The Climate Accountability Scorecard

Ranking Major Fossil Fuel Companies on Climate Deception, Disclosure, and Action

Union of Concerned Scientists

The Climate Accountability Scorecard

Ranking Major Fossil Fuel Companies on Climate Deception, Disclosure, and Action

Kathy Mulvey
Jayne Piepenburg
Gretchen Goldman
Peter C. Frumhoff

October 2016

Union of Concerned Scientists

AUTHORS

Kathy Mulvey is the climate accountability campaign manager for the UCS Climate and Energy program. Kathy has a quarter-century of experience in strategic corporate research, policy analysis, and campaigning and advocacy on a range of corporate accountability, environmental, and public health issues.

Jayne Piepenburg is the project research and outreach associate with UCS. She has a master's degree from Indiana University School of Public and Environmental Affairs, with a focus on environmental policy and natural resource management and a B.S. in Environmental Science from Purdue University.

Gretchen Goldman is the lead analyst for the Center for Science and Democracy at UCS. Gretchen researches how science is used and misused in public policy. She holds a Ph.D. and M.S. in Environmental Engineering from the Georgia Institute of Technology and a B.S. in Atmospheric Science from Cornell University.

Peter C. Frumhoff is the director of science and policy and chief scientist of the climate campaign at UCS. He ensures that UCS brings robust science to bear on our efforts to strengthen public policies. A lead author of multiple reports of the Intergovernmental Panel on Climate Change, he has taught at Stanford University, Tufts University, Harvard University and the University of Maryland. He holds a Ph.D. in ecology and an M.A. in zoology from the University of California, Davis, and a B.A. in psychology from the University of California, San Diego.

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with citizens across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future. More information about UCS and the Climate and Energy Program is available on the UCS website: *www.ucsusa.org*.

This report and an accompanying appendix containing the complete dossiers are available online (in PDF format) at *www.ucsusa.org/ClimateScorecard*

Designed by: Tyler Kemp-Benedict
Cover image: © Audrey Eyring/UCS
Printed on recycled paper

CONTRIBUTORS

Asha Sharma is a project assistant with the UCS Climate and Energy program. She conducts research and engages with consumers, scientists, and corporations to ensure corporate action is taken to reduce emissions and mitigate climate change.

Jean Sideris is the deputy director of campaigns for the UCS Climate and Energy program. She has more than a decade of experience connecting scientists and experts with the public and policy makers to educate them on global warming science, impacts, and solutions and to advocate for strong action to reduce emissions.

[CONTENTS]

[FIGURES, TABLES, AND BOXES]

FIGURES

TABLES

BOXES

[ACKNOWLEDGMENTS]

The report was made possible by the support of the Fresh Sound Foundation, Wallace Global Fund, The Grantham Foundation for the Protection for the Environment, The Energy Foundation, KR Foundation, Center for International Environmental Law, and UCS members.

We would like to thank the following individuals for their thoughtful contributions and comments on the methodology and analysis: Naomi Ages, Greenpeace USA; Emilia Aguinaga, Gulf Coast Center for Law and Policy; Dave Anderson, UCS; Sara Blackwell, International Corporate Accountability Roundtable; Lukas Brochard, CDP; Tim Brennan, Unitarian Universalist Association; Nancy Cole, UCS; Sam Cossar-Gilbert; Kert Davies, Climate Investigations Center; Michael K. Dorsey, Sierra Club National Board; Bruce Freed, Center for Political Accountability; Richard Heede, Climate Accountability Institute; Christina Herman, Interfaith Center on Corporate Responsibility; Alyssa Johl; Donald A. Kirshbaum, Connecticut Retirement Plans and Trust Funds; Stephen Kretzmann, Oil Change International; Esben Madsen, CDP; Alberto Serna Martin, Sustainalytics; Jeremy Martin, UCS; Richard Millar, Oxford Martin Net Zero Carbon Investment Initiative, Oxford Martin School, University of Oxford; Deborah Moore, UCS; Carroll Muffett, Center for International Environmental Law; Thomas O'Neill, Influence Map; Colette Pichon Battle, Gulf Coast Center for Law and Policy; Katharina Rall, Human Rights Watch; Larisa Ruoff, Sustainability Group at Loring, Wolcott & Coolidge; Rob Schuwerk, Carbon Tracker; Tyson Slocum, Public Citizen, Inc.; Tim Smith, Walden Asset Management; Nanya Springer, Center for Political Accountability; Irene Stevenson; Stephen Viederman, Network for Sustainable Financial Markets. For their advice and support, we thank Angela Anderson, Ken Kimmell, Seth Shulman, and David Wright.

We thank Karin Matchett for her editorial support and Tyler Kemp-Benedict for the report design. Thanks to Cynthia DeRocco, Audrey Eyring, and Bryan Wadsworth for their dedication to the production of the report.

The opinions expressed herein do not necessarily reflect those of the organizations that funded the work or the individuals who reviewed it. The Union of Concerned Scientists bears sole responsibility for the report's content.

The major fossil fuel producers bear a particular responsibility for climate change.

Not only do their products cause a buildup of heat-trapping gases in the atmosphere, but many of these companies have also worked systematically to block laws or regulations that would reduce emissions of heat-trapping gases, in some cases by spreading disinformation about climate science (Mulvey et al. 2015). Furthermore, these companies continue to encourage, plan for, and invest in expanded and unabated fossil fuel use—despite fully understanding the adverse climate impacts of their products and having the technical and financial capacity to facilitate the transition to low-carbon energy (Frumhoff, Heede, and Oreskes 2015).

All companies operate with a social license, and companies that fail to act responsibly can lose the public's trust. The experience of the tobacco and asbestos industries suggests that heightened societal awareness and growing public pressure will be necessary to ensure that the major fossil fuel producers accept their climate responsibilities (Oreskes and Conway 2011). The international climate agreement reached in Paris in December 2015 is creating additional pressure on these companies to reduce their emissions in line with the goal of keeping the increase in the global average temperature to well below 2°C above pre-industrial levels. This scorecard is based on extensive research into companies' climate-related communications, positions, and actions, focusing on the period from January 2015 through May 2016. It also provides a detailed look at the main areas where eight major fossil fuel companies must take immediate action to prevent the worst effects of global climate change.

The Companies Studied

According to a recent study, just 90 companies have produced and marketed the fossil fuels and cement responsible for almost two-thirds of the world's industrial carbon emissions over the past two and a half centuries. Fifty are investor-owned coal, oil, and natural gas companies (Heede 2014), of which we have focused on eight.

These eight companies' products are responsible for nearly 15 percent of industrial carbon emissions since 1850 (Heede 2014). They are

- the five leading investor-owned oil and gas companies ranked in terms of cumulative emissions (**Chevron**, **ExxonMobil**, **BP**, **Royal Dutch Shell**, and **ConocoPhillips**); and
- the three leading investor-owned US-based coal companies ranked in terms of cumulative emissions (**Peabody Energy**, **CONSOL Energy**,[1] and **Arch Coal**). Peabody Energy and Arch Coal, though currently under Chapter 11 bankruptcy protection, are included in this analysis because of their significant contribution to historical emissions, because they continue to produce fossil fuels, and because they continue to fund prominent individuals

1 *As of July 2016, CONSOL Energy shed its last West Virginia coal mines, pursuing its increased focus on natural gas (Levesque 2016). In this report the company is classified in the coal sector based on its cumulative historical emissions and its operations during the study period.*

Sea level rise pushes inland, causing the Potomac river to reach a park bench on a sunny day.

Mr.TinDC/Creative Commons (Flickr)

and groups that deny climate change or spread disinformation about climate change and climate science.[2]

We assessed each company's climate-related positions and actions for 30 metrics, in all but a few cases looking at the period from January 2015 through May 2016, including

- accuracy and consistency of public statements on climate science;
- affiliation with trade associations and industry groups that spread disinformation on climate science and/or attempt to block climate action;
- positions on US federal climate policies;
- disclosure of carbon emissions and plans to reduce them;
- disclosure of regulatory, physical, and other risks of climate change to the company; and
- company-specific commitments and targets to reduce carbon emissions resulting from company operations and the use of their fossil fuel products.

We then placed each company in one of five bands for the areas scored:

- "**Advanced**" means the company is demonstrating best practices.
- "**Good**" means the company is meeting emerging societal expectations.
- "**Fair**" means the company's performance is neither positive nor negative.
- "**Poor**" means the company is falling short of emerging societal expectations.
- "**Egregious**" means the company is acting very irresponsibly.

In evaluating major fossil fuel companies' positions and actions on climate change, the Union of Concerned Scientists (UCS) aims to accelerate the transition to low-carbon energy by equipping the media, investors, policy makers, and consumers with tools to assess companies' current performance and urge specific, immediate action. This scorecard provides analysis to inform an assessment of whether these fossil fuel companies are taking appropriate responsibility for their products' adverse climate impacts and outlines concrete next steps needed by each company.

Results

Our analysis found that, on the whole, all eight companies can and must do more to distance themselves from the spread of climate disinformation and to engage productively in policy discussions. However, some companies have made more progress than others.

- **Renouncing disinformation on climate science and policy** scores ranged from fair to egregious:
  - All companies except BP and Shell scored low on the metric for "accuracy and consistency of public statements on climate science and the consequent need for swift and deep reductions in emissions from the burning of fossil fuels."
  - All eight companies maintain membership—and in many cases have leadership positions—in trade associations and other industry-affiliated groups that spread disinformation about climate science and/or seek to block climate action.
- **Planning for a world free from carbon pollution** scores ranged from fair to egregious:
  - All three coal companies (Arch Coal, CONSOL Energy, and Peabody Energy) received the score of egregious—and only Shell scored fair—in this area.
  - None of the eight companies studied has laid out a company-wide pathway or plan to align its business model with the international climate agreement reached in Paris in 2015.
- **Supporting fair and effective climate policies** scores ranged from good to poor:
  - BP and ConocoPhillips received a score of "good" in this area—the latter, despite strong disclosure, policies, and oversight related to political spending in general, scored poorly on the climate policies we examined.
  - During the study period some of the companies made general statements about the need to reduce

All companies in our analysis must do more to distance themselves from the spread of climate disinformation.

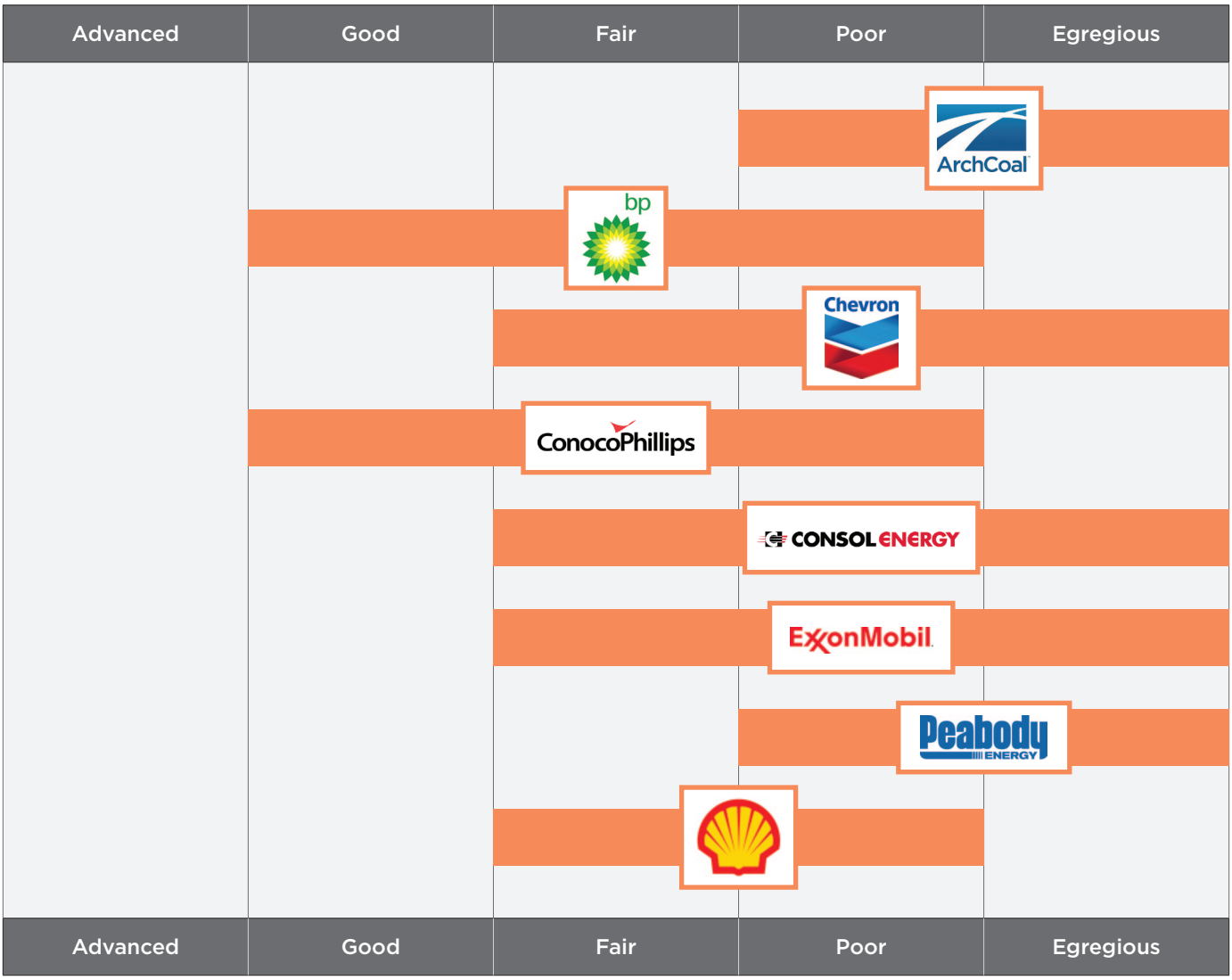
2 *Arch Coal reportedly expects to emerge from bankruptcy in October 2016.*

emissions of heat-trapping gases but fell short of expressing support for specific US policies, such as the Environmental Protection Agency's (EPA) Clean Power Plan or the EPA methane rule.

