Subcommittee on Oversight and Investigations The Denial Playbook: How Industries Manipulate Science and Policy from Climate Change to Public Health February 26, 2019

David Michaels Answers to QFRs sent by House Natural Resources Committee, Subcommittee on Oversight and Investigations, TJ Cox, Chairman

1. Last week, we learned that notorious climate denier William Happer is going to be President Trump's pick to lead his ironically-named Committee on Climate Security. Happer is formerly head of the George C. Marshall Institute, a conservative think tank with a long history of denying climate change.

Through numerous publications, the Institute argued that "cyclical variations in the intensity of the sun would offset any climate change associated with elevated greenhouse gases." Their arguments have been debunked by the Intergovernmental Panel on Climate Change, among others. However, their publications have still been used to try to reduce environmental regulations and to combat climate change policies.

Many experts have accepted that the intensity of storms like Hurricane Maria will continue to escalate if we don't begin putting common sense policies in place. This is especially alarming for those living in low-lying islands.

Is this a page out of the denial playbook? Do you have any recommendations on how to best combat denial campaigns like those of William Happer and the George C. Marshall Institute?

Within the scientific community, there is little if any doubt that climate change is being driven by human caused greenhouse gas accumulation. Multiple, massive reports have been written on the subject. The overwhelming proportion of papers in scientific journals work accept this premise. Most climate deniers don't even publish in scientific journals, and then claim bias against their positions. Many of their arguments require if not torturing, then cherry picking data. It would be laughable if it weren't tragic.

For those corporations funding the denial playbook, getting mired in this debate is a primary objective. Arguing over the existence of specific effects of atmospheric carbon accumulation delays actions to reduce or at least slow that buildup. It is important to get past arguments about specific weather events and focus on the big picture – that climate breakdown is occurring, and extreme weather events will become more frequent and more extreme as a result of atmospheric carbon accumulation.

At one time, it might be useful to say that we need scientists without conflicts of interest to review and synthesize the data, but this has been done numerous times. The fossil fuel firms that fund climate breakdown deniers have spent many millions of dollars to promote bad science. Groups like the Heartland Institute and scientists affiliated with them and similar groups, like William Happer, simply should be ignored. The corporations that have funded these groups, however, should be called out and criticized for their outrageous behavior.

2. It sounds like the NFL and NCAA continue to focus on a solution that doesn't really get to the root of the problem. Is this just another page out of the denial playbook? How has the climate denial movement used this same strategy?

After years of denial, the NFL now recognizes that brain damage is a severe problem facing the game of football. The fossil fuel industry is still funding deniers of climate breakdown. At the same time, some of these firms have acknowledged that climate breakdown is occurring and are beginning to talk about solutions, but not in particularly meaningful ways. And none seem willing to make any efforts to actually slow the production of greenhouse gases, since this would impact their profits.

3. In Mr. Hampton's testimony, he described how the pharmaceutical industry tries to shift the blame for opioid addiction to the victims of the epidemic. They essentially tell people it's their fault that they are addicted to opioids. For them, it seems as though distorting the science isn't enough- they also need to turn human beings who are suffering into

scapegoats.

Have you seen this blame shifting in other denial campaigns? How has the fossil fuel industry shifted blame away from themselves in their efforts to deny climate change?

Fossil fuel industry funded front groups like to blame "human nature" or attribute greenhouse gas buildup to progress. In fact, fossil fuels have been subsidized by the government in many ways and have shifted the social and environmental costs of their product on to the public. At the same time, the fossil fuel industry lobbied against programs that would encourage the use of renewable energy sources. It was not inevitable or "human nature" that we used huge amounts of fossil fuels; it happened because the industry had great power and made sure their product was predominant.

4. You also mentioned that the pharmaceutical industry has funded front groups and advocacy groups to continue marketing to doctors and other opioid prescribers. In a similar vein, the fossil fuel industry has funded "green-sounding" groups- often referred to as astroturf groups- to build grassroots opposition tosensible climate change policy.

