2015. In
2015 alone, WSPA spent \$9.2 million [54]. In
November 2014, a leaked presentation by the
President of WSPA revealed a stealth campaign to
block climate mitigation policies through the
construction of astroturf groups (with names such as
"Oregon Climate Change Campaign" and "AB 32
Implementation Group") [Figure 6; Ref. 55]. The
presentation details a plan to throttle California's

Assembly Bill 32 (AB 32, also known as the California Global Warming Solutions Act of 2006, requiring a statewide reduction in greenhouse gas emissions to 1990 levels by 2020) and low-carbon fuel standards in California, Oregon, and Washington State.

We note that other sponsors of the AGU Fall Meetings, Shell and Chevron, are also members of the WSPA [53].

Such activities conflict with ExxonMobil's public position that "Because the risks to society and ecosystems [of climate change] could prove to be significant, ExxonMobil believes that it is prudent now to develop and implement global strategies that address the risks, keeping in mind the central importance of energy to the economies of the world. This includes putting policies in place that start us on a path to reduce emissions..." [56]. We encourage the AGU to also consider whether ExxonMobil's support of organizations working to derail climate legislation is in violation of the broader expectations of AGU's policies.

4. ExxonMobil's funding of climate-denying politicians

From 2013 to 2014, ExxonMobil contributed \$724,500 to 110 members of the United States Congress who deny the basic realities of anthropogenic climate change. Indeed, Exxon's support of climate-denying members of Congress has risen dramatically even since its 2008 pledge to end support of climate denial: between 2007-08 and 2013-14, both Exxon's total monetary contributions to climate-denying Congresspersons and the number of funded climate-denying Congresspersons more than doubled (Figure 7). Although only a small portion of data for 2015-2016 is currently available, continued funding confirms that Exxon is still donating to climate-denying members of Congress through the present day.

In total, since 2007, ExxonMobil has given at least \$1.88 million to climate-denying members of Congress. We conservatively estimate that since 1999, ExxonMobil has given at least \$3.45 million to at least 208 individual climate-denying members of Congress. That is, a large portion - on the order of one half - of ExxonMobil's donations to climate-denying Congresspersons has occurred *after* it publicly pledged to end support for climate denial.

Among those members of Congress who ExxonMobil continues to support with its donations are several dozen who refuse to even accept that Earth is warming, according to their public statements.

For example, Chairman of the U.S. Senate
Environment and Public Works Committee, Jim
Inhofe (R-OK), has repeatedly described [57,58]
global warming as "the greatest hoax ever
perpetrated on the American people" [59],
compared environmentalists to Nazis [60],
and insisted that climate change is impossible
because "God's still up there" [61]. Inhofe has
received at least \$35,000 from ExxonMobil, including
in 2015; the same year that he attempted to refute
2014's then-record global temperature anomaly by
producing a snowball on the Senate floor [62]. As of
2015, ExxonMobil evidently continues to financially
support those perpetuating climate science
misinformation.

Likewise, current prospective presidential candidate Senator Ted Cruz (R-TX) has taken at least \$24,050 from ExxonMobil, including within the last six months. Over the same time period, Cruz has called climate change "a pseudo-scientific theory" [63] and dismissed it as "not science, it's a religion" [64]. He has previously attested that for "the last 15 years, there has been no recorded warming" [65].

ExxonMobil has donated at least \$123,050 in support of Senator John Cornyn (R-TX), including \$34,400 in 2013-2014. According to Cornyn, "Taxpayer funded research by NASA and the Goddard Institute for Space Studies (GISS) concerning the warmest years on record has been the subject of dispute and after challenges, has been changed and re-released. What is less known is why the changes were made and what inherent flaws existed in the original data, if any. It is important to understand the reasons behind these alterations and further to avoid suspicion that data was massaged to fit the prescribed theory that global warming is attributable to man-made greenhouse gas emissions" [66].

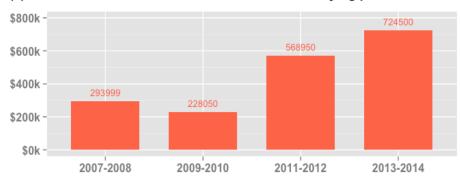
Correlation does not prove causation, and we do not presume to know or guess the motivations behind ExxonMobil's donations to any/all politicians. However, it appears indisputable that ExxonMobil continues to lend its financial support and social license to individuals who continue to spread climate science misinformation, and therefore, irrespective of the motivation or extent of this support, violates

AGU's policy of not accepting funding from those who "publicly promote misinformation of science".

Note: ExxonMobil's donations to members of Congress were compiled by the Dirty Energy Money campaign [67] and are based on publicly available data from the Federal Election Commission. Our determination that a member of Congress denies the basic realities of anthropogenic climate change is based on the latest analysis by the Center for American Progress Action Fund [68]. The researchers classify as climate-deniers any lawmakers who have: questioned or denied the scientific consensus behind human-caused climate change; answered questions about climate change with the refrain, "I'm not a

scientist"; claimed that the climate is always changing; or questioned the extent to which human beings contribute to global climate change [66,69]. We note that our updated analysis of funding from 2007-present deviates almost negligibly from the recent analysis conducted by Oil Change International in collaboration with The Guardian [8]. Our estimates of earlier donations to climate denying Congresspersons (since 1999) are conservative, since the names of politicians funded by ExxonMobil since 1999 have only been cross-referenced against the Center for American Progress Action Fund's database of climate deniers in the 114th Congress (2015-2017). We take full responsibility for any errors contained herein.

(a) Total donations from ExxonMobil to climate-denying politicians



(b) Number of climate-denying politicians receiving ExxonMobil funding

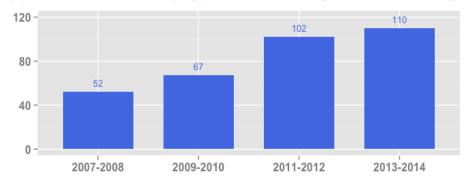


FIGURE 7. (a) Total donations (\$) from ExxonMobil to climate-denying members of Congress each year have more than doubled from 2007 to present. (b) The number of climate-denying members of Congress who have received financial support from ExxonMobil each year has more than doubled from 2007 to present.

Why ExxonMobil's past climate misinformation should not be overlooked

The question of ExxonMobil's recent and ongoing activities in scientific misinformation is the focus of this report, and AGU has stated that this, as opposed to past activities, will determine whether our society should continue to accept sponsorship from the company [2]. Identifying these ongoing activities is vital, for it shows that, despite official ExxonMobil statements declaring the validity of anthropogenic climate change and the necessity for political solutions [70,71], Exxon continues to actively work against the public understanding of climate science and political efforts to mitigate the threats of rising greenhouse gas levels in the atmosphere.

However, ExxonMobil's past activities are more than just cause for skepticism of the sincerity of their more recent statements. The actions taken by ExxonMobil over the last three decades - to sow doubt in the public's eye about the reality and gravity of climate change, to frame attempts to change the energy system as futile, and to encourage politicians to do likewise - have done irreparable harm to the Earth system which supports human society. As geoscientists are well aware, barring colossal development and deployment of carbon capture and sequestration technologies, historical carbon emissions have "locked in" substantial and unavoidable warming, and therefore climate change consequences, for centuries and millennia to come [72]. Given the tremendous resources ExxonMobil has devoted to promoting an inaccurate view of climate science, it should at a minimum now be expected to correct this view among policymakers and politicians in line with the company's stated acceptance of anthropogenic climate change. We see no evidence of advertising or lobbying on ExxonMobil's part promoting sound climate science to mitigate the harm caused by their past misinforming advertising and lobbying campaigns. That ExxonMobil engaged in such obstructive tactics for so long, despite being aware of the risks of unabated carbon pollution from the international scientific community and the work of their own scientists, is ethically reprehensible. It warrants censure by scientific organizations, especially by AGU, one of the world's largest and most respected societies of Earth scientists.

The scientifically insupportable actions of ExxonMobil over the past decades have been extensively documented (e.g. 27, 52, 55, 73, 74, 75-77). When scientific opinion began to converge in the late 1980s on a significant and growing human impact on the global carbon budget, and the serious consequences to the Earth system that would result, ExxonMobil and its industry peers created the Global Climate Coalition (GCC; Ref. 78). The GCC's own internal documents make clear that its goal was to sow doubt and confusion about the science of climate change, despite the fact that a 1995 internal GCC memo (Figure 8; Ref. 79) from Mobil Oil (which merged with Exxon in 1998) stated that "The scientific basis for the Greenhouse Effect and the potential impact of human emissions of greenhouse gases such as CO2 on climate is well established and cannot be denied." From 1989-2002, the GCC employed advertising and political lobbying, as well as public attacks on individual scientists, to generate doubt among the public and policymakers about the validity of climate science.

