

# Colorado Targeted by Fossil Fuel Industry's Disinformation Playbook

*Climate Deception Harms Communities' Health  
and Safety*

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# Chapter 1

## Deceiving the Public: The Disinformation Playbook

Communities across Colorado, especially those near major fracking sites, suffer substantial harm from oil and gas operations. The oil and gas industry not only endangers their health and safety but also plays an immense role in climate change that adversely affects the region, leaving the state and localities to foot the bill for the resulting damages and the costs of adaptation. The industry claims unearned credit for high economic performance, overstates its financial contributions to the state and local economies, and leaves state coffers to cover much of the financial burden of cleaning up abandoned ventures.

Over the past decade the oil and gas industry has used deceptive tactics to exert outsized political control in the state, a corporate strategy that deeply threatens Coloradans. The Union of Concerned Scientists (UCS) calls these industry tactics the Disinformation Playbook. Corporate interests use the Disinformation Playbook to sideline science and facts, deceive the public, and buy political influence at the expense of public health and safety. Inspired by the tobacco industry’s successful application of the Playbook in its long battle to evade regulation and legal liability, these tactics have spread rapidly to other industries—including the fossil fuel industry, as UCS has documented in *The Climate Deception Dossiers* (Mulvey and Shulman 2015). Over the past decade, Colorado has been a primary target of the “plays” employed by oil and gas companies and their surrogates.

UCS has examined the various ways the oil and gas industry maintains its stranglehold on the political processes and people of Colorado. UCS has documented this industry’s use of four basic disinformation plays in Colorado:

- **The Fix:** The industry manipulates government officials or processes to inappropriately influence policy to its financial advantage.
- **The Diversion:** The industry manufactures uncertainty about science (including economics) and facts where little or no uncertainty exists.
- **The Screen:** The industry buys credibility through alliances with academia, professional societies, and trusted local organizations and messengers.
- **The Fake:** The industry creates, supports, and promotes questionable scientific and economic analyses and tries to pass them off as facts or legitimate research.



*Misrepresenting science. Manufacturing uncertainty. Buying credibility. Manipulating policymaking. The fossil fuel industry in Colorado uses these tricks to evade responsibility for the harm its products cause.*

*SOURCE: WildEarth Guardians*

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## **The Disinformation Playbook and Colorado Oil and Gas Operations**

As oil and gas exploration and extraction continue expanding across Colorado, threats to human health and safety, damage to precious natural resources, and costs associated with climate change are mounting. In response, Coloradans are fighting for the health and well-being of their families and communities—protesting, demonstrating, and speaking out; testifying at the legislature and regulatory agencies charged with protecting Coloradans; gathering signatures for ballot initiatives; raising the visibility of health and safety issues in the local press and on social media; and even suing major oil and gas companies to force them to pay a fair share of the costs of remediating climate-related damages. State legislation enacted in 2019 put some meaningful public protections in place: Colorado Governor Jared Polis signed Senate Bill 181, *Concerning Additional Public Welfare Protections Regarding the Conduct of Oil and Gas Operations, and, in Connection Therewith, Making an Appropriation* (Colorado General Assembly 2019). It includes these protections:

- Refocusing the mission of the Colorado Oil and Gas Conservation Commission to prioritize health, safety, and the environment over industry profits and staffing it with paid, full-time experts;
- Giving local governments a stronger say by clarifying basic powers such as zoning and noise limitations and allowing local oversight and enforcement of operations;
- Reducing allowable levels of harmful air pollution, including volatile organic compounds, nitrogen oxides, and methane (a potent global warming gas), by adopting rules related to oil and natural gas well production facilities and compressor stations;

- Better protecting property owners from “forced pooling,” which requires landowners to cede their land to oil and gas drilling against their will if enough of their neighbors agree to do so; and
- Combating the growing problem of “orphaned” wells—wells with no known owner or bankrupt owners—by setting forth a rule around financial assurances and bonding requirements for oil and gas permits.

Despite the community efforts and some notable victories, the deck remains heavily stacked against the people of Colorado. Oil and gas companies use aggressive and often deceptive public relations campaigns, wield undue political influence, and deploy tactics that often fly under the public radar—all fueled by undisclosed but vast amounts of money. The industry goal: to weaken, delay, or sideline science-based decisions that would protect public health and safety and the environment.

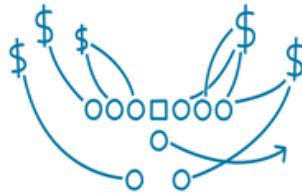
For more than a decade, Colorado oil and gas exploration and development have intensified, often putting dangerous and polluting industrial activities in close proximity to homes, schools, playgrounds, and other public spaces. This report exposes how the fossil fuel industry positions itself as the backbone of the state economy, often framing any community opposition to this industry’s dangerous operations as a fight against local interest in the form of tax revenue, school funding, and jobs. The industry largely glosses over evidence it causes health, economic, or environmental damage, and its clout enables oil and gas extraction and expansion to continue with little regard for those facing the adverse health and economic impacts.

In Colorado, the oil and gas industry is comprised of powerful transnational corporations, including ExxonMobil and Chevron, along with companies such as Noble Energy (now owned by Chevron), Anadarko (now owned by Occidental Petroleum), and Suncor (a large Canadian tar-sands operation with close ties to ExxonMobil and Royal Dutch Shell). The industry’s interests are represented by heavyweight national lobbying outfits like the American Petroleum Institute (API), as well as local trade associations, like the Colorado Oil and Gas Association (COGA). A proliferation of industry-created and backed front groups includes several with ties to the private multinational conglomerate Koch Industries. They often all work together to run the same Disinformation Playbook.

Of course, the fossil fuel industry uses similar tactics and wields considerable political clout in other oil- and gas-producing states and at the federal level. Consider its success in stalling any meaningful climate action for more than two decades and its ability to despoil public and Native lands and waters with drilling and pipelines. Or consider the API’s nationwide TV and digital ad campaign, launched ahead of the 2020 elections and targeting not only Colorado, New Mexico, Pennsylvania, and other key oil- and gas-producing states but also Wisconsin, Michigan, and other political swing states (API 2020a; API 2020b).

# Chapter 2

## Disinformation Tactic: The Fix



*Manipulate government officials and processes to inappropriately influence policy*

Many companies and business groups lobby state and local governments, seeking to convince them to enact legislation and regulations favorable to their interests as well as to influence regulatory or judicial processes that might lead to industry liability. Some companies and trade associations go so far as attempting to manipulate democratic processes, undermine scientific evidence, and evade liability for the harms their industries cause. While it is reasonable for public officials to consider industry’s views, transparency and public vigilance are necessary as well.

How does the fossil fuel industry use “The Fix” to rig the system in its favor in Colorado? In the big picture, the industry—including oil and gas companies, their trade associations, and front groups—pours vast amounts of money into the state to undermine science-based decisionmaking. A *Denver Post* investigation revealed that the industry spent in excess of \$80 million from 2012 through 2016—using the money to support political candidates, thwart or sway ballot initiatives, and influence public opinion—all in a state with a population of just over 5 million people (Osher 2017). A former Anadarko Petroleum director of public affairs who helped develop the industry’s strategy boasted to the *Post* that he believed the Colorado political and public relations effort was among the best funded in the country. As for its efficacy: had the industry not responded as it did, fracking likely would have been banned in Colorado, he claimed (Osher 2017).

The Colorado oil and gas industry uses “The Fix” to exert political power over crucial legislation, regulations, legal challenges, and grassroots initiatives in five ways:

- Lobbying to weaken public health and safety protections and enhance fossil fuel profits;
- Overwhelming public voices to thwart ballot initiatives;
- Pitting local leaders against the health and safety of their constituents;

- Influencing public policy positions from inside and out; and
- Using proxy groups to confuse the public and undermine support for climate accountability lawsuits.

## **Lobbying to Weaken Public Health and Safety Protections and Enhance Fossil Fuel Profits**

In the early years of fracking in Colorado, API and its local division, the Colorado Petroleum Council (CPC), pushed the state legislature to enact the little-known *ad valorem* tax credit, which allows oil and gas companies to deduct local property taxes from the severance tax that fossil fuel companies must pay to the state. As local property taxes have increased, particularly for oil and gas operations, the state’s pool of severance taxes, based on production and profits, has shrunk—even though severance-tax revenues are needed to remediate abandoned and orphaned wells. Such wells are often underground pathways through which toxic fluids and gases migrate upward into air, water, and homes. These wells are also a significant source of leaked methane, a heat-trapping pollutant that has 80 times the warming power of carbon dioxide during the first 20 years after it reaches the atmosphere (Bushkin-Bedient et al. 2020). Thanks to the *ad valorem* tax credit, some oil and gas operations have paid nothing to the state in recent years, leaving old wells unremediated and dangerous to residents (Eason 2020; Legislative Council Staff, n.d.; Silbaugh 2020).

