

Film 3, *A Climate of Doubt* and *Merchants of Doubt* (2024)

A great battle is currently underway. Millions of lives hang in the balance. Hundreds of people millions risk becoming refugees in what may well be the greatest diaspora in human history. The world economy may teeter; entire nations disappear. As in all wars, animals and plants will also suffer; tens of thousands of species will become extinct. No place on the face of the globe will be left untouched, from the upper limits of the atmosphere to the deepest ocean floors.

What will cause all this? Climate change brought about by a range of human practices. To mitigate as best we can the above and a great many more consequences, we need, according to the Intergovernmental Panel on Climate Change (IPCC) and other experts, to limit global warming to a maximum of two degrees Celsius (3.6 Fahrenheit). To do this, something like 88% of the Earth's coal reserves, 35% of its oil, and 52% of its natural gas must remain in the ground, unextracted.

The problem is that these resources are of enormous economic value. Some of the wealthiest companies on the planet are in the fossil fuel business. For the most part, they primarily measure their worth not in terms of money in the bank, but rather by the value of unextracted fossil fuels that they control.

If we mandated that the aforementioned percentages of these resources remained in the ground, it would staggeringly reduce the values of these companies. Imagine having \$100 in the bank and being faced with the prospect that 88% of it could never be taken out. For all practical purposes, you would now have \$12, not \$100. You would not likely be pleased. Not surprisingly, these companies are not at all happy.

Consequently, these companies have doubled down and are now fighting for their financial interests, rather than those of the planet and its life, including human beings. When I said that a great battle was currently underway, this is what I meant: a battle between the fossil fuel industry and its many affiliates and champions (such as politicians who it funds) and, on the opposing side, a range of individuals who want to act quickly and decisively to mitigate the climate crisis, thereby keeping the earth as welcoming and habitable as possible for human and a range of beings with which we share the planet.

a)

Have you ever wondered how climate change became such a political issue, such a battleground, in America? Like everything else, this has a history. While we can see it as a long history spanning decades, the last dozen or so years has been incredibly important.

The documentaries *A Climate of Doubt* and *Merchants of Doubt* both take up this history, though in somewhat different ways.

A Climate of Doubt, which is a PBS Frontline documentary, chronicles a decisive moment in American history when the politicalization of climate change came to a head. Although the film is now a decade old, it is of historical interest, as it chronicles when the tide began to turn in favor of fossil fuel interests.

While you might have been under the impression that this sea-change took place with the election of Donald Trump in 2016, the situation really goes back a few years further.

Here is how the filmmakers described their documentary in 2012:

“Four years ago, climate change was hot. Politicians from both parties, pressed by an anxious public, seemed poised to act. But that was then. Today [i.e. 2012], public opinion about the climate issue has cooled, and politicians either ignore the issue or loudly proclaim their skepticism of scientific evidence that human activity is imperiling the planet. What’s behind this reversal? FRONTLINE correspondent John Hockenberry...goes inside the organizations that fought the scientific establishment, environmental groups, and lawmakers to shift the direction of debate on climate issues and redefined the politics of global warming.”

But how, exactly, is this battle being fought?

At first glance, this may seem to be a battle for scientists to wage with the fossil fuel interests. However, the underlying science is no longer seriously in question. As you may have heard (I repeatedly mention it and the paper introducing it has been referenced in the media more than any other on climate change), a 2013 study that looked at roughly 12,000 journal articles dealing with climate change found that 97% of these scientists concluded that climate change is real, underway, and is principally anthropogenic.

Instead, this is largely – as amazing as it may seem – a battle of words. A debate on whether the climate crisis is real or not being staged for the public.

Ultimately, as years pass and the real-world consequences of anthropogenic climate change become impossible to deny, fossil fuel companies and their allies will lose this war. However, each year that they sway public opinion away from the truth regarding climate change and our acting on that knowledge, the more severe will be the consequence, as many more trillions of pounds of fossil fuels will annually be extracted and burned while we wait.

From the point of view of the fossil fuel industry, their goal is to take every last dollar that they possibly can out of the ground before legislation hampers them from doing so. How much will be extracted? Quite a bit depends on this debate over the nature and validity of climate change.