  - Several companies were silent on or actively opposed any state or national actions.

- **Fully disclosing climate risks** had the least differentiation, with four companies scoring fair and four companies scoring poor:
  - Only ConocoPhillips and ExxonMobil have acknowledged climate change as a contributor to the physical risks faced by their businesses.
  - All of the companies studied can and should do better to fulfill existing climate risk disclosure requirements, and they should begin to prepare for enhanced disclosure regimes in the future.

FIGURE 1. Company Area-Level Scores Ranged from Good to Egregious



No company scored better than its peers in all areas, and several were relative leaders in some areas and relative laggards in others. Each company's scores ranged—some quite significantly—across the four areas.

TABLE 1. Climate Accountability Scorecard

Climate Responsibility Metrics	Arch Coal	BP	Chevron	Conoco-Phillips	CONSOL Energy	Exxon Mobil	Peabody Energy	Royal Dutch Shell
Renouncing Disinformation on Climate Science and Policy								
Accuracy and consistency of public statements on climate science and the consequent need for swift and deep reductions in emissions from the burning of fossil fuels	0	1	-1	0	-1	-2	0	2
Affiliations with trade associations and other industry groups that spread climate science disinformation and/or block climate action	-3	-5	-7	-6	-3	-9	-5	-4
Policy, governance systems, and oversight mechanisms to prevent disinformation	-1	-1	-1	-1	-1	-1	-1	-1
Support for climate-related shareholder resolutions	0	1	-2	-2	-1	-2	0	1
	Poor	Poor	Egregious	Poor	Poor	Egregious	Poor	Fair
Planning for a World Free from Carbon Pollution								
Support for the Paris Climate Agreement	-1	0	-1	-1	-1	-1	-1	0
Company-wide commitments and targets to reduce greenhouse gas emissions	-2	-2	-1	-1	-2	-2	-2	-1
Use of an internal price on carbon in investment decisions	-2	0	-1	-1	-2	-1	-2	0
Commitment and mechanism to measure and reduce carbon intensity of supply chain	-1	0	-1	-1	-1	-1	-1	0
Disclosure of investments in low-carbon technology research and development	-1	0	-1	-1	-1	-1	-1	0
Disclosure of greenhouse gas emissions reduction plans	-1	-1	-1	-1	-1	-1	-1	-1
Disclosure of how company manages greenhouse gas emissions and associated risks	-1	-1	0	0	0	0	-1	0
Disclosure of greenhouse gas emissions	-2	0	0	1	0	0	-1	1
	Egregious	Poor	Poor	Poor	Egregious	Poor	Egregious	Fair

What We *Should* Expect from Fossil Fuel Companies

Governments, industry, and individuals all bear some responsibility for climate change. But major fossil fuel companies—including (ranked in terms of cumulative emissions) Chevron, ExxonMobil, BP, Royal Dutch Shell, ConocoPhillips, Peabody Energy, CONSOL Energy, and Arch Coal—are substantial contributors to the problem and, as such, must take responsibility for their climate-related decisions, positions, and actions.

They could have taken a different path. Recent revelations make it clear that the petroleum industry was advised as early as 1968 about potentially catastrophic risks to the global climate from burning fossil fuels (CIEL 2016). Scientists

TABLE 1. Climate Accountability Scorecard (CONTINUED)

Climate Responsibility Metrics	Arch Coal	BP	Chevron	Conoco-Phillips	CONSOL Energy	Exxon Mobil	Peabody Energy	Royal Dutch Shell
Supporting Fair and Effective Climate Policies								
CPA-Zicklin Index of Corporate Political Disclosure and Accountability: Disclosure	-2	0	0	1	-2	-1	1	0
CPA-Zicklin Index of Corporate Political Disclosure and Accountability: Policy	-2	2	2	2	0	2	0	2
CPA-Zicklin Index of Corporate Political Disclosure and Accountability: Oversight	-2	-1	1	2	0	0	0	-1
Engagement with Congress on federal climate policies or legislation	0	0	0	0	0	0	0	0
Consistent support for US policy action to reduce emissions	-1	0	-1	-1	-1	0	-2	0
Engagement on the EPA Clean Power Plan	-1	0	0	0	-1	-1	-2	0
Engagement on the EPA methane rule	0	1	-1	-1	-1	0	0	0
Company influence through international or national business alliances or initiatives that are supportive of specific climate policies	0	1	0	0	0	0	0	1
	Poor	**Good**	**Fair**	**Good**	**Poor**	**Fair**	**Poor**	**Fair**
Fully Disclosing Climate Risks								
Disclosure of regulatory risks	1	1	1	1	1	-1	0	-1
Disclosure of physical risks	-1	-1	-1	0	-1	0	-2	-1
Disclosure of market and other indirect risks and opportunities	-1	0	0	0	0	0	-1	0
Disclosure of corporate governance on climate-related risks by board and senior management	-2	-2	-2	-2	-2	-2	-2	-1
	Poor	**Fair**	**Fair**	**Fair**	**Fair**	**Poor**	**Poor**	**Poor**

To review detailed information on each company's scores, including the resources we examined to calculate them, visit www.ucsusa.org/ClimateScorecard.

employed by ExxonMobil were working to understand the role of carbon emissions on the climate during the 1970s, and the American Petroleum Institute (API) had a task force from 1979 to 1983 to monitor and share climate research among the nation's largest oil companies (Banerjee 2015). More than half of all industrial carbon emissions have been released into the atmosphere since 1988, *after* major fossil fuel companies un-

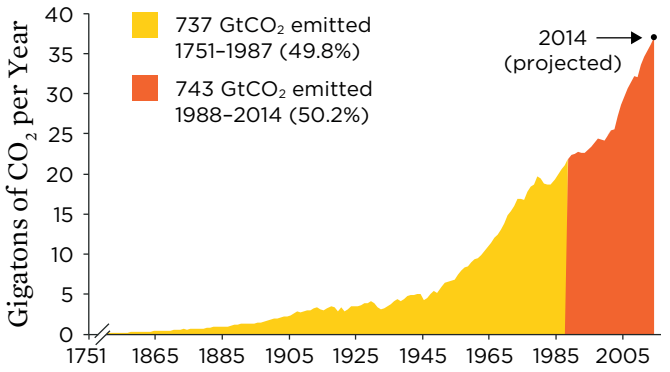
All eight companies should disclose more detail about climate risks to their operations.

equivocally should have known about the risks of their products (see Figure 2) (Frumhoff, Heede, and Oreskes 2015).

UCS has developed a set of standards for fossil fuel producers that choose to chart a new course and act responsibly on climate change. To meet these standards and retain the public trust and social legitimacy necessary to do business, a fossil fuel producer must accept its role in contributing to the problem and must contribute to solutions, by taking action in five broad areas:

- **Renouncing disinformation.** Stop all corporate support for disinformation on climate science and policy, including affiliation with or funding of organizations involved in spreading disinformation.
- **Planning for a world free from carbon pollution.** Align the company's business model with a carbon-constrained world consistent with the goal of keeping warming well below a 2°C increase above pre-industrial levels, as agreed by world leaders.
- **Supporting fair and effective climate policies.** Consistently and actively advocate fair and effective policies to reduce heat-trapping emissions at the subnational, national, and international levels.
- **Fully disclosing climate risks.** Fully disclose financial and physical risks of climate change to the company's business, including its infrastructure and reserve assets.
- **Paying its share of climate costs.** Agree to pay the company's share of the costs of climate-related damages and climate change adaptation. This report does not assess company performance in this area, as no fossil fuel company has even begun to pay its share of the costs of climate damages and adaptation.

FIGURE 2. Half of Industrial Carbon Emissions Have Been Released Since 1988



Though the Industrial Revolution began more than 250 years ago, more than half of all industrial carbon emissions have been released since 1988—after major fossil fuel companies knew about the harm their products were causing.

SOURCES: FRUMHOFF ET AL. 2015 BASED ON LE QUÉRÉ ET AL. 2014; BODEN, MARLAND, AND ANDERS 2013.

As substantial contributors to climate change, major fossil fuel companies must take responsibility for their actions.

Methodology and Scope

The research team developed 30 specific indicators and criteria in four broad areas against which to measure fossil fuel companies' performance and progress in meeting these expectations for responsible action on climate change. In order to assess current company positions and actions on climate change and provide a benchmark against which to measure their progress, the research focused on the period from January 2015 through May 2016.

To aid in our assessment, we drew on existing resources such as CDP Climate Change Reporting (CDP 2016), the Science Based Targets Initiative (Science Based Targets n.d.a), the Oxford Martin Working Principles for Investment in Fossil Fuels (Allen et al. 2015), the CPA-Zicklin Index of Corporate Political Disclosure and Accountability (CPA 2015), and the *Guide for Responsible Corporate Engagement in Climate Policy* (Karbassi et al. 2013). We also consulted with a wide range of experts and peer organizations. The methodology was informed by previous UCS studies including *A Climate of Corporate Control* (Grifo et al. 2012), *Tricks of the Trade: How Companies Anonymously Influence Climate Policy Through their Business and Trade Associations* (Goldman and Carlson 2014), *Stormy Seas, Rising Risks* (Carlson, Goldman, and Dahl 2015), *The Climate Deception Dossiers* (Mulvey et al. 2015), and *Fueling a Clean Transportation Future* (Martin 2016).

Below are the four broad areas with examples of the indicators covered in each.

- **Renouncing disinformation on climate science and policy—10 indicators**, including
  - accurate and consistent public statements on climate science and the consequent need for swift and deep reductions in emissions from the burning of fossil fuels; and
  - company affiliation with specific trade associations and industry groups that spread climate disinformation on climate science and/or policy.
- **Planning for a world free from carbon pollution—eight indicators**, including
  - public support for the international climate agreement adopted in Paris in 2015; and
  - company-wide commitments and targets to reduce net emissions of heat-trapping gases from their operations and the use of their products.
- **Supporting fair and effective climate policies—eight indicators**, including
  - consistent support for US federal action to reduce carbon emissions.
- **Fully disclosing climate risks—four indicators**, including
  - disclosure of physical risks to their operations and infrastructure of climate impacts.

Scoring of most indicators is on a five-point scale: advanced (+2), good (+1), fair (0), poor (-1), egregious (-2). For some indicators, the scale ranges from good (+1) to poor (-1). For any indicator

- "**advanced**" means that the company is demonstrating best practices;
- "**good**" means that the company is meeting emerging societal expectations;
- "**fair**" means that the company's performance is neither positive nor negative;

BOX 1.

Paying for Climate Damages and Adaptation

In an essay in *Climatic Change*, Peter Frumhoff, Rick Heede, and Naomi Oreskes suggested that fossil energy producers should be expected to stop supporting disinformation on climate change; unequivocally encourage and support state, federal, and international policies consistent with keeping warming below the 2°C global temperature target; transparently report on and increase their investments in low-carbon energy technologies and carbon capture and storage; and fully disclose the financial and physical risks of climate change to their business operations.

In addition, they suggested that "we should expect fossil fuel corporations to pay for a share of the harms resulting from the use of their products, both for the damages that have already occurred and the costs of preparing to limit the damages from further, now unavoidable impacts that responsible actions by these companies could have, and should have, helped to avoid" (Frumhoff, Heede, and Oreskes 2015).

The cost of climate damages and adaptation is mounting in cities and states around the United States and across the globe. There is no question that taxpayers will be footing the bill for disaster relief, coastal protection, drought, and many other impacts of climate change. But could the companies that produced the products largely responsible for this damage be liable for some of those costs?

The responsibility of fossil energy companies is being explored in several policy and legal arenas. In the United States, the eventual resolution of investigations and potential legal action by state attorneys general and others may begin to define expectations of the fossil fuel industry's share of climate costs. Policy tools may create a pool of resources to be used to support community preparedness and adaption; carbon pricing, for example, would impose taxes or fees on the fossil fuel industry. While those fees would likely be passed on to consumers as higher prices, effective policy design can mitigate the impact of those price hikes on low-income consumers. Another approach is royalties collected by the federal government from companies extracting fossil fuels from federal lands, with about half of the sum returning to the states for distribution locally. Several towns already experiencing the effects of a changing climate, especially in the western United States, are calling for changes to the current system so that royalties are paid on the true market price of the commodity—which would increase the amount of money that communities can apply to climate adaptation costs (Finley 2015; Hayes and Stock 2015).

Internationally, there is some discussion of a "loss and damage" mechanism to create insurance pools or compensation funds to address climate harms that cannot be adapted to—such as the permanent inundation likely to submerge many small island nations. The question of whether or how corporate or government-run entities contribute to this fund will continue to be debated as part of the implementation of the international climate agreement adopted in Paris in December 2015.

