



May 15, 2012

Obama's War on Coal

In January 2008, then-presidential candidate Obama said coal-fired power plants would go “bankrupt” and “electricity rates would necessarily skyrocket” under his plan to tax greenhouse gas emissions through a cap-and-trade system. After Congress rejected that policy, President Obama defiantly announced there were other ways of “skinning the cat.” His administration bypassed Congress and the will of the American people by drafting environmental regulations that effectively ban the use of coal as an energy source. Abandoning this affordable American energy solution has increased the cost of everyday living.

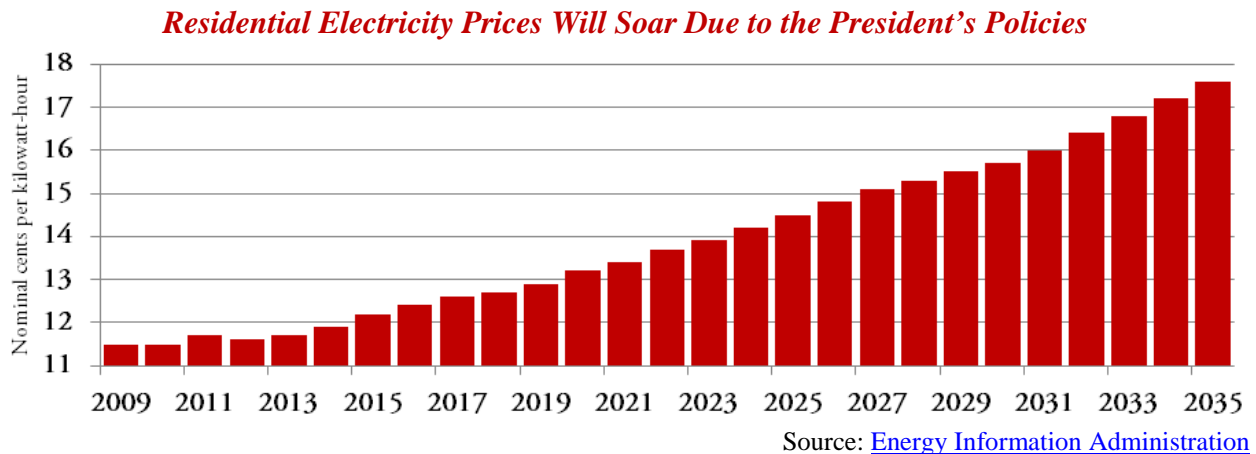
Agency	Rule	Annual Costs	Status
EPA	Cross State Air Pollution Rule	\$2.4 billion	Final
EPA	Utility MACT Rule	\$9.6 billion	Final
EPA	NSPS for Greenhouse Gas Emissions	Not available	Proposed
EPA	NAAQS for Sulfur Dioxide	\$1.5 billion	Final
EPA	NAAQS for Ozone	\$19 billion to \$90 billion	Postponed
EPA	NAAQS for Particulate Matter	Not available	Under Review
EPA	Cooling Water Intake Rule	\$319 million	Proposed
EPA	Steam Electric Power Plant EGLs	Not available	Under Review
EPA	Coal Combustion Waste Rule	\$597 million to \$1.5 billion	Proposed
Interior	Stream Buffer Zone Rule	Not available	Under Review
Army Corps	Nationwide Permit 21 for Surface Coal Mining Activities	Not available	Final

These rules go further than protecting public health and the environment. They set standards so severe that as much as 20 percent of the existing coal-fired power plant fleet will have to retire, and new coal-fired power plants will be prevented from being built.

To comply, industry could pay up to \$130 billion to retrofit existing coal-fired plants with emissions control equipment – costs that consumers ultimately will bear. In some cases, industry may find that emissions control equipment necessary for compliance is not commercially available or does not even exist.

Combined with [other](#) actions by the Environmental Protection Agency (EPA), Interior Department, and Army Corps of Engineers targeting surface coal mining operations, these rules

constitute an aggressive regulatory assault on the American coal industry. They have been a major factor in the decisions of utilities to shut down coal-fired power plants and eliminate the affordable, plentiful electricity they provide. As utilities transition to lower emission, often higher-cost energy sources