What is fascinating here is that there is no real debate. The thousands of scientists researching this issue have concluded beyond any reasonable doubt (they certainly no longer debate the issue among themselves) that anthropogenic climate change represents a real, pressing, and significant global danger. Nonetheless, a media spectacle is being staged by fossil fuel interests with the goal of influencing public opinion.

Surprisingly, unlike many debates, winning over opinion to one side or the other isn't necessarily the goal. True, on the one side, scientists would like to convince the public that anthropogenic climate change is indeed real, but, as far as climate change deniers are concerned, all that matters is that a broad swath of the public is confused or unsure whether human beings are indeed significantly changing our planet's climate.

In this sense, their goal is to create doubt, as an individual doubting the validity and scope of a problem is unlikely to make sweeping life changes and support the spending of trillions of tax dollars in an attempt to remedy it.

In their 2010 book *Merchants of Doubt*, two historians (Naomi Oreskes and Erik Conway) explored how effective campaigns of disinformation were waged by tobacco and fossil fuel interests in order to block government interventions into their industries. Surprisingly, as *Merchants of Doubt* made clear, these two campaigns used some of the same rogue scientists to build their cases.

In 2014, a documentary of the same name was made of the book. Here is how the filmmakers describe it:

“Merchants of Doubt takes audiences on a satirically comedic, yet illuminating ride into the heart of conjuring American spin. Filmmaker Robert Kenner lifts the curtain on a secretive group of highly charismatic, silver-tongued pundits-for-hire who present themselves in the media as scientific authorities – yet have the contrary aim of spreading maximum confusion about well-studied public threats ranging from toxic chemicals to pharmaceuticals to climate change.”

I am curious to hear what you thought of either one of the other (or both) of these “doubt” documentaries and the battle underway for the support of the American public.

Class discussion of *Merchants of Doubt*

Note that the following observations, which are in italics, have not been paraphrased or altered, though I do correct the occasional typo and, because of space concerns, often just part of the comment is reproduced here along with my reply. In working through these, I will first quote a student’s observation, followed by my thoughts.

Watching the documentary “A Climate of Doubt” was so infuriating that I had to pause it half way through and take a 10-minute walk around my house trying to fathom how people can be so incredibly selfish.

And similarly:

After watching, “A Climate of Doubt” I’m simply in utter disgust and disbelief. It was truly hard to watch all fifty-three minutes of it.

Quite a few people found it difficult to travel the world with Leonardo DiCaprio and see the impact of climate change. And some people, quite understandably, found it more than a little tough to watch the documentary about the fire in Paradise, California.

But *A Climate of Doubt* was difficult to watch for an entirely different reason, as it introduces a cause of the climate crisis that we sometimes ignore. Not greenhouse gases, like CO₂ and methane, and not human practices, like eating beef and driving cars, but rather the fossil fuel industry’s attempt to deny the climate crisis and keep us in the dark.

Even if every person and every government on the planet resolved to do all that we could to solve climate crisis, we would still be facing an enormous undertaking. Indeed, it would have been an incredible challenge 50 years ago when we first realized that there was a problem.

But the fact is that the fossil fuel industry and its affiliates and champions (i.e. such as certain politicians) have been extraordinarily successful in keeping us from tackling the climate crisis. They have done so by simply denying that there is a problem.

From the perspective of the fossil fuel industry, the challenge is to keep their corporations alive, as they would obviously go out of business as fossil fuel companies if we shifted away from extracting and using these resources. Of course, from another perspective, the challenge is to keep the planet healthy, not these corporations.

Unfortunately, not only are these two enterprises in direct conflict, but for decades the fossil fuel industry has been winning, as it is healthy and growing. In contrast, the Earth and its life are suffering.

Because this documentary introduces us to some of the masterminds behind this project to deny the climate crisis, it can, indeed, as both of these people noted, be difficult to watch.