In April 2017, a house in Firestone, Colorado blew up, killing two residents and seriously injuring a third. The explosion was traced to gas leaking from an old well that had not been disconnected from the wellhead or properly capped (Markus 2018; Osher 2017; Svaldi and Finley 2017). In direct response to the explosion, the legislature took up a science-based bill to require regulators to map oil and gas pipelines throughout the state; a filibuster in the Republican-controlled state Senate killed the proposal. Lobbying disclosure reports and campaign-finance records showed that Anadarko and Noble Energy, both of which opposed the bill, spent significantly in support of Senate Republican candidates in the 2016 election as well as to directly lobby against the bill (Osher 2017; Sirota 2017).

Also in April 2017, the legislature considered a bill mandating that new oil and gas facilities be set back a certain distance from school property. Such a policy is intended to reduce children’s exposure to toxic releases by keeping them a safer distance from potential explosions. By a one-vote margin along party lines, a Senate committee killed the bill to establish a buffer zone separating oil and gas wells and associated facilities from occupied buildings and property lines. COGA, CPC, and other industry representatives led the opposition, arguing that “energy is the cornerstone of [the state’s] prosperity” (Glick and Ray 2017)—overstating the industry’s economic importance while ignoring the value of keeping children safe. An investigative report put oil and gas industry clout into some perspective: “Most of the people who testified in favor of the school setback bill were residents. . . . Virtually all who opposed it were paid lobbyists, most from industry associations” (Glick and Ray 2017).

With the passage of Senate Bill 181 in 2019, the state got serious about tightening health and safety controls on the oil and gas industry. The industry, which aggressively opposed the bill, lobbied successfully for a late language change that weakened the ability of local governments to protect public health and safety. At the behest of industry lobbyists, the terms “necessary



and reasonable” were added as qualifiers to the bill’s text, potentially limiting the ability of cities and counties to require new protective measures (Bloom 2019).



*Oil and gas operations in direct proximity to homes in Weld County, Colorado. The current scientific consensus is that a 2,000–2,500-foot setback is needed to protect health and safety, especially that of children. Fossil fuel industry representatives have fought against standards that would keep dangerous oil and gas operations a safe distance from children and families.*  
*SOURCE: WildEarth Guardians*

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Once Senate Bill 181 became law, the battleground shifted to the Colorado Oil and Gas Conservation Commission (COGCC), the state agency charged with developing and implementing regulations on the oil and gas industry. At public hearings, the industry self-servingly claimed that the law—which allows substantially more local control over siting, permitting, reporting, and safety regulations—gives local governments authority to set new standards *less* stringent than state regulations, an interpretation that the law’s authors vehemently reject (Jaffe 2020b; Young 2020). The industry position appears to have been an attempt to leave the door open for future lobbying to undermine the state’s science-based health and safety regulations through pressure on local councils or boards.

## **Overwhelming Public Voices to Thwart Ballot Initiatives**

In 2016, aggressive campaigns by Protect Colorado and Coloradans for Responsible Energy Development (CRED)—front groups funded by API, CPC, Noble Energy, and Occidental Petroleum—prevented two grassroots-driven ballot measures from getting in front of voters (Dyer 2016a). One measure would have increased local control over oil and gas expansion, with the aim of putting science at the forefront of decision-making on siting, reporting, and safety requirements designed to protect the communities. The other measure would have improved community health and safety by requiring fracking operations be set back 2,500 feet from any occupied structure (homes, schools, businesses) or “areas of concern” (drinking water sources, lakes, parks). The current scientific consensus is that a setback of 2,000 to 2,500 feet is needed to protect health and safety, especially that of children (Lewis, Greiner, and

Brown 2018; Milton et al. 2014; McKenzie et al. 2012). The setback would have reduced exposure to air and water pollution, lessened noise pollution, and kept children further from potential explosions. Opponents outraised proponents by a ratio of 24–1, with 99.9 percent of the opponents’ nearly \$17 million total coming from energy industry companies or front groups; their campaign drowned out the public health and safety arguments at the heart of initiative (Table 1) (Blake 2016; Claypool 2016).

Table 1. An Example of How Industry Spending Overwhelms Health and Safety

| Group Name                                     | Support/Oppose | Total Contributions | % Contributions that Came from Corporate/Business Groups |
|--|----------------|---------------------|--|
| <b>Yes for Health and Safety Over Fracking</b> | Support        | \$703,536           | 3.60%  |
| <b>Protect Colorado</b>                        | Oppose         | \$16,904,293        | 99.90%   |

*Fossil fuel companies, under the guise of Protect Colorado PAC, amassed nearly \$17 million to prevent the Mandatory Setback from Oil and Gas Development Amendment (#78) from going before voters in the 2016 election. Supporters of “Yes for Health and Safety Over Fracking” were out-raised by a ratio of 24:1. Among the big spenders were Anadarko (\$6.5 million), Noble Energy (\$5 million), Coloradans for Responsible Energy Development (\$500,000), and Extraction Oil & Gas (\$375,000). SOURCE: Claypool 2016; Blake 2016*

Protect Colorado repeated the play again two years later, in 2018, spending almost \$40 million to oppose Proposition 112 (Sirota and Woodruff 2018b), which would have required new oil and gas development projects to be set back 2,500 feet from occupied buildings and other areas of concern. In addition to donating millions of dollars to Protect Colorado PAC to oppose Proposition 112, Noble Energy directly funded spots on at least 12 TV stations in the month before the election (Sirota and Woodruff 2018b). One ad explicitly told voters: “When you vote, we need your support to stop Proposition 112, so we can continue producing the natural gas and oil that power our daily lives.” This ad ignored the initiative’s health and safety intent, instead advancing a bogus economic argument that stronger protective measures would put the industry out of business (Sirota and Woodruff 2018a).

In 2020, the industry poured money into ad campaigns even with no initiatives on the ballot or legislation in the works. Protect Colorado spent hundreds of thousands of dollars on a statewide online and TV ad campaign aimed at Governor Polis and the COGCC, threatening to challenge any new regulations, particularly on siting setbacks, that the industry deemed unreasonable (Bunch 2020). The industry promoted 500-foot setbacks—about one-fourth the distance that scientists say is best to protect communities, especially vulnerable populations (Lewis, Greiner, and Brown 2018; Milton et al. 2014).

## Pitting Local Leaders Against the Health and Safety of Their Constituents

Local efforts to ban fracking, institute moratoriums on expanding operations, or impose stricter regulations on oil and gas drilling and fracking began building several years ago, achieving considerable success in 2012 and 2013 in some communities on the Front Range of the Southern Rocky Mountains (Wines 2013). An industry counteroffensive began exerting its influence locally around the same time. Evidence of industry interference in local affairs emerged in a leaked transcript of a presentation made by Mark Truax, director of operations and coalitions for the front group CRED, at the 2015 annual conference of the Interstate Oil and Gas Compact Commission, attended by industry representatives, state regulators, and elected officials (Dyer 2016a; Glick and Ray 2016).

According to a transcript of Truax’s presentation, CRED and its innocuous-sounding political arm, Protect Colorado, helped defeat an anti-fracking initiative in Loveland, an emergency moratorium on fracking in Erie, and a community bill of rights in Windsor. They also conducted preemptive strikes to elect pro-oil and gas city council members in Fort Collins and Denver and stopped the recall of a swing-vote city councilor who had failed to disclose serious conflicts of interest related to the oil and gas industry during her election campaign. While concealing their ties to fossil fuel companies, these deceptively named industry-backed groups have deployed a wide variety of tactics—such as direct mail and social media, door-to-door canvassing, campaign door hangers, TV commercials, and opinion pieces in local and state newspapers—to promote the industry’s position (Dyer 2016a; Glick and Ray 2016).