None of the companies studied in this report have even begun to pay their share of the costs of climate damages and adaptation. As these costs become more clearly delineated, and companies' climate responsibilities more widely understood, society will be better poised to consider what companies' appropriate support might be and through what mechanisms it may best flow.

- "**poor**" means that the company is falling short of emerging societal expectations; and
- "**egregious**" means that the company is acting very irresponsibly.

Our assessment of the climate-related positions and actions of companies in the sample is based on publicly available information covering the study period of January 2015 through May 2016[3], including

- company annual reports, proxy statements, sustainability reports, and CDP submissions;
- company 10-K or 20-F filings with the US Securities and Exchange Commission (SEC);
- company websites and press releases;
- transcripts and recordings of corporate annual meetings;
- public statements by company executives;
- the 2015 CPA-Zicklin Index of Corporate Political Disclosure and Accountability;
- news sources; and
- third-party websites.

3 *For a few of the metrics, information from 2014 was the most recent available or was relevant to climate policies under consideration during the study period. For details, see Appendix: Methodology and Scope online at* www.ucsusa.org/ClimateScorecard.

The companies assessed were provided an opportunity to discuss with us and clarify information about their climate-related policies and actions. Our preliminary findings were sent in the form of a questionnaire to leaders at all eight companies several months in advance of the publication of this report. None of the companies completed the questionnaire. BP, CONSOL Energy, Peabody Energy, and Shell engaged in some dialogue with us regarding our questions and provided relevant source material. Arch Coal and ConocoPhillips acknowledged our request for information and provided no substantive reply. Chevron and ExxonMobil sent electronic messages confirming receipt of the questionnaire but did not respond despite the research team's several follow-up communications.

This assessment provides a baseline against which company and industry-wide progress toward the above expectations can be measured going forward. The research we have initiated could (and should) be expanded in the future, by us or others, in the following ways:

- While eight companies were chosen for inclusion in this report, this publicly available methodology could be used to assess additional fossil energy companies in the future (within the constraints of publicly available data).
- This analysis does not assess actions taken by these companies before January 2015 or after May 2016, nor does it address questions of historical or continuing responsibility for climate deception arising before 2015. Specifically, the fiduciary requirement of returning value to shareholders does not absolve corporations of other legal and ethical responsibilities relating to their products. One approach to holding corporations accountable for the harm of their products, when used as intended, is to pursue legal remedies. The attorneys general of some states are investigating whether ExxonMobil violated any laws in misleading shareholders and consumers about the realities and risks of climate change. Other states may also launch investigations into the fossil energy industry's decades-long campaign to distort and suppress climate science, to discredit and disparage scientists and the scientific evidence linking fossil fuels and global warming, and to prevent policies that would encourage the transition to low-carbon energy.
- We focus primarily on companies' actions to influence US federal climate policies. Future analyses could assess major fossil fuel producers' support for or opposition to selected state policies, policies in other countries or regions, and/or international agreements.
- We hope that this inaugural scorecard will spur heightened monitoring of companies' climate-related positions and actions by the public, investors, and policy makers, and create a demand for greater transparency. These developments would substantially improve future iterations of the scorecard and ultimately incentivize company actions that will help curb climate change.

This research by UCS focuses narrowly on the responsibilities of fossil fuel producers with respect to climate change and should not be construed to rate any company's overall corporate responsibility performance. The operations of such large corporations—most of them transnational—affect a host of issues, including human rights, worker rights, public health, and the environment in myriad ways that UCS has not examined here. In many cases, other organizations and communities in the United States and internationally are engaging with these fossil fuel producers and working to hold them accountable for negative impacts on people and the planet.

The full methodology is available online at *www.ucsusa.org/ClimateScorecard*.

Climate impacts are intensifying around the world and fossil fuel companies must be held accountable for their climate actions. They should immediately stop funding climate deception and publicly acknowledge the international climate agreement's long-term goal and its implications for the swift transition to global net-zero emissions. Left: A New York student wades through an extreme high tide in Broad Channel, NY. Center: Crews fight a wildfire in California's Stanislaus National Forest. Right: A construction worker struggles to keep cool during a heat wave.

[CHAPTER 2]

Detailed Findings

While the assessment covers 30 metrics to determine how these fossil fuel companies are performing with regard to their climate responsibilities, below we feature five metrics from our four broad areas that we believe are the most important for these companies to act on today. Assessment of all 30 metrics can be found online at *www.ucsusa.org/ClimateScorecard*.

For each of the five metrics we include a scoring table, a narrative summary of our findings with specific examples, and our recommendations for company action.

Area 1: Renouncing Disinformation on Climate Science and Policy

The science is clear. Burning fossil fuels is a primary driver of climate change, and the impacts are already being felt today—from rising seas to longer and more frequent droughts to extreme heat. Fossil fuel companies must acknowledge the scientific evidence of climate change. They must stop supporting individuals or special interest groups that distort or deny climate science, and they must distance themselves—publicly—from deceptive activities in relation to climate science and policy.

We assessed the scientific accuracy and consistency of companies' direct communications with the public about climate change, including whether they affirm the need for swift and deep reductions in emissions from the burning of fossil fuels. We looked at each company's affiliation—through membership or leadership positions—with key trade associations and industry groups that spread disinformation on climate science or misrepresent the possible effects of climate policies. We evaluated whether companies have safeguards in place to prevent their involvement in future disinformation, and whether they have supported climate-related shareholder resolutions put forward by established networks of socially responsible investors.

However, it is not sufficient for a fossil fuel company to improve the quality of its own communications on climate science and policy. These companies should publicly disclose all funding they provide to trade and industry associations, researchers, political organizations, and other groups and institutions involved in advocacy on climate change. Each fossil fuel company also must take steps to identify whether any of the groups it supports is involved in spreading disinformation and perpetuating climate denial. If so, the company should do one of the following:

1. Use its leverage to end the disinformation produced by that group and speak publicly about these efforts
2. Publicly distance itself from the group's activities, for example, by doing one or both of the following:
    a) Directing a trade association not to use company payments to fund climate disinformation or lobbying or litigation against fair and effective climate policies.
    b) Consistently and publicly stating its disagreement with the group's climate-related positions and actions.
3. Publicly sever ties with the group, if unable to influence its position on climate change

Our indicators in this area were adapted in part from consistency and transparency criteria outlined in the *Guide for Responsible Corporate Engagement in Climate Policy* by the United Nations Global Compact, the secretariat of the United Nations Framework Convention on Climate Change, and the United Nations Environment Programme, in cooperation with the World Resources Institute (Karbassi et al. 2013).

TABLE 2. Renouncing Disinformation on Climate Science and Policy

Advanced	Good	Fair	Poor	Egregious
		Royal Dutch Shell	Arch Coal	Chevron
			BP	ExxonMobil
			ConocoPhillips	
			CONSOL Energy	
			Peabody Energy	

Companies scored from "egregious" to "fair" in the area of "renouncing disinformation on climate science and policy." All eight companies can and must do more to distance themselves from the spread of climate disinformation.

TABLE 3. Accuracy and Consistency of Public Statements on Climate Science and the Consequent Need for Swift and Deep Reductions in Emissions from the Burning of Fossil Fuels

Arch Coal	BP	Chevron	Conoco-Phillips	CONSOL Energy	ExxonMobil	Peabody Energy	Royal Dutch Shell
0	1	-1	0	-1	-2	0	2
Fair	**Good**	**Poor**	**Fair**	**Poor**	**Egregious**	**Fair**	**Advanced**

All companies except BP and Shell scored low on this metric, though it's the only metric that includes the full range of scores—from "advanced" to "egregious."

We also drew on the work of InfluenceMap to assess trade association influence over climate policy.

ACCURACY AND CONSISTENCY OF PUBLIC STATEMENTS ON CLIMATE SCIENCE AND THE CONSEQUENT NEED FOR SWIFT AND DEEP REDUCTIONS IN EMISSIONS FROM THE BURNING OF FOSSIL FUELS

The social contract within which all companies operate means that, as producers of fossil fuels, these eight companies have a responsibility to be open and truthful about the inherent risks and impacts of using their products. They must take seriously the findings of climate science and acknowledge that emissions from the use of their products are driving dangerous climate change.

An "egregious" score indicates at least one example of misrepresenting climate science in a public platform during the study period. In order to receive a score of "good" in this category, a company must publicly acknowledge the scientific evidence of climate change and affirm the consequent need for swift and deep reductions in emissions from the burning of fossil fuels. The company must be consistent in its positions across platforms, such as websites and public statements by company executives. An "advanced" score is achieved when a company also highlights the urgency and importance of achieving the global net-zero CO_2 emissions necessary to keep temperature rise well below 2°C and limit risks to society and the ecosystems on which it relies.

A robust public conversation about the causes, impacts, and solutions to climate change is unnecessarily hampered by fossil fuel companies downplaying, omitting, or misrepresenting the science. Just as the tobacco companies downplayed and obscured the link between tobacco use and disease, several of these fossil fuel companies have played significant roles in prominent climate disinformation campaigns for decades (see, for example Banerjee et al. 2015; Jennings, Grandoni, and Rust 2015; Jerving et al. 2015; Lieberman and Rust 2015; Mulvey et al. 2015).

> ***Fossil fuel companies have a responsibility to be open and truthful about the risks and impacts of using their products.***

Recent revelations make it clear that the petroleum industry was advised about potentially catastrophic risks to the global climate from burning fossil fuels as early as 1968 (CIEL 2016). Scientists employed by ExxonMobil were working to understand the role of carbon emissions on the climate during the 1970s, and the API ran a task force from 1979 to 1983 to monitor and share climate research among the nation's largest oil companies. A background paper informed API members of rising carbon dioxide in the atmosphere and projected when clear effects of climate change might begin to be felt (Banerjee 2015; Oppenheim and Donn 1982). A leaked 1995 "primer on climate change science" quietly commissioned by an industry group called the Global Climate Coalition demonstrates that major fossil fuel companies were well aware of the scientific understanding of climate change even as they continued to sow doubt about the science and block climate action (Bernstein 1995). There is no excuse for industry spokespeople today to cast doubt on climate science when their own experts have understood the climate risks of burning fossil fuels for decades.

RECOMMENDATIONS FOR COMPANY ACTION

- **ExxonMobil** stands out for actively disparaging climate science in public statements. While the company makes a clear statement acknowledging climate science and the risks of climate change on its website, CEO Rex Tillerson has repeatedly misrepresented basic climate science in public statements by casting doubt on the accuracy and competency of climate models. At ExxonMobil's annual meeting in 2015, Tillerson argued that the world should wait to improve its understanding of climate science before taking action, stating, "so that's why we have always posed this question of what if everything we do, it turns out our models were really lousy and we achieved all our objectives, but it turned out the planet behaved differently because the models just weren't good enough to predict?" (ExxonMobil Corporation 2015). At the annual meeting in 2016, Tillerson repeated his assertion that climate models are not accurate (ExxonMobil Corporation 2016; MacCracken 2016).

> ***ExxonMobil should stop attempting to discredit and disparage the scientific evidence on climate change.***

Scientists routinely report the uncertainty from climate models. The largest source of uncertainty is that associated with human activities (see Figure 11-08 in Kirtman et al. 2013). ExxonMobil should stop attempting to discredit and disparage the scientific evidence on climate change by clarifying that much of the range in climate models' projections has to do with assumptions about society's energy use—including the projections about the future share of our energy needs to be filled by fossil fuels, a future share over which the company has considerable control.

- On its website **Chevron** has downplayed the need to reduce heat-trapping emissions. According to the company's policy principles for addressing climate change, "Unilateral action [to reduce emissions] by any country or jurisdiction could result in unintended consequences that could distort markets, reduce competitiveness of trade-exposed industries, and undermine intended environmental objectives" (Chevron Corporation 2016). Chevron should definitively acknowledge climate change risks by ceasing to imply that any action at the national or subnational level to reduce emissions of heat-trapping gases would be counterproductive and should not be taken.
- **CONSOL Energy** is the only company in our sample that had no discussion of climate change on its website, and we found no public statements on climate during the study period. This company should take the simple step of publicly acknowledging the scientific evidence of climate change and the role its products play in driving climate change.
- **Arch Coal**, **ConocoPhillips**, and **Peabody Energy** consistently acknowledge the scientific evidence of climate change. They should improve their public communications on climate science by affirming the need for swift and deep reductions in emissions from the burning of fossil fuels.
- **Shell's** and **BP's** scores are a positive sign that, at least in their direct public communications, a few fossil fuel companies are beginning to consistently affirm both climate science and the consequent need for swift and deep reductions in emissions from the burning of fossil fuels. BP should highlight the urgency and importance of achieving global net-zero CO_2 emissions in order to keep temperature rise well below 2°C and limit risks to society and ecosystems. And as discussed in the next section, both of these companies should ensure that the trade associations and industry groups they support do not disparage climate science or downplay the need for swift reductions in emissions.

AFFILIATIONS WITH TRADE ASSOCIATIONS AND INDUSTRY GROUPS THAT SPREAD DISINFORMATION ABOUT CLIMATE SCIENCE AND/OR SEEK TO BLOCK CLIMATE ACTION

Past research indicates that much of fossil fuel companies' affiliation with climate disinformation comes through ties to third-party groups, including trade associations, think tanks, and other nonprofits (Grifo et al. 2012). Companies can anonymously fund such groups to do their bidding in public climate discussions without facing direct accountability for their positions and actions. However, to avoid complicity in climate deception, fossil fuel companies must be transparent about their ties to such groups and cease direct funding of climate disinformation.

