Earlier in August, the governor of West Virginia asked Trump for a billion-dollar bailout of the Eastern coal industry. Under his plan, the federal government would pay power companies $15 per ton to use Appalachian coal. That's a sign of the industry's desperate economic plight. In 2016, global coal use had its biggest drop in history. The U.S. had the largest drop of any country. The decline in U.S. production seems likely to continue, despite a minor blip recently. The U.S. Energy Information Agency (EIA) projects continued declines in coal use between now and 2040. In its "reference case,"

> *Coal consumption decreases as coal loses market share to natural gas and renewable generation in the electric power sector.*
>
> *On a percentage basis, renewable energy grows the fastest because capital costs fall with increased penetration and because current state and federal policies encourage its use.*

The reference case assumes continuation of current technological trends and of existing regulations but does not take into account proposed regulations or future regulatory changes.

Trump and Pruitt might respond that eliminating current regulations might change this result. But this doesn't account for projected decreases in coal use after 2025 when current policies will no longer be producing further decreases. It's also worth noting that the EIA's projections for solar have consistently fallen short of reality.

A careful analysis in a recent Columbia University study shows that Trump's policies, if fully implemented, would at best lead to a small increase in coal use, back to 2014 levels by 2030. On the other hand, with falling prices for natural gas and renewables, coal use could end up as low it would have been with Obama's policies.

In several ways, this study gives Trump the benefit of the doubt. It assumes that Trump's policies will be fully implemented, with no defeats in court. It also assumes that his policies will remain in effect after 2020, when his first term ends, and that in any event the risk of a large reversion to Obama's policies has no impact on utility company investments.

Of course, there are policies that *would* help revive coal. For instance, a ban on fracking would push up natural gas prices, and this effect could be amplified with a tax on conventional gas. But that's the opposite of Trump's goal of increasing oil and gas production.

The study also considers trends in the international coal market. There’s been a small uptick in Chinese imports, due to problems with Chinese production. The IEA projects a small decline in Chinese coal use between now and 2030, so China seems unlikely to bail out the U.S. coal industry. India might have a small increase in coal use, but not enough to offset declines in China. All this assumes that India and China don’t make an unexpectedly large turn toward renewables. There are some indications that they are in fact moving away from coal faster than expected, though it remains to be seen if those indications will prove out.

The bottom line is that Trump’s policies might be able to prevent further decline in the coal industry, but even so, nothing we currently know suggests a substantial revival for the industry. In the very best case scenario, production would be less than a third of what it was in 1980.

And any revival that did occur would be more likely to help Western producers than Appalachia, because costs are lower there and the coal is less polluting. As I noted in a previous post, an issue brief by Alan Krupnick at Resources for the Future (RFF) lays out the stark economics of the situation:

> *Western coal is far cheaper because it is strip-mined (rather than deep-mined), driving the underlying labor productivity differences (29.3 short tons per worker-hour in Wyoming’s Powder River Basin versus 1.6 short-tons per tons per worker-hour in southern Appalachia.). And western coal is more desirable to utilities because it has a much lower sulfur content (if somewhat lower energy content) than eastern coal, so helps meet standards for sulfur dioxide emissions under the Clean Air Act.*

According to Krupnick, the cost disadvantage of Eastern coal is so great that even doubling the federal royalty on Western coal would hardly help. That would lead to a 15% increase in coal production in Northern Appalachia and a 7% increase in Central Appalachia.

In short, Trump’s policies offer no recipe for reviving eastern coal country. But they *would* increase U.S. air pollution and carbon emissions. All pain and little or no gain, in other words.