The Fossil Fuels behind Forest Fires in New Mexico

Quantifying the Contribution of Major Carbon Producers to Increasing Wildfire Risk

Over the past several decades, almost all aspects of wildfires have worsened across the forests of western North America. Fueled by climate change, wildfires are burning larger areas, more severely, at higher elevations, and over a lengthening fire season. Wildfires are taking a heavy toll on New Mexicans. From 2017 to 2021, New Mexico experienced more than 4,000 wildfires that burned more than 800,000 acres and destroyed nearly 50 homes and businesses. Notably, the 2022 Calf Canyon/Hermit's Peak Fire became the state's largest fire on record, burning more than 340,000 acres.

With the impacts and costs of wildfires—and climate change more broadly—growing increasingly severe, many legal and policy questions have arisen: Who is responsible for climate change? How much responsibility does each entity bear? What is the obligation of those entities to pay their fair share of the costs? These questions particularly apply to the fossil fuel industry, which has carried out decades-long disinformation campaigns that sowed doubt about climate change.

This analysis by the Union of Concerned Scientists determines what portions of the observed increases in fire-danger conditions and burned forest area across western North America can be attributed to the world’s 88 largest fossil fuel companies—including ExxonMobil, BP, Chevron, and Shell—and cement manufacturers. The analysis finds that 48 percent of the rise in fire-danger conditions in western North America since 1901 can be traced to carbon emissions from these companies. In addition, 37 percent of western North America’s cumulative burned forest area since 1986 can be traced back to those emissions (see Figure 1, p. 2).

Emissions from the products of fossil fuel companies and cement manufacturers have fundamentally reshaped the climate of western North America and left behind a scarred, charred landscape in which people, communities, and ecosystems are suffering. Tribal, rural, historically disadvantaged, and low-income communities are disproportionately affected by these impacts of wildfires. While New Mexico is making progress in addressing wildfire risk, the resilience-building needed is vast, and, to date, the general public has largely been footing the bill. This analysis underscores the responsibility of fossil fuel companies for a portion of the impacts and costs of coping with wildfires and climate change.

Holding Fossil Fuel Companies Accountable

State governments and officials have important roles to play in holding companies accountable for the harms they have caused and advancing efforts to build wildfire resilience. For example, they should:

- Preserve access to justice through the courts for people and communities experiencing climate impacts.
- Account for the major financial and economic risks posed by climate change when making investment decisions on behalf of constituents.
- Pressure fossil fuel companies and their investors to:
  - stop engaging in greenwashing and funding the spread of climate disinformation.
  - fully disclose the climate impacts and economic risks of their businesses.
  - update their business models to enable sharp emissions reductions from their products and operations at a pace and scale consistent with the goals of the Paris Agreement on climate change.

Additional Policies to Limit Harms from Wildfires

Even with improved corporate accountability, the efforts needed to build wildfire resilience are vast and must be supported.
Decrease Human-Ignited Wildfires
States should enact legislation directing electric utilities to plan and implement measures that prevent energy infrastructure from sparking fires while also engaging communities, protecting ecosystems, and ensuring the continued functioning of critical equipment. State governments should require the adoption of defensible-space standards and other risk-reduction standards along with the latest building codes for structures in high-risk areas.

Increase Resources for Forest Health
States must: (1) allocate and sustain funding for identifying at-risk forests, (2) scale up forest treatments using science-informed strategies, and (3) reduce barriers to and encourage the use of prescribed fire on state lands and in conjunction with private landowners and local and tribal stakeholder communities. In doing so, it is imperative to respect tribal sovereignty, traditional ecological knowledge, cultural traditions, and local stakeholder input.

Protect Community Health and Safety
States must implement strong public health regulations and programs that protect vulnerable populations from direct and indirect threats from wildfires, including threats to air and water quality. State and local zoning regulations should also limit development in the wildland-urban interface and invest in safe, affordable housing elsewhere. In addition, state lawmakers must ensure that fire insurance policies are transparent and affordable, and include pricing that accounts for wildfire mitigation measures.

Advance, Track, and Help Coordinate Equitable Investments
The impacts of wildfire often fall most heavily on people with the fewest resources to cope. States must identify and prioritize low-income, at-risk communities for resilience-building measures. To ensure the efficacy of resilience investments, states should also bolster their capacity to receive and distribute federal funding.

Endnotes
1. This analysis used vapor pressure deficit (VPD) as a measure of fire-danger conditions. For more information, see www.ucsusa.org/resources/fossil-fuels-behind-forest-fires.