## Influencing Public Policy Positions from Inside and Out

The aptly named “revolving door” between government and fossil fuel corporations has created a mutually beneficial relationship between Colorado’s oil and gas industry and the very regulators and elected officials tasked with keeping it in line with health and safety standards. Two examples:

- Matt Lepore began government service as an assistant attorney general in 2009. In that capacity, he represented the COGCC and counseled it on implementing regulations. In 2011, he joined a private firm representing oil and gas operators in regulatory disputes with that commission. The following year, then-Governor John Hickenlooper appointed him to direct the commission itself (Lepore, n.d.). As COGCC director, Lepore maintained a close relationship with fossil fuel companies and worked directly with CRED’s Truax (Dyer 2016a; Glick and Ray 2016).

Lepore left the COGCC in 2018 to become an energy-industry attorney, leaping, as the *Denver Post* put it, “from the role of regulator to helping those he regulated” (Finley 2018; Herrick 2018). In a 2020 consulting role to Garfield County, he helped a coalition of Western Slope and Eastern Plains counties and cities argue at COGCC and Colorado Department of Health regulatory hearings that local health and safety rules should prevail, even if they are less protective than the state standard. The position taken by oil and gas-friendly counties, represented by attorney Lepore, amounted to an attempted end run around the health and safety intent of SB181 (Jaffe 2020a; Jaffe 2020b; Woodruff 2020).

- Josh Penry served in the Colorado General Assembly for six years, first as a member of the Colorado House and then as Republican party leader in the Senate. He subsequently became a lobbyist and consultant for the oil and gas industry. He founded the company EIS Solutions (recently renamed 76 Group) to help defeat various anti-fracking measures and is deeply involved with various front groups that promote the oil and gas industry in the state (as is his wife, Kristin Strohm—read more under The Screen) (Bunch 2021; Dyer 2015; Dyer 2016b; EIS Solutions, n.d.b ; 76 Group, n.d.).

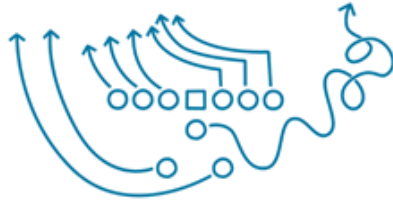
## **Using Proxy Groups to Confuse the Public and Undermine Support for Climate Accountability Lawsuits**

In 2018, Boulder and San Miguel counties and the city of Boulder sued ExxonMobil and Suncor, arguing that the companies violated state law by deceiving the public about the dangers of their fossil fuel products. These local governments are demanding that the companies pay their fair share of remediating climate damages accruing in their communities (Boulder County, n.d.; City of Boulder, n.d.; EarthRights International, n.d.; San Miguel County, n.d.).

Almost immediately, ExxonMobil and Suncor launched a counteroffensive, using proxy groups to distort the public’s understanding of the case. The defendants, falsely suggesting that the local governments were seeking a back-door path to achieve legislative goals, attempted to redirect attention away from the on-the-ground reality that communities face budget-busting expenses due to climate change-related fires, flooding, bad air quality, and extreme heat. Industry PR companies, particularly Western Wire (an ExxonMobil executive serves on its board of directors) and Energy In Depth (a project of the Independent Petroleum Association of America), ramped up their substantial media buys to discredit the legal strategy (EarthRights International 2018). Industry groups also attacked and attempted to discredit a public forum at the University of Colorado Law School on holding fossil fuel companies liable for climate change harms in the state (MAP 2019; University of Colorado Law School 2019). Further, their representatives posed as journalists to try to interview plaintiff’s attorneys outside of appropriate court channels (EarthRights International 2018; EarthRights International 2019). For more than three years, the defendants have used procedural tactics to keep this case—like other recent climate accountability complaints against fossil fuel companies—from being considered on its merits.

# Chapter 3

## Disinformation Tactic: The Diversion



*Manufacture uncertainty about science (including economics)  
and facts where little or no uncertainty exists*

In an infamous 1969 memorandum, a tobacco executive captured the Diversion tactic well: “Doubt is our product, since it is the best means of competing with the ‘body of fact’ that exists in the minds of the general public” (Mulvey and Shulman 2015). To create doubt, undermine science, influence public opinion, and gain access to policymakers while maintaining the illusion of independence, fossil fuel companies in Colorado have deployed trade associations, front groups with innocuous-sounding names, and “greenwashing” advertising campaigns that paint oil and gas as sources of clean energy and central to climate solutions. Corporate interests even create, fund, and control so-called “astroturf” groups that falsely portray themselves as grassroots.

To rig the system in its favor, Colorado’s fossil fuel industry uses “The Diversion” to exert political power over crucial legislative, regulatory, and grassroots-led initiatives, commonly engaging in a variety of activities, including:

- Elevating industry interests above community voices;
- Fabricating the appearance of local support; and
- Greenwashing your screens.

### **Elevating Industry Interests Above Community Voices**

At least three oil and gas industry trade associations operate aggressively in Colorado: the American Petroleum Institute, the Colorado Petroleum Council (the API’s local affiliate), and the Colorado Oil and Gas Association. Also active are the Colorado Petroleum Association, the Western Energy Alliance, the Independent Petroleum Association of America (IPAA), and the CO-WYO Petroleum Marketers Association. Wielding its wealth and political power, the industry is able to supercharge its advocacy and drown out community voices. Sometimes visibly and sometimes behind the scenes, these trade associations engage in extensive

legislative and regulatory lobbying and pour hundreds of thousands of dollars into campaigns to sway public opinion, especially investing in large-scale TV, radio, and social-media advertising.

Fossil fuel trade associations use their clout to spread disinformation. For example, their lobbyists routinely exaggerate the industry's economic benefits while downplaying the health and safety risks to community members. In 2017 testimony to a state Senate committee hearing on the proposed legislation on setbacks from school properties, COGA's president claimed that protective setback extensions would undermine oil and gas as "the cornerstone of prosperity" in the state (Glick and Ray 2017). The industry has peddled that exaggeration for years, even though the oil and gas sector is a notoriously unstable, "boom and bust" enterprise that accounts for roughly 1 percent of Colorado jobs. At the same time, it offloads onto the state and its communities innumerable externalities, such as air pollution, fouled waters, and abandoned mines (PwC 2017; API 2017; BEA, n.d.b).

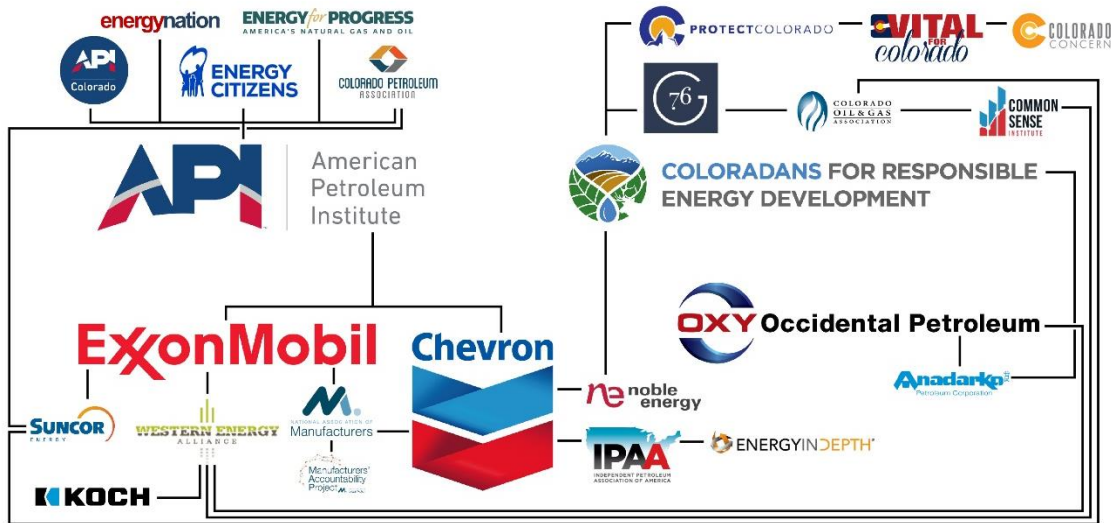
The industry also downplays, even denies, the health risks from contaminants released during oil and gas exploration and extraction. During the 2017 setback hearing, CPC's executive director told the press that the idea of protecting school children "was based on the presumption that being near oil and gas facilities is dangerous," adding that CPC "absolutely rejects that notion" (Glick and Ray 2017). Yet current oil and gas production releases a host of dangerous chemicals into the air and water—including those that cause cancer and disrupt the endocrine system—and it creates significant noise and light pollution. Science shows that children are particularly sensitive to those dangerous chemicals (Bushkin-Bedient et al. 2020, 60, 86; Glick and Ray 2017, McKenzie et al. 2017).