Among the early members of the now-defunct GCC was the American Petroleum Institute (API), an active trade organization of the oil and gas industry, of which ExxonMobil is a member [80]. In 1998, the API circulated a Global Climate Science Communications Plan, outlining an extensive media and lobbying strategy for promoting an emphasis on the uncertainty of climate science (Ref. 52; full document available here). Randy Randol of ExxonMobil is acknowledged as a contributor to the document. The Plan states, "In fact, it [sic] not known for sure whether (a) climate change actually is occurring, or (b) if it is, whether humans really have any influence on it." Describing the strategy to promote doubt, the Plan states, "A majority of the American public, including industry leadership, recognizes that significant uncertainties exist in climate science, and therefore raises questions among those (e.g. Congress) who chart the future U.S. course on global climate change."

Introduction and Summary

Since the beginning of the industrial revolution, human activities have increased the atmospheric concentration of CO₂ by more than 25%. Atmospheric concentrations of other greenhouse gases have also risen. Over the past 120 years, global average temperature has risen by 0.3 - 0.6°C. Since the Greenhouse Effect can be used to relate atmospheric concentration of greenhouse gases to global average temperature, claims have been made that at least part of the temperature rise experienced to date is due to human activities, and that the projected future increases in atmospheric concentrations of greenhouse gases (as the result of human activities) will lead to even larger increases in future temperature. Additionally, it is claimed that these increases in temperature will lead to an array of climate changes (rainfall patterns, storm frequency and intensity, etc.) that could have severe environmental and economic impacts.

This primer addresses the following questions concerning climate change:

1) Can human activities affect climate?

The scientific basis for the Greenhouse Effect and the potential impact of human emissions of greenhouse gases such as CO₂ on climate is well established and cannot be denied.

FIGURE 8. Excerpt from a Global Climate Coalition (GCC) internal memo stating that the link between anthropogenic CO₂ emissions and warming "cannot be denied."

THE SKY ISN'T FALLING

Despite decades of dire predictions by "environmentalists," Earth's future is greener than ever, reports the Competitive Enterprise Institute

Washington, D.C., April 18, 2005— The 1970's brought us many things, including the idea that Earth was going to pot. Gloom and doom predictions by those supposedly in the know have kept "Earth Day" a main focus for the environment movement. But the Competitive Enterprise Institute, a public policy group based in Washington, D.C., and according to the Wall Street Journal, "the best environmental think tank in the country," Earth Day is nothing more than a propaganda tool used to scare the public. As evidence, CEI cites the following advances, many of which go well beyond the 30-yr, history of "Earth Day."

• There is no 'scientific consensus' that **global warming** will cause damaging climate change. In fact, global average temperature is only about 0.60 higher than a century ago. Outlandish claims that our earth is warming at an extreme rate mischaracterize the scientific research by the Intergovernmental Panel on Climate Change and the National Academy of Sciences. The world is not in severe danger from 'ising sea levels. Research from Nils-Axel Morner of Stockholm University demonstrates that current sea levels are within the range of sea level oscillation over the past 300 years. And extreme weather conditions have no provable link to Global warming. Research by German scientists have demonstrated that the devastating floods in central Europe in 2002 were quite normal. And don't blame climate on the growth of vector-borne diseases such as malaria. World experts agree that "other factors" are more important when it comes to the spread of diseases. CEI Senior Fellow in International Policy, Iain Murray.

FIGURE 9. A 2005 Competitive Enterprise Institute (CEI) press release denies a scientific consensus on global warming.

This document represents intentional climate disinformation, because it was released three years after the GCC memo described above acknowledging the fact of anthropogenic global warming. The API document is focused on averting the ratification of the Kyoto Protocol, but it also acknowledges that unless "there are no further initiatives to thwart the threat of climate change, there may be no moment when we can declare victory for our efforts." Targets of the campaign include members of Congress, major media outlets, science writers, schoolteachers, and students. The API continues to work to thwart climate mitigation. For example, in 2011, API led a lawsuit against the U.S. Environmental Protection Agency contesting the agency's authority to regulate greenhouse gases as pollutants. API likewise opposed EPA rules to regulate carbon emissions from power plants in 2014 [81] and rules to regulate methane emissions from oil and gas production in 2015 [82]. We note that most oil and gas companies, including other sponsors of AGU, are also current members of API.

In addition to funding third party organizations, ExxonMobil has attempted to directly influence the public, and even the scientific process. In 2000, ExxonMobil placed an advertisement in the Washington Post criticizing the draft 2001 National Climate Assessment of the US Global Change Research Program [83] as insufficiently peerreviewed and based on unreliable models. In 2001, ExxonMobil sent a fax to the White House asking explicitly for changes to the personnel representing the United States in the IPCC Third Assessment Report [84]. The fax implied that the current representatives were appointed with a political agenda by the previous administration and recommended specific replacements, who had either non-scientific backgrounds or held skeptical views of the human influence on climate. In less than two years, all four of the persons recommended by Exxon for removal were no longer in their posts. One of the targeted scientists, Michael MacCracken, directly criticized ExxonMobil: "to be in opposition to the key scientific findings is rather appalling for such an established and scientific organization" [85].

ExxonMobil gave \$676,500 to the Heartland Institute between 1998 and 2006. In 1998, Heartland released an "Instant Expert Guide" to global warming [86], which stated that, "Most scientists do not believe human activities threaten to disrupt the Earth's climate." The Heartland Institute's "Nongovernmental International Panel on Climate Change" [87] purports to offer a "second opinion" on

the scientific and economic aspects of climate change, but is described by actual climate scientists as "dishonest" [88]. The Union of Concerned Scientists found that **nearly 40% of ExxonMobil's donations to Heartland were specifically designated for climate-related work** [74].

From 1998-2005, ExxonMobil provided over \$2 million in funding to the Competitive Enterprise Institute (CEI), which in 1999 decried AGU's new position statement on climate change, saying that, "It is nothing more than an underhanded attempt by some to use the AGU as a vehicle to promote their personal political views" [89]. To be clear: AGU defines its Organizational Partners from whom it accepts funding as bodies that "do not harm AGU's brand and reputation," [1] yet ExxonMobil, an Organizational Partner of AGU, has financially supported CEI while CEI publicly attacked AGU. In 2000, CEI released a report stating that, "If there is one thing certain about global warming, it is that the nature and extent of humanity's impact on the global climate system is not yet known" [90]. In reviewing the conclusions of the 1995 IPCC report, the CEI report exclusively highlights statements describing scientific uncertainty, and remarks that "Since the [IPCC] report was issued, numerous studies have appeared in the peer-reviewed literature that further demonstrate the uncertainty of climate forecasts and the unlikelihood that human activity poses a serious threat of inducing a climate catastrophe." In 2005, CEI published a press release stating that "There is no 'scientific consensus' that global warming will cause damaging climate change" (Figure 9; Ref. 91).

In 2005, ExxonMobil's then-CEO Lee Raymond told attendees of the Asia Oil & Gas conference that "We in ExxonMobil do not believe that the science required to establish this linkage between fossil fuels and warming has been demonstrated - and many scientists agree" [92].

In short, while Earth scientists were becoming increasingly certain of the role of fossil fuel burning in climate change, ExxonMobil was leading the energy industry towards willful misinformation of this science. Acknowledging this is not simply a matter of pointing a finger at the company for bad behavior. In part because of their concerted efforts together with trade groups, industry peers, and obliging politicians, political action to mitigate climate change has been delayed by decades, during which time CO₂ from fossil fuel combustion has relentlessly accumulated in

the atmosphere and ocean. Over half of industrial fossil fuel emissions have occurred since 1988, when NASA scientist James Hansen first brought anthropogenic climate change to the attention of the U.S. Senate (Figure 10; Ref. 77).

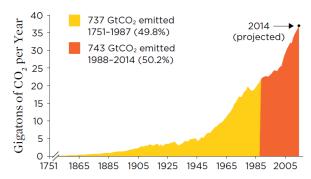


FIGURE 10. Cumulative global carbon emissions have doubled since 1988, when anthropogenic climate change was introduced to the US Senate (reproduced from UCS 2015).