We included seven US industry groups and trade associations in our study because of their well-documented roles in spreading climate science disinformation and their use of disinformation in opposing recent climate policy proposals. Our selection was also affected by public availability of information about membership and leadership positions in these groups and associations: at least two of the eight companies we studied have recently been affiliated with each of these groups. A UCS report released in 2015, *The Climate Deception Dossiers*, documents the tactics of several such groups. (See Box 2, p. 14 for description of how each of these industry groups and trade associations met our criteria.) All eight of the companies in our sample maintain membership—and

TABLE 4. Affiliations with Trade Associations and Industry Groups that Spread Disinformation about Climate Science and/or Seek to Block Climate Action

	Arch Coal	BP	Chevron	Conoco-Phillips	CONSOL Energy	Exxon Mobil	Peabody Energy	Royal Dutch Shell
American Coalition for Clean Coal Electricity (ACCCE)	1	N/A	N/A	N/A	1	N/A	-1	N/A
American Legislative Exchange Council (ALEC)	-1	1	-2	1	0	-2	-2	2
American Petroleum Institute (API)	N/A	-2	-2	-2	N/A	-2	N/A	-2
National Association of Manufacturers (NAM)	-2	-2	0	-2	0	-2	0	-2
National Mining Association (NMA)	-1	N/A	N/A	N/A	-2	N/A	-1	N/A
US Chamber of Commerce (US Chamber)	0	0	-1	-2	-2	-1	-1	0
Western States Petroleum Association (WSPA)	N/A	-2	-2	-1	N/A	-2	N/A	-2
Overall Affiliations Score	**Poor**	**Poor**	**Egregious**	**Poor**	**Poor**	**Egregious**	**Poor**	**Poor**

+2 (Advanced) Company meets the criteria in "good" and in leaving, publicly distancing itself from, or never joining the association, company states explicitly that it is because the group's position on climate science is inaccurate and inconsistent with company's position

+1 (Good) Company has left or publicly distanced itself from the association; or there is clear, incontrovertible evidence that company has never been affiliated with it.

0 (Fair) Information is unavailable to determine company's affiliation with the association.

-1 (Poor) Company is a recent member of the association and has not taken any steps to distance itself from the group's climate deception.

-2 (Egregious) Company is a recent member with a leadership role, such as board membership, in the association and has not taken any steps to distance itself from the group's climate deception.

Not Applicable (N/A) Industry group or trade association is not applicable to the fossil fuel company, e.g., coal companies are not scored on oil trade associations.

All eight companies maintain membership—and in many cases have leadership positions—in trade associations and other industry-affiliated groups involved in climate disinformation. See Box 2, p. 14, for more information about the trade associations and industry groups in our analysis.

in many cases, leadership positions—in trade associations and other industry-affiliated groups that spread disinformation about climate science and/or seek to block climate action.

Some companies have taken initial steps to distance themselves from deception on climate science and policy. BP and Shell left the American Legislative Exchange Council (ALEC) in 2015, with Shell citing the inconsistency between ALEC's position on climate change and its own as the rationale for its departure. In response to a question at BP's 2016 annual meeting about the misleading tactics of the Western States Petroleum Association (WSPA) in California, CEO Bob Dudley said, "of course we did not support that particular campaign" (Rouse 2016).

Trade associations provide companies with a number of important services beyond climate policy lobbying, including, engaging policy makers and the public on behalf of member companies through lobbying, advertising, publishing, education, and a number of other means. Many groups also set industry standards and provide other non-political services. However, if a company's position on climate science and policy differs from that of a given trade association, the company must at a minimum publicly make that difference known. If it is a leader in such an organization, it can and should press for changing the association's positions and actions. Companies should also consider whether other trade or industry groups can provide them with the same services without engaging in disinformation on climate change.

RECOMMENDATIONS FOR COMPANY ACTION

All eight companies should publicly disclose all payments to politically active trade associations and other relevant organizations and, at a minimum, disclose the portion of those payments used for political purposes.

BOX 2.

Trade Associations and Industry Groups that Spread Climate Disinformation

The **American Coalition for Clean Coal Electricity** (ACCCE) is a trade group for coal and utility interests. It opposes climate action, including the Environmental Protection Agency's (EPA) efforts to limit carbon pollution. The ACCCE has argued that the many benefits of carbon emissions outweigh the risks, claiming as recently as 2014 that the benefits of increased CO_2 outweigh the costs by as much as 500 to 1 (Bezdek 2014). Controversy over the ACCCE's position on climate has contributed to a significant corporate exodus from the group. Of the three coal companies in this study, only Peabody Energy remains a member (ACCCE 2016).

The **American Legislative Exchange Council** (ALEC) is a lobbying group with diverse membership. ALEC brings together state lawmakers and companies to draft sample legislation that can be introduced in state legislatures across the country. Many of these bills have been aimed at dismantling state policies that have proven effective in reducing carbon pollution and accelerating the transition to clean energy, and at obstructing state compliance with EPA limits on carbon emissions. ALEC has engaged with state legislators in secretive meetings sponsored by fossil fuel and utility interests and has regularly given climate deniers a speaking platform at its annual meeting, as recently as 2015 (Deyette 2015). Half of the companies in our sample—Arch Coal, Chevron, ExxonMobil, and Peabody Energy—are members of ALEC, and some have sponsored conferences and serve on ALEC task forces (CMD 2016a). ConocoPhillips confirmed in 2013 that it is no longer a member of ALEC. BP and Shell left in 2015, the latter stating that ALEC's stance on climate change "is clearly inconsistent with our own" (CMD 2016b; Mufson 2015). We found no documentation that CONSOL Energy has ever been a member of ALEC.

The **American Petroleum Institute** (API) is the largest oil trade association in the United States and has a long history of communicating climate science disinformation, as exemplified by the now-notorious internal strategy memo written by an API task force in 1998—a roadmap of the fossil fuel industry's plan to deliberately cast doubt on the public's understanding of climate science. The API's online briefing on climate and energy emphasizes uncertainties in climate science (API n.d.). While the API recently formed a task force to revisit its messaging on climate change, it has long opposed taxing emissions of heat-trapping gases and sought to block limits on carbon pollution such as those in the EPA Clean Power Plan. All five oil companies in our sample maintain leadership positions at the API, including ConocoPhillips' CEO Ryan Lance as the chair of its board (API 2015; Carroll 2015).

The **National Association of Manufacturers** (NAM) is the largest manufacturing trade association in the United States. It has questioned the validity of climate science and the burning of fossil fuels as the primary source of heat-trapping emissions. NAM's comment on the EPA Clean Power Plan criticized "the failure to

To ensure that corporate funds are not used to advocate for climate policy positions that the company does not support, all of the companies in this study should instruct trade associations not to use their payments to fund climate disinformation, lobbying or litigation against fair and effective climate policies, or activities related to the election or defeat of political candidates or parties.

Additional recommendations are as follows:

- **Arch Coal** has left ACCCE (ACCCE 2016). It should also leave ALEC, publicly citing inconsistencies between the group's position on climate change and its own. It should use its leadership role within NAM to demand an end to the group's disinformation on climate science and policy, and speak publicly about these efforts. Arch Coal should also publicly distance itself from NMA's positions on climate science and policy.
- **BP** has left ALEC (CMD 2016b). It should use its leverage as a leader within API, NAM, and WSPA to demand an end to their disinformation on climate science and policy, and speak publicly about these efforts; this would translate CEO Bob Dudley's statement about not supporting WSPA's anti-climate campaign in California into meaningful action.

All eight companies should publicly disclose payments to trade associations and industry groups

disclose and quantify key uncertainties involved in the modeling" and "the failure to incorporate potential benefits associated with increased temperatures," and it has joined the federal lawsuit opposing the plan (*State of West Virginia et al. v. EPA et al.* 2016a; NAM 2014). Five of the eight companies in this study are represented on the board of directors of NAM, and for the other three companies (Chevron, CONSOL Energy, and Peabody Energy), we were unable to determine their affiliation (NAM 2016).

The **National Mining Association** (NMA) is a trade group that lobbies on behalf of mining interests in federal and state legislatures. It has a history of climate deception, including having funded a campaign to distort the science of climate change (Goldman and Rogerson 2013). It has joined the federal lawsuit opposing the EPA Clean Power Plan. All three coal companies in our sample were members of the NMA during the study period, and CONSOL Energy was represented on its board of directors (NMA 2016a; *NMA v. EPA* 2014; CONSOL Energy 2016).

The **US Chamber of Commerce** (US Chamber) is an umbrella business association that claims to represent the interests of the business community; however, few companies publicly agree with the group's controversial positions on climate change, including its refusal as recently as 2015 to acknowledge that global warming is human-caused (Goldman and Carlson 2014). The US Chamber's priorities include opposing the EPA's efforts to regulate heat-trapping emissions under the Clean Air Act and challenging the science-based finding that global warming pollution endangers public health, on which the legislation rests. Five out of eight of the companies in our sample are members of the US Chamber, with individuals from CONSOL and ConocoPhillips serving on the board of directors during the study period (ExxonMobil Corporation 2016d; Goldman 2016; US Chamber of Commerce 2016a).

The **Western States Petroleum Association** (WSPA) is the top lobbyist for the oil industry in the western United States and the oldest petroleum trade association in the country. WSPA serves as a key organizer of opposition to California's groundbreaking climate policies, including the state's low-carbon fuel standard and its AB32 plan that requires a sharp reduction in carbon emissions by 2020. WSPA made headlines in summer 2015 for spreading blatantly false statements about California's proposed limits on carbon emissions from cars and trucks. The association employed deceptive ads on more than one occasion to block the "half the oil" provisions of a major clean-energy bill enacted by California lawmakers (Siders 2015a; Siders 2015b). All five oil companies in our sample are members of WSPA, and four maintain leadership positions in the organization, with Chevron President of Global Manufacturing Gary Yesavage serving as board chair (WSPA 2016; Ballotpedia 2015).

- **Chevron** should leave ALEC, publicly citing inconsistencies between the group's position on climate change and its own. Chevron should use its leadership roles within API and WSPA to demand an end to their disinformation on climate science and policy, and speak publicly about these efforts. It should also publicly distance itself from the US Chamber of Commerce's (US Chamber's) positions on climate science and policy.
- **ConocoPhillips** has left ALEC (CMD 2016b). It should use its role as chair of API and its leverage as a leader within NAM and the US Chamber to demand an end to the groups' disinformation on climate science and policy, and speak publicly about these efforts. ConocoPhillips should also publicly distance itself from WSPA's positions on climate science and policy.
- **CONSOL Energy** has left ACCCE (ACCCE 2016). It should use its leverage as a leader within the US Chamber and the NMA[4] to demand an end to the groups' disinformation on climate science and policy, and speak publicly about these efforts.
- **ExxonMobil** should leave ALEC, publicly citing inconsistencies between the group's positions on climate change and its own. ExxonMobil should use its leadership roles within API, NAM, and WSPA to demand an end to their disinformation on climate science and policy, and speak publicly about these efforts. It should also publicly distance itself from the US Chamber's positions on climate science and policy.
- **Peabody Energy** should leave ALEC and ACCCE, publicly citing inconsistencies between the groups' positions on climate change and its own. Peabody Energy should also publicly distance itself from the positions of NMA and the US Chamber[5] on climate science and policy.
- **Shell** has left ALEC (Mufson 2015). It should use its leadership roles within API, NAM, and WSPA to demand an end to their disinformation on climate science and policy, and speak publicly about these efforts.

Area 2: Planning for a World Free from Carbon Pollution

Fossil fuel companies should take immediate action to cut emissions from their operations, for example, by ending the climate-damaging practice of flaring natural gas. They should update their business models to reflect an understanding of the risks of unabated burning of fossil fuels, as well as the importance, and the necessity, of national and international policies limiting carbon emissions. As a key component of this, fossil fuel companies should map out the pathway they plan to take in the next 20 years to ensure that society achieves a carbon pollution–free clean-energy future.

As both domestic and international actors whose products and core businesses directly and substantially contribute to global climate change, fossil energy companies must demonstrate a level of ambition similar to that shown by countries in the Paris Climate Agreement and lay out the pathway they plan to take to reduce emissions in service of its global temperature goals. Currently, many fossil fuel companies are planning on business scenarios that would result in emissions that far exceed those allowable under the international climate goals (see, for example, BP PLC 2016; ExxonMobil Corporation 2016c; Royal Dutch Shell PLC 2016b). Fossil fuel companies must explain—taking into account net emissions both resulting from their operations and from the use of their products—how they are changing their business models to become consistent with a net-zero-emissions world.

We attempted to evaluate the steps that each company has taken to (1) align its business model with a carbon-constrained future; (2) disclose long-term and short-term company-wide emissions reduction strategies and data demonstrating progress towards those goals; and (3) execute reduction plans through concrete actions, thus bolstering the resilience of company business models in a carbon-constrained world. Given that no company in our sample has yet met our criteria for the first two steps covering its business plan and disclosures, it is not currently possible to assess the third criterion on how well they are executing their plans.

Fossil fuel companies should map out the pathway they plan to take in the next 20 years toward a carbon pollution-free future.