An API TV ad opposing a 2019 package of oil and gas reforms in the legislature is another example of how industry advertising spreads falsehoods and misrepresentations. The ad claimed that the measures would "shut down energy production in Colorado"—a claim with no economic basis (API 2019). The ad suggested that lawmakers, acting in bad faith, had snuck the bill out of committee "in the middle of the night." In reality, the relevant committee voted at 2:00 a.m. only after hearing more than 12 hours of testimony from both supporters and opponents (Woodruff 2019).

## **Fabricating the Appearance of Local Support**

A plethora of oil and gas industry front groups litters the political landscape in Colorado, often with ambiguous or purposely confusing names, sometimes using dirty-trick tactics, and rarely disclosing ties to the industry (Yowell 2018). To conceal its lobbying activities, the industry hides behind astroturf organizations, created to falsely appear as grassroots in their opposition to forward-looking climate and energy policy ( see Figure 1).

Figure 1. Colorado's Climate Disinformation Complex



*The fossil fuel industry invents groups with innocuous-sounding names like “Protect Colorado” and “Energy for Progress.” While these groups may give the appearance of grassroots support, they are created and funded by corporate interests such as ExxonMobil and the American Petroleum Institute. Lines show known relationships between entities. Lack of transparency makes it difficult to verify funding, membership, and leadership of many groups active on behalf of the fossil fuel industry in Colorado.*

*SOURCES: Dyer 2015; Glick and Ray 2017; Chevron 2020; ExxonMobil 2021; Occidental 2020; Suncor 2020*

In 2019, the industry ran an aggressive and misleading campaign in opposition to Senate Bill 181. In addition to TV and radio ads, it invested in social-media advertising. Using the Facebook Ad Library, an investigative reporter identified “dozens of sponsored posts from astroturf groups like ‘Energy Citizens’ and ‘Energy Nation’ opposing SB181,” paid for with tens of thousands of dollars from the API. The ads recorded millions of impressions (Woodruff 2019; Davies 2011).

Perhaps the most ubiquitous of the front groups is Coloradoans for Responsible Energy Development. Created and generously funded by Anadarko Petroleum and Noble Energy, CRED describes itself as an educational organization, yet it engages deeply in overt political activities. Mark Truax, in his presentation to the Interstate Oil and Gas Compact Commission in 2015, described these activities. As CRED’s director of operations and coalitions, he also boasted about the vast amount of money the organization invested in those activities (Dyer 2016a; Glick and Ray 2016).

The trade associations and front groups create astroturf groups that are industry-funded and led by industry representatives and political operatives. CRED created its political arm, Protect Colorado, for the purpose of defeating grassroots-led anti-fracking ballot initiatives

(Protect Colorado, n.d.). For example, to defeat the 2016 setback and local control initiatives, Protect Colorado initiated a “decline to sign” campaign, discouraging Coloradans from signing a petition to get the initiatives on the ballot; it used various grassroots organizing techniques funded with nearly \$17 million by CRED, Anadarko Petroleum, Noble Energy, and several other oil and gas companies (Blake 2016; Claypool 2016). As tracked by Public Citizen, “The widest disparity between spending by corporate-backed groups and their mostly non-corporate opposition was found in the race for Colorado’s Mandatory Setback from Oil and Gas Development Amendment” (Claypool 2016).

Also as part of 2016 efforts to keep setback and local-control initiatives off the statewide ballot, Protect Colorado hired people to carry signs saying “decline to sign #75 and #78” (Evans 2016; Glick and Ray 2016; KGNU 2016). Protect Colorado was similarly behind efforts to harass signature gatherers and petition signers. Protesters followed a Denver mom out gathering signatures, screaming in her face, “You’re taking our jobs!” No one answered when she asked her harassers questions about the “jobs” they had in the industry (Glick and Ray 2016).

These dirty tricks continued and even expanded in 2018. The industry again hired protesters who followed petition-signature gatherers, sometimes harassing and threatening them, in an effort to keep the setback initiative off the ballot (Yowell, 2018). An undisclosed pro-industry group paid a signature-gathering firm to stop its work on the initiative; the contractor admitted on tape to initiative organizers: “Nobody threatened me. You know what they’re doing. They’re going around and buying people” (Olabi 2018). The industry also created new astroturf organizations with names strikingly similar to those of initiative supporters, apparently attempting to confuse voters about who was behind the campaigns (Yowell 2018).

## Greenwashing Your Screens

Fossil fuel trade and front groups in Colorado have spread deceptive and greenwashing messages through social-media advertisements, spending well over a million dollars since 2018 on Facebook alone. The two most prolific social-media greenwashers have been CRED and Protect Colorado.

CRED, COGA, and others have funded misleading ads painting oil and gas as clean energy and central to climate solutions. Messages like “Fracking Supports our Environment,” “Colorado’s oil and natural gas industry works to provide clean energy,” and “Clean Colorado Oil and Gas is all around you” grace images and videos of nature scenes, as though dirty fossil fuels were not destroying our climate and those very ecosystems. An April 2021 CRED advertisement invoked climate change directly: “The climate is changing. And Colorado’s oil and natural gas industry is part of the solution.” In fact, US Energy Information Administration data show that both oil and fossil gas are even larger contributors to energy-related carbon dioxide emissions than is coal (EIA 2021). And the transportation sector, because of its dependence on oil, accounts for the nation’s largest share of carbon emissions (EIA 2021). Advertising fracking as environmentally safe and fossil fuels as clean energy is deeply deceptive—it is insidious greenwashing.

The ads go to great lengths to highlight the positive contributions fossil fuels make to the state, leaving out the damage and harm that comes from the industry’s operations. COGA ads regularly celebrate oil and gas that is “fueling our freedom” and “fueling our summer fun” but ignore the pollution that forces Coloradans to stay inside to protect themselves from extreme



heat, wildfire smoke, and other impacts of climate change. These sunny assertions also disregard the many Coloradans who suffer from respiratory diseases due to poor air quality caused by fossil fuel pollution. Nor are dangerous situations isolated incidents. In 2021, Colorado issued alerts for unhealthy ozone levels on 65 days during “ozone season,” the 93 days from May 31 to August 31 (CDPHE, n.d.). In other words, fossil fuel-driven climate change, which has increased production of ground-level ozone, threatens about two-thirds of Colorado’s “summer fun” days. Further, thanks to fossil fuels, rising temperatures threaten not just summer fun but Coloradans’ very lives. A study of heat-related mortality found that over the past three decades, high percentages of heat-related deaths in Colorado could be attributed to human-induced climate change (Vicedo-Cabrera et al. 2021). The data are staggering: according to that study, 18.6 percent of Denver heat-related deaths could be attributed to fossil fuel-driven global warming, nearly 25 percent in Boulder, and over 42 percent in Colorado Springs.

**Colorado Oil & Gas Association**  
Sponsored • Paid for by Colorado Oil & Gas Association  
ID: 511029773674850

Warmer weather means it's time for more outdoor activities. Fueled by Colorado Oil and Gas since 1860.

**OIL + GAS  
HERE**

CLEANCOLORADOENERGY.COM  
Fueling Our Outdoor Fun

Learn More

*Colorado Oil and Gas Association ads celebrate how fossil fuels “fuel our outdoor fun” and lead viewers to the deceptively named website “CleanColoradoEnergy.com.” In reality, fossil fuel-driven climate change has led to increased ozone pollution and extreme heat, forcing Coloradans inside more often during summer months.*

*SOURCE : Colorado Oil & Gas Association*

# Chapter 4

## Disinformation Tactic: The Screen



*Buy credibility through alliances, such as with academia, professional societies, or trusted local organizations and messengers*

To improve their public images, individual companies and whole industries often forge strong financial or partnership-type connections with university research departments, respected think tanks, and even well-known nonprofit organizations. Transparency and scientific independence are crucial to the legitimacy of any such relationships, with full disclosure of the financial ties critical to assessing the objectivity of scientific literature and claims of fact. As UCS research shows, Colorado fossil fuel companies have exploited state-based alliances to influence research and policy and spread disinformation that serves corporate interests while undermining public health and safety.

To rig the system in its favor in Colorado, the fossil fuel industry uses “The Screen,” including such activities as:

- Building credibility by hiding behind trusted state institutions; and
- Burnishing industry’s reputation through association with respected nonprofits.