Like other major fossil fuel companies, ExxonMobil has employed many highly capable scientists throughout its existence. Over the years, these scientists have contributed to important advances in a variety of fields, including climate science. Indeed, the company is currently under investigation from the Attorneys General of New York and California for allegedly having ignored the conclusions of their own scientists forewarning the dangers of unabated carbon emissions. Regardless of what is revealed by these investigations, as scientists, it is incomprehensible that the leaders of a company such as ExxonMobil, whose business activities are linked so tightly to scientific knowledge of the Earth system, would be sincerely ignorant of the scientific consensus on anthropogenic climate change, to the point of promoting contradictory claims. The fact that they engaged in scientific misinformation about climate change for such a long period of time while the scientific community clearly refuted their public messaging is patently incompatible with the principle of scientific integrity.

AGU has acknowledged that ExxonMobil's past activities have not been consistent with the scientific consensus on climate science, stating that, "It cannot be said that Exxon's past positions and actions regarding climate change were in keeping with our policy or with the company's current public positions" [1]. We believe that by granting ExxonMobil a "clean slate" and ignoring all of the damage they have knowingly contributed to but never remedied, AGU is failing to honor its values of "integrity in everything"

we do" and the "benefit of science for a sustainable future" [93], or conveying to the public the significance of the ecological harm, human suffering, and expense that so much delay has ensured. AGU acknowledges the consequences of such inaction in its statement on climate change, noting that "our past, present, and future emissions will influence the climate system for millennia" [51]. In the words of Frumhoff et al. (2015), "We should make clear that [fossil fuel] companies operate with a social license, and consider ways to revoke that license for carbon producers who fail to act on their social responsibility" [77].

Examining ExxonMobil's history of climate science misinformation provides an opportunity for AGU to take an honest look at its own past complicity with organizational partners. The official grounds for terminating a sponsor partnership are only recently available through AGU's Organization Support Policy, adopted in 2015 [1]. Why are we only now seriously taking stock of our association, as scientists, with a company such as ExxonMobil, which has engaged in unethical behavior contributing to society's collective failure to adequately respond to climate change? Given that since 2008, funding for organizations that spread climate science misinformation has largely evolved into "dark money" contributions through untraceable foundations such as Donors Trust [27], discovering the financial links between companies like ExxonMobil and groups promoting misinformation is now more difficult. Had organizations such as AGU taken a more active stance in pushing back against ExxonMobil for its misinformation in the past, we may have been able to encourage more significant political progress towards climate mitigation. The past cannot be changed; however, we should consider the consequences of our own past actions, or inactions, to inform how we act today and in the future.

Whatever the specific motivations for ExxonMobil's recent statements in support of legitimate science and policy solutions, their concerted efforts over the course of decades have polluted their scientific reputation. Continuing to associate with such an entity tarnishes the public image of the AGU. ExxonMobil must bear responsibility for its knowingly harmful actions in the past, and AGU must acknowledge its past failure to compel ExxonMobil to end such behavior. Disassociating from ExxonMobil now will help restore integrity to our society and signal to the public that scientifically and ethically pernicious actions are not welcome in the scientific community.

CONCLUSION

The evidence presented in this report demonstrates that, despite stating publicly in 2008 that it would no longer support climate science misinformation, ExxonMobil has continued to make public statements disparaging the validity of climate science and to financially support others who do the same. In contrast to its industry peers, ExxonMobil continues to support groups such as the American Legislative Exchange Council (ALEC), which promote doubt and skepticism of accepted climate science. Recent examples include:

- ❖ At the 2013 ExxonMobil shareholders meeting, CEO Rex Tillerson claimed that the temperature record of the past 10 years "had been relatively flat" despite rising greenhouse gas concentrations, and described climate models as "not competent". He reiterated his dismissal of climate models at the 2015 shareholders meeting, saying, "We don't really know what the climate effects of 600 ppm versus 450 ppm will be because the models simply are not that good."
- In 2014, ExxonMobil affiliate Syncrude stated that "...the production and consumption of petroleum fuels is not dangerous and does not pose a risk to human health or safety."
- ❖ ExxonMobil continues to be a member, with company representation on the Board, of ALEC, whose official position on climate change states, "Global Climate Change is Inevitable. Climate change is a historical phenomenon and the debate will continue on the significance of natural and anthropogenic contributions." ExxonMobilsponsored ALEC conferences in recent years have featured workshops and literature for policymakers on denying the reality of anthropogenic climate change. ALEC also opposes a carbon tax, which ExxonMobil states it supports.
- ExxonMobil continues to support the American Enterprise Institute, whose fellow Jonah Goldberg in 2014 described scientists accepting the consensus on anthropogenic global warming as a "rent-seeking group of people who are looking to profit off of government action."
- ExxonMobil supports the National Black Chamber of Commerce, whose official position on climate change states "There is no sound science to support the claims of Global Warming."

When pressed to defend such actions, the company has pointed to its associations with scientific institutions as evidence of their sincere commitment to addressing the climate crisis. In short, the scientific community is being exploited: by providing funding for research and scientific meetings, ExxonMobil insulates itself against criticism from the public and scientists for its actions that perpetuate doubt and confusion about climate science and thereby promote global inaction in the face of the climate threat.

In addition to the evidence presented here of recent inconsistencies between ExxonMobil's official statements on climate change and the company's actions, we argue that past misinformation activities should also be considered when evaluating AGU's partnership with Exxon. AGU has already acknowledged that ExxonMobil's past activities have not been consistent with the scientific consensus on climate science or AGU's policy. Documentation from groups of which Exxon was a member show that ExxonMobil was aware of the "undeniable" scientific consensus on anthropogenic global warming by the early 1990s, at the very latest. And yet the company continued to support misinforming think tanks such as the Competitive Enterprise Institute and the Heartland Institute for many years thereafter.

As the scientific consensus around climate change grows ever more robust, these positions have become public liabilities, and the company has changed its official posturing and ceased direct financial support to some of these groups over the past few years. However, as demonstrated in this report, the company still engages in willful misinformation of climate science, which constitutes a violation of AGU's Organizational Support Policy. The onus lies on ExxonMobil to refute its engagement in such activity, and for AGU to assert that it will not accept sponsorship from the company until it has satisfactorily done so.

We further contend that it is not enough for ExxonMobil to simply cease casting doubt on legitimate science. The company bears a significant responsibility for the damage that has already been done and will continue to unfold as a result of their past actions. The misinformation tactics of ExxonMobil encouraged widespread political inaction on climate mitigation that continues today, and will not stop tomorrow if ExxonMobil quietly walks away

from groups such as ALEC. We urge AGU to exercise maximum diligence in acting on its Position
Statement on Climate Change, by pressing
ExxonMobil, and all organizational partners involved in fossil fuel production, to mobilize their tremendous resources towards correcting the public understanding of climate change. Actions such as this are necessary to mitigate the impacts of ExxonMobil's past misinformation activities and promote real progress towards a sustainable climate future.

We wholeheartedly share the desires of President Leinen and AGU's board to approach this matter thoughtfully, collaboratively, and with the integrity befitting our society and the ideals of the scientific process. In this vein, President Leinen has described the importance of "ensur(ing) that our discussions be representative of all sides of AGU's community" and that the AGU Council's "discussions and concerns" on this matter have reflected "pro(s) and con(s)." To this point, we respectfully note that AGU must be aware of the risk of status quo bias that might predispose a decision against cutting ties with ExxonMobil. In fact, the determination called for by President Leinen as to whether "ExxonMobil is currently engaging in the promotion of misinformation about science or adopting positions that are in conflict with AGU's own, or supporting groups that do" is essentially a factual one. It is our assessment that there should be no confusion: ExxonMobil evidently continues to engage in the promotion of climate science misinformation - both itself and through its support of groups and individuals - and is therefore in breach of AGU policy.

We urge the AGU Board to consider the following questions:

Why have ExxonMobil CEO Rex Tillerson and Vice President Ken Cohen continued to promote climate misinformation?

- * Why has ExxonMobil continued to fund the American Legislative Exchange Council, the American Enterprise Institute, and the National Black Chamber of Commerce, (and in the case of ALEC, to help lead it, too): organizations that promote climate change denial and obstruction of climate mitigation policies?
- Why has ExxonMobil funded and participated in the ALEC task forces that promote climate change denial and undermine climate action?
- * Why does ExxonMobil fail to notify its shareholders of the risks of climate change and climate policies to its business activities, as instructed by the SEC?
- * Why does ExxonMobil only lobby to oppose climate mitigation policies without proposing any alternatives?
- What actions has ExxonMobil taken to correct the understanding of climate science among the public and policymakers to take accountability for its past misinformation activities?