They have names like "Washington Consumers for Sound Fuel Policy"- which sounds nice but is actually the handiwork of top oil lobbyists. Can you tell us a little more about how these front groups work? What are some of their tactics?

There is extensive evidence that the tobacco industry and the Koch donor network have been the two primary funders of a local and national chain of anti-regulatory, free-market academic centers, think tanks, and "Astroturf" and "Greenwash" groups, all with names that strike similar chords: Freedom Works, Americans for Prosperity, Enough is Enough, the Coalition Against Regressive Taxation, Get Government Off Our Backs Coalition, International Climate Science Coalition, Center for the Study of Carbon Dioxide and Global Change, and countless more. Each purport to be an independent grass roots operation or coalition, but each is in fact an instrument of big business—with the goal of a "small government" that allows people (and corporations) to do what they want, unhindered by government regulation.

The chorus of wealthy corporate entities calling for a return to liberty and small government have two objectives: lower taxes and regulation for the wealthy and corporations and reduce the costly social safety net. With climate breakdown issues specifically, the fossil fuel industry has led the fight against environmental protections, with both overt and covert campaigns to manufacture doubt and defend "the principles of free markets and limited government" in the words of one Koch-funded advocacy group. Thanks to litigation, literally millions of pages of internal tobacco industry documents have given us a new understanding of how tobacco and the Koch family (through Citizens for a Sound Economy and other vehicles) have bankrolled and directed a powerful anti-regulatory campaign in the name of increased freedom and getting the government off our backs. Through these documents, we learned that the Tea Party did *not* spontaneously spring up in opposition to the Affordable Care Act (aka Obamacare) in 2009. Philip Morris first developed the Boston Tea Party analogy for its grass roots operations in 1989 and continued to promote it through the 1990s. In 2002, Citizens for a Sound Economy started the U.S. Tea Party, registering the website www.usteaparty.com.

The fossil fuel industry also funds groups with innocuous sounding names to promote stop regulation that would encourage use of renewable energy sources. See, for example, the Energy & Policy Institute's report on how fossil fuel firms like Koch Industries and Peabody Energy, and electric utility companies, like American Electric Power and Duke Energy, used front groups like the 60 Plus Association, the Citizens' Alliance for Responsible Energy, the Consumer Energy Alliance, and the Partnership for Affordable Clean Energy, to oppose the growth of clean energy, which would compete with their activities: https://www.energyandpolicy.org/renewable-energy-state-policy-attacks-report-2015/

These types of groups work hard to get their positions and statements quoted in the press and social media, often in op eds or by providing "experts" without identifying their funding sources – and that they are actually front groups for the fossil fuel industry. The Checks and Balances Project investigated thus issue and issued a report revealing much about this problem in the mainstream media. The Checks and Balances report, Fossil Fuel Front Groups on the Front Page, is at

https://checksandbalancesproject.files.wordpress.com/2012/12/fossilfuelsonthefrontpage1.pdf

5. As you mentioned in your testimony, the tobacco industry put the denial playbook on the map. They worked for decades to convince the American public that cigarette smoking does not cause lung cancer and that nicotine is not addictive. As you may recall, seven of the top tobacco industry executives famously testified before Congress that they didn't believe nicotine was addictive. We now know how untrue that is. Nicotine is unequivocally addictive, and smoking is responsible for nearly half a million deaths every year in the United States alone. Although the tobacco industry was able to deceive the public and claim millions of lives for years, the truth finally came out.

How did science prevail in that case? Are we starting to see the same trend with climate change science? Is the American public beginning to see through the denial playbook?

The scientific evidence linking tobacco and lung cancer, and showing that nicotine is addictive, has been clear for many decades. What finally changed was that the tobacco industry stopped manufacturing uncertainty about the science because of the powerful impact of litigation. The companies were found to be guilty of racketeering by a federal judge, and the firms lost numerous state court battles. The documents revealed through the discovery process in these cases went public, exposing the cynical campaign the industry had waged for years.