### **Building Credibility by Hiding Behind Trusted State Institutions**

Some front groups claim to be impartial think tanks, yet their reports and analyses conveniently find themselves in the hands of oil and gas industry promoters just when they can make a difference. For example, the Common Sense Policy Roundtable (CSPR), a powerful front group for the oil and gas industry, exerts significant influence over economic modeling and reports from the Leeds School of Business at the University of Colorado Boulder (Dyer 2016b). Heading CSPR, now renamed the Common Sense Institute, is Kristin Strohm, who is married to Josh Penry—see The Fix (Common Sense Institute 2019).

In 2013, CSPR purchased a license to use a powerful economic model called REMI (Regional Economic Models Inc). Publicly partnering with two Colorado economic development organizations but privately exercising control over the partnership, CSPR approached the

Leeds School with a proposed agreement: Leeds would run the REMI model and produce reports for those organizations. In return, the university could use the model for other purposes (CSPRF and Leeds School 2013). All this is made clear in over 2,000 pages of documents obtained by a joint Greenpeace-*Boulder Weekly* request under the Colorado Open Records Act and reported in *HuffPost* and the *Boulder Weekly*.

As those documents reveal, the Leeds School coordinates closely with oil and gas front groups without publicly disclosing the full nature of that collaboration (Lewandowski 2014). This provides a sheen of credibility for the industry's health, safety, and economic claims. However, according to the documents obtained by Greenpeace and *Boulder Weekly*, CSPR selected the members of the collaboration's management committee, actively edited report text, determined which reports would be publicly released, and had ultimate authority over this contract. Moreover, Leeds leadership, despite protestations to the contrary, was fully aware of CSPR's decisionmaking authority (Coleman 2017; Dyer 2015; Dyer 2016b).

As reported by Jesse Coleman, then-investigative researcher for Greenpeace USA:

One such study was the 2014 [Leeds] Fracking Ban Report. The report, published during a major political storm regarding local control over fracking, found that allowing affected communities to hold some regulatory power over fracking would hurt Colorado's economy—a position favored by the industry. The report, paid for by CSPR, did not mention the group's financial ties to the fracking industry. The study's release was strategically planned by Starboard Group and EIS Solutions, two influential PR firms with oil and gas clients. The firms used the report as a mobilization tool for Vital for Colorado, CRED, and other anti-regulatory front groups, which share board members and staff with CSPR. Kristin Strohm, managing partner of Starboard Group, coordinated fracking industry PR and media departments to promote the study. CSPR's own literature claims the study had a profound impact, boasting that the report was "cited in all debates" on fracking ballot initiatives (Coleman 2015).

In 2015, CSPR was at it again. A Leeds School report projected drastic economic harm from a proposed 2,500-foot protective buffer zone between oil and gas operations and public buildings (BRD 2016). Some of the report's assumptions and conclusions were highly debatable (Dyer 2016b). Most important, the report failed to meet a basic standard of transparency: nowhere did it disclose that the oil and gas industry controlled and paid for CSPR, the sponsor of the analysis (BRD 2016). Like other Leeds economic reports that contained analyses favorable to oil and gas industry positions and messaging, the school released the report in time to influence voters. It was heavily promoted by anti-78 groups in radio, TV, and digital media and cited by many state politicians (Dyer 2016b).

## **Burnishing Industry's Reputation through Association with Respected Nonprofits**

The oil and gas industry seeks to mislead Coloradans into believing that the public supports an expansion of drilling and fracking. It uses well-known and trusted organizations, such as hunting and fishing groups, to amplify the message that increased, relatively unfettered oil and gas activities are good for the state, especially its economy. These recognized and respected organizations lend the industry a cover of legitimacy.

CRED especially uses its relationship with local organizations to be visible to their members, then it mobilizes those members to oppose public health and safety measures. In his presentation to oil and gas industry representatives, CRED's Truax described how this is done. Talking about targeting CRED's digital ads for the "right folks," he showed his audience a slide and exhorted them:

[Look at] the one [ad] in the back there . . . really focused on hunters and anglers. And there are hundreds of thousands of folks in Colorado that either have a hunting license or a fishing license and they turn out to vote. . . . So when you tell them in Colorado \$82 million in severance tax went to . . . the Department of Natural Resources and go[es] into wildlife restoration and habitat restoration, maybe the oil and gas industry isn't so bad (Dyer 2016a).

Truax characteristically failed to mention the damage oil and gas operations exact on the state's natural resources, while greatly exaggerating the industry's contributions to protecting and restoring wildlife habitat of interest to hunters and anglers.

Truax then boasted about CRED's coalition-building prowess:

This is what I like to call my NASCAR slide, all our different organizations. . . . and you can see this is farm bureaus, the chambers of commerce, the county organizations, the cattlemen's groups, other business entities, Pheasants Forever, sportsman's groups. All of these groups come together and say Colorado and the oil and gas industry here in the state is absolutely vital for our existence (Dyer 2016a).

CRED and Vital for Colorado, another industry-created and backed group, recruit members to this coalition using Vital's seven-principle pledge (EIS Solutions, n.d.a), which oversells the industry's economic importance to the state, glosses over its many safety violations and dangers, suggests the coalition supports reasonable regulation when in fact it has opposed almost all proposed restraints, and excludes any mention of serious, industry-caused, public health concerns. CRED and Vital use this coalition to inflate the perceived amount of support for the industry in the state, bolster its case with legislative and regulatory agencies, and activate coalition members to oppose city and county ballot initiatives and influence elections (Dyer 2016a; EIS Solutions, n.d.a; Money Trails, n.d.).

# Chapter 5

## Disinformation Tactic: The Fake



*Support and promote misleading or inaccurate scientific and economic analyses and try to pass them off as facts or legitimate research*

Corporations underwrite a good deal of scientific research, and society often benefits from it. But *bona fide* scientific research demands a high degree of scientific integrity to ensure that results derive from evidence rather than a desire to meet predetermined, non-scientific objectives. Evading reasonable standards of integrity, some companies support and promote questionable science. They selectively publish results, fail to publicly identify important caveats in the methodology or findings, and commission scientific or economic studies with flawed methodologies or inputs biased toward predetermined results.

To rig the system in its favor in Colorado, the fossil fuel industry uses “The Fake,” exemplified by the industry’s efforts to exaggerate its economic benefits.

While the industry’s front groups generally avoid outright lies, their advertising misleads Coloradans about the safety and benefits of fossil fuels. For example, CRED ads have claimed that oil and gas in Colorado are responsible for supporting “hundreds of thousands of jobs” and an “energy industry that generates \$31 billion in economic activity.” Those numbers make a great soundbite, but they are also deeply misleading. The figures rely on a 2017 study paid for and published by the American Petroleum Institute, and they represent jobs and economic activity that are “directly or indirectly attributable to the oil and natural gas industry’s operations” (PwC 2017; API 2017). Those “direct or indirect” attributions include jobs anywhere along the supply chain—including “caterers and contractors that benefit from the industry’s economic activity.” However, according to data from the Bureau of Economic Analysis in the US Department of Commerce, the industry’s *direct* contributions are a mere fraction of CRED’s claims. Oil and gas extraction accounted for 24,786 jobs in Colorado in 2019, well under 1 percent of jobs in the state—hardly the “hundreds of thousands” that the API boasts (BEA, n.d.b).

Among the ads touting the industry’s contributions to state tax revenues is a July 2019 claim that it “has helped transform rural fire departments. In fact, one station received 89% of its funding from such tax revenue” (CRED 2019). One year following that ad, Colorado was in the throes of its worst fire season on record, due in large part to extreme drought and heat

brought on by fossil fuel-driven climate change (Ingold 2020; Woodruff 2021b). Municipal fire departments may utilize the industry's tax payments to fight local fires, but those payments do little for firefighters across the state who put their lives on the line to stop destruction exacerbated by the industry's business model every wildfire season.

As noted, industry representatives use misleading, often false, information to recruit support from respected Colorado organizations, such as hunting and fishing groups (Dyer 2016a). Not only do industry spokespeople fail to mention the threats that fossil fuel expansion poses to state wildlife, outdoor recreation, water resources, and scenic landscapes, but they also significantly oversell the financial benefits. For example, the severance tax paid and touted by the industry is highly variable. Over the period 2010–2020, proceeds ranged from a high of \$264.7 million to a low of \$4 million, with an average of \$143 million per year (Legislative Council Staff, n.d.). Half of the proceeds go to local governments and the other half to the Department of Natural Resources. The department's share is further split into two different funds; each of those funds is further split among multiple programs, many of which have nothing to do with hunting, fishing, or outdoor recreation (Bernard et al. 2020). A 2019 report from Colorado Parks and Wildlife shows that only 5 percent of its annual budget came from the state's "general fund and severance tax" that year, so the severance tax accounts for something less than 5 percent of the total (CPW 2019).