Finally, we reiterate that this work constitutes the efforts of a handful of scientists and should not be considered the complete story. Rather, we believe that the burden of proof lies with ExxonMobil to demonstrate that it is no longer supporting climate science misinformation, and with the AGU to leverage its influence and connections to access any information that may not be publicly available. As early career Earth scientists and AGU members who are deeply concerned about the climate crisis and our society's scientific integrity, we thank the AGU leadership for taking this matter into serious consideration.

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APPENDIX A

Copy of the Union of Concerned Scientists' record of ExxonMobil's funding of climate-denying organizations (1998-2014)

ExxonMobil Foundation & Corporate Giving to Climate Change Denier & Obstructionist Organizations

Organization	2014	2007-2014	1998-2006	1998-2014
Acton Institute	-	\$50,000	\$315,000	\$365,000
Advancement of Sound Science Center	-	-	\$50,000	\$50,000
American Conservative Union Foundation	-	\$40,000	\$50,000	\$90,000
American Council for Capital Formation	\$55,000	\$135,000	\$1,619,523	\$1,754,523
American Council on Science and Health	-	\$40,000	\$125,000	\$165,000
American Enterprise Institute (AEI)	\$310,000	\$1,910,000	\$1,860,000	\$3,770,000
American Legislative Exchange Council (ALEC)	\$61,500	\$454,500	\$1,275,700	\$1,730,200
American Spectator Foundation	-	\$75,000	\$40,000	\$115,000
Annapolis Center	-	\$285,000	\$868,500	\$1,153,500
Atlas Economic Research Foundation	-	\$302,500	\$780,000	\$1,082,500
Capital Research Center/Greenwatch	-	\$50,000	\$215,000	\$265,000
Cato Institute	-	-	\$125,000	\$125,000
Center for a New Europe-USA	-	-	\$170,000	\$170,000
Center for American and International Law	\$42,000	\$227,600	\$224,550	\$452,150
Center for Defense of Free Enterprise	-	-	\$230,000	\$230,000
Center for the Study of CO2 and Global Change	-	-	\$100,000	\$100,000
Chemical Education Foundation	-	\$25,000	\$130,000	\$155,000
Committee for a Constructive Tomorrow (CFACT)	-	\$40,000	\$542,000	\$582,000
Communications Institute	-	\$315,000	\$200,000	\$515,000
Competitive Enterprise Institute (CEI)	-	-	\$2,005,000	\$2,005,000
Congress of Racial Equality	-	\$50,000	\$275,000	\$325,000
Consumer Alert	-	-	\$70,000	\$70,000
Environmental Literacy Council	-	\$50,000	\$50,000	\$100,000
Federal Focus	-	-	\$125,000	\$125,000
Federalist Society	\$15,000	\$120,000	\$105,000	\$225,000
Foundation for Research on Economics and the Environment (FREE)	-	\$210,000	\$240,000	\$450,000
Fraser Institute	-	-	\$120,000	\$120,000
Free Enterprise Action Institute	-	-	\$50,000	\$50,000
Free Enterprise Education Institute	-	-	\$80,000	\$80,000
FreedomWorks	-	-	\$380,250	\$380,250
Frontiers of Freedom	-	\$90,000	\$1,182,000	\$1,272,000
George C. Marshall Institute	-	\$150,000	\$715,000	\$865,000
George Mason University Law and Economics Center	\$30,000	\$230,000	\$215,000	\$445,000
Harvard-Smithsonian Center for Astrophysics	-	\$207,212	\$210,000	\$417,212
Heartland Institute	-	-	\$676,500	\$676,500
Heritage Foundation	-	\$340,000	\$490,000	\$830,000
Hoover Institution	\$50,000	\$50,000	\$295,000	\$345,000
Independent Institute	-	\$15,000	\$70,000	\$85,000
Independent Women's Forum	-	\$15,000	\$50,000	\$65,000
Institute for Energy Research/American Energy Alliance	-	\$95,000	\$242,000	\$337,000
Institute for Senior Studies	-	-	\$30,000	\$30,000
Institute for Study of Earth and Man	-	-	\$76,500	\$76,500
International Policy Network-North America	-	-	\$390,000	\$390,000
International Republican Institute	-	-	\$115,000	\$115,000
Landmark Legal Foundation	-	\$40,000	\$50,000	\$90,000
Lexington Institute	-	-	\$10,000	\$10,000
Lindenwood University	-	\$20,000	\$20,000	\$40,000
Manhattan Institute	\$100,000	\$475,000	\$325,000	\$800,000

Media Institute	-	-	\$120,000	\$120,000
Media Research Center/Cybercast News Service	-	\$160,000	\$202,500	\$362,500
Mercatus Center, George Mason University	\$25,000	\$260,000	\$120,000	\$380,000
Mountain States Legal Foundation	\$10,000	\$60,000	-	\$60,000
National Association of Neighborhoods	-	\$100,000	\$125,000	\$225,000
National Black Chamber of Commerce	\$75,000	\$800,000	\$225,000	\$1,025,000
National Center for Policy Analysis	-	\$150,000	\$495,900	\$645,900
National Center for Public Policy Research	-	\$110,000	\$335,000	\$445,000
National Legal Center for the Public Interest	-	-	\$216,500	\$216,500
National Taxpayers Union Foundation	\$75,000	\$630,000	\$70,000	\$700,000
Pacific Legal Foundation	\$10,000	\$155,000	\$120,000	\$275,000
Pacific Research Institute for Public Policy	-	\$235,000	\$430,000	\$665,000
Property and Environment Research Center	-	\$20,000	\$135,000	\$155,000
Reason Foundation/Reason Public Policy Institute	-	-	\$321,000	\$321,000
Regulatory Checkbook	-	-	\$50,000	\$50,000
Science and Environmental Policy Project	-	-	\$20,000	\$20,000
Tech Central Science Foundation/Tech Central Station	-	-	\$95,000	\$95,000
Texas Public Policy Foundation	-	\$50,000	\$30,000	\$80,000
U.S. Chamber of Commerce	\$1,000,000	\$1,000,000	-	-
Washington Legal Foundation	\$40,000	\$240,000	\$215,000	\$455,000
Totals	\$1,898,500	\$10,076,812	\$20,908,423	\$30,985,235

Sources: ExxonMobil Worldwide Contributions and Community Investments reports and ExxonMobil Foundation 990 tax forms compiled by Greenpeace (www.exxonsecrets.org) and the Union of Concerned Scientists.

APPENDIX B

Copy of the Center for Media and Democracy's letter to the California Attorney General (dated January 21, 2016)

The Center for Media and Democracy

122 W. Washington Ave., Ste. 555 Madison, Wisconsin 53703 Phone: 608-260-9713

January 21, 2016

Attorney General Kamala Harris Office of the Attorney General California Department of Justice P.O. Box 944255 Sacramento, CA 94244-2550

Dear Attorney General Harris,

We write to bring additional information to your attention that may be relevant to your office's investigation into whether Exxon Mobil deceived its shareholders and the public about the impact that burning fossil fuels has on climate change. In our view, the evidence strongly suggests it did.

Our organization, the Center for Media and Democracy, submitted a similar letter to New York Attorney General Eric Schneiderman.

Introduction

Since at least 1981, Exxon Mobil has funded the American Legislative Exchange Council, or "ALEC," a national lobbying organization that acts as a conduit for corporate interests to advance their legislative agenda with state legislators. An Exxon Mobil lobbyist sits on ALEC's corporate board.

With Exxon's financial support and leadership, ALEC has adopted resolutions denying the science behind the causes of climate change, promoted legislation to undermine policies aimed at addressing climate change, such as efforts to promote renewable energy or limit carbon emissions, and held workshops for state legislators promoting climate change denial.

By funding ALEC for decades Exxon has promoted numerous aspects of climate change denial and blocked legislative efforts to address climate change—while Exxon knew from its own scientific research that burning carbon was fueling climate change, a fact that it only belatedly admitted publicly.

Our organization, the Center for Media and Democracy, has conducted extensive research on ALEC via our "ALECexposed.org" project, and we are available to provide additional information that may assist you in conducting your investigation. Some of the information below is based on CMD's in-depth investigation of ALEC including ALEC's central role in climate change denial in the states, and some of the information below is based on investigative work by Kert Davies of the Climate Investigations Center.

Background on ALEC

ALEC describes itself as a "membership organization," with members from the "public sector" (an estimated 2,000 state legislators from all 50 states) and the "private sector." CMD has calculated that nearly 98 percent of its funding comes from private sources other than state legislators. In other words, ALEC's core operations are made possible by funding from global corporations like Exxon Mobil.

