

## CHAPTER 1

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# CLIMATE MYTHS: THE CAMPAIGN AGAINST CLIMATE SCIENCE

*The oil and coal industries—and many of their big industrial customers—have for decades tried to dismiss concerns about climate change, discredit climate science, and thwart climate legislation and policy. Working through pseudoscientific think tanks, institutes, and assorted right-wing proxy organizations, they manufacture myths about climate change, paralyze the climate policy process, criticize reputable scientists, and pretend that policies to protect the climate pose a dangerous threat to democracy and prosperity. But as you will see, such myths do not stand up to scrutiny. The pages that follow spotlight the companies, organizations, and individuals conducting the highly successful multimillion dollar disinformation campaign that has set back global climate protection by decades that the world can ill afford to waste. You will learn the tactics and strategies that have been used to effectively mislead tens of millions of people around the world.*

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### CLIMATE DISINFORMATION

**F**or decades, the oil and coal industries and some of their largest industrial customers have conducted a sophisticated and wildly successful multimillion dollar campaign based in the U.S. to convince the American public that climate change is not a serious threat. The impetus for the campaign has been to protect industry profits by blocking any action designed to reduce the emission of carbon dioxide and other global heating gases produced in burning fossil fuels.

Policies such as carbon taxes and carbon caps are intended to limit the release of carbon dioxide by restraining demand for fossil fuels. Fossil fuel companies, however, have correctly concluded that crimping fuel consumption would reduce revenue and would also erode the multitrillion dollar value of their oil, coal, and gas reserves.<sup>a</sup>

Fossil fuel industry leaders have long known that as policies to address the dangers of fossil fuel burning and climate change were progressively made into law and policy, they would ultimately affect profits. Anticipating these threats to their income and wealth, large fossil fuel energy companies—and those who have made common cause with them—decades ago mounted a well-funded campaign to discredit climate science. Its architects recognized that, if successful, the campaign would provide the rationale for their political and legislative efforts to obstruct public policy efforts aimed at climate protection. The beginning and expansion of this campaign are the subjects of this book.

While the campaign has served and continues to serve a political and economic purpose for the industries behind it, it also serves the psychological need of reconciling industry's economic interests with their version of climate science, climate economics, and the economics of climate protection. Thus those in the climate science denial camp believe themselves "on the side of the angels."

In the political arena, the energy company campaign not only succeeded in confusing facts about climate change but also managed to undermine U.S. participation in the 1997 Kyoto Protocol, a precedent-setting international climate protection treaty discussed frequently throughout this book (see index for

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<sup>a</sup> A wholesale write-down of these reserves will occur when financiers and other investors decide that a portion of these reserves cannot be developed. These reserves contain several times as much carbon dioxide as the atmosphere holds and far more than the 565 gigatons that scientists believe it can contain before global temperatures spike more than 2° C. The complete combustion of these reserves would thus destroy the Earth's climate. Therefore, much of these assets inevitably will have to be entirely written off for the foreseeable future.

complete listing). The fossil fuel industry achieved this political triumph by providing the arguments that were used in turning Congressional sentiment against the Protocol.

The industrial opposition to climate science and climate-safe energy policies has grown more sophisticated and varied over the past decade. The campaign operates through dozens of industry-funded institutes, policy centers, councils, research foundations, and societies that speak for industry on climate and energy.

The climate “skeptics,” as they like to be called, include anti-government and anti-regulation conservatives and libertarians who oppose government action on ideological grounds. Their strategy has often been to hide ideologically based misrepresentations of climate science beneath a mantle of science.

A review of scientific publications on climate, however, reveals that whereas many thousands of high-quality scientific papers validated by peer review have been published documenting all phases of global warming, only a trivial number of dissenters who dispute the evidence have published in similar journals.

Moreover, by contrast, the results of climate studies confirming global warming and humanity’s role in it can be found in the most prestigious scientific journals. Almost without exception, the deniers’ reports appear in publications that are not peer reviewed, since their objections to climate science have been repeatedly refuted; thus they are of little interest to responsible, well-respected scientific publications. Finally, the national academies of science of most nations of the world have passed resolutions affirming that we are warming the planet.<sup>1</sup>

Although climate change is a scientific issue, it has been adopted as a Republican “litmus test” issue by certain Republican Party spokesmen and thus public opinion surveys show that more Republicans than Democrats characterize themselves as “climate skeptics.” These individuals today appear less focused on disparaging climate science than in the past, when climate

science was less settled. Nowadays they seem to have shifted tactics to focus more attention on defeating the environmental and energy policies implied by climate change concerns.