4 *As of September 2016 (after our study period), CONSOL Energy was no longer listed as a member of NMA (NMA 2016b). According to a CONSOL Energy spokesperson, its affiliate CNX Coal Resources handles all relationships with coal trade associations (Sheppard 2016).*

5 *As of July 2016 (after our study period), Peabody Energy was represented on the board of directors of the US Chamber (US Chamber of Commerce 2016b). This leadership role increases Peabody Energy's responsibility for and leverage over the US Chamber's positions on climate science and policy.*

TABLE 5. Planning for a World Free from Carbon Pollution

Advanced	Good	Fair	Poor	Egregious
		Royal Dutch Shell	BP	Arch Coal
			Chevron	CONSOL Energy
			ConocoPhillips	Peabody Energy
			ExxonMobil	

All three coal companies (Arch Coal, CONSOL Energy, and Peabody Energy) received the score of "egregious" in "planning for a world free from carbon pollution." Among the oil and gas companies only Shell scored "fair" in this area.

TABLE 6. Public Support for the Paris Climate Agreement and Commitment to Align Business Model with its Goals

Arch Coal	BP	Chevron	Conoco-Phillips	CONSOL Energy	ExxonMobil	Peabody Energy	Royal Dutch Shell
-1	0	-1	-1	-1	-1	-1	0
Poor	**Fair**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Fair**

Among the companies in our study, only BP and Shell have publicly expressed support for the international climate agreement reached in Paris in 2015 and its global temperature goals.

© Anadolu Agency/Getty Images

History was made with the Paris Climate Agreement, when countries worldwide committed to an ambitious plan to reduce carbon emissions in order to curb climate change. However, major investor-owned fossil fuel companies currently have business plans that would result in emissions far greater than the limits set in Paris. It's time for these companies to be held accountable for their role in climate change and to take action to reduce their carbon emissions.

Metrics in this area were informed by the Science Based Targets Initiative of CDP, the United Nations Global Compact, the World Resources Institute, and the World Wildlife Federation (Science Based Targets n.d.a), as well as the Oxford Martin School's working principles for investment in fossil fuels (Allen et al. 2015).

PUBLIC SUPPORT FOR THE PARIS CLIMATE AGREEMENT AND COMMITMENT TO ALIGN BUSINESS MODEL WITH ITS GOALS

Among the companies in our study, only BP and Shell have publicly expressed support for the international climate agreement reached in Paris in 2015 and its global temperature goals. None of the eight companies studied has laid out a company-wide pathway or plan to align its business model with the new reality established in Paris—even as calls from shareholders to report on the impact of changing climate policies continue to grow markedly in number and support. While more than 170 companies have committed to set science-based targets to reduce their emissions in line with the international climate agreement, no fossil energy company has agreed to do so (Science Based Targets n.d.b).

Global companies must keep pace with global priorities. It is imperative that all companies recognize the importance of the international climate agreement and take steps to align their business models accordingly in a transparent manner. Fossil energy companies must acknowledge the global political consensus to transition to a low-carbon energy future. Shell's board chair is on the Energy Transitions Commission, a diverse group of leaders from the public, private, and social sectors that "aim[s] to accelerate change towards low-carbon energy systems that enable robust economic development and limit the rise in global temperature to well below 2 degrees Celsius" (Energy Transitions Commission 2015). BP and Shell both participate in the Oil and Gas Climate Initiative, whose website states that participating companies:

> [W]elcome and support the historic result achieved by 195 nations at the 21st Conference of the Parties (COP21). . . . The Paris Agreement, which strives to limit the global average temperature rise to well below 2°C, offers the world a clear signal that will help all actors to take actions and make investments towards a lower carbon future. The [Oil and Gas Climate Initiative] believes that this offers significant opportunity for innovation and investments in lower [heat-trapping] emission solutions. . . . Going forward, we will continue in our efforts to play our part in helping lower the current global emissions trajectory (Oil and Gas Climate Initiative 2015).

BP and Shell also directly expressed support for the international climate agreement in company reports (BP PLC 2015a; BP PLC 2015c; Royal Dutch Shell PLC 2016c). ExxonMobil has called the agreement "a step forward" (McCarron 2016), and Chevron's CEO praised it as "a good first step" (Baker 2016), but neither company has acknowledged the long-term global temperature goal. ConocoPhillips made

BOX 3.

The 2015 Paris Climate Agreement: A Global Commitment

In December 2015, the leaders of 195 nations committed to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change" (UNFCCC 2015).

The world's governments have made their initial commitments. Now the business community must do its part to stop dangerous climate change, given the large role that the commercial sector plays in carbon emissions worldwide.

More than 170 companies have committed to set science-based targets to reduce their emissions in line with climate science and the Paris agreement, and 20 have successfully developed science-based emissions reductions targets (Science Based Targets n.d.b). Yet not a single fossil energy company is among them.

Fossil energy companies can and must acknowledge both climate science and the global political consensus to transition to a low-carbon energy future. Statoil and Total S.A., two fossil fuel companies outside our sample, have taken steps in that direction in recent months.

Statoil has welcomed the international climate agreement and has published information on asset portfolio resilience to post-2035 scenarios, research and development strategies for low-carbon energy sources, investment strategies for these energy sources, public policy intervention, and strategic key performance indicators the company will use and how they are linked to executive incentives (Statoil Corporation 2016; Statoil Corporation 2015).

Total S.A. recently pledged to invest one-fifth of its assets in low-carbon business over the next 20 years (Total Corporation 2015).

> ***Only BP and Shell have publicly expressed support for the international climate agreement reached in Paris in 2015.***

affirmative statements in advance of the negotiations in Paris, but did not express support or approval after the final agreement was reached (Volcovici 2015).

Fossil fuel companies should disclose their emissions and adopt strong, viable, long-term science-based targets for bringing company-wide emissions to net zero in the service of the global temperature goal. Even companies that have expressed support for the international climate agreement have a large discrepancy between the emissions reductions goals they profess to support and their projections for the future of fossil fuel consumption and emissions, which show trajectories heading to well above 2°C.

The External Review Committee for Shell's 2015 sustainability report, for example, found that "the report does not adequately convey the urgency of this transition in light of the 2015 Paris Agreement to keep the global temperature rise well below 2°C above preindustrial levels and to pursue efforts to limit it to 1.5 °C. The [External Review Committee] encourages Shell to disclose more precisely how its strategy aligns with this global ambition and to provide more disclosure on Shell's thinking on the role of natural gas (and other fossil fuels) beyond 2050. . . . The [committee] encourages Shell to more clearly articulate short- and medium-term (up to five years) and longer-term (5 to 20 years) goals detailing a robust and comprehensive low-carbon transition strategy" (Royal Dutch Shell PLC 2016a).

ExxonMobil's External Citizenship Advisory Panel recently "encourage[d] the company to discuss more fully its continued focus primarily on oil and gas, relative to plans for moving toward lower-carbon sources of energy," noting that "many of the world's leading companies—including some in the oil and gas sector[6]—are publicly announcing science-based goals to transition their businesses toward a low-carbon economy. As investors and stakeholders increasingly call for disclosure of corporate strategic goals, we believe ExxonMobil would benefit from becoming a leader in this regard" (ExxonMobil Corporation 2016a).

6 *In fact, no fossil energy company has yet committed to adopt a science-based emissions reduction target.*

RECOMMENDATIONS FOR COMPANY ACTION

All companies in our sample should

- publicly acknowledge the international climate agreement's long-term goal and its implications for the swift transition to global net-zero emissions;
- disclose emissions resulting from their operations and the use of their products;
- set and disclose initial near-term company-wide targets to reduce emissions from their operations and the use of their products; and
- develop and publicly communicate a clear plan and timeline to deepen reductions consistent with the international climate agreement's long-term goal.

Area 3: Supporting Fair and Effective Climate Policies

The fossil fuel industry has generally opposed a wide array of policies, including cap and trade, renewable energy standards, renewable fuel standards, direct regulation of emissions, and others. It is time for the industry to identify and publicly support policies that will lead to the reduction of emissions at a scale needed to lessen the worst effects of global warming.

As producers of the fossil fuels primarily responsible for climate change, fossil fuel companies have a unique responsibility and opportunity to engage constructively in conversations about policy solutions to limit carbon emissions. When companies downplay the importance of action, make vague suggestions about policy, never find a climate policy they like or could support, or simply stay out of the conversation altogether, they avoid responsibility for the harm their product is causing and either block or slow action to address this harm. If fossil fuel companies want to evolve as energy companies, they have an additional incentive to support forward-looking climate policies.

The fossil energy industry has played a leading role in opposition to the Clean Power Plan, the first-ever nationwide limit on carbon emissions from the electric power sector, through its comments to the EPA and the public and through its participation in legal challenges, both directly and through key industry trade groups. If a fossil energy company opposes such comprehensive climate policies, intended to deliver on the US commitment to the international climate agreement, the onus is on the company to present and vigorously advocate for a specific, viable alternative policy that would result in equivalent or greater emissions reductions.

As discussed elsewhere in this report, companies must also be aware of the climate policy positions taken by the industry groups that they support, and they should leave or

TABLE 7. Supporting Fair and Effective Climate Policies

Advanced	Good	Fair	Poor	Egregious
	BP	Chevron	Arch Coal	
	ConocoPhillips	ExxonMobil	CONSOL Energy	
		Royal Dutch Shell	Peabody Energy	

Only BP and ConocoPhillips received a score of "good" in this area, which takes into consideration companies' disclosure, policies, and oversight related to political spending in general; all others scored "fair" or "poor."

TABLE 8. Consistent Support for US Policy Action to Reduce Carbon Emissions

Arch Coal	BP	Chevron	Conoco-Phillips	CONSOL Energy	ExxonMobil	Peabody Energy	Royal Dutch Shell
-1	0	-1	-1	-1	0	-2	0
Poor	**Fair**	**Poor**	**Poor**	**Poor**	**Fair**	**Egregious**	**Fair**

Only three companies publicly support at least one generic type of policy to reduce carbon emissions, and all eight fall short of expressing support for specific federal or state policies.

publicly distance themselves from industry groups that oppose climate policies without presenting viable alternatives, particularly in cases where these groups use climate science disinformation in their discussion of climate policies.

We evaluated companies' disclosure and governance of their political activity in general, as well as their support for specific federal policies that would address climate change. Since there was no major climate legislation under consideration by Congress during the study period, we found no publicly available evidence to use in assessing company engagement with Congress on climate issues. Indicators in this area incorporate the 2015 CPA-Zicklin Index (Center for Political Accountability 2015) and the criteria outlined in the *Guide for Responsible Corporate Engagement in Climate Policy* (Karbassi et al. 2013).

CONSISTENT SUPPORT FOR US POLICY ACTION TO REDUCE CARBON EMISSIONS

Fossil fuel companies should be transparent and consistent in their advocacy for policies designed to reduce carbon emissions in line with the agreed-upon global temperature goal. They should expend their lobbying and other resources in support of those policies and refrain from undermining that support through contributions to organizations or political campaigns whose positions and advocacy on climate change are not aligned with their own.

Given the high emissions of heat-trapping gases by the United States and the significance of US markets to the companies in our sample, US policies are of particular importance and relevance. In order to score "good" on this metric, a company must have identified a category of US federal or state climate change policies that it supports (e.g., carbon tax, cap and trade, regulations under the Clean Air Act) and maintain this position consistently across all platforms.

Only three of these eight fossil fuel companies publicly support at least one generic type of policy to reduce carbon emissions, and none of the three have connected their stated support to meaningful action.

- **BP** states that "putting a price on carbon—one that treats all carbon equally, whether it comes out of a smokestack or a car exhaust—will make energy efficiency more attractive and lower-carbon energy sources more competitive" (BP PLC 2015b).
- **ExxonMobil** supports a revenue-neutral carbon tax, stating that "a properly designed carbon tax can be predictable, transparent, and comparatively simple to understand and implement" (ExxonMobil Corporation 2016e). However, some believe that the company has gotten undue credit for its stated position and has not been consistent in its support for a carbon tax. ExxonMobil's own External Citizenship Advisory Panel has called for "more specificity about the company's support for a carbon tax, as well as its engagement on other policy issues in the United States and internationally" (ExxonMobil Corporation 2016b).

> ***Only three fossil fuel companies publicly support at least one generic type of policy to reduce carbon emissions.***

- **Shell** says that it "supports the establishment of government-led carbon 'pricing' mechanisms," and that "both CO_2 taxes and emissions trading systems could generate new revenue for governments and ensure that consumers are not affected by higher energy costs" (Royal Dutch Shell PLC 2016b).

Many of the companies studied have made general statements about the need to reduce emissions of heat-trapping gases, but fall short of expressing support for specific policies, such as the EPA Clean Power Plan or the EPA methane rule. During the study period several companies were silent on or actively opposed any state or national actions.[7]

RECOMMENDATIONS FOR COMPANY ACTION

All companies in our sample should disclose direct and indirect political spending and climate-related lobbying at the federal, state, and local levels, with a rationale for their actions.

Additional recommendations are as follows:

- **Peabody Energy** was the only company to use climate science disinformation as a justification for its opposition to federal or state climate policies during the study period. The company denied the clear scientific consensus on climate change in its 2014 comments on the EPA's proposed Clean Power Plan (Peabody Energy Corporation 2014) and in legal challenges aimed at blocking the plan (*State of West Virginia et al. v. EPA, et al.* 2016b). Peabody Energy should renounce the use of climate science disinformation in public policy debates.
- **BP**, **Shell**, and **ExxonMobil** have publicly expressed support for carbon-pricing policies. Each of these companies should consistently call for US policy action on climate change, identify specific federal and/or state legislation or regulation that it supports, and advocate publicly and consistently for those policies.