Corporate and special interests pay between 50 and 500 times as much as a lawmaker to be part of the organization. Legislators pay just \$50 per year to join ALEC, whereas corporations pay between \$7,000 and \$25,000 for membership, plus additional fees to fund ALEC Task Forces or sponsor legislative workshops for lawmakers or meetings where corporate lobbyists push bills and resolutions that helped set the legislative agenda in state capitols across the country.

ALEC is quintessentially a pay-to-play operation that helps lobbyists obtain access to lawmakers and promote the agenda of the corporations for which they work.

For decades, corporate interests have paid to join an ALEC "Task Force" and get an equal vote with legislators on the adoption of bills and resolutions that are often introduced in state

legislatures at the behest of the state legislative leaders of ALEC, who are tasked with a duty to push the ALEC agenda into law. Until recently, ALEC's corporate task force members could also directly propose bills to be voted on with legislators behind closed doors at ALEC meetings. For example, Exxon Mobil was behind an ALEC model bill from 2012 to hide the chemicals used in fracking. (ALEC has claimed that only legislators can introduce bills, but CMD has debunked that by showing how that is largely a nominal process where legislators introduce bills at ALEC sought by corporate lobbyists.²)

Corporate interests also pay to sponsor workshops at ALEC meetings and can dictate the content of those workshops. Private interests also underwrite the reports presented by ALEC, such as the "EPA Regulatory Train Wreck," which outlined 15 bills for state legislators to use to thwart the power of the EPA to regulate carbon emissions. Corporate interests also fund ALEC's meetings of state legislators and lobbyists and have their logos prominently presented on the agenda.

ALEC is registered in California with the Attorney General's Office as a charitable organization, and it has federal tax-exempt status under section 501(c)(3) of the Internal Revenue Code. However, ALEC's tax-exempt status has been challenged in a series of complaints filed with the IRS alleging that ALEC operates primarily as a lobbying organization operating for the private benefit of its funders. CMD has submitted extensive evidence to the IRS in support of the filings of Common Cause.

Exxon Mobil's Funding of ALEC and Leadership in ALEC Contradicts Its Public Positions on Climate Change

Exxon Mobil has cumulatively given at least \$1,730,200 to ALEC between 1998 and 2014, according to publicly-available information, although the actual total is likely higher. CMD has

¹ See Cora Currier, ALEC and ExxonMobil Push Loopholes in Fracking Chemical Disclosure Rules, PRO PUBLICA (Apr. 24, 2012), <a href="http://www.propublica.org/article/alec-and-exxonmobil-push-loopholes-in-fracking-alec-and-exxonmobil-push-loopholes-alec-and-exxonm

² See Matt DeFour, *Documents Released in Open Records Lawsuit Show Lobbying Group Pulling Legislators' Strings*, WISCONSIN STATE JOURNAL (APR. 4, 2014), http://host.madison.com/wsj/news/local/govt-and-politics/documents-released-in-open-records-lawsuit-show-lobbying-group-pulling/article_1e33edf4-857d-507c-92c7-ec6948c5fc02.html.

identified records showing that Exxon has funded ALEC as far back as 1981,³ and that it sponsored ALEC's meetings of legislators and lobbyists at least as early as 1984.⁴ Because ALEC has often sought to keep the public in the dark about the identities of the corporations driving its legislative agenda, records of it corporate membership each year are not complete, but CMD has also identified materials showing both Exxon and Mobil as corporate members of ALEC in 1992⁵ and 1994, as well as in the past seventeen years.⁶

Additionally, we know that between 2003 and 2005 Exxon Mobil earmarked \$428,000 of its funding to ALEC for "climate change" as ALEC peddled climate change denial and aimed to thwart regulation and legislation to address climate change. And Exxon's continued funding in recent years, although not expressly earmarked for climate change on documents produced by the corporation or its foundation,, has nonetheless continued to help ALEC advance its climate denial policies, contradicting Exxon's public statements on the issue.

Based on Exxon Mobil's corporate disclosure reports and the Exxon Mobil Foundation's IRS filings, the company's known funding to ALEC in recent years includes:

Year	Amount	ExxonMobil funding entity	Stated purpose	Source
1998	\$15,000	Corporate	"Conference for freshman legislators"	1998 Exxon Education Foundation Dimensions report
2000	\$70,000	Foundation	"General Support"	2000 IRS Form 990
2001	\$70,000	Corporate	"Annual Conference" - \$50,000 "Annual Summit" - \$20,000	2001 Worldwide Giving Report
2001	\$10,000	Foundation	"General Support"	2001 Worldwide Giving Report

³ Letter from Kathleen Teague, Exec. Dir., American Legislative Exchange Council, to Mike Irish, Philip Morris USA (Oct. 14, 1981), *available at* http://www.alecexposed.org/w/images/c/cf/1981_ALEC_Exxon.pdf.

⁴ AMERICAN LEGISLATIVE EXCHANGE COUNCIL, ALEC'S ELEVENTH ANNUAL MEETING 1 (June 21-24, 1984), *available at* http://www.alecexposed.org/w/images/c/c1/ALEC_1984_Funders.pdf.

⁵ AMERICAN LEGISLATIVE EXCHANGE COUNCIL, 1993 ANNUAL MEETING 61 (1992), *available at* http://www.alecexposed.org/w/images/b/bf/ALEC_1992_Annual_Meeting_Partial.pdf.

⁶ AMERICAN LEGISLATIVE EXCHANGE COUNCIL, 1994 ANNUAL MEETING 46 (1994), *available at* http://www.alecexposed.org/w/images/4/4c/1994_ALEC_Meeting_page_46.pdf.

			"Annual Conference" - \$50,000; "General operating Support"	
2002	\$163,200	Corporate	- \$80,000 "Membership" - \$5,000 "Project support" - \$25,000 "other" - \$3,200	2002 Worldwide Giving Report
2002	\$30,000	Foundation	"General Operating Support"	2002 Worldwide Giving Report
2003	\$78,000	Corporate	"Annual Conference"	2003 Worldwide Giving Report
2003	\$290,000	Foundation	"Energy and climate change"- \$50,000 "General Operating Support" - \$100,000 "Global Climate Change" - \$140,000	2003 Worldwide Giving Report
2004	\$55,000	Corporate	"Annual Conference"	2004 Worldwide Giving Report
2004	\$167,000	Foundation	"Energy and Climate Change"- \$62,000 "Climate Change"- \$75,000 "General Operating Support"-\$30,000	2004 Worldwide Giving Report
2005	\$90,000	Corporate	"Annual Conference"	2005 Worldwide Giving Report
2005	\$151,500	Foundation	"Energy sustainability project (climate change)" - \$80,000 "Climate change environmental outreach" - \$21,500 "General operating support" - \$30,000 "Project Support" - \$20,000	2005 IRS Form 990
2006	\$56,000	Corporate	"Annual meeting host committee sponsorship" - \$15,000 "Annual meetings sponsorship" - \$31,000 "General Support" - \$10,000	2006 Worldwide Giving Report
2006	\$30,000	Foundation	None	2006 Worldwide Giving Report
2007	\$31,000	Corporate	None	2007 Worldwide Giving Report
2008	\$56,000	Corporate	None	2008 Worldwide

				Giving Report
2009	\$47,500	Corporate	"Annual Conference - \$15,000 General Support -\$31,000 other -\$1,500	2009 Worldwide Giving Report
2010	\$64,000	Corporate	"General Support -\$39,000; "National Chairman's Reception" - \$25,000	2010 Worldwide Giving Report
2011	\$86,500	Corporate	None	2011 Worldwide Giving Report
2012	\$59,000	Corporate	"2012 Annual Conference" \$25,000; "Private Sector and Energy and Tax Task Force" \$34,000	2012 Worldwide Giving Report
2013	\$49,000	Corporate	"2013 Annual Conference" \$15,000; "Private Sector, Energy and Tax Task Forces" \$34,000	2013 Worldwide Giving Report
2014	\$61,500	Corporate	"Annual Conference" - \$25,000; "Private Sector-Jefferson Club Membership" -\$25,000; "Other Contributions, each under \$5,000" - \$11,500	2014 Worldwide Giving Report
	\$1,730,200 =	Total Funding Exxon to ALEC, 1998- 2014		
	\$428,000 =	Total Funding Earmarked for Climate Change		

This funding makes Exxon Mobil one of ALEC's top financial supporters, even though it is only a small amount of the global corporation's total profits.