In the initial stages of the climate debate, industry proxy organizations often flatly contradicted climate science and claimed, variously, that the Earth was cooling or at least wasn't warming, or that if the Earth was warming, the warming wasn't due to human activity, or that if the Earth were to warm, it would be mild and beneficial.

Many of these discredited claims have been abandoned by all but diehard opponents of climate science as the global scientific consensus on climate change has strengthened and as the evidence for global warming has become overwhelming. Some deniers still persist in presenting discredited arguments, however.

For example, industrial critics of decisive action on climate change (such as the National Association of Manufacturers) made a case in Congress and with the public in 2009 that effective measures to reduce carbon emissions would bring economic disaster in the form of high taxes, lost jobs, lower productivity, and reduced competitiveness for America in world markets.<sup>2</sup>

Since their arguments weren't gaining traction in the world of science, industry-funded think tanks then spent millions of dollars making their case against climate science to more gullible media, government officials, opinion leaders, students, and the general public. Climate skeptics and their allies have thus become a major presence on the Internet, over radio, and on TV airwaves, as well as through industry-sponsored books, magazines, articles, reports, and press releases.

An unsuspecting person who uses an Internet search engine and enters terms commonly associated with climate change will be hard pressed to discern the truth amid the plethora of misleading information many of these organizations provide. Since some of the most effective arguments consist of deceptive

statements wrapped in layers of truth, it can be very challenging for students and others without advanced scientific training or sophisticated rhetorical and analytical skills to sift truth from falsity without investing lots of time.

To put climate skeptics' current claims in perspective, it is useful to review the initial 20<sup>th</sup> century phase of the energy industry's assault on climate science and its related effort to block Federal laws and policies to combat global warming. I will then examine some of the main myths they manufactured about climate change and explain their fallacies.

At this point in the narrative, readers who are unfamiliar with climate science and why the release of greenhouse gases disturbs the climate can skip directly to page 35 of this book to read the point-by-point discussion of climate myths. Readers can also soon consult a companion volume of mine, *Climate Peril: The Intelligent Reader's Guide to the Climate Crisis* (Northbrae Books, 2013).

### **SABOTAGE OF THE KYOTO PROTOCOL**

As noted earlier, the industries trying to defuse concern over global warming were successful in mobilizing opposition to the 1997 Kyoto Protocol. The Kyoto agreement was modest in its goals and was meant as an inoffensive and attainable first international step toward controlling global carbon emissions. Thus the Kyoto Protocol called on the industrialized nations to reduce their greenhouse gas emissions by only five percent by 2012, instead of the nearly 90 percent or more needed to stabilize the atmosphere's carbon dioxide (CO<sub>2</sub>) concentration (see pages 52-53).

The U.S. signed the agreement, although it had already been weakened during negotiations, in deference to U.S. industry opposition. Industry was then successful in winning Senate support (in a 95 to 0 vote) for a resolution declaring that the

U.S. should not be obligated to cut its carbon emissions unless developing nations were also obligated to do so.

Because the Kyoto Protocol had no provisions requiring mandatory emission reductions by developing countries, the Clinton Administration knew the Kyoto Protocol would be defeated in the Senate and thus did not even submit it to the Senate for ratification. President George W. Bush, President Clinton's successor, withdrew the U.S. from the Kyoto agreement, even though, as a presidential candidate, he had said that he would cap carbon emissions if elected.<sup>3</sup>

Of course, in a Catch-22, the developing nations of the world that have historically contributed relatively little atmospheric carbon dioxide, and who are far less affluent than the U.S., clearly would not want to reduce their carbon output before the U.S. agreed to reduce its own.

The forces behind the anti-Kyoto campaign included the coal, oil, auto, electric, metal, chemical, paper, cement, and railroad industries. Their efforts were joined by various anti-environmental groups. Members of this coalition seemed to take it on faith that the unrestrained use of fossil fuels was a good thing and that continual economic growth was possible and desirable, without drawbacks. I call this coalition “the fossil fuel industry” because of their common interests in continuing very heavy reliance on fossil fuel. (The natural gas industry does not march in lockstep with the oil and gas lobbyists on climate issues, for reasons to be explained shortly.)

Why have so many multibillion dollar industries opposed a consensus about climate change forged by the world’s leading climate scientists? The executives of these companies live on this planet, too. They have children and grandchildren. But since they profit directly from either the production or use of carbon-based fuels, or both, they clearly do not want their costs increased or the value of their assets decreased, nor do they want to see their hundreds of billions of dollars in sales revenue reduced.

