Testimony of Dr. Geoffrey Supran
Associate Professor of Environmental Science and Policy
Director of Climate Accountability Lab
Rosenstiel School of Marine, Atmospheric, and Earth Science
University of Miami

Senate Committee on Environment and Public Works Spotlight Forum
Worsening Storms, War on Science: Climate Change in Trump's Fossil Fuel Era

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Ranking Member Whitehouse, Members of the Environment and Public Works Committee,

1. The fossil fuel playbook
Two years ago, I testified before the Senate Budget Committee about the fossil-fuel industry's playbook of climate denial and delay. Today, I want to focus on one part of that playbook: its targeting and weaponization of science and expertise.

For decades, fossil-fuel interests have known that their products cause dangerous climate change[1–9]. Yet rather than warn the public, they deployed a strategy familiar from Big Tobacco: cultivate experts who defend business as usual and discredit those who threaten it[3,9–15]. In 1998, Exxon, Chevron, the American Petroleum Institute, and others explicitly strategized to build relationships with sympathetic scientists and maximize their influence with Congress and the media[16].

2. The bigger picture
This assault on expertise is older and broader than climate. Fossil-fuel interests have been at it since the 1920s[17–19]. By the 1970s, they had become intertwined with a conservative and libertarian movement seeking to foster a so-called "counter-intelligentsia" financed by foundations including Olin, Scaife, Koch, and Bradley[20–24]. The Trump administration's political assault on higher education has deep roots in this movement[24].

Two interests thus converged: a commercial motive to defend profits from inconvenient science, and an ideological project to challenge expert institutions informing regulation and governance. Climate science sits at their intersection.

3. The playbook follows the threat
History reveals another pattern: the playbook follows the threat. Physical scientists documented climate change, and were attacked[11,25,26]. As climate science became harder to deny, social scientists documented industry deception, and we were attacked too[27–29].

4. Attribution is the new frontier
The evidentiary frontier is now moving again – to attribution science[30]. Increasingly, scientists can trace the causal chain from particular fossil fuel producers, through emissions and warming, to specific harms and economic costs[31–36]. Emissions from Chevron's products alone have been estimated to cause trillions of dollars in heat-related economic losses[37].

Attribution lets scientists ask not simply, “Did climate change contribute to this harm?” but “Whose pollution contributed, by how much, and with what consequences?”

Attribution matters commercially because it can inform responsibility, damages, and liability. Fossil-fuel propaganda has long shifted responsibility downstream, from producers onto consumers[38,39]. Attribution looks upstream, towards the companies whose products contributed to the harm. Ideologically, attribution gives scientific evidence a potentially powerful role in regulation and the courts.

5. The three-pronged attack on attribution
Today, attribution is under attack at three levels: scientists, science, and institutions[40].

First, attack the scientists. National Academies attribution researchers faced demands for their private communications from Argus Insight, an opposition-research firm funded for research by the political network of right-wing activist Leonard Leo – a network with documented fossil fuel ties[41–45]. The House Science Committee chairman subsequently demanded National Academies records, noting that its report would “likely influence significant litigation and policy decisions.”[46]

Second, attack the science. Republican senators introduced legislation declaring that efforts to attribute climate damages to energy businesses “lack scientific credibility.”[47] This contradicted the National Academies’ assessment that attribution science has advanced considerably and can provide useful information in legal contexts[48].

Third, attack the institutions. Twenty-seven Republican state attorneys general objected to a climate science chapter in the scientific reference manual for federal judges, leading to its removal[49,50]. President Trump called the material “political fraud and false science.”

These actions emerge from overlapping commercial and ideological interests. Seen historically, the pattern is pressure across the entire pathway from scientific knowledge to accountability.

6. From greenhouse pollution to information pollution
Another frontier is already emerging, attributing damages not only to greenhouse pollution, but to information pollution – to the deception itself[51–55]. The scientific frontier keeps advancing, and the playbook will keep following the threat.

7. From knowledge to justice
Why does this matter? Because attacks on expertise threaten the ability of scientific evidence to inform democratic decision-making and accountability. As my colleagues and I wrote in 2019, fossil fuel deception denied Americans their “right to be accurately informed about climate change, just as they were denied the right to be informed about the risks of smoking.”[56] That was about our right to know.

But the stakes now extend to our right to seek accountability. More than one in four Americans live in jurisdictions whose governments have sued oil companies for their climate damages and deceit[57]. Efforts to restrict those cases – or undermine their scientific evidence – threaten the ability of tens of millions of Americans to seek justice through the courts.

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