In addition to directly funding ALEC, Exxon Mobil plays an important leadership role within the organization. Exxon Mobil has long had a representative on ALEC's corporate board, which ALEC previously called its "Private Enterprise Board" and has recently rebranded as its "Private Enterprise Advisory Council." The ALEC corporate board meets jointly with ALEC's Board of

Directors (made up of a rotating cycle of legislators) to make decisions for the organization's operations. The Board of Directors ultimately approves ALEC model legislation.

Exxon Mobil is currently represented on the ALEC corporate board by its U.S. Government Affairs Manager Cynthia Bergman. Records of Exxon Mobil's involvement in ALEC's governing corporate board go back to at least 2002.⁷

Exxon Mobil has also long funded and been a voting member of ALEC's Energy, Environment, and Agriculture Task Force, the committee of legislators and lobbyists responsible for the majority of ALEC's climate denial resolutions and projects. Records additionally show that Mobil chaired the committee in 1995, when it was known as the Energy, Environment, and Natural Resources Task Force.⁸

Exxon Mobil's funding of ALEC and leadership role within ALEC suggests that the company may be working behind-the-scenes to oppose policies that it tells the public and its shareholders that it supports—namely, the science behind climate change and policies aimed at addressing it, such as regulation of carbon emissions or a carbon tax.

Moreover, the company has directly funded ALEC's work on climate change, and at times has sought to conceal this work from shareholders. In 2005, for example, Exxon Mobil gave ALEC a total of \$241,500 from its corporate and foundation arms. In its corporate "Worldwide Giving Report" published for shareholders, Exxon listed an \$80,000 grant for an "Energy Sustainability Project" and \$71,500 for "General Operating Support." From the 2005 Exxon Worldwide Giving Report:

⁷ See AMERICAN LEGISLATIVE EXCHANGE COUNCIL, IRS FORM 990 23 (2002), available at http://www.alecexposed.org/w/images/2/29/2002_ALEC_990.pdf (listing Walt Buchholz, Exxon Mobil's Government Relations & Issues Advisor, as a "P E Director").

⁸ AMERICAN LEGISLATIVE EXCHANGE COUNCIL, LEGISLATIVE BRIEFINGS 5 (1995), *available at* http://www.alecexposed.org/w/images/9/9e/Alec-staff-and-board-1995.pdf.

American Legislative Exchange Council, Washington, D.C.

Annual Conference*
Energy Sustainability Project
General Operating Support
Subtotal

90,000 80,000 71,500 **241,500**

Yet in documents submitted to the IRS from the Exxon Mobil Foundation, Exxon described the \$80,000 grant more specifically as "Energy Sustainability Project (Climate Change)" and also described a \$21,500 grant earmarked for "Climate Change Environmental Outreach." From the Exxon Mobil Foundation 2005 Form 990:

ExxonMobil Foundation
Schedule of 2005 Appropriations and Payments - by Program Area
December 31, 2005

Payee Organization	Tax Status	Beginning Balance	New Allocations	Amended	Amount Paid	Ending Balance
2005						
American Legislative Exchange Council	501c(3)	\$0.00	\$80,000.00	\$0.00	\$80,000.00	\$0.00
1129 20th Street, NW, Suite 500 Washington, DC 20036						
Energy Sustainability Project (Climate Change)						
\$80,000.00						
2005						
American Legislative Exchange Council	501c(3)	\$0.00	\$20,000.00	\$0.00	\$20,000.00	\$0.00
1129 20th Street, NW, Suite 500						
Washington, DC 20036						
Project Support \$20,000.00						
2005						
American Legislative Exchange Council	501c(3)	\$0.00	\$21,500.00	\$0.00	\$21,500.00	\$0.00
1129 20th Street, NW, Suite 500						
Washington, DC 20036						
Climate Change Environmental Outreach						
\$21,500.00						
2005						

As described in more detail below, that same year, ALEC issued a publication titled "10 Myths About Global Warming," ALEC's director stated in an op-ed that "the science was uncertain" around global warming, and ALEC's website suggested that concern about climate change was driven by "junk science." ALEC issued no publications that year or in nearby years supporting efforts to address climate change.

ALEC Has Been Described as a Component of the Exxon-Backed Plan to Promote Climate Change Doubt

The role of ALEC in peddling Exxon-funded climate denial is evidenced by a 1998 document called the "Global Climate Communications Action Plan," which was developed by Exxon and

other fossil fuel interests to reframe climate science as "uncertain" following the December 1997 Kyoto Protocol to reduce greenhouse gas emissions.⁹

The plan notes that economic arguments about the impact of the Kyoto Protocol had failed to derail the treaty or undermine its public support, and that "those who oppose the treaty have done little to build a case against precipitous action on climate change based on the scientific uncertainty."

"Upon this tableau, the Global Climate Science Communications Team (GCSCT) developed an action plan to inform the American public that science does not support the precipitous actions Kyoto would dictate, thereby providing a climate for the right policy decisions to be made," the plan states.

Exxon was part of the "Global Climate Science Communications Team" that developed this plan to mislead the public about climate science, despite the company having identified the impact of carbon emissions on climate change more than twenty years earlier.

ALEC was described as one of five "potential fund allocators" for implementing the plan, along with the Committee for a Constructive Tomorrow (CFACT) and the Competitive Enterprise Institute, both of which continue to regularly participate in ALEC meetings. It is not known how much money Exxon or other companies provided to ALEC or any other group as part of this climate denial plan.

In 1998, the same year that the Exxon-backed "Global Climate Communications Action Plan" was developed with ALEC as a "potential fund allocator," ALEC adopted at least four bills and resolutions for state legislators aimed at opposing Kyoto, claiming there is "scientific uncertainty" around the causes of climate change, and otherwise undermining greenhouse gas regulation. Those bills include:

⁹ See EXXON CORPORATION ET AL., GLOBAL CLIMATE COMMUNICATIONS ACTION PLAN (April 3, 1998) (draft) (obtained by the Climate Investigations Center), available at https://www.documentcloud.org/documents/784572-api-global-climate-science-communications-plan.html#document/p8/a147247.

- "State Responses to Kyoto Climate Change Protocol" 10
- "Ozone Attainment State Implementation Plan Act" ¹¹
- "Resolution on Environmental Justice" 12
- "Interstate Research Commission Act on Climatic Change Act." ¹³

The "State Responses to Kyoto Climate Change Protocol" expressed opposition to the treaty and prohibited a state from adopting regulations on greenhouse gas prior to the treaty's ratification by the U.S. Congress.¹⁴

The "Interstate Research Commission Act on Climatic Change Act" declared that human activity "may lead to deleterious, neutral, or possibly beneficial climatic changes" and that "a great deal of scientific uncertainty surrounds the nature of these prospective changes." (ALEC reapproved the "Interstate Research Commission Act on Climatic Change Act" in 2013, the same year that Exxon Mobil disclosed that it gave \$49,000 to the organization, and well after Exxon Mobil had stated publicly that it acknowledged the science around climate change.)

In the following years, with the Kyoto treaty stalled in Congress and ultimately rejected by the George W. Bush administration, states increasingly began taking steps to regulate carbon emissions. ALEC framed these state regulatory efforts as "Son of Kyoto" bills and continued to deny that carbon emissions caused climate change. Ultimately, ALEC urged the repeal of Regional Greenhouse Gas Initiatives that states adopted to help address climate changes.

¹⁰ ALECExposed, State Reponses to Kyoto Climate Change Protocol Exposed,

http://www.alecexposed.org/wiki/State_Responses_to_Kyoto_Climate_Change_Protocol_Exposed (last visited Nov. 13, 2015).

¹¹ ALECExposed, Ozone Attainment State Implementation Plan Act Exposed,

http://www.alecexposed.org/wiki/Ozone_Attainment_State_Implementation_Plan_Act_Exposed (last visited Nov. 13, 2015).

¹² ALECExposed, Resolution on Environmental Justice Exposed,

http://www.alecexposed.org/wiki/Resolution_on_Environmental_Justice_Exposed (last visited Nov. 13, 2015).

¹³ ALECExposed, Interstate Research Commission on Climatic Change Act Exposed,

http://www.alecexposed.org/wiki/Interstate_Research_Commission_on_Climatic_Change_Act_Exposed (last visited Nov. 13, 2015).

¹⁴ See supra note 10.

¹⁵ See supra note 13.

In 2003, the *New York Times* reported:

The rising level of state activity is causing concern among those who oppose carbon dioxide regulation.