# Chapter 6

## A Litany of Harms: Health and Safety

The economic, health, and societal impacts of the oil and gas industry's misleading and deceptive actions to pursue profits while avoiding accountability are substantial. In Colorado and around the country, fracking is increasingly understood to be an environmental justice issue. Fracking disproportionately harms communities of color, Indigenous people, children, pregnant women, and low-income communities. Oil and gas operations, including fracking and its infrastructure, are more likely to be sited in communities of color, where residents already bear the brunt of exposure to toxic waste and air pollution (Zwickl 2019; Bushkin-Bedient et al. 2020). Colorado's Hispanic communities are particularly at risk (Borowsky 2019; Zwickl 2019).

An egregious example is Colorado's only petroleum refinery, located in Commerce City. Owned by Suncor, the refinery and all its operational and waste processes are sited in communities that are majority people of color and majority low-income (Krieger et al. 2020), as well as primarily Hispanic or Latinx (Brasch 2020b; Armijo and Hook 2014). It is also one of the state's most polluting facilities (Krieger et al. 2020). Air pollution levels spiked above permit limits more than 500 times between 2018 and 2020 (Finley 2020). A 2019 study found per- and poly-fluoroalkyl substances (PFAS), often referred to as "forever chemicals" because of their tendency to accumulate in humans and not break down, in concentrations almost 150 times above that advised by the US Environmental Protection Agency (EPA) (Brasch 2020b). In 2020, PFAS levels in Sand Creek, bordering the refinery, were measured at three times the federal health advisory for drinking water (Brasch 2020b). Research suggests that exposure to PFAS chemicals can cause immune problems, pregnancy issues, and kidney and liver diseases, and it may be linked to cancer (Brasch 2020b; CDC 2019). One Commerce City zip code, 80216, was found by a 2017 study to be the most polluted in the country (Svaldi 2017). Residents in this and nearby communities are more likely to suffer from chronic health conditions, such as cardiovascular disease, diabetes, obesity, and asthma; the life expectancy is lower than the state average (Brasch 2020b; Krieger et al. 2020; Armijo and Hook 2014).

Some recent progress has been encouraging, including a \$9 million settlement with the state in 2020 over years of pollution violations (Brasch 2020b), a new state Water Quality Control Commission policy to limit PFAS substances (Brasch 2020a), and significant money coming to local groups to monitor air quality regularly (Brasch 2021). But the overall picture remains challenging for families in Commerce City and nearby neighborhoods. Myriad health and safety harms continue to be associated with the state's oil and gas industry.

Despite the reality facing residents of Commerce City and other communities, the fossil fuel industry rarely acknowledges the harm it causes and sometimes even denies the existence of threats to public health and safety. For example, Energy In Depth, a front group run through the IPAA (and also funded directly by ExxonMobil) (Climate Investigations Center 2019), has a website dedicated to challenging health science on oil and gas impacts (EID n.d.), and the group is active in Colorado policy debates (Jacobs 2019). When community members or local elected officials raise these concerns, they are accused—in industry propaganda and by

industry spokespeople—of standing in the way of economic development, jobs, and tax revenues.

## Cancer-Causing and Other Dangerous Chemicals in the Air and Water

The production of oil and gas releases cancer-causing, endocrine-disrupting, and other dangerous chemicals into the air and water, and it creates significant noise and light pollution (Bushkin-Bedient et al. 2020; Helmig 2020). An appalling example concerns the Bella Romero Academy, a majority Latino working-class school near Greeley. Despite intense objections from parents and school board members, Mineral Resources Inc. constructed a 24-well pad about 1,200 feet from the school building and 800 feet from the playground boundary (Herrick 2020). This location was the company's second choice, selected only after the original proposal near a mostly white school was protested by those parents (Turkewitz 2018). Mineral Resources Inc. (now owned by Extraction Oil and Gas) even boasted at the time that withdrawing its application to drill near the mostly white school was an “example of how our company and our industry continue to engage and listen to the community” (Sakas 2020).

The operation near Bella Romero began producing fracked gas in summer 2019. Later that year, the state used a mobile lab to monitor the area for cancer-causing emissions, including benzene, a known cause of leukemia. Results did show benzene levels minimally exceeding EPA guidelines, but an analysis a few months later used the same data, applying a stricter, health-based benzene level established in California in 2014; benzene levels exceeded these limits 113 times (Herrick 2019; Barrett Engineering 2020; Herrick 2020).

The health implications of releasing oil- and gas-related pollution into the air and water include poor birth outcomes, respiratory impacts, cancer, heart disease, and mental health problems (Bushkin-Bedient et al. 2020). Pregnant women and their children are particularly susceptible to the toxic chemicals emitted during all phases of fracking, but they are certainly not alone. A 2014 Colorado School of Public Health study found that Colorado mothers living in areas with the most intense levels of oil and gas activity were 40 to 70 percent more likely to have children with congenital heart defects; researchers reaffirmed these findings in 2019 (McKenzie, Allshouse, and Daniels 2019). The 2014 study also associated congenital heart defects, and possibly neural tube defects in newborns, with the density and proximity of gas wells within 10 miles of mothers' residences (McKenzie et al. 2014). A 2017 Colorado School of Public Health study found that children and young adults between the ages of 5 and 24 with acute lymphocytic leukemia were 4.3 times more likely to live in areas dense with active oil and gas wells (McKenzie et al. 2017). A 2018 study found that early signs of cardiovascular disease—high blood pressure, changes in the stiffness of blood vessels, markers of inflammation—occurred more often in people living in communities with more intense oil and gas development (McKenzie et al. 2019).

## Poor Air Quality

Poor air quality is a special concern on the Front Range, where active oil and gas operations spew toxins and ozone-forming chemicals into the air “at levels known to have health impacts” (Bushkin-Bedient et al. 2020). Air pollution causes premature death, exacerbates asthma and chronic obstructive pulmonary disease, leads to poor birth outcomes, and contributes to higher rates of hospitalization and emergency room visits (Bushkin-Bedient et



al. 2020; McMullin et al. 2018). “Researchers in Colorado have documented that air pollution increased with proximity to drilling and fracking operations and was sufficiently high to raise cancer risks in some cases” (Bushkin-Bedient et al. 2020).

Ground-level ozone is produced when fossil fuel products are produced or burned (for example, by oil and gas operations or by vehicles) in a chemical reaction that depends on ultraviolet radiation from the sun and is amplified by higher temperatures. The risk of onset or worsening of respiratory and cardiovascular disease is associated with a single or a combined exposure to ground-level ozone pollution, particulate air pollution, respiratory allergens, and extreme heat. Among many health effects, ozone can promote or aggravate asthma and respiratory allergies (USGCRP 2018). Ozone concentrations along the Front Range are so high, especially on hot days, that the state is in “non-attainment” of EPA air standards. The EPA has notified Colorado that it “faces demotion to an even lower attainment category in 2022 that will force state regulators to clamp down harder on stationary sources” of air pollution such as oil drilling and fracking (Booth 2021). The Denver Metro North Area will move in 2022 from “serious” non-attainment to “severe,” the second highest of five levels of severity.<sup>1</sup>

