

Yale Environment 360

The Economics Case for Environmental Rules

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In recent months, some in Congress have been waging a whole-scale war against the Environmental Protection Agency. By now it has reached comical dimensions, with three separate bills aimed at preventing a so-called EPA “dust rule” that has never even existed.

The spectacle would indeed be funny, if it wasn’t deadly serious. Republicans in Congress and in the GOP presidential debates are seeking to defund an already cash-strapped EPA under the pretense of caring about the federal deficit and are trying to hamper the agency by arguing that its rules hurt the economy.

Quite to the contrary. We have 40 years of data to show that a cleaner environment goes hand in hand with solid economic growth.

Harvard Professor [Dale W. Jorgenson](#), one of the deans of macroeconomic modeling who has been honing his model of the U.S. economy for decades, calculates that gross domestic product in 2010 was 1.5 percent higher because of the Clean Air Act of 1970. It turns out that protecting children from foul air leads to more productive adult workers.

That’s the moral equivalent of arguing for child labor laws by saying that keeping kids in school will increase their earnings as adults. But even this reductionist argument, focused only on a narrow definition of dollars and cents, works to show the benefits of cleaner air.

Overall, benefits of the 1970 Clean Air Act exceed costs by a factor of 30 to 1. The 1990 Clean Air Act

Amendments match that ratio: \$1 of investments led to \$30 in benefits — fewer children sick or dying, more productive workers, and healthier environs.

In a [2010 analysis of rules passed in the prior decade](#), the non-partisan Office of Management and Budget calculated benefits-to-cost ratios across various government agencies. The EPA came out on top with the highest ratios by far, with benefits from its regulations exceeding costs by an average of more than 10 to 1. If you care about well-functioning, free markets, the EPA would be the last federal agency you'd want to cut.

None of this is magic. It's something much more mundane: honest accounting.

As any economist worth his or her professional crest will tell you, regulation solves problems that markets ignore. For example, they ensure that the costs of those who pollute show up on their own books, rather than increase the costs for others — either those left with cleanup costs or the healthcare expenses of those who live downwind or downstream.

Those who create costs pay for them — that simple idea is the logic behind the Clean Air Act and most other environmental regulations. It forces markets to reckon with the true costs of doing business, to be more efficient, and to innovate. And it does so at a great benefit to society, even boosting GDP in the long run by making us all healthier and more productive.

But is now the right time to strengthen environmental rules? No major piece of U.S. environmental legislation has been passed when the unemployment rate was above 7.5 percent. (U.S. unemployment currently stands at 9.0 percent.) Environmental protection, after all, costs money that we don't currently have, or so the story goes. Wrong again: smart environmental regulation creates long-term policy certainty and mobilizes capital in the short term.

Sadly, economic models aren't helping here. Professor Jorgenson's model, for example, shows large, long-term benefits of cleaner air. But it also shows short-term costs. The benefit-cost ratio may be high, but there are still costs after all. Someone needs to pay for [building retrofits](#) or investments in newer, cleaner technologies.

That, however, is largely a function of the model, which, like most others, assumes a Panglossian economy of full employment, humming along at full speed. Any alteration to that perfect world will, by definition, entail costs.

That's clearly not the world we live in. Our current economy, with record unemployment, cries out for investment to fuel growth. Sure, government can pay to dig and fill those proverbial holes in the ground. We clearly need massive investments in updating crumbling public infrastructure like roads, railroad lines, and bridges. But we ought to be looking for smarter investments that go beyond paying for jobs that will cease once the government money stops flowing. The whole-scale transition of our energy sector into a cleaner, leaner one is the prime example.

What's needed more than anything is policy certainty. Smartly enforced regulation provides it and allows us to mobilize private capital to meet the regulatory — and societal — goals. Will that regulation cost money? Yes, but the flipside of cost is investment: Much-needed spending is needed now, and it is the only way to create jobs.

Leave it to the CEO of one of the largest U.S. utilities to set the record straight. Michael Morris, the CEO of American Electric Power, [said during an investors' conference call last month](#) that EPA's proposed tighter mercury and toxics standards would be anything but a job killer: "Once you put capital money to work, jobs are created." Someone needs to install the scrubbers and modernize the existing energy fleet.

As Josh Bivens from the Economic Policy Institute put it in a recent [congressional hearing on the same EPA toxics rules](#): "In short, calls to delay implementation of the rule based on vague appeals to wider economic weakness have the case entirely backward — there is no better time than now, from a job-creation perspective, to move forward with these rules."

Indeed, the numbers just for the EPA toxics rule speak for themselves: up to 17,000 lives saved, and anywhere from 28,000 to more than 150,000 jobs created. That should satisfy even the worst cynics who believe jobs created should trump lives saved.

Yes, EPA regulation does bring down the unemployment rate — and that's just when you consider traditional clean air regulation. It doesn't take into account global warming, which poses an even larger investment opportunity and multiple benefits in lives and jobs alike.

When detractors speak of the enormous costs associated with sensible global warming policy, we can safely discount these figures. But we should always remember that one person's "cost" is another's "investment." A dollar spent is a dollar pumped into an economy that sorely needs more spending to create jobs.

“Green growth” isn’t just a catch phrase. It’s the only way to reconcile our relentless pursuit for material wealth on a finite planet with an atmosphere at the boiling point. The fact is that sound environmental regulations — whether they address dirty air or an overheating planet — can create jobs and be a boost, rather than a burden, for the economy.

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