The fossil fuel industry is now facing similar suits. There is already extensive evidence that these firms have known for decades about the harmful impact of burning their products. Discovery documents are likely to expose a great deal more; if and when they are revealed, we will know a great deal more about the industry's campaigns to manufacture scientific uncertainty and public opinion will be impacted significantly, I believe.

6. In scientific research, the findings are really only as good as the methodology. In other words, if the data is collected in a way that is incomplete or biased, the findings will also be incomplete or biases. That's why it's always so important that when we see statistics and scientific conclusions, we critically evaluate how those conclusions were reached.

What are some of the techniques that denial playbook scientists use to reach their biased, or even false, findings? Are they actually changing the data or are the collecting it in a way that is incomplete- similar to the way Mr. Borland described?

Many of the scientific claims of climate change deniers do not use sophisticated methodological techniques to concoct the results they want. They simply cherry pick some limited data and announce their results. Until very recently, for example, this was a typical statement of a climate change denier: "the Earth has been warming and cooling for millennia, certainly before the industrial revolution. It has been steadily warming since the Little Ice Age of the 1700s. Over the past 15 years, despite increasing greenhouse gas emissions, the warming by some measures has stopped." (this one dates to 2013)

This is based on the idea that warming stopped in 1998—a date evidently chosen because of the record high temperatures that year. And by cherry picking the data, it was at least temporarily a useful argument for them: 1998 saw a strong El Nino, a warm water event in the eastern Pacific Ocean, which made that year the hottest one to that date, and something of an anomaly. The next few years were slightly cooler, which made the talking point about 1998 wildly helpful and popular. But global temperatures in 2005 soon exceeded those in 1998, and global temperatures remain hotter than those of 1998. Since then, for the most part, each year has been hotter than the one before it. The seven warmest years on record have all occurred since 2010.

7. In the current administration, we are seeing industry infiltrate federal agency science across the government. As the Chairman mentioned in his statement, it was recently reported that President Trump picked William Happer, the former head of a Kochfunded climate denialist front group, to lead his Committee on Climate Security. But of course, that's only the tip of the iceberg. Just yesterday, the Union of Concerned Scientists posted an article outlining five clear examples of the Trump administration giving industry the reins, including the appointment of William Happer.

The four other incidents they pointed out include:

- Assembling an advisory group of big-name utility companies at the Environmental Protection Agency to guide the rollback of regulations on power and coal plants.
- Setting aside studies that showed how a dangerous pesticide harms children's health, at the behest of Dow Chemical.

- Listening to the requests of automakers to weaken fuel efficiency standards at the EPA.
- Meeting with mining, oil, and gas representatives to reduce protections for the endangered sage grouse on 9 million acres of land managed by the Depaitment of the Interior.

Mr. Michaels, how are these actions by the Trump administration playing into industry's denial playbook?

In terms of climate breakdown denial, the Trump Administration is reviving arguments that have long been discredited, in order to avoid the obvious truth: the climate in changing rapidly, driven by the buildup of greenhouse gasses that have been released into the atmosphere by the burning of fossil fuels.

These other examples have components of the Administration simply ignoring strong scientific evidence and making decisions that endanger human health and the environment, but that will increase the profits of certain industries.

8. What is the one thing that you most want the American public to know about how industry has deceived the American public?

Unfortunately, the long history of the "debate" over tobacco and climate change demonstrates that when corporations have products and activities that are doing real damage, too often their instinctive response is to deny and defend. They enlist mercenary scientists to help question the evidence, shape public opinion, delay public health protections that will help prevent future harm, and defeat litigation claims from people alleging current or past harm.

To address this, we need government decisions to be driven by science produced and interpreted by independent scientists, free of conflict of interest.

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