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When asked what would happen if the climate skeptics were wrong, Myron Ebell's response was only "I would be sorry." Are you kidding me? When millions of people have to be relocated because their homes are no longer habitable, when the 3 billion people on earth who rely on fish for their primary food source starve, and billions of species go extinct — I think it's going to be a little too late for an apology...I think that politicians who deny climate change need to be locked up in jail. I know that sounds extreme, but the policies that they are promoting are destroying our ecosystem and ruining any chance that we have at salvaging a habitable planet.

See also the following statements regarding Myron Ebell.

How can their "sorry" answer their grandchildren's pleas for clean air, less hurricanes, less fires, and a more hopeful future?

His answer was "then I'll have to say I'm sorry." This really frustrates me for a number of reasons. First, just in the years since this [documentary] has been made, we have experienced major climate disasters and are seeing the effects of the climate crisis...Second, it is infuriating seeing a wealthy old man say that he'll apologize if he's wrong when in reality he's gotten to live his life, he's not going to feel the effects the way poor communities are, the way younger generations are.

Myron Ebell has been politically active for a number of decades now. In the 1990s, he worked in the defense of the tobacco industry in an effort to keep it from being regulated. For over 25 years he has been working to deny the climate crisis. In September 2016, two months before he was elected president, Donald Trump revealed that Myron Ebell would lead his transition team for the Environmental Protection Agency (EPA).

Allow me to repeat that. The future of what is arguably the most influential environmental protection organization on the planet was handed over to Myron Ebell.

Consequently, immediately after Trump was elected, there was considerable speculation that Ebell would be appointed as the EPA Administrator (Director).

Donald Trump made a number of public statements (often by way of tweets) denying the climate crisis. However, what went on behind the scenes in his administration with respect to the crisis is even more shocking. A prime example would be appointing Myron Ebell as the architect of an entirely new Environmental Protection Agency, which denied the validity of the climate crisis altogether.

Shortly after Donald Trump was sworn into office in January 2017, he [“instructed EPA’s communications team to remove the website’s climate change page, which contains links to scientific global warming research, as well as detailed data on emissions.”](#) By [“April 2017, the Trump administration took down the agency’s extensive trove of resources on climate change.”](#)

When *A Climate of Doubt* was made, Myron Ebell was something of a fringe character in American politics. Just a few years later, he set about making climate change denial the official position of the US. government, including the Environmental Protection Agency itself.

While I was always aware that the topic of climate change and the climate crisis was political, I was also unaware of the extent to which politics affected the issue. For the most part I was under the belief that climate change skepticism was relatively rare, and was only such a big issue because a minority of people (being policymakers, members of Congress, and lobbyists) held a large amount of power. While this is true to an extent, I was completely unaware of the sheer number of people who are in the dark about the issue of climate change

The fossil fuel industry and its affiliates have taken a multi-prong approach to making sure that the industry is allowed to continue with its business as usual, regardless of the impact that it has on the planet and its life.

First, as *A Climate of Doubt* revealed, they are directly contributing (in some cases, millions of dollars) to individual politicians. However, this would not be sufficient if the American public, specifically the people who put these politicians in office, we’re at odds with this project.

Consequently, the fossil fuel industry has gotten into the business of trying to convince the American public (and by that, I mean voters) to go along with this project, even though it is completely against the public's interests and counter to the facts and science.

As I have noted elsewhere, this doesn't necessarily mean convincing the American public that climate change is definitely not happening. Instead, all that is needed is to raise enough doubt in the minds of the public to keep them from voting for candidates who take the position that the climate crisis is real and needs to be dealt with quickly and decisively.

One of the things that is most striking about *A Climate of Doubt* is that it reveals that the fossil fuel industry and its affiliates have been remarkably successful in raising doubt in the last decade.

Just how successful have they been in swaying the voting public? In November 2016, a climate change denier was elected President of the United States.

[O]ne part of the film that gave me hope for the fight against climate change denial was hearing Bob Inglis talk about how he changed his mind about climate change after witnessing its consequences first hand. It's nice to see that even people who once held firm beliefs of denial can be educated and change their minds. Examples like that one give me hope that people can realize the truth, however I worry that it will take too long before enough people change their minds for it to make a difference.

If you don't happen to recall, Bob Inglis was an exceptionally conservative member of the US. House of Representatives from South Carolina who nonetheless refused to deny that climate change was happening. As a consequence, he was quickly voted out of office (he didn't even receive his party's nomination).