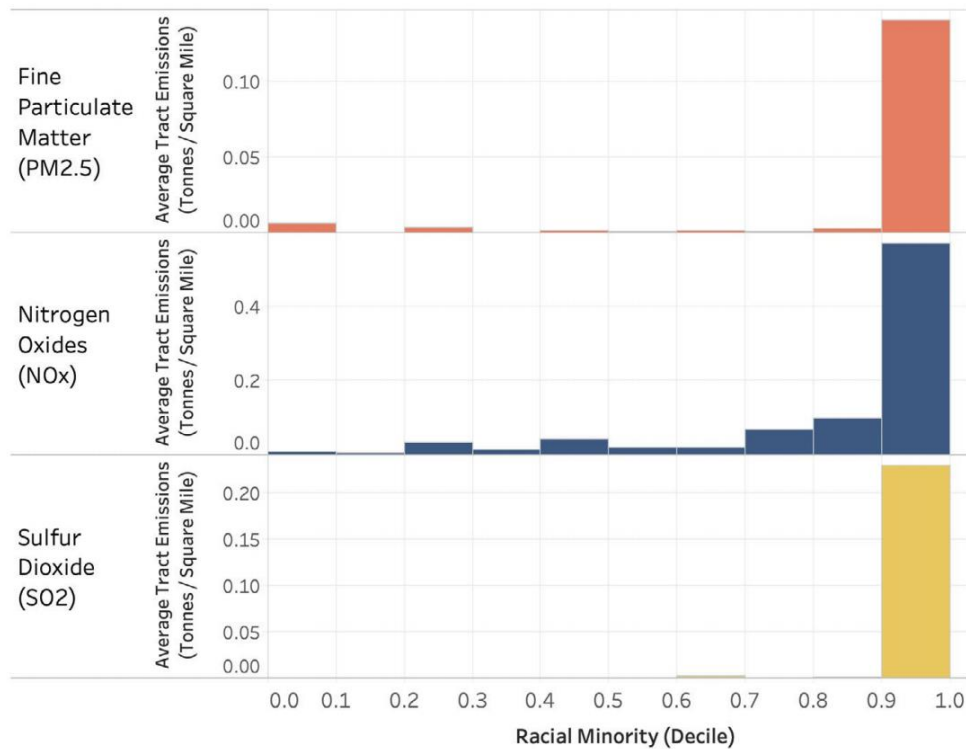
Preliminary research further suggests that eastern Colorado’s serious air-quality problems may exacerbate the dangers of the COVID-19 pandemic. Previous research established that oil and gas production sites are a major contributor to air pollution; that chronic exposure to air pollution worsens serious health conditions; and that preexisting diseases or medical conditions increase the risk of hospitalization or death in patients diagnosed with COVID-19. A 2021 study from Physicians for Social Responsibility asked whether living in an area with active oil and gas extraction operations increases a person’s risk of getting or dying from COVID-19 (Ketyer and McKenzie 2021). Examining data from five Colorado counties with significant oil and gas operations, the researchers found that more COVID-19 deaths were observed than were expected in the three counties that experienced high levels of oil and gas development in 2020—Adams, Broomfield, and Weld (Ketyer and McKenzie 2021). The incidence of COVID cases was disproportionately high among Hispanics and people aged 20 to 29 years in Adams, Garfield, and Weld counties (Ketyer and McKenzie 2021).<sup>2</sup>

## **New Research Identifies Even More Dangerous Ozone Problems**

Examining air-quality problems in greater depth, James Crooks, an air-quality specialist at National Jewish Hospital in Denver, and UCS climate scientists found that the “ozone climate penalty”—the impact of recent climate change on ozone concentrations—has worsened air quality along the Front Range in northeastern Colorado (Crooks et al. 2021). The climate penalty also has made it more difficult to control air pollution in the region, delaying the attainment of EPA clean-air standards by about two years.

Using census tract data, that study found that the ozone-specific health burden due to climate change since the 1950s has fallen hard on disenfranchised and frontline communities, especially neighborhoods with a higher percentage of Hispanic residents, residents with asthma or diabetes, and residents lacking health insurance. Conversely, these communities would have benefited the most from climate action in the past, and they could benefit the most from future mitigation. Reductions in the production and combustion of oil and gas would slow the rising number of days with extreme heat favorable for ground-level ozone formation in Colorado, as well as reduce ozone-precursor pollutants that are released during oil and gas operations.

Figure 2. Fossil Fuel Industry Emissions are Higher in High Racial-Minority Census Tracts



*A Physicians for Social Responsibility study found that average emissions of PM2.5 (particulate matter particles in the air that are 2.5 microns or less in width), nitrogen oxides, and sulfur dioxide from fossil fuel operations are higher per unit area in census tracts with higher proportions of people of color. Emissions in higher racial-minority census tracts are due partly to oil and gas development facilities, including the Suncor petroleum refinery in the Denver metropolitan area.*  
*SOURCE : Krieger et al. 2020*

## Dangerous Inactive Wells

Health and safety harms do not disappear once an oil and gas well or drilling site is inactive or abandoned—which happens frequently in an inherently boom-and-bust industry sensitive to turbulent market forces. Unplugged orphaned wells are poorly monitored and can easily become public threats. “Abandoned wells pose risks for soil and water contamination and can emit toxic air pollution and global-warming gases. Some have even exploded” (Bushkin-Bedient et al. 2020). Many of these wells release methane. And many are located directly under neighborhoods in the Front Range’s largest cities, including Boulder, without the knowledge of those living nearby (Davis 2017; Zaffos 2018).

Too often, the oil and gas industry leaves state or local authorities stuck with big bills and even bigger headaches to clean up the mess from inactive wells. For example, the state’s Orphaned Well Program spent more than \$4.7 million in 2020 on projects at 102 different sites, but bonds provided by oil and gas operators covered only about 10 percent of that cost (Woodruff 2021a). Although Senate Bill 181 requires oil and gas companies to cover more of the costs to plug and

manage abandoned wells, the administrative rulemaking to implement the relevant section of the law has been delayed to 2022—to the delight of industry lobbyists and the chagrin of groups seeking to hold the industry accountable for well clean-up (Woodruff 2021a).

## Climate Change Impacts

The extraction, distribution, and burning of oil and gas (as well as coal) in vehicles, power plants, industry, and homes and businesses also generate heat-trapping emissions that are the primary cause of climate change. In Colorado, the main health-related climate impacts are extreme heat (daily maximum temperatures), poor air quality, poor water quality, wildfires (both direct and indirect dangers), and extreme precipitation (flooding and drought). In the Denver Metro North Front Range region, maximum daily temperatures were 3 to 4°F higher in the 2010s than in the 1950s during most of the warm months (Crooks et al. 2021). Higher temperatures increase the likelihood of heat stroke and other ailments that can cause illness and death. In addition to extreme heat, two of the environmental conditions of greatest concern for human health are particulate air pollution (such as from wildfires and dust storms) and ground-level ozone air pollution.

Several of these impacts interact to increase the dangers. For example, the smoke from wildfires contributes to significantly poorer air quality, while burn areas are particularly susceptible to dangerous flash flooding because of plant cover loss and more exposed soil. In 2020, this interaction was the case in Poudre Canyon west of Fort Collins in an area scorched by the Cameron Peak Fire, the largest recorded fire in Colorado history (Otárola and Zialcita 2021; CPR 2021; Sakas 2021). For some communities, access to clean water is threatened for years after a fire, as mud, ash, and scorched earth pour into rivers used for drinking, and downstream water treatment systems can be damaged, destroyed, or disabled (Runyon 2020). These climate change conditions are expected to worsen considerably by mid-century, even if strict measures are taken to reduce heat-trapping emissions.

# Chapter 7

## A Litany of Harms: Economic

In addition to the serious environmental, health, and safety concerns, the oil and gas industry causes economic harm to the people of Colorado in a variety of ways. In general, the industry's consistent exaggeration of its economic benefits makes cost-benefit accounting difficult, but there is no question that it oversells its benefits and undersells the costs.

### Bogus Complaints about High Taxes

Despite industry complaints of a high tax burden in Colorado, the total tax burden on oil and gas production was estimated at 5 percent for fiscal year 2019, this for a multibillion-dollar industry. Colorado's oil and gas taxes rank third lowest among the nine major fossil fuel-producing states in the West—lower than Wyoming (10 percent) and Texas (8 percent) (Silbaugh 2020).

In addition to state and local taxes collected on oil and gas companies, Colorado imposes its severance tax based on company production and gross income generated from selling these resources. A severance tax is common in states with extractive industries; the funds are used for various state and local budget priorities. Given the industry's boom-and-bust nature, severance-tax collections are highly variable, making it unreliable income for a state, yet industry spokespeople highlight it to oversell the economic benefits to Colorado (Dyer 2016a; Bloom 2019). Moreover, Colorado's oil and gas companies have underpaid their severance taxes for years: a January 2020 state audit found that some oil and gas operations paid the state nothing in recent years (Eason 2020; OSA 2020).

One use Colorado makes of this tax is to pay for remediating abandoned and orphaned wells, an expense that often falls to the state. This includes the costs of properly closing wells, monitoring for leaks, and remediating environmental damage. Yet the severance-tax pool is severely underfunded due to inadequate bonding and the *ad valorem* tax credit—a tax break lobbied for and secured by the American Petroleum Institute and its state affiliate, the Colorado Petroleum Council. All this leaves an increasing number of Coloradans both holding the bag for remediation *and* suffering the ongoing health consequences.