Several companies in our sample could take a positive step simply by identifying a general category of climate policy that they support:

- **Arch Coal** advocates for policies supporting technology research and development to reduce heat-trapping emissions from human-made sources on its website, but has not identified any climate policy that it supports.
- **Chevron** has called for government action to remove barriers to the deployment of technologies that could reduce carbon pollution and includes policy principles for addressing climate change on its website. However, the company has not publicly supported any policy proposals. Chevron's policy principles assert that global engagement is required to effectively reduce emissions, but at this year's annual meeting CEO John Watson expressed strong opposition to an international price on carbon (Baker 2016). Furthermore, the company argues that unilateral action by any country or jurisdiction could be harmful (by distorting markets, reducing industrial competitiveness, and undermining the nation's environmental objectives). Chevron's policy principles imply that anything other than global action is harmful and, therefore, no nation or sub-national entity should take steps to reduce emissions.
- **ConocoPhillips** has made public statements against national and sub-national climate policies and continues to advocate for voluntary measures rather than policy action. In January 2015, CEO Ryan Lance expressed disappointment with US government efforts to regulate methane emissions, saying that "the industry is already doing a lot of things to voluntarily deal with the methane emissions problem" (Dlouhy 2015).
- **CONSOL Energy** did not engage publicly in any discussions on federal or state climate policy during the study period.

Area 4: Fully Disclosing Climate Risks

Companies face many risks from climate change itself, efforts to mitigate it, and its political context. The public and companies' own investors have a right to know what these risks are and how companies are managing them. By law, fossil fuel companies that are publicly traded in the United States are required to discuss risks that might materially affect their business in their annual SEC filings. However, compliance

7 *Comments were submitted on the EPA Clean Power Plan prior to our study period. However, as these policies were actively being developed during our study period, we consider comments made on these rules in 2014 to be relevant to this analysis.*

BOX 4.

Lack of Transparency a Major Obstacle

Companies, including those featured in this report, exert a great deal of influence over public policy at the federal, state, local, and international levels, yet much of this influence occurs behind closed doors. Limited and patchy disclosure requirements restrict the amount of information that is publicly available about companies' political activities, especially when it comes to their payments to third-party groups such as trade associations, think tanks, and research organizations.

For example, the companies in our sample reported spending more than $42 million on federal lobbying in 2015 and $7.5 million in campaign contributions in the 2015–2016 election cycle to date (see Figures 3 and 4) (Senate Office of Public Records 2016; CRP 2016). However, it is impossible to determine from federal filings what position a company took on particular legislative proposals, let alone how much it spent to lobby for or against them. Furthermore, there is no requirement for companies to disclose their indirect political contributions or so-called "dark money"—funds given anonymously to nonprofit organizations that often spend massive amounts to influence elections.

Organizations such as Americans For Prosperity, the Competitive Enterprise Institute, the Energy and Environment Legal Institute, and the Heartland Institute have played a key role in spreading disinformation on climate science and policy, but a lack of transparency regarding these groups' membership and funding makes it near impossible to verify corporate affiliations with them. Yet we know from document leaks and bankruptcy filings that the fossil fuel industry has played a role funding such groups (Peabody Energy Corporation 2016). Trade groups, too, have played an outsized role in undermining climate science and policy efforts, through lobbying, political contributions, public communications, and legal strategies (Goldman and Carlson 2014).

Disclosure of state-level lobbying and political contributions varies widely from one state to another. We know that the oil industry spent a record $22 million in California in 2015, when major climate legislation was under consideration. WSPA led the way at nearly $11 million, and Chevron was the top corporate spender at nearly $4 million (California Secretary of State 2016). As at the federal level, however, little information is available about how that money was used.

As noted in our discussion of Area 4, the disclosure of the business risks associated with climate change (see p. 21), company compliance with existing guidance by the SEC is inconsistent. Efforts are therefore underway to strengthen national requirements and harmonize disclosures at the global level.

Several policy changes could address the lack of transparency that prevents the public from holding the fossil fuel industry accountable for its involvement in climate disinformation. The Internal Revenue Service could tackle some of the concerns around so-called "dark money" as it considers a rule clarifying requirements for nonprofit status in the tax code. The president could issue an executive order asking federal contractors, including several of the companies in this report and many other large US companies, to disclose more about their political spending. Finally, the SEC could respond to the more than one million public comments that it received in support of a rule asking publicly traded companies to disclose more about their political activities to their investors.

with this guidance is not consistent. Fossil fuel companies must fully assess climate change risks and disclose any material risks to the SEC and their shareholders.

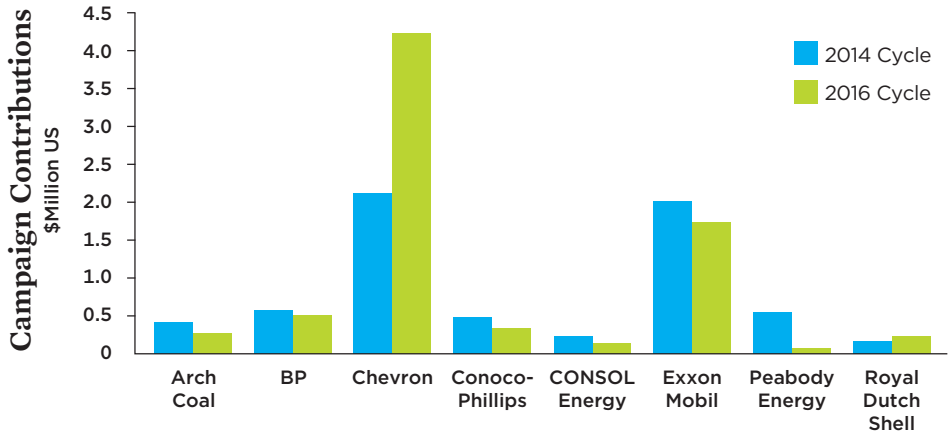
Since 2010, the SEC has asked companies to report on material, regulatory, physical, and indirect risks and opportunities related to climate change. The SEC guidance document explicitly states that "significant physical effects of climate change . . . have the potential to have a material effect on . . . business and operations. These effects can impact . . . personnel, physical assets, supply chain, and distribution chain. They can include the impact of changes in weather patterns, such as increases in storm intensity, [and of] sea-level rise" (SEC 2010).

The SEC is reviewing its requirements for business and financial disclosures by companies in their periodic reports, which is an opportunity to demand better climate-related disclosure (SEC 2016). In addition, the White House has proposed a new rule that would push companies with federal contracts to publicly disclose more information about their impact on climate change (Federal Register 2016). UCS supports more climate-related disclosure from companies through these government mechanisms.

Efforts are also underway to strengthen and harmonize disclosure at the global level. The Financial Stability Board is an international body that monitors and makes recommendations about the global financial system. Throughout 2016, the board's Task Force on Climate-related Financial Disclosures is working to develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders (TFCFD 2016). These standards should raise the bar for climate-related disclosures by companies in all sectors, including the energy sector.

BOX 4. (CONTINUED)

FIGURE 3. Reported Campaign Contributions, 2013–2014 and 2015–2016 Election Cycles

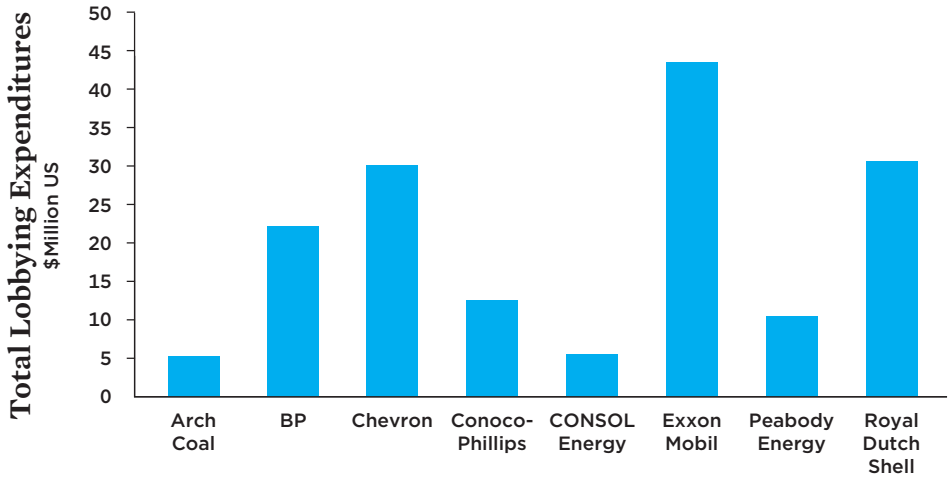


Companies in our sample reported spending $7.5 million in campaign contributions in the 2015–2016 election cycle (to date).

Note: Campaign finance totals for the 2015–2016 election cycle were released by the Federal Election Commission on June 27, 2016, and by the Internal Revenue Service on May 2, 2016. Campaign contributions reflect a compilation of contributions to: candidates, leadership political action committees (PACs), parties, campaign and party committees, and outside spending groups not coordinated with candidates' committees.

SOURCE: CRP 2016.

FIGURE 4. Reported Federal Lobbying Expenditures, January 2013 to August 2016



Companies in our sample reported spending more than $160 million on federal lobbying since 2013.

SOURCE: SENATE OFFICE OF PUBLIC RECORDS 2016.

In this area, we assessed company disclosure of regulatory risks, physical risks, market and other indirect risks and opportunities, and corporate governance by the board and senior management on climate-related risks. We found that disclosure of the business risks associated with climate change by these major fossil fuel producers is incomplete. While most of the companies in our sample do a good job reporting on regulatory risks related to climate change, none is yet providing

TABLE 9. Fully Disclosing Climate Risks

Advanced	Good	Fair	Poor	Egregious
		BP	Arch Coal	
		Chevron	ExxonMobil	
		ConocoPhillips	Peabody Energy	
		CONSOL Energy	Royal Dutch Shell	

Companies scored from "poor" to "fair" in the area of "fully disclosing climate risks." All of the companies studied can and should do better to fulfill existing climate risk disclosure requirements.

TABLE 10. Disclosure of Physical Risks

Arch Coal	BP	Chevron	Conoco-Phillips	CONSOL Energy	ExxonMobil	Peabody Energy	Royal Dutch Shell
-1	-1	-1	0	-1	0	-2	-1
Poor	**Poor**	**Poor**	**Fair**	**Poor**	**Fair**	**Egregious**	**Poor**

Companies scored from "egregious" to "fair" on the metric for "disclosure of physical risks that are caused or exacerbated by climate change, and how the company plans to address these risks." Only ConocoPhillips and ExxonMobil have acknowledged climate change as a contributor to the physical risks faced by their businesses.

sufficient information to investors about physical and operational risks, or market risks and opportunities for their businesses. Only one of the companies (Shell) discloses anything about corporate governance on climate-related issues, mentioning climate change as one of the topics discussed by its board Committee on Corporate and Social Responsibility but providing no details on how the committee manages the company's climate-related risks and opportunities.

Indicators and criteria in this area were adapted from *Sustainable Extraction? An Analysis of SEC Disclosure by Major Oil and Gas Companies and Deepwater Drilling Risk* (Coburn, Salmon, and Grossman 2010) by Ceres and *Carbon Asset Risk: Discussion Framework* from the World Resources Institute and United Nations Environment Program Finance Initiative Portfolio Carbon Initiative (Fulton and Weber 2015).

DISCLOSURE OF PHYSICAL RISKS

Much of this report focuses on the role of fossil fuel products in generating carbon emissions. Yet these companies are subject to climate change impacts themselves. Oil refineries, for example, are highly vulnerable to sea level rise and increased storm intensity. As previous research has documented, many companies that operate refineries are not disclosing climate-related physical risks to shareholders or to local communities (Carlson, Goldman, and Dahl 2015).

RECOMMENDATIONS FOR COMPANY ACTION

All of the companies in our sample can and should do better to fulfill existing climate risk disclosure requirements, and they should begin to prepare for enhanced disclosure regimes in the future:

- **Peabody Energy** should take the first step by publicly acknowledging the physical risks it faces due to climate change.
- **Arch Coal**, **BP**, **Chevron**, **CONSOL Energy**, and **Shell** should provide details about the nature and magnitude of climate-related physical risks they face and the impacts these may have on the company.
- **ConocoPhillips** and **ExxonMobil** could meet investors' expectations in disclosing physical climate risks by providing details on
  - the operational segments and/or specific company facilities that might be impacted;
  - the magnitude and timeframes of the anticipated impacts (quantified, when feasible); and
  - how the company plans to respond to physical impacts.

[CHAPTER 3]

Conclusions and Recommendations

Governments, industry, and individuals all bear some responsibility for climate change. But, through the products they put into commerce, major fossil fuel companies—including (ranked in terms of cumulative emissions) Chevron, ExxonMobil, BP, Royal Dutch Shell, ConocoPhillips, Peabody Energy, CONSOL Energy, and Arch Coal—are substantial contributors to the total historical emissions driving disruptive climate change. Leading fossil fuel companies have failed to adjust their business models to reduce the adverse impact of their products. At the same time, many of these companies have worked to discredit scientists, disparage climate science, and deny the significance of the problem of climate change, while at the same time lobbying to prevent policies that would encourage the transition to a low-carbon energy system. Therefore, these companies must take responsibility for their climate-related decisions, positions, communications, and actions.