"I believe the states are being used to force a federal mandate," said Sandy Liddy Bourne, who does research on global warming for the American Legislative Exchange Council, a group contending that carbon dioxide should not be regulated because it is not a pollutant. "Rarely do you see so many bills in one subject area introduced across the country."

The council started tracking state legislation, which they call son-of-Kyoto bills, weekly after they noticed a significant rise in greenhouse-gas-related legislation two years ago. This year, the council says, 24 states have introduced 90 bills that would build frameworks for regulating carbon dioxide. Sixty-six such bills were introduced in all of 2001 and 2002.¹⁶

The following year, ALEC released a report titled "Sons of Kyoto: Greenhouse Gas Regulation in the States," claiming the Kyoto treaty did "not have a scientific standing nor did it reflect economic realities" and warning about the spread of state climate regulation:¹⁷

"Regardless of the scientific uncertainty and the economic costs, there is an orchestrated movement to force the federal government and the American public to implement Kyoto-like regulation and develop a cap and trade carbon emission system," the report stated.

Based on public disclosures, the peak years of Exxon Mobil's funding for ALEC came during this same period, 2003 to 2005, at the height of state efforts to regulate carbon emissions. During those years Exxon Mobil earmarked \$428,500 in funding to ALEC for work on "climate change."

Throughout this period ALEC promoted efforts to thwart greenhouse gas regulation at the state level, in part by claiming there was "scientific uncertainty" about the role of CO2 emissions in climate change—the same role described for ALEC a few years earlier in the Exxon-backed "Global Climate Communications Action Plan."

 $^{^{16}}$ Jennifer Lee, "The Warming is Global but the Legislating, in the U.S., Is All Local," The New York Times, Oct. 29, 2003, http://www.nytimes.com/2003/10/29/us/the-warming-is-global-but-the-legislating-in-the-us-is-all-local.html.

¹⁷ AMERICAN LEGISLATIVE EXCHANGE COUNCIL, SONS OF KYOTO: GREENHOUSE GAS REGULATION IN THE STATES (January 2004), *available at* http://www.alecexposed.org/w/images/7/7d/Sons_of_Kyoto.pdf.

Evidence of Exxon Mobil funding ALEC as it advanced climate change denial during these years include:

2003:

\$368,000 total from Exxon to ALEC, \$190,000 earmarked for "climate change." In 2003, Exxon disclosed a \$50,000 contribution to ALEC for "energy and climate change" and another contribution in the amount of \$140,000 for "global climate change." ¹⁸

ALEC held "Energy Sustainability Academy" for state legislators featuring climate deniers.

In January 2003, ALEC organized a two-day "Energy Sustainability Academy" for state legislators at the Westin Hotel in Denver, Colorado, featuring known climate deniers such as James Taylor of the Heartland Institute and Marlo Lewis and Christopher Horner, who were then with the Competitive Enterprise Institute (another group described in the "Global Climate Communications Action Plan"). ¹⁹

ALEC issues publication claiming "the science is uncertain" on climate change and warning against state CO2 regulation.

The foreword to a 2003 ALEC publication titled "Energy, Environment, and Economics" describes Kyoto as an "ill-founded international agreement" that "reflected neither scientific uncertainties nor economic reality" and warning that an "effort is underway in some states to promote legislation and regulation with Kyoto-like goals."

EXXON MOBIL CORPORATION, 2003 CONTRIBUTIONS 40 (2003), available at
 http://www.alecexposed.org/w/images/1/1e/2003-exxon-giving-report.pdf.
 AMERICAN LEGISLATIVE EXCHANGE COUNCIL, 2003 SUSTAINABILITY ACADEMY (2003), available at
 http://www.alecexposed.org/w/images/9/9a/ALEC_2003_Sustainability_Academy.pdf.

The publication repeats the mantra that "the science is uncertain" regarding the causes of climate change and provides state legislators with resources to push back on the "global warming scare" and model bills to thwart CO2 regulation and litigation.²⁰

ALEC's executive director pushed climate denial in opinion piece.

In a 2003 *Washington Times* opinion piece, ALEC's executive director stated the claim that carbon dioxide contributes to global warming was "no means agreed upon the scientific community." From the op-ed:

"The claim that carbon dioxide contributes to global warming is highly controversial, and is by no means agreed upon in the scientific community. Plenty of evidence suggests global temperature changes during the last century have stemmed from natural causes, not man-made ones. The U.S. government, even after spending \$45 billion in global warming research over the last decade, still concedes the science is inconclusive." ²¹

ALEC published a summary of greenhouse gas regulations.

In 2003, ALEC published a summary of greenhouse gas legislation that sought to regulate carbon dioxide from 2001 to 2002 legislative sessions. The tracking document included bills passed and rejected as well as agency regulations.²² ALEC has used such lists to assess where it can try to stop or repeal standards or where it can promote legislation to advance its corporate funders agenda.

ALEC declared EPA cannot regulate carbon emissions.

In 2003, ALEC issued a press release opposing a state lawsuit urging the EPA to regulate carbon dioxide, claiming, "the suit is based on inconclusive logic and faulty science." ALEC's Energy, Environment, Natural Resources and Agriculture task force director stated in a quote: "If you

²⁰ Alexandra Liddy Bourne, *Energy Sustainability in the 21st Century, in* American Legislative Exchange Council, Energy, Environment, and Economics 4 (Jan. 2003), *available at*

http://www.alecexposed.org/w/images/6/62/ALEC_Energy_Book_Split.pdf.

²¹ Duane Parde, Skewed Road Map to Kyoto, THE WASHINGTON TIMES, June 20, 2003,

http://www.alecexposed.org/w/images/0/02/Skewed_road_map_to_Kyoto_-

_The_Washington_Times_Commentary.pdf.

²² AMERICAN LEGISLATIVE EXCHANGE COUNCIL, 2003 LEGISLATION TO REGULATE GREENHOUSE GASES (2003), *available at* http://www.alecexposed.org/w/images/b/bc/ALEC_2003_Legislation_to_Regulate_Greenhouse_Gases.pdf.

begin to regulate carbon dioxide, who will prevent the government from regulating water vapor and oxygen – the two largest greenhouse gas concentrations in the atmosphere."²³

Task force heard negative presentations on economic impact of climate policies.

In 2003, ALEC's Energy, Environment, Natural Resources and Agriculture Task Force held a workshop on the "economic impact of climate change policies" and heard presentations from climate change deniers like Joe Bast of the Heartland Institute.²⁴

2004:

\$219,000 total from Exxon to ALEC, \$137,000 earmarked for "climate change."

In 2004, Exxon disclosed a \$62,000 contribution to ALEC for "energy and climate change" and another contribution in the amount of \$75,000 for "climate change." ²⁵

ALEC "Sons of Kyoto" report claimed Kyoto Protocol did not have scientific standing.

In a 2004 publication titled "Sons of Kyoto: Greenhouse Gas Regulation in the States," ALEC claimed the Kyoto Protocol to limit greenhouse gas emissions "was conceived under the auspices of concern about increased temperatures due to global warming" but "did not have a scientific standing nor did it reflect economic realities." ²⁶

2005:

\$241,500 from Exxon to ALEC, \$101,500 earmarked for "climate change."

²³ Press Release, American Legislative Exchange Council, Attorneys General in Three States Sue EPA in Attempt to Regulate CO2 (June 5, 2003), *available at*

http://www.alecexposed.org/w/images/e/ea/ALEC_Press_Release_Attorneys_General.pdf.

²⁴ American Legislative Exchange Council, "Natural Resources Task Force," *available at*

http://www.alecexposed.org/w/images/e/e8/ALEC_Natural_Resources_Taskforce.pdf.

²⁵ EXXON MOBIL CORPORATION, 2004 WORLDWIDE CONTRIBUTIONS AND COMMUNITY INVESTMENTS 2 (2004), *available at* http://www.alecexposed.org/w/images/0/00/2004-exxon-giving-report.pdf.

²⁶ AMERICAN LEGISLATIVE EXCHANGE COUNCIL, SONS OF KYOTO: GREENHOUSE GAS REGULATION IN THE STATES (January 2004), *available at* http://www.alecexposed.org/w/images/7/7d/Sons_of_Kyoto.pdf.

In 2005, Exxon disclosed a \$80,000 contribution to ALEC for "energy sustainability project (climate change)" and a \$21,500 contribution to ALEC for "climate change environmental outreach."

ALEC publication addresses "10 myths about global warming."