Bob Inglis's story is heartening because, as this person notes, "even people who once held firm beliefs of denial can be educated and change their minds." On the other hand, it's a disheartening tale, as Inglis was crushed by a political machine largely controlled by the fossil fuel industry. As a consequence, he became something of a cautionary tale for any conservative politician who might advocate for climate change action.

Although there were many quotes that resonated with me throughout the film, one in particular sent chills down my spine, "doubt is our product". It sickens me that there are mega million corporations out there that have lied about their harmful product or production for monetary gain...How could half of America allow themselves to be fooled by industries that just want to fill their pockets even more?

The tobacco and fossil fuel industries provide fascinating case studies in how a broad swath of the American public was swayed to support industries that clearly harm (and in some cases actually kill) these supporters directly.

The whole notion of democracy hinges on the fact that citizens would vote for politicians that would, first and foremost, act in the best interest of these citizens. Historically, this is why democracies supplanted monarchies, which largely acted in the interest of the monarch and other powerful groups and individuals.

It is surprising, then, that democracy can be subverted by wealthy and powerful individuals and corporations. Since politicians cannot be directly appointed by these corporations (in the way that various leaders are appointed in monarchies and dictatorships), massive media and political campaigns are now initiated to put such politicians in the office.

It could be argued that one of the flaws in our particular form of democracy in the US. is that we allow powerful corporations and interests to finance the campaigns of politicians. In effect, this allows them to buy votes, as it is demonstrably the case that the more money that is infused into a campaign the more votes will be received.

This is why some politicians, such as Bernie Sanders and AOC (who both, incidentally, support the Green New Deal), argue for campaign reform. As Sanders succinctly puts it, we need to “[Get Corporate Money Out of Politics.](#)”

This is yet another example of something that we could do to help mitigate the climate crisis that never occurs to most people. Indeed, getting corporate money out of politics might well be one of the most effective things that we could do to help mitigate the climate crisis.

[A]fter watching this week's film Climate of Doubt. I feel angry, confused, and frustrated as I see people denying the climate crisis. I grew up in China, a country that has begun to pay more attention to climate issues in recent years. Most Chinese students have developed the awareness of protecting the environment. If you ask a young girl on the street if she believes in the climate crisis, the answer is very likely to be “yes.”

Although climate change denial is rampant in the US, this is not the case across the planet.

Climate change denial is often found in countries that speak English, such as Canada, England Australia, and New Zealand (in addition to the U.S, of course). The reason for this is that the climate change denial literature, which exists both in print and online, is generally written in English, as it primarily comes from the US, where it is funded by fossil fuel interests.

However, in recent years it has spread to some other countries, such as [Spain, Finland, Austria, and Germany](#), arguably in response to the recent rise of nationalism. The issue here is the climate change needs to be addressed as global problem, as greenhouse gas are being emitted it all over the planet. Hence every country needs to agree to cut down on these emissions, which is exactly what happened at the COP 21 in 2015, as the countries

of planet Earth all signed an agreement (now called the Paris Agreement, as this is where it was signed) to cut down on emissions.

In short, [“in order to confront climate change, we need additional loyalties and commitments to a level beyond the nation.”](#) This is at odds with nationalism in so far as the goal is often to close borders and reduce, rather than strengthen, ties with other countries. Hence, climate change denial has been spreading with nationalism in the past few years - and is yet another reason why the recent spread of nationalism is alarming.

In any event, one might suppose the climate change denial would be similarly rampant in China, as the two largest oil companies on the planet, Sinopec and China National Petroleum, are Chinese corporations. However, both are wholly owned by the state. As a consequence, the Chinese government dictates their behavior, which means that they are not allowed to promote climate change denial like Western oil companies.