In particular, they regard the possibility of significant new energy taxes, which would make fossil fuels more expensive, a serious threat to their prosperity. With trillions invested in fossil fuel energy infrastructure, it is no surprise that these industries are not exactly keen on renouncing the carbon economy.

Despite the obvious public health benefits that fossil fuel industry leaders and their progeny would receive if we protected the climate,<sup>b</sup> the fossil fuel industry takes a dim view of stronger clean air standards that impose pollution control costs on fossil fuel polluters. Even if those costs are passed on to consumers, higher costs restrain demand and siphon away revenue. Technologies that improve fuel efficiency also depress fuel demand. So the fossil fuel industry has a powerful vested interest in opposing these antidotes to climate change.

### NIXING A CARBON TAX

The fossil fuel industry and its allies have a long history of working effectively together to oppose clean air and water regulations and fuel efficiency standards. During much of the 1990s, these industries spent millions of dollars hiring public relations firms, sponsoring industry-funded think tanks, and creating corporate coalitions with misleading names that sounded like grassroots organizations but did industry's bidding.<sup>c</sup>

Using these surrogates, the oil and coal industries and their allies sent their message out through press briefings, web sites, news releases, newspaper ads, conferences, email and petition drives, and direct contacts with editors, columnists, television correspondents, government officials, and business leaders. In 1993, they halted the Clinton Administration's efforts to pass a modest tax on the energy content of fuels, which would have helped control carbon emissions. This victory set back the nation's efforts to control its emissions by at least 20 years.

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<sup>b</sup> See *Solving the Climate Crisis*, cited earlier.

<sup>c</sup> Some of the public relations experts hired had previously labored for the tobacco industry to downplay the risks of cigarette smoking.

Later, these industries lobbied Congress to oppose domestic renewable energy and energy efficiency programs, which they called back-door implementation of the Kyoto Protocol.

### ORIGINS OF THE CLIMATE “DEBATE”

Since they were not able to disprove any important aspects of climate science, the main tactics of the fossil fuel industry’s climate campaign have been to sow doubt about climate science and to sow fear that efforts to reduce global warming will inflict grave economic pain. They soon found that it was easy to create doubt by raising sensationalistic questions, even if the questions had no scientific merit, so long as they required time and expert knowledge to rebut. That would be enough to make the public uneasy, unable to dispel the doubts raised.

The industries recognized many years ago that even if they were unable to refute climate science, they could achieve their objectives of delaying and obstructing government action for years by raising enough doubts to stir up opposition and paralyze decision makers.

These doubts were relentlessly spread to Congress year after year through briefings and other contact with Congressional staffers, supported with reams of biased literature and by misleading testimony from scientists recruited to the industry’s public relations campaign. Few Congressmen had sufficient scientific training to see through this ruse, perpetrated with the help of scientists who received compensation from industry.

This strategy was very effective in preventing Congressional action on climate change, since it convinced many Senators and Representatives that climate science was fraudulent or at least controversial and hence too unreliable to base policy and law upon.<sup>4</sup>

Once industry created enough doubt in the public’s mind and sowed enough fears, it did not need to prevail on the merits of the scientific debate. They won their short-term victory and

thus delayed meaningful action to reduce carbon emissions and protect the climate.

Fortunately for industry, it is far easier to make unfounded charges and raise misleading questions than it is to authoritatively refute them. Reasonably intelligent public relations operatives and clever lobbyists can endlessly raise invalid but plausible-sounding issues that the public has great difficulty in distinguishing from genuine scientific controversy.

In the next section, I'll summarize the coal and oil industries' early disinformation campaign against climate protection policy. Then I'll review the stands of the right-wing and libertarian think tanks that profess nonpartisan educational aims yet promote industry views. Finally, I'll examine some of the industry's most basic climate change myths.

### **INDUSTRY'S SPIN ON CLIMATE CHANGE**

The fossil fuel industry often works through proxy organizations and individual climate skeptics, who generally have no credibility on climate issues but who are good at shaking public confidence in the conclusions of climate science to paralyze the policy making process.

The Greening Earth Society was one such organization. You might think from its name that it was an environmentally oriented group. But no, The Greening Earth Society was a creation of the Western Fuels Association, a \$400 million coal producer co-op.

From its website ([www.greeningearthsociety.org](http://www.greeningearthsociety.org)), this benevolent-sounding “green organization” served as a gateway to coal, oil, and mining industry-funded think tanks and institutes as well as to publications rife with misinformation. Some of the materials circulated by the “Just Say ‘No’ to Climate Change” folks even targeted elementary school children through their teachers.