In 2005, ALEC issued a publication titled "<u>Top 10 Myths About Global Warming</u>" authored by the Director of ALEC's Natural Resources Task Force, Kelli Kay. From the publication:

- MYTH 1: "Scientists have conclusively proven that human activity is causing the earth to warm"
- MYTH 2: "Earth's temperature has risen to an unnatural level over the last century
- MYTH 3: "The ice caps are melting and sea levels are rising"
- MYTH 4: "Extreme weather phenomena are increasing due to global warming"
- MYTH 5: "Global warming threatens fragile ecosystems and may cause threatened and endangered species to become extinct"
- MYTH 6: "The U.S. Government believes the theory of global warming has been proven and supports capping greenhouse gas emissions"
- MYTH 7: "Adhering to the Kyoto Protocol and other carbon dioxide reduction schemes will decrease earth's temperatures"
- MYTH 8: "Adhering to the Kyoto Protocol and other carbon dioxide reduction schemes will be relatively inexpensive"
- MYTH 9: "Multi-pollutant regulation, which includes both EPA criteria pollutants and greenhouse gases, is an inexpensive, 'no-regrets' method for improving air quality"
- MYTH 10: Renewable energy technology can immediately replace all fossil fuels". 28

ALEC's website claimed science supporting the idea of climate change was "junk science" In 2005, ALEC's website stated:

"In Our Environmental Policy: Increasingly, 'junk science' has dictated the direction in which environmental policy is headed. Current regulations, restrictions, and government intervention are so pervasive that if no action is taken to counter this trend, economic progress and prosperity face near paralysis. The danger to our economic progress that the 'precautionary principle' presents far outweighs the perceived potential dangers to our environment."²⁹

²⁷ EXXON MOBIL CORPORATION, 2005 WORLDWIDE GIVING REPORT 1 (2005), *available at* http://www.alecexposed.org/w/images/5/51/2005-exxon-giving-report.pdf.

²⁸ Kelli Kay, *Top 10 Myths About Global Warming*, AMERICAN LEGISLATIVE EXCHANGE COUNCIL 18-21 (2005), *available at* http://www.alecexposed.org/w/images/d/d9/ALEC_Climate_Myths.pdf.

²⁹ American Legislative Exchange Council, "Junk Science," *available at* http://www.alecexposed.org/w/images/4/44/Junk_Science.pdf.

These are just a few examples of the numerous ways in which ALEC has been deployed to teach climate change denial to thousands of state legislators and block political action during a period that Exxon contributed substantial funding to ALEC's "climate change" efforts.

More recent examples show that Exxon Mobil's ongoing support for ALEC has continued to undermine the company's stated policy positions.

For example, Exxon Mobil has publicly indicated that it supports a carbon tax.³⁰ However, in 2013, the ALEC "Energy, Environment and Agriculture Task Force" and the "Tax and Fiscal Policy Task Force" jointly adopted a resolution at ALEC's Annual Meeting declaring the organization "opposes all Federal and state efforts to establish a carbon tax on fuels for electricity and transportation" (see ALEC "Resolution in Opposition to a Carbon Tax" available at http://www.alec.org/model-legislation/resolution-opposition-carbon-tax/).

That same year, Exxon Mobil disclosed that it gave \$49,000 to ALEC, which included \$15,000 to sponsor the 2013 Annual Meeting and \$34,000 towards the ALEC "Energy, Environment and Agriculture Task Force" and the "Tax and Fiscal Policy Task Force." Companies that fund ALEC task forces become members of that task force and are given a vote on bills and resolutions.

In other words, the ALEC "Resolution in Opposition to a Carbon Tax" was adopted by the same ALEC task forces funded by Exxon Mobil, and at the same Annual Meeting sponsored by Exxon Mobil, even as Exxon Mobil told its shareholders and the public that it supports a carbon tax. During this same period an Exxon Mobil representative was also on the ALEC corporate board.

In 2014, Exxon Mobil disclosed that it gave \$61,500 to ALEC, which included \$25,000 to sponsor ALEC's Annual Conference, \$25,000 to join the 501(c)(4) "Jeffersonian Project," and

 $^{^{30}}$ See Coral Davenport, Large Companies Prepared to Pay Price on Carbon, New York Times, Dec. 5, 2013, http://www.nytimes.com/2013/12/05/business/energy-environment/large-companies-prepared-to-pay-price-on-carbon.html.

\$11,500 in "other contributions." At ALEC's Exxon Mobil-sponsored Annual Meeting that year, Heartland Institute President Joseph Bast led an ALEC workshop for state legislators from across the country featuring a presentation claiming that:

- "There is no scientific consensus on the human role in climate change."
- "There is no need to reduce carbon dioxide emissions and no point in attempting to do so."
- "Carbon dioxide has not caused weather to become more extreme, polar ice and sea ice to melt, or sea level rise to accelerate. These were all false alarms."
- The International Panel on Climate Change (IPCC) "is not a credible source of science or economics."
- "The likely benefits of manmade global warming exceed the likely costs."

Additionally, at that same Exxon Mobil-funded meeting, the Committee for a Constructive Tomorrow (CFACT) handed legislators a worksheet called "Climate change talking points 2014" that coached ALEC legislative members on how to talk about "manmade climate fears." CFACT was one of the other organizations listed in the 1998 Exxon-backed "Global Climate Science Communications Plan," along with ALEC.

In that worksheet, legislators were told to respond to the question "how can you deny global warming?" by stating "we inhale oxygen and exhale CO2" and that "higher atmospheric CO2 levels cannot possibly supplant the numerous complex and interconnected forces that have always determined Earth's climate."

These arguments were echoed at ALEC's December 2014 meeting, when Craig Idso of the Center for the Study of Carbon Dioxide and Global Change led a workshop telling state legislators that "CO2 is not a pollutant. It is a benefit. It is the very elixir of life."

Notably, there is no indication of any workshop ever held by ALEC where Exxon promoted the reality that burning carbon is contributing to climate change. Instead, Exxon funding for ALEC has coincided with the advance of the climate change denial agenda to powerful legislators

across the country, arming them with disinformation from the ALEC national meetings Exxon has underwritten.

ALEC has also aimed to promote climate change denial among school children. ALEC's "Environmental Literacy Improvement Act" requires that all environmental education programs and activities "provide a range of perspectives presented in a balanced manner" and "provide instruction in critical thinking so that students will be able to fairly and objectively evaluate scientific and economic controversies."

Yet because there is no serious scientific controversy about climate change, mandating a "balanced" approach to educating children about the issue has the effect of misleading students about the extent and reality of the problem. ALEC adopted this bill in 2000, the same year that Exxon Mobil reported giving \$70,000 to ALEC and the Exxon Mobil Education Foundation reported giving \$10,000. ALEC re-approved the bill in 2013, the same year that Exxon Mobil disclosed that it gave \$49,000 to the organization.

ALEC has been an aggressive opponent of any legislative or regulatory efforts to address climate change, whether reducing carbon pollution or increasing renewable energy. Several model bills oppose EPA efforts to reduce carbon pollution. These attacks on EPA include:

- Undermining EPA action to limit carbon pollution from power plants.
- Questioning EPA's authority to reduce carbon pollution, despite the Supreme Court's many decisions to uphold EPA authority.
- Castigating EPA's efforts to improve air quality and reduce carbon pollution as a "regulatory train wreck."

The full extent of Exxon's funding of ALEC is not known. What is known is that Exxon's continued funding of ALEC and its leadership role within the organization has made ALEC's decades of climate change denial possible.

We encourage you to seek answers to the following questions:

- What were the "deliverables" for Exxon Mobil's funding for ALEC?

- Who reviewed the deliverables on grants to ALEC?

- Does Exxon Mobil have any memoranda of understanding, contracts, grant agreements, or other communications with ALEC about legislation, resolutions, publications, and workshops to help lawmakers embrace climate change denial and attack, stop, or undermine efforts to address the climate changes underway?

- Why has Exxon Mobil continued to fund ALEC as the organization promoted climate change denial?

- Why has Exxon Mobil continued to lead ALEC through membership on its corporate Board as the organization worked to thwart policies aimed at addressing climate change?

- Why has Exxon Mobil funded and participated in the same ALEC task forces that promote climate change denial and undermine climate action?

Please do not hesitate to contact CMD if you need additional information about these matters.

Thank you for your consideration of our views and thank you for opening an investigation of Exxon Mobil about its public and private representations and actions regarding climate change.

Sincerely,

Lisa Graves

Executive Director

Brendan Fischer

General Counsel

Nick Surgey

Research Director