This is an intriguing example of a government response to climate crisis, as China decided that it is clearly not in the benefit of its people to deny the crisis. The government is able to act because it is more powerful than corporations in China, even though Sinopec and China National Petroleum are, when measured by revenue, [two of the five wealthiest companies on the planet.](#)

Put simply, in China, the government controls corporations, which is arguably just the opposite of the situation in the U.S. today. Consequently, with respect to the climate crisis, China is now producing [twice as much solar](#) and [twice as much wind](#) energy as the U.S. and has made [a commitment to cut meat consumption by 50% by 2030.](#)

This is not to say that corporations need to be government owned in order to reel them in. Denmark, for example, has an open economy though a strong central government. Hence, the [“Denmark’s parliament recently voted](#) to make its new and sweeping carbon reduction plan law. Denmark has one of the most aggressive climate plans of any country, aiming to reduce emissions to 70% of its 1990 carbon levels within 10 years.”

As former climate skeptics like Rep. Inglis demonstrated in their ill-fated efforts to spread the truth, trying to stop climate change denial is like trying to put a lid on a thousand schoolyard rumors at once. All it takes is one mention of “sunspots” or “more than 31,000 scientists” or “a candle in a crib” on the news for millions to keep parroting it for years to come. What good is a peer-reviewed study against a self-perpetuating wall of bite-sized falsehoods? Disturbingly, “Merchants of Doubt” demonstrates to us that when it comes to quelling climate change denial, the truth is not enough.

“[T]he truth is not enough.” What a perfect summation of the problem of climate change denial.

As I have repeatedly noted, scientists have been informing us of the truth about anthropogenic climate change for decades now. And this goes back long before NASA

scientist James Hansen testified before Congress on the issue in 1988, which made the front page of *The New York Times*.

However, “the truth is not enough,” as alternative facts are constantly being generated by fossil fuel affiliates and endlessly rehearsed by climate change deniers. To again quote this person, “[w]hat good is a peer-reviewed study against a self-perpetuating wall of bite-sized falsehoods?”

What is happening here, of course, is that free-speech is being exploited by fossil fuel affiliates.

It is ironic that, as we all know, a person cannot yell fire in a crowded theater. As this could potentially harm people, free speech does not cover such a reckless act. However, even though, to quote Greta Thunberg, “our house is on fire,” there is nothing to stop people from standing up and yelling “No it’s not, please do not do anything,” even though over 500 people were literally cooked alive [just in British Columbia](#) during the heat wave of June/July 2021.

Lake campaign reform, putting an end to the outright and egregious lies being put forth by fossil fuel affiliates might well be one of the most effective things that we could do to help mitigate the climate crisis.

After watching this film, it seemed to me that it’s rather unlikely that we will be able to educate anyone who is already a denier of climate change due to the fact that these companies have so much wealth and so much power that they can afford to keep fueling the spread of disinformation to the public. The only way that I could possibly see change happening in the future would be to implement some form of policy change that completely bans things like fracking or a carbon tax that would directly force people to make eco-friendly decisions based on their own carbon emissions.

This is a sobering but probably true observation. Climate change denial literature has already been so effective that there are some people who will never likely believe that the climate crisis is really happening. At least not for decades, which is not nearly quickly enough.

What then is to be done?

Perhaps the best answer is that we need to, as this person suggests, enact a series of laws, such as regarding fracking, and, importantly, also price carbon emissions.

Right now, any corporation or individual in the US can emit as many greenhouse gases as they please without any cost to them, even though these emissions will ultimately cost us

many trillions of dollars, as well as bring about enormous suffering. The simple solution is that we need to put a price on these emissions, which is what carbon pricing does.

In practical terms, this would mean that the cost of gasoline at the pump would go up significantly. So would pound of beef. Regardless of whether or not you believed in anthropogenic climate change, you would still have to shoulder these costs, just like everyone else. Consequently, you might just forgo having a car or burgers all together, regardless of your position on climate change. You may not like it, but this would simply be the new reality of life.

The problem is climate change denial rhetoric is standing between us and carbon pricing, as not enough U.S. politicians are in office to enact it.

Incidentally, other countries began pricing carbon, in the form of a carbon tax, as early as 1990 (1990 for Finland, 1991 for Norway, and 1992 for Sweden and Denmark). The idea was to start with a relatively small tax and then incrementally increase it. For example, Denmark's carbon tax increased by an average of 1.8% per year from 2008 to 2015.