When I last searched for [www.greeningearthsociety.org](http://www.greeningearthsociety.org) in 2008, the website was no longer operational. However, at the Western Fuel Association's website, I found a link to the Center for the Study of Carbon Dioxide and Global Change, whose website denies a connection between the Earth's recent warming and increased atmospheric carbon dioxide.

C.D. Idso and K.E. Idso's 1998 treatise, "Carbon Dioxide and Global Warming: Where We Stand on the Issue" was prominent on the Center's website, [www.co2science.org](http://www.co2science.org), in June 2008. "Atmospheric CO<sub>2</sub> enrichment brings growth and prosperity to man and nature alike," they claimed; translation: global warming is good for nature and humanity. Co-author Craig D. Idso, is the Center's founder and former president and he's the former Director of Environmental Science at Peabody Energy Company. Peabody is the world's largest private coal company, fueling 10 percent of all U.S. electricity generation.<sup>5</sup>

Climate skeptics have played a critical role in the coal and oil industries' efforts to foster doubts about climate science and fears of an economic meltdown. Although the skeptics present themselves to the public as independent scientists or respected climate experts, most of the best known of these "objective thinkers" have taken significant amounts of energy industry money for themselves or their organizations, and they espouse scientifically dubious positions.

Prominent examples include Dr. S. Fred Singer, funded at times by Exxon, Shell, Unocal, ARCO, and Sun Oil; Dr. Pat Michaels, recipient of at least \$165,000 from coal and other energy interests; Dr. Richard Lindzen of MIT, who has received money from the Western Fuels Association; and climatologist Dr. Robert Balling of Arizona State University, whose work received over \$300,000 from coal and oil interests.<sup>6</sup>

Individuals like these, supporting views far outside mainstream climate science, have paraded before the media, their presence falsely suggesting a pervasive disagreement among climate scientists and obscuring their wide consensus. At times,

climate skeptics have recycled discredited scientific opinion on the assumption that the public would be unable to sort out the truth.

In doing so, they enjoyed a great advantage. Unwary or irresponsible members of the press have often given these erratic views equal time with those of responsible, reputable climate scientists, creating the false impression that the basic ideas of climate science are widely disputed. Uninformed readers and listeners might be inclined to regard both sides of the make-believe controversy as equally credible, and “split the difference,” since one side said there was a serious problem and the other side claimed there was none.

For an example of just how irresponsible a newspaper can be in publishing nonsense about climate change, see, “Science Has Spoken: Global Warming is a Myth,” which appeared in *The Wall Street Journal* on December 4, 1997. Its authors, chemist Arthur Robinson and his son Zachary, ran the tiny Oregon Institute of Science and Medicine outside Cave Junction, Oregon, from which they marketed nuclear bomb shelters and home-schooling advice.

Relying on the mistaken claim that changes in solar activity explain the Earth’s increase in temperatures since the Little Ice Age, the article concludes, “There is not a shred of persuasive evidence that humans have been responsible for increasing global temperatures.” The article then advises readers not to worry “about human use of hydrocarbons warming the Earth.”

“Carbon dioxide emissions have actually been a boon for the environment,” the article states. “Our children will enjoy an Earth with twice as much plant and animal life as that with which we are now blessed. This is a wonderful and unexpected gift from the Industrial Revolution.”<sup>7</sup>

Another attempt to cloak the climate disinformation campaign in the trappings of science was a “Global Warming Petition” supposedly signed by 17,000 U.S. scientists, but whose names were published without any identifying titles

or affiliations. (The list included author John Grisham, several actors from the TV series M\*A\*S\*H\*, and a Spice Girl.) The petition was circulated by none other than Dr. Robinson's Oregon Institute of Science and Medicine.

With the petition came a bogus "eight-page abstract of the latest research on climate change," formatted to look like a published scientific article from the prestigious *Proceedings of the National Academy of Sciences*, with which it had no connection.

Filled with misinformation and put together by the Robinsons and two coauthors affiliated with the George C. Marshall Institute, the tract was accompanied by a letter of endorsement from the late Dr. Frederick Seitz, a former president of the National Academy of Sciences in the 1960s, who contended that "global warming is a myth." Dr. Seitz was a physicist, not a climatologist, and in the opinions of at least two very prominent scientists, "has no expertise in climate matters." He had been, however, "one of the last remaining scientists who insist that humans have not altered the stratospheric ozone layer, despite an overwhelming body of evidence to the contrary." Dr. Seitz's views illustrate that expertise and professional distinction, even in physics, does not insure good judgment in another area of science and policy.