Fossil fuel producers must

- renounce disinformation on climate science and policy;
- plan for a world free from carbon pollution, developing business models that are consistent with keeping warming well below a 2°C increase above pre-industrial levels, as agreed by world leaders;
- support sensible climate policies to reduce emissions of heat-trapping gases;
- fully disclose the financial and physical risks of climate change to their business operations; and
- pay for their share of the costs of climate-related damages and climate change adaptation.

All of the companies in this study must take steps to accept responsibility for the climate impacts of their products. As this report has shown, some fossil fuel companies are performing better than others relative to the first four of these five expectations. Company leaders who act on the specific recommendations that we provide here can improve their scores relative to industry peers and can demonstrate leadership to their investors and to the public. Recent bankruptcies of major coal companies, including Peabody Energy and Arch Coal, are a cautionary tale of what happens to businesses that do not evolve in response to changing demand, public policy, and societal norms.

As a first step, any major fossil fuel company that has not acknowledged the scientific evidence of human-caused climate change and affirmed the consequent need for swift and deep reductions in emissions from the burning of fossil fuels should issue a clear, unequivocal statement doing so.

In addition, all major fossil fuel companies assessed in this report should

- break from climate-denying trade associations and industry-affiliated groups, or publicly commit to work within these groups to change their climate-related policies and actions;
- disclose all climate-relevant information, including heat-trapping emissions, climate-related business risks, direct and indirect political spending, payments to trade associations and industry groups active on climate issues, and climate-related lobbying;
- make company-specific commitments to contribute to global goals to limit warming; and
- be consistent, specific, and transparent about the need for US and international policies to reduce emissions of heat-trapping gases.

[REFERENCES]

Allen, M., C. Helpburn, R. Millar, and P. Walton. 2015. *Working principles for investment in fossil fuels*. Oxford, UK: Oxford Martin Net Zero Carbon Initiative. Online at *www.oxfordmartin.ox.ac.uk/downloads/reports/Net_Zero_Working_Principles.pdf*, accessed August 17, 2016.

American Coalition for Clean Coal Electricity (ACCCE). 2016. Members. Online at *www.americaspower.org/about-accce/bios/members*, accessed August 17, 2016.

American Petroleum Institute (API). 2015. Internal Revenue Service form 990. Online at *http://990s.foundationcenter.org/990_pdf_archive/130/130433430/130433430_201412_990O.pdf?_ga=1.177969059.787331409.1472067660*, accessed August 21, 2016.

American Petroleum Institute (API). No date. Climate change and energy: Energy and climate. Online at *www.climatechangeandenergy.com/#/?section=energy-climate*, accessed August 17, 2016.

Baker, D.R. 2016. CEO attacks climate rules. *San Francisco Chronicle*, May 26.

Ballotpedia. 2015. Western States Petroleum Association. Online at *https://ballotpedia.org/Western_States_Petroleum_Association*, accessed August 18, 2016.

Banerjee, N. 2015. Exxon's oil industry peers knew about climate dangers in the 1970s, too. *Inside Climate News*, December 22.

Banerjee, N., J.H. Cushman Jr., D. Hasemyer, and L. Song. 2015. Exxon: The road not taken. *InsideClimate News*, series of articles run from September 16 to December 22. Online at *https://insideclimate news.org/content/Exxon-The-Road-Not-Taken*, accessed September 12, 2016.

Bernstein, L.S. 1995 Predicting future climate change: A primer. Online at *http://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-7_GCC-Climate-Primer.pdf*, accessed September 12, 2016.

Bezdek, R.H. 2014. The social costs of carbon? No, the social benefits of carbon. Prepared for the American Coalition for Clean Coal Electricity by Management Information Services, Inc. Online at *www.americaspower.org/sites/default/files/Social_Cost_of_Carbon.pdf*, accessed August 17, 2016.

Boden, T.A., G. Marland, and R.J. Andres. 2013. Global, regional, and national fossil-fuel CO_2 emissions. Oak Ridge, TN: Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, US Department of Energy.

BP PLC. 2016. BP energy outlook: 2016 edition. Online at *www.bp.com/content/dam/bp/pdf/energy-economics/energy-outlook-2016/bp-energy-outlook-2016.pdf*, accessed August 17, 2016.

BP PLC. 2015a. Annual report and form 20-F 2015. Online at *www.bp.com/content/dam/bp/pdf/investors/bp-annual-report-and-form-20f-2015.pdf*, accessed August 17, 2016.

BP PLC. 2015b. Climate change. Online at *https://web.archive.org/web/20151117104812/http:/www.bp.com/en/global/corporate/sustainability/the-energy-future/climate-change.html*, accessed September 7, 2016.

BP PLC. 2015c. *Sustainability report 2015*. Online at *www.bp.com/content/dam/bp/pdf/sustainability/group-reports/bp-sustainability-report-2015.pdf*, accessed August 25, 2016.

California Secretary of State. 2016. Lobbying activity: Employers of lobbyists. Online at *http://cal-access.ss.ca.gov/Lobbying/Employers*, accessed August 18, 2016.

Carlson, C., G. Goldman, and K. Dahl. 2015. *Stormy seas, rising risks: What investors should know about climate change impacts at oil refineries*. Cambridge, MA: Union of Concerned Scientists. Online at *www.ucsusa.org/sites/default/files/attach/2015/02/stormy-seas-rising-risks-ucs-2015.pdf*, accessed August 15, 2016.

Carroll, C. 2015. API board elects Ryan Lance as chair, Greg Garland as finance chair. American Petroleum Institute, November 9. Washington, DC. Online at *www.api.org/news-policy-and-issues/news/2015/11/09/api-board-elects-ryan-lance-as-chair-gre*, accessed August 17, 2016.

Center for International Environmental Law (CIEL). 2016. Smoke and fumes. Online at *www.smokeandfumes.org*, accessed August 17, 2016.

Center for Media and Democracy (CMD). 2016a. ALEC corporations. *Sourcewatch*, August 4. Online at *www.sourcewatch.org/index.php/ALEC_Corporations*, accessed August 17, 2016.

Center for Media and Democracy (CMD). 2016b. Corporations that have cut ties to ALEC. *Sourcewatch*, August 15. Online at *www.sourcewatch.org/index.php/Corporations_that_Have_Cut_Ties_to_ALEC*, accessed August 17, 2016.

Center for Political Accountability (CPA). 2015. The 2015 CPA-Zicklin index of corporate political disclosure and accountability: S&P 500 review shows political disclosure enters the corporate mainstream. Online at *http://files.politicalaccountability.net/index/CPA-Zicklin_Index_Final_with_links.pdf*, accessed August 17, 2016.

Center for Responsive Politics (CRP). 2016. Oil and gas. Online at *www.opensecrets.org/industries/indus.php?ind=e01*, accessed August 17, 2016.

CDP. 2016. CDP 2016 climate change scoring methodology. Online at *www.cdp.net/Documents/Guidance/2016/CDP-climate-change-scoring-methodology-2016.pdf*, accessed August 17, 2016.

Chevron Corporation. 2016. Policy principles for addressing climate change. Online at *https://web.archive.org/web/20160818142453/https://www.chevron.com/corporate-responsibility/climate-change/policy-principles*, accessed August 18, 2016.

Coburn, J., R. Salmon, and D. Grossman. 2010. *Sustainable extraction? An analysis of SEC disclosure by major oil and gas companies on climate risk and deepwater drilling risk*. Boston, MA: Ceres. Online at *www.ceres.org/resources/reports/sustainable-extraction-an-analysis-of-sec-disclosure-by-major-oil-gas-companies-on-climate-risk-and-deepwater-drilling-risk*, accessed August 17, 2016.

CONSOL Energy Inc. 2016. Corporate Responsibility Report 2015. Online at *http://2015crr.consolenergy.com*, accessed September 16, 2016.

Deyette, J. 2015. ALEC's annual meeting to feature more attacks on successful clean-energy policies. *The Equation* blog, July 21. Cambridge, MA: Union of Concerned Scientists. Online at *http://blog.ucsusa.org/jeff-deyette/alecs-annual-meeting-to-feature-more-attacks-on-successful-clean-energy-policies-813*, accessed August 17, 2016.

Dlouhy, J.A. 2015. Oil industry says methane plan unneeded. *Houston Chronicle*, January 14.

Energy Transitions Commission. 2015. Who we are. Online at *www.energy-transitions.org/who-we-are*, accessed August 17, 2016.

ExxonMobil Corporation. 2016a. External citizenship advisory panel. Online at *http://corporate.exxonmobil.com/en/community/corporate-citizenship-report/about-this-report/citizen-advisory-panel*, accessed August 17, 2016.

ExxonMobil Corporation. 2016b. ExxonMobil corp annual shareholders meeting—Final. *Fair Disclosure Wire*, May 25. Comments by Rex Tillerson, president, CEO, and chairman of ExxonMobil Corporation.

ExxonMobil Corporation. 2016c. The outlook for energy: A view to 2040. Online at *http://cdn.exxonmobil.com/~/media/global/files/outlook-for-energy/2016/2016-outlook-for-energy.pdf*, accessed August 17, 2016.

ExxonMobil Corporation. 2016d. Worldwide giving report: Public information and policy research. Online at *http://cdn.exxonmobil.com/~/media/global/files/worldwide-giving/2015-worldwide-contributions-public-policy.pdf*, accessed August 18, 2016.

ExxonMobil Corporation. 2016e. Engaging on climate change. Online at *http://corporate.exxonmobil.com/en/current-issues/climate-policy/climate-perspectives/engagement-to-address-climate-change*, accessed August 26, 2016.

ExxonMobil Corporation. 2015. ExxonMobil corp annual shareholders meeting—Final. *Fair Disclosure Wire*, May 27. Comments by Rex Tillerson, president, CEO, and chairman of ExxonMobil Corporation.

Federal Register. 2016. Federal acquisition regulation: Public disclosure of greenhouse gas emissions and reduction goals—Representation. Docket No 2015-0024. Online at *www.federalregister.gov/articles/2016/05/25/2016-12226/federal-acquisition-regulation-public-disclosure-of-greenhouse-gas-emissions-and-reduction*, accessed August 24, 2016.

Finley, B. 2015. Western towns hard-hit by climate change unite, target coal for funds. *Denver Post*, May 5.

Frumhoff, P., R. Heede, and N. Oreskes. 2015. The climate responsibility of industrial carbon producers. *Climatic Change* 132(2):157–171.

Fulton, M., and C. Weber. 2015. Carbon asset risk: Discussion framework. Washington, DC: World Resources Institute; Geneva, Switzerland: United Nations Environment Programme Finance Initiative. Online at *www.unepfi.org/fileadmin/documents/carbon_asset_risk.pdf*, accessed August 17, 2016.

Goldman, G. 2016. Who stands with the US Chamber of Commerce on climate change? New data says few (still). *The Equation* blog, January 20. Cambridge, MA: Union of Concerned Scientists. Online at *http://blog.ucsusa.org/gretchen-goldman/who-stands-with-the-u-s-chamber-of-commerce-on-climate-change-new-data-says-few-still-788*, accessed August 17, 2016.

Goldman, G., and C. Carlson. 2014. *Tricks of the trade: How companies anonymously influence climate policy through their business and trade associations*. Cambridge, MA: Union of Concerned Scientists. Online at *www.ucsusa.org/sites/default/files/legacy/assets/documents/center-for-science-and-democracy/tricks-of-the-trade.pdf*, accessed August 17, 2016.

Goldman, G., and P. Rogerson. 2013. *Assessing trade and business groups' positions on climate change*. Cambridge, MA: Union of Concerned Scientists. Online at *www.ucsusa.org/sites/default/files/legacy/assets/documents/center-for-science-and-democracy/trade-and-business-groups-climate-change.pdf*, accessed August 17, 2016.

Grifo, F., G. Goldman, B. Gutman, J. Freeman, P. Rogerson, and D. Veysey. 2012. *A climate of corporate control: How corporations have influenced the US dialogue on climate science and policy*. Cambridge, MA: Union of Concerned Scientists. Online at *www.ucsusa.org/sites/default/files/legacy/assets/documents/scientific_integrity/a-climate-of-corporate-control-report.pdf*, accessed on August 15, 2016.

Hayes, D.J., and J.H. Stock. 2015. The real cost of coal. *New York Times*, March 24.

Heede, R. 2014. Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010. *Climatic Change* 122:229–241.

Jennings, K., D. Grandoni, and S. Rust. 2015. How Exxon went from leader to skeptic on climate change research. *Los Angeles Times*, October 23.

Jerving, S., K. Jennings, M.M. Hirsch, and S. Rust. 2015. What Exxon knew about the Earth's melting arctic. *Los Angeles Times,* October 9.

Karbassi, L., H. Huusko, F.C. Silveira, M. VanVoore, S. Haeussling, E. Metzger, Y. Dagnet, S. Putt del Pino, J. Morgan, K. Jenkinson, and B. Watson. 2013. Guide for responsible corporate engagement in climate policy. A Caring for Climate Report by the United Nations Global Compact, the secretariat of the United Nations Framework Convention on Climate Change, and the United Nations Environment Programme, in cooperation with the World Resources Institute. Online at *www.unglobalcompact.org/docs/issues_doc/Environment/climate/Guide_Responsible_Corporate_Engagement_Climate_Policy.pdf*, accessed August 17, 2016.

