

WHY COAL?



I have a two-and-a-half year old son who asks, two-and-half thousand times a day, different iterations of a very basic question: “Why?” Sparked by a simple event like the flip of a light switch, he rarely accepts my answer without asking follow-up questions that force me to think really hard about how we live and *should* live—on this fair planet. So let us take a cue from my son and ask a simple question of critical importance: “Why coal?”

The conventional answer is that coal is a black rock that holds lots of energy. To get at this energy, we rip up mountains and other landscapes in twenty-six states, mostly West Virginia, Wyoming, Kentucky, Pennsylvania, and Montana. We then transport this coal to one of the 600 or so massive, often antiquated coal-fired power plants that we’ve built in the United States to generate electricity. Once generated, electricity is transmitted along transmission lines to our homes, schools,

and businesses. In the United States, we generate about 45% of our electricity from coal (24% comes from natural gas, 20% from nuclear, 10% from renewables, and 1% from oil and other liquids).

Extracting and combusting this coal is a brutal process. At every stage, coal infrastructure devastates wild landscapes and communities, releasing vast amounts of pollution into our land, air, and water, with tragic impact to the environment and human health. Much of this pollution comes in the form of greenhouse gases that are inching us towards catastrophic climate change. While we often focus on climate change, it's worth emphasizing the human health impacts. As Physicians for Social Responsibility explain, "coal pollutants affect all major body organ systems and contribute to four of the five leading causes of mortality in the U.S.: heart disease, cancer, stroke, and chronic lower respiratory diseases...[E]ach step of the coal lifecycle—mining, transportation, washing, combustion, and disposing of post combustion wastes—impacts human health."

Sometimes, we do clean up coal pollution, at least in part. For example, in a case I'm working on, the U.S. EPA in 2011 mandated that New Mexico's 1800-megawatt San Juan Generating Station modernize its equipment to clean up regional haze pollution that impairs iconic landscapes like the Grand Canyon. The EPA's decision for this coal-fired power plant alone will clean up dirty skies across a four-state region. Each year, it'll also save seven lives, prevent more than two

thousand cases of exacerbated asthma symptoms, and reduce the risk of heart attack, respiratory illness, emergency room visits, hospital admissions, and lost days of school and work due to pollution-related illness. Even if you focus on economics and somehow put aside the moral responsibility to protect human health, the benefits of EPA's decision equal sixty million dollars annually. If we cleaned up every coal-fired power plant in this country—or, even better, stopped using coal entirely—the environmental, human health, and economic benefits would be incredible.

Too often, however, we don't clean up this pollution and the public—i.e., you and me—shoulders its impacts. As economists Nicholas Z. Muller, Robert Mendelsohn, and William Nordhaus conservatively determined in a 2011 study, the true cost of coal to society is more than five times its monetary value. This isn't chump change: we're talking about damages to the U.S. public totaling a third to over one-half of a trillion dollars annually.

Of course, our reliance on coal is not just an environmental and human health problem, but a political problem. Coal companies—and the power companies that use coal—have invested huge amounts of money in the landscape-scale infrastructure that mines, transports, and burns coal. As corporate entities, they're not set up to protect people or the environment. Instead, they're set up to make money and maximize their return on investment. To do that, they've co-opted and

ossified our political system for their advantage and engaged in impressive disinformation campaigns.

Under the administration of President Barack Obama, we've seen some progress to wean our nation off coal and put us on a wiser, saner energy path. EPA, as suggested above, has taken some solid action to reign in coal pollution. This action may help tip the scale in favor of retiring coal plants and transitioning to an economy powered by the wind, water, and sun. As Stanford's Mark Jacobson and University of California at Davis' Mark Delucchi have shown, we can end our reliance on fossil fuels entirely and achieve this transition by 2050. Yet at the same time EPA has taken action, the Department of the Interior, furthering a poll-tested but foolish "all of the above" approach to energy policy, has opened up vast tracks of the American West to more coal mining.

This is a really bad idea, turning our country's coal resources (which, relative to the rest of the world, are abundant) into a loaded gun pointed at the climate and our own people. Even if we retire our existing fleet of 600 or so coal-fired power plants, other countries—like China—will still want to burn our coal. These countries would therefore love it if we turned the American West into an interconnected colony of coal mines, coal trains, and coal export terminals to power their booming, energy-intensive economies—economies that produce goods that are only fed back into our own energy-intensive, consumption-based lifestyles.

So, as we question this system and ask “Why?,” the logic justifying our reliance on coal looks ever weaker.

This system, and the failure of our political system to address its problems in a meaningful way, is troubling, and may lead you to despair. But don't. Hope—and *action*—remains. Whether you are a shop owner in Bellingham, Washington fighting coal-export terminals, a rancher in Montana fighting coal mines and railroads, or a public interest environmental attorney (like me) fighting coal-fired power plants in New Mexico, you are part of a shared, ‘all-hands-on-deck’ fight against the linked network of coal mines, trains, power plants, and ports. Already, we've largely stopped this country from building new coal-fired power plants, and in the years ahead, we'll retire existing coal plants and stop coal mines, trains, and ports—all while promoting a life-affirming vision for this country premised on clean energy from the wind, water, and sun.

Every day, my son inspires me to ask “Why?” In essence, to question our country's problematic reliance on coal and fossil fuels. In answering that question with action, I work with smart, fearless, and dedicated people that are building a wiser, saner, and still beautiful world that my son *will* inherit. So don't despair. Hope. And fight as if our survival depends on it. Because it does.

Source: <http://readthedirt.org/why-coal>