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The EQUATION

Fossil Fuel Companies Make Billions in Profit as We Suffer Billions in Losses

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ACCEPT

The world's biggest fossil fuel companies recently released their 2022 earnings reports, revealing record-breaking profits last year; just five companies—ExxonMobil, Shell, BP, Chevron, and TotalEnergies—reported a total of nearly \$200 billion in profits. At the same time, the world is incurring record losses due to extreme weather events. Thanks to advances in attribution science, we now understand many of these extreme events have been worsened by climate change. The fossil fuel industry plays the dominant role globally in causing climate change and therefore their profits come at the expense of our global health and safety.

As the field of attribution science advances, researchers are increasingly able to show when and how particular extreme events are occurring due to human-caused climate change, and to trace these changes back to the source of the heat trapping emissions. As this causal chain is strengthened, it may give people an avenue for seeking compensation for damages, meaning that companies would need to use part of their profits to pay for the share of the damage that can be traced to them.

The profits made by the oil and gas majors come at the direct expense of all of us and our shared planet. These companies continue to extract more fossil fuels from the ground, lobby for their interests, deceive and misinform the public about climate change, and build new infrastructure to lock us into

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They profit, we lose

While these companies are making hundreds of billions of dollars in profit, people around the world are bearing hundreds of billions of dollars each year in losses due to the devastating and worsening effects of climate change.

ExxonMobil and Chevron, two companies headquartered in the United States, reported earnings of \$55.7 billion and \$35.5 billion, respectively, during 2022. In 2022, the United States experienced 18 separate climate and weather related disasters, including droughts, floods, severe storms, and wildfires which each caused over \$1 billion in damage and led to the deaths of four hundred and seventy four people. Altogether the 18 events cost an estimated \$165 billion, making 2022 the third most costly year for US weather and climate disasters since 1980.

The impacts from the fossil fuel industry's products don't stop at national borders, but rather are truly global in nature. Looking outside of the United States, numerous heartbreaking climate-related disasters occurred around the world in 2022. One of the most extreme was the horrific flooding in Pakistan which impacted 33 million people, killed 1700, and caused up to \$40 billion in damages. People continue to struggle with the aftermath of this event and the severely underfunded aid efforts to respond.

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much of the loss and damage suffered involves things so precious that it is impossible to place a monetary value on them, including losses of life, cultural heritage, and a sense of safety. Thousands of people lost their lives in the disasters mentioned above and in other extreme events, incurring an incalculable cost to their loved ones. Many people's lives were also impacted or lost because of disasters fueled by climate change that did not cause over \$1 billion in damage and thus received less media attention.

Attribution of climate-fueled disasters

Science has long since established that the combustion of fossil fuels is the primary cause of climate change. The world's largest oil and gas companies have played an enormous role in both driving these detrimental changes and delaying action to remedy the increasingly dire situation.

The growing field of attribution science allows researchers to show a causal connection between human activity, our changing climate, and particular events. Source attribution research can link the sources of the change— fossil fuels produced by specific companies— to quantifiable changes to the Earth's climate. Research has shown that the heat-trapping emissions from these companies' products have led to rising temperatures and sea levels, as well as ocean

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After a storm, people often ask how we can know that it was worsened due to climate change given that the Earth has always experienced periodic intense storms. A second type of attribution science, called [event attribution](#), provides an answer. With event attribution, researchers can show whether and to what extent a disaster was worsened by climate change. As attribution techniques get more established, researchers are increasingly able to rapidly analyze disasters as they happen. There is a pressing [need for more attribution science](#) to inform climate litigation, as it is one of the many mechanisms that can be used to hold bad actors accountable.

Some event attribution research is already [available](#) for the 18 US disasters that have caused more than \$1billion in damages each in 2022 and more research is ongoing. For instance, the incredibly [damaging rainfall](#) produced by Hurricane Ian was found to be [10 percent higher](#) due to climate change, and further attribution work is likely to show that its massive storm surge was worsened by sea level rise attributable to human-caused climate change. Hurricane Ian was the most expensive US storm of 2022, causing [\\$113 billion](#) in damage. Attribution research could eventually tell us how much of this monetary damage was due to aspects of the storm that were worsened by climate change. This type of research has previously quantified how much of the economic losses from [Superstorm Sandy](#) resulted from

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Inequitable impacts of climate disasters

For people who suffered losses due to Hurricane Ian, or any other climate and weather related disaster, much of damage might not be covered by [insurance](#) or there could be years long efforts to try to get payouts from insurance companies. This puts an additional burden on people who may already be struggling with [stagnant wages](#) that haven't increased with inflation, a burden which increases for the tens of thousands who [lost their jobs](#) as a result of the hurricane damage. As we have seen repeatedly in past disasters, Hurricane Ian disproportionately impacted marginalized groups and exacerbated existing disparities. In many impacted areas, a substantial percentage of the population lived [below the poverty line](#), often in manufactured or subsidized housing. Many people have become [unhoused](#) as a result of the damage. Black communities highlighted the [disparity](#) in accessing relief efforts. The hurricane also impacted [1.2 million people with disabilities](#), showing yet again that disaster response plans must center their needs. These inequitable outcomes are not unique to Hurricane Ian but rather are the norm during extreme events, demonstrating the need for [equitable and just](#) resilience planning.

All of these outcomes make it difficult to watch fossil fuel

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come up with the money to recover from these disasters, they are right to wonder who should foot that bill.

Oil industry profits come directly from our losses

The oil industry's profits came, in part, from everyday people like you and me who have been paying increasingly high costs to obtain the fossil fuels that still heat many of our homes and fuel our cars. My own heat and electricity bill rose by a whopping 40 percent last month. I sincerely wish my house wasn't heated by natural gas, but it currently is. We need to transition to a clean energy and transportation system to reduce costs, mitigate climate change, and create a healthier and safer world.

My colleague Paul Arbaje recently wrote an excellent [blog post](#) to help people understand what is behind the high costs we are all paying this winter. He notes that higher costs “are being driven by a major overreliance on natural gas, which has sharply spiked in price and is currently the dominant fuel source in the US for both [home heating](#) and [electricity generation](#).” Crucially, he points out that the price increases are inequitably distributed: “Cost increases arising from US dependence on gas will disproportionately impact low-income households and communities of color, which tend to have higher energy burdens (i.e., a higher percentage of

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documented in a [new report](#) showing that millions of people in the United States had their electricity shut off even as oil and gas industry profits soared.

Paul's blog post warns that the actions of the oil and gas industry have become a self-perpetuating cycle in which the industry's lobbyists attempt to maintain high profits by convincing the public and policymakers that bringing down prices requires increasing fossil fuel production and decreasing environmental regulation. This then locks us into a cycle of increased reliance on fossil fuels, more industry profits, and more damages induced by climate change. This cycle needs to stop, and for that, we need accountability for the industry. But current trends are moving in the opposite direction: even as their profits soar, Shell, Exxon, and BP have all announced that they are [scaling back](#) ambition on reducing emissions and reducing funding for renewable energy projects..

We need accountability now

It is fundamentally unjust that the oil and gas companies earn billions in profit while people around the world suffer enormous losses every year.

My colleague Laura Peterson [points out](#) that the oil and gas industry plans to take the road they have taken many times

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be trusted to do the right thing on their own, so accountability needs to come from elsewhere.

There are [many ways](#) we can get to [accountability](#) by strengthening climate risk disclosures, making companies internalize the costs of the damages caused by their products, continuing to challenge in court through ongoing [climate litigation](#), supporting Senators who [may continue](#) last year's House of Representatives investigations into the actions of the fossil fuel industry, and more.

There is also a big role for science. We need more attribution science—both event attribution to tie major disasters to a changing climate, and source attribution to show exactly how the fossil fuel industry has contributed to these harms.

Every one of us has a role to play to keep these conversations going by sharing this research and corporate accountability work. The more people are informed, the more successfully we can work together to create a just and sustainable future in which polluters can no longer profit from our losses.

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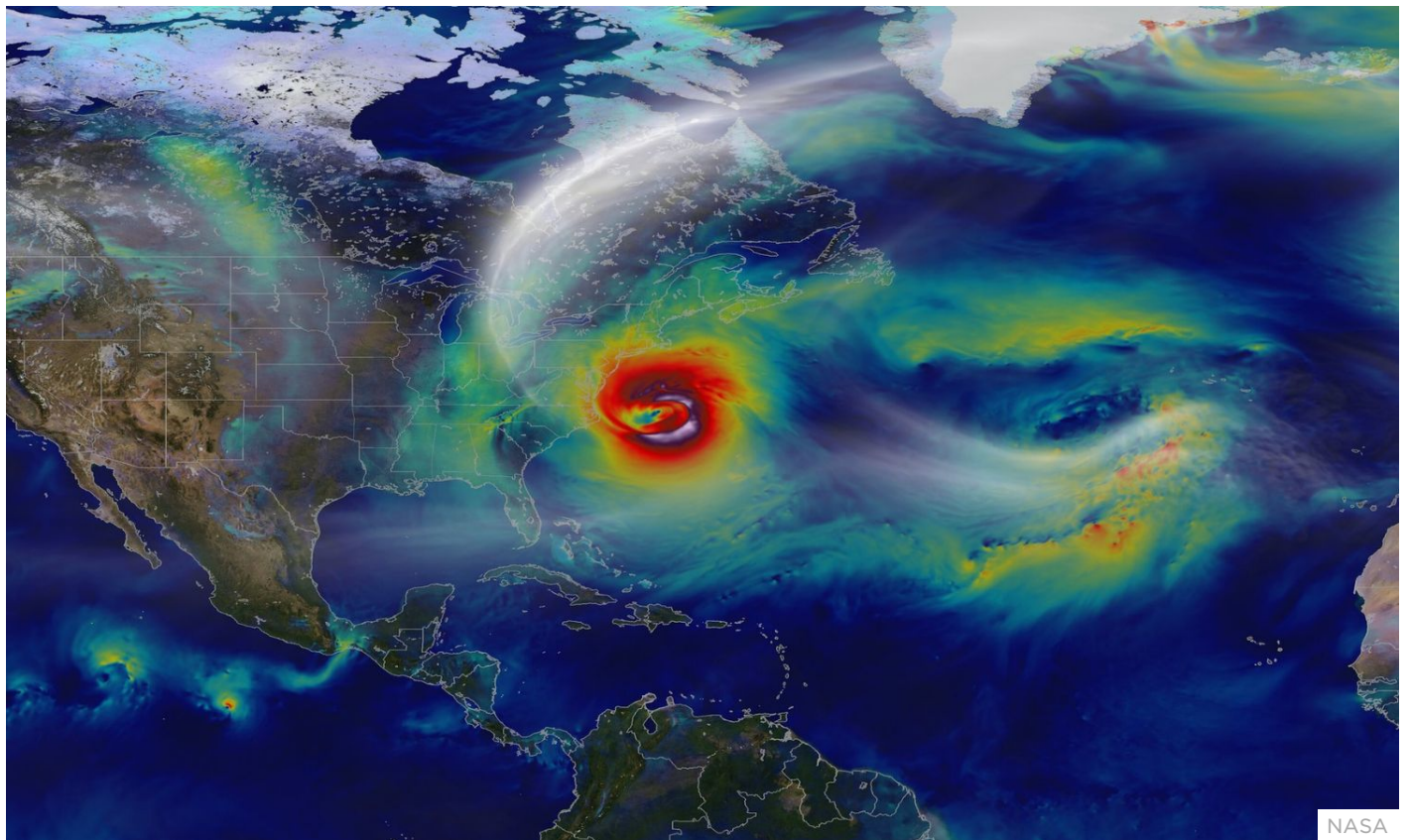
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