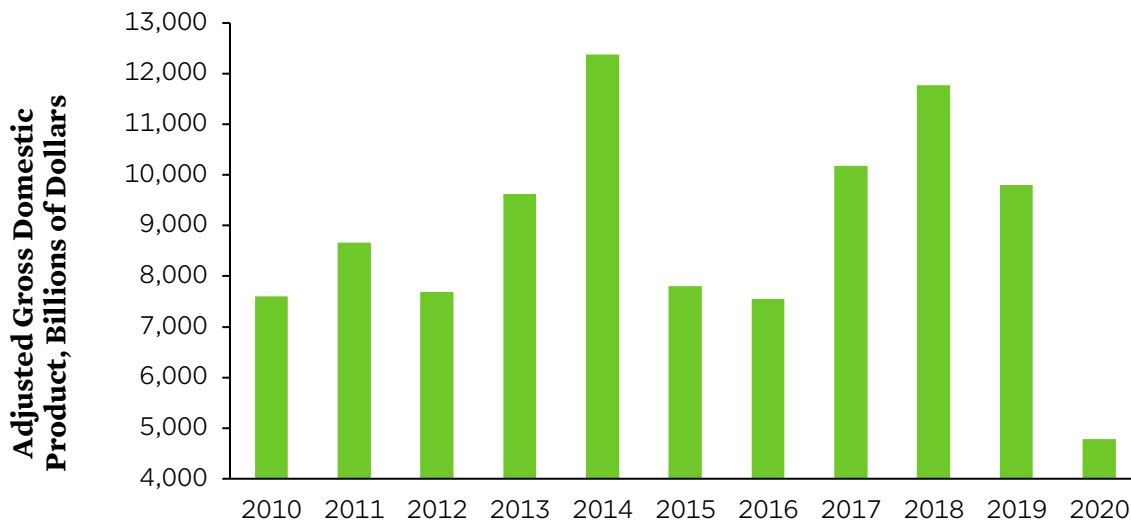
### Inflated Jobs Claims

Colorado's oil and gas industry claims to be a critical source of jobs, but such claims are greatly exaggerated. As noted, oil and gas extraction accounted for an estimated 24,786 jobs in 2019 (BEA, n.d.b)—well under 1 percent of jobs in the state—and that number is steadily shrinking. Even counting jobs related to the industry, such as support activities for mining and refining coal and oil, the share barely hits 1 percent. Meanwhile, leisure and hospitality provide at least 10 times as many jobs in Colorado as the oil and gas industry (CDLE 2021).

It is true that energy employment, including jobs related to the oil and gas industry, is important to the state economy, but solar and wind jobs are a growing part of the energy

picture. According to the 2020 US Energy & Employment report, solar and wind represent by far the largest segment of employment related to electric power generation; job numbers rose 7.5 percent for solar and 2.6 percent for wind from the previous year (NASEO and EFI 2020). Not only does the oil and gas industry actually represent a small share of Colorado’s economy, but it is also an unreliable one. The inherently unstable nature of fossil fuel prices might lift state revenue at times but send it into sharp decline at others. Oil and gas extraction’s share of the state GDP shows erratic rises and dips, with a high of \$12.4 billion in 2014 dropping to \$7.6 billion two years later, and \$4.7 billion in 2020. Put another way, the 2014 figure represented 3.7 percent of the state GDP and the 2016 figure, 1.9 percent (Figure 3) (BEA, n.d.a).

Figure 3. Oil and Gas Extraction’s Boom-and-Bust Contribution to the Colorado Economy



*The inherently unstable nature of fossil fuel prices might lift the state’s revenue at times but send it into sharp decline at others.*

*SOURCE: BEA (n.d.a)*

## Other Harms, Some Difficult To Monetize

A number of harms that are difficult to capture in precise economic terms afflict residents living near oil and gas operations. Coloradans endure noise, bright lights, and dangerous emissions from diesel generators and on-site equipment. Tanker trucks hauling water, sand, and chemicals thunder down residential streets daily. Sometimes, homebuyers are unaware that their new homes have been built on top of old or abandoned well sites and pipes (Colorado Rising, n.d.). Well water can become undrinkable. Some people have had to abandon their homes or been forced to sell at a loss.

Lower property values not only adversely affect the homeowners but can also diminish local tax revenues. Yet communities near drilling and fracking operations also may experience—and

have to budget for—expenses related to rising crime rates, increasing costs for road maintenance and other infrastructure, increasing stress on local school districts, and increasing strain on municipal services in general (Bushkin-Bedient et al. 2020).

Economic development decisionmakers often must balance the competing demands of different sectors important to a state’s economic health. Thus, it is appropriate to acknowledge any threats to tourism and its associated outdoor industries (e.g., skiing, hunting, fishing, camping, hiking) that depend to some extent on Colorado’s reputation for clear air and healthy living. From 2015-2019, recreation and tourism-related services contributed nearly double the amount of revenue to Colorado’s GDP as oil and gas extraction (BEA, n.d.a). The highly polluted Front Range is the gateway to the Rocky Mountains, where much of the state’s lucrative tourism industry thrives. “What is unique to Colorado is the growing confrontation between the state’s self-image as a clean, John Denver, Rocky Mountain High lifestyle sanctuary, and the collision between population growth and the oil and gas industry’s increasing reach across the state over the past 10 years” (Glick and Ray 2017).

# Chapter 8

## Recommendations

Community groups have fought tirelessly to restrain the unbridled expansion of oil and gas exploration and extraction in Colorado, yet these operations continue growing, with too little accountability and at great public expense. In sum, the oil and gas industry has limited the ability of the state and local governments to oversee operations or impose life-saving regulations, underfunded the state's ability to fix the problems it created, interfered with the ability to monitor air quality effectively at the local level, helped defeat ballot initiatives and other grassroots attempts to impose health and safety precautions, funded the election of fossil fuel-friendly city and county boards, and denied responsibility for the health, economic, and climate impacts felt by everyday people. When some communities have attempted a creative solution—specifically, climate-damages lawsuits to require the industry to help pay for the mounting costs of local climate impacts—the oil and gas companies have aggressively and deceptively fought back, both in the court of law and in the court of public opinion.

Calling out how the deceptive practices of the oil and gas industry have silenced community voices and repressed opposition is an important tool in pushing back against industry influence at the state and local levels. It is vital to ensuring that fossil fuel companies and their operatives in Colorado are held to account for their deception and political interference that put community members at risk.

*Colorado legislators and regulators must hold the oil and gas industry accountable:*

- Use the latest science in making decisions about improving the safety of oil and gas operations. This includes seeking out environmental and public health expertise.
- Prioritize the voices of your constituents, especially those living on the front lines of fossil fuel operations.
- Require fossil fuel companies to clean up their pollution of Colorado's air and water.
- Support real time, widespread, and consistent air-quality monitoring to hold fossil fuel operators accountable to strict standards and to give communities access to accurate information.
- Commit to winding down fossil fuel operations to meet Colorado's state-set emissions-reduction goals of 50 percent by 2030 and 90 percent by 2050.

*Fossil fuel companies active in Colorado and their trade groups must take these steps:*

- Commit to complete transparency about all partnerships with universities or other institutions whose scientific or analytical work you fund or control.
- 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.

- Publicly sever ties with any affiliated group or institution that spreads climate disinformation.
- End greenwashing ad campaigns that mislead Coloradans about the risks of fossil fuel pollution.
- Pay your fair share of the climate, environmental, and public health costs of fossil fuel production and combustion.



*Coloradans deserve to be protected from the harms resulting from the fossil fuel industry's pollution and deceptive practices. Legislators and regulators must act now to hold oil and gas companies accountable and preserve Colorado's health, safety, and natural beauty.*  
 SOURCE : WildEarth Guardians

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## ENDNOTES

1. For an explanation of non-attainment categories, see EPA (2018). For the Metro Denver North EPA decision, see EPA (2019).
2. The report is clear on the need for further research. Many factors other than air pollution exposure could influence the transmission or severity of COVID-19 in these counties, including ability to comply with COVID-19 restrictions (e.g., social distancing and mask wearing) and prevalence of co-morbidities such as asthma, diabetes, and obesity, as well as proportions of high-risk essential worker and residential populations, such as meat-packing workers, prisoners, and nursing-home residents. Further investigations using individual-level data on COVID-19 morbidity and mortality and exposures to air pollution from each of these sources are necessary to determine if air pollution from oil and gas production sites exacerbates COVID-19. Additionally, future studies need to include comorbidities, age, vulnerability to COVID-19 exposure, and other individual characteristics.

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