Kirtman, B., S.B. Power, J.A. Adedoyin, G.J. Boer, R. Bojariu, I. Camilloni, F.J. Doblas-Reyes, A.M. Fiore, M. Kimoto, G.A. Meehl, M. Prather, A. Sarr, C. Schär, R. Sutton, G.J. van Oldenborgh, G. Vecchi, and H.J. Wang. 2013. Near-term climate change: Projections and predictability. In *Climate change 2013: The physical science basis. Contribution of working group I to the fifth assessment report of the Intergovernmental Panel on Climate Change*, edited by T.F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P.M. Midgley. Cambridge, United Kingdom and New York, NY: Cambridge University Press.

Le Quéré, C., R. Moriarty, R.M. Andrew, G.P. Peters, P. Ciais, P. Friedlingstein, S.D. Jones, S. Sitch, P. Tans, A. Arneth, T.A. Boden, L. Bopp, Y. Bozec, J.G. Canadell, F. Chevallier, C.E. Cosca, I. Harris, M. Hoppema, R.A. Houghton, J.I. House, A.K. Jain, T. Johannessen, E. Kato, R.F. Keeling, V. Kitidis, K. Klein Goldewijk, C. Koven, C.S. Landa, P. Landschützer, A. Lenton, I.D. Lima, G.H. Marland, J.T. Mathis, N. Metzl, Y. Nojiri, A. Olsen, T. Ono, W. Peters, B. Pfeil, B. Poulter, M.R. Raupach, P. Regnier, C. Rödenbeck, S. Saito, J.E. Sailsbury, U. Schuster, J. Schwinger, R. Séférian, J. Segschneider, T. Steinhoff, B.D. Stocker, A.J. Sutton, T. Takahashi, B. Tilbrook, G.R. van der Werf, N. Viovy, Y.-P. Wang, R. Wanninkhof, A. Wiltshire, and N. Zeng. 2014. Global carbon budget 2014. *Earth System Science Data Discussions* 7:521–610. doi:10.5194/essdd-7-521-2014.

Levesque, J. 2016. Not mine: Consol Energy puts a wrap on CAPP coal business. *The Barrel*, August 11.

Lieberman, A., and S. Rust. 2015. Big oil braced for global warming while it fought regulations. *Los Angeles Times*, December 31.

MacCracken, M. 2016. Challenging ExxonMobil CEO Rex Tillerson on climate change. *The Equation* blog, June 8. Cambridge, MA: Union of Concerned Scientists. Blog, June 8. Online at *http://blog.ucsusa.org/guest-commentary/challenging-exxonmobil-ceo-rex-tillerson-on-climate-change*, accessed August 17, 2016.

Martin, J. 2016. *Fueling a clean transportation future: Smart fuel choices for a warming world*. Cambridge, MA: Union of Concerned Scientists. Online at *www.ucsusa.org/sites/default/files/attach/2016/02/Fueling-Clean-Transportation-Future-full-report.pdf*, accessed on August 15, 2016.

McCarron, S. 2016. Signing the Paris accord a step forward. *Energy Factor*, April 22. Irving, TX: ExxonMobil. Online at *https://energyfactor.exxonmobil.com/perspectives/signing-paris-accord-step-forward*, accessed August 17, 2016.

Mufson, S. 2015. Shell Oil will drop its membership in ALEC, citing differences over climate change. *Washington Post*, August 7.

Mulvey, K., S. Shulman, D. Anderson, N. Cole, J. Piepenburg, and J. Sideris. 2015. *Climate deception dossiers: Internal fossil fuel industry memos reveal decades of corporate disinformation*. Cambridge, MA: Union of Concerned Scientists. Online at *www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf*, accessed August 17, 2016.

National Association of Manufacturers (NAM). 2016. Board of directors. Online at *www.nam.org/About/Board-of-Directors*, accessed August 17, 2016.

National Association of Manufacturers (NAM). 2014. Comments in *Standards of performance for greenhouse gas emissions from existing sources: Utility generating units* submitted by the American Chemistry Council, American Forest and Paper Association, American Fuel and Petrochemical Manufacturers, American Iron and Steel Institute, American Petroleum Insitute, American Wood Council, Brick Industry Association, Corn Refiners Association, Council of Industrial Boiler Owners, Electricity Consumers Resource Council, National Association of Manufacturers, National Lime Association, National Oilseed Processors Association, Portland Cement Association, Fertilizer Institute, and US Chamber of Commerce, on behalf of their members (EPA document EPA-HQ-OAR-2013-0602). Washington, DC: Environmental Protection Agency.

National Mining Association (NMA). 2016a. Member list. Online at *www.nma.org/index.php/member-list*, accessed May 1, 2016.

National Mining Association (NMA). 2016b. Member list. Online at *www.nma.org/index.php/member-list*, accessed August 26, 2016.

National Mining Association (NMA) v. Environmental Protection Agency (EPA). 2014. Docket no. 14-49. Online at *www.scotusblog.com/case-files/cases/national-mining-association-v-environmental-protection-agency*, accessed September 7, 2016.

Oil and Gas Climate Initiative. 2015. OGCI welcomes the Paris agreement. Online at *www.oilandgasclimateinitiative.com/news/ogci-welcomes-the-paris-agreement*, accessed August 17, 2016.

Oppenheim, A., and W.L. Donn. 1982. Climate models and CO_2 warming: A selective review and summary. Palisades, NY: Lamont-Doherty Geological Observatory. Prepared for the American Petroleum Institute. Online at *https://insideclimatenews.org/sites/default/files/documents/API%201982%20Climate%20models%20and%20CO2%20warming.pdf*, accessed September 12, 2016.

Oreskes, N., and E.M. Conway. 2011. *Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming*. New York: Bloomsbury Press.

Peabody Energy Corporation. 2016. United States Bankruptcy Court 16-42529. Online at *www.documentcloud.org/documents/2859772*, accessed August 18, 2016.

Peabody Energy Corporation. 2014. Comments in *Standards of performance for greenhouse gas emissions from existing sources: Utility generating units* submitted by Alexander C. Schoch on behalf of Peabody Energy Corporation (EPA document EPA-HQ-OAR-2013-0602). Washington, DC: Environmental Protection Agency.

Rouse, L. 2016. BP distances itself from WSPA position on California climate legislation saying "of course we did not support that campaign." Twitter post, August 17. Online at *https://twitter.com/rouselouise/status/720601059287285760*, accessed on August 17, 2016.

Royal Dutch Shell Corporation. 2016a. External review committee opinion. Online at *www.shell.com/sustainability/sustainability-reporting-and-performance-data/external-review-committee/external-review-committee-letter.html*, accessed August 17, 2016.

Royal Dutch Shell Corporation. 2016b. Climate change and energy transitions. Online at *www.shell.com/sustainability/environment/climate-change.html*, accessed December 15, 2015.

Royal Dutch Shell Corporation. 2016c. *Sustainability report 2015*. Online at *www.shell.com/sustainability/sustainability-reporting-and-performance-data/sustainability-reports.html*, accessed August 17, 2016.

Science Based Targets. No date (a). Science-based targets: Driving ambitious corporate climate action. Online at *http://sciencebasedtargets.org*, accessed August 17, 2016.

Science Based Targets. No date (b). Companies taking action. Online at *http://sciencebasedtargets.org/companies-taking-action*, accessed August 17, 2016.

Securities and Exchange Commission (SEC). 2016. Business and financial disclosure required by regulation S-K. 17 CRF Parts 210, 229, 230, 232, 239, 240, and 249. Online at *www.sec.gov/rules/concept/2016/33-10064.pdf*, accessed August 17, 2016.

Securities and Exchange Commission (SEC). 2010. Commission guidance regarding disclosure related to climate change. 17 CFR Parts 211, 231, and 241. Online at *www.sec.gov/rules/interp/2010/33-9106.pdf*, accessed August 17, 2016.

Senate Office of Public Records. 2016. Queries of the lobbying disclosure act database. Online at *www.senate.gov/legislative/Public_Disclosure/LDA_reports.htm*, accessed September 12, 2016.

Sheppard, K. 2016. King Coal is losing its lobbying edge. Huffington Post, August 18. Online at *www.huffingtonpost.com/entry/coal-lobby-washington_us_57b4c3cbe4b0fd5a2f40f90c*.

Siders, D. 2015a. Adwatch: Oil interests mislead about vehicle monitoring. *Sacramento Bee*, August 31.

Siders, D. 2015b. Fact check: Ad misleads on gas reduction law. *Sacramento Bee*, August 22.

Staff writer. 2016. Total SA (ADR) to invest one-fifth of assets in carbon business. *Business Finance News*, May 25.

State of West Virginia et al. v. Environmental Protection Agency, et al. 2016a. USCA case 14-1146. Online at *www.americanbar.org/content/dam/aba/publications/supreme_court_preview/briefs/11-338_petitioneramcuplf.authcheckdam.pdf*, accessed September 7, 2016.

State of West Virginia et al. v. Environmental Protection Agency, et al. 2016b. USCA case 15-1363.Initial reply brief of intervenors Dixon Bros., Inc., Nelson Brothers, Inc., Wesco International, Inc., Norfolk Southern Corp., Joy Global Inc., Gulf Coast Lignite Coalition, and Peabody Energy Corp. supporting petitioners. Online at *www.ago.wv.gov/publicresources/epa/Documents/Peabody%20Intervenor%20Brief%20-%20file-stamped%20(M0119624xCECC6).pdf*, accessed September 7, 2016.

Statoil Corporation. 2016. Statoil presents annual and sustainability reports for 2015. Online at *www.statoil.com/en/NewsAndMedia/News/2016/Pages/18mar-annual-report-2015.aspx*, accessed August 17, 2016.

Statoil Corporation. 2015. Statoil welcomes the Paris agreement. Online at *www.statoil.com/en/NewsAndMedia/News/2015/Pages/16dec_paris_agreement.aspx*, accessed August 17, 2016.

Task Force on Climate-related Financial Disclosures (TFCFD). 2016. About the task force. Online at *www.fsb-tcfd.org*, accessed August 17, 2016.

Total Corporation. 2015. Climate: Total CEO welcomes a "very good agreement." December 16. Online at *http://jp.total.com/en-us/home/media/list-news/climate-total-ceo-welcomes-very-good-agreement*, accessed August 18, 2016.

United Nations Framework Convention on Climate Change (UNFCCC). 2015. Adoption of the Paris agreement. Proposal by the President (draft decision), United Nations Office, Geneva (Switzerland), p. 32. Online at *https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf,* accessed August 20, 2016.

US Chamber of Commerce. 2016a. Board of directors. Online at *www.uschamber.com/about-us/board-directors*, accessed May 1, 2016.

US Chamber of Commerce. 2016b. Board of directors. Online at *www.uschamber.com/about-us/board-directors*, accessed August 17, 2016.

Volcovici, V. 2015. ConocoPhillips signals conditional support for UN climate deal. *Reuters*, September 4. Online at *www.reuters.com/article/us-usa-oil-climatechange-idUSKCN0R42HI20150904*, accessed August 17, 2016.

Western States Petroleum Association (WSPA). 2016. Member list. Online at *www.wspa.org/member-list*, accessed August 18, 2016.

The Climate Accountability Scorecard

Ranking Major Fossil Fuel Companies on Climate Deception, Disclosure, and Action

> ***As substantial contributors to climate change, major fossil fuel companies must take responsibility for their climate-related actions.***

The major fossil fuel producers bear a particular responsibility for climate change. Not only do their products cause a buildup of heat-trapping gases in the atmosphere, but many of these companies have also worked systematically to block laws or regulations that would reduce emissions of heat-trapping gases, in some cases by spreading disinformation about climate science (Mulvey et al. 2015).

An in-depth analysis of eight major fossil fuel companies—Arch Coal, BP, Chevron, ConocoPhillips, CONSOL Energy, ExxonMobil, Peabody Energy, and Royal Dutch Shell—finds none of them has made a clean break from climate disinformation, and none of them is yet adequately planning for a world free from carbon pollution, despite the goals set by world leaders in the international climate agreement of 2015.

Each company's scores ranged—some quite significantly—across the four areas examined: renouncing disinformation on climate science; planning for a world free from carbon pollution; supporting fair and effective climate policies; and fully disclosing climate risks. While some companies are making more progress than others, no company scored better than its peers in all areas, and several were relative leaders in some areas and relative laggards in others.

Union of Concerned Scientists

FIND THIS DOCUMENT ONLINE: www.ucsusa.org/ClimateScorecard

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with citizens across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

NATIONAL HEADQUARTERS
Two Brattle Square
Cambridge, MA 02138-3780
Phone: (617) 547-5552
Fax: (617) 864-9405

WASHINGTON, DC, OFFICE
1825 K St. NW, Suite 800
Washington, DC 20006-1232
Phone: (202) 223-6133
Fax: (202) 223-6162

WEST COAST OFFICE
500 12th St., Suite 340
Oakland, CA 94607-4087
Phone: (510) 843-1872
Fax: (510) 843-3785

MIDWEST OFFICE
One N. LaSalle St., Suite 1904
Chicago, IL 60602-4064
Phone: (312) 578-1750
Fax: (312) 578-1751

WEB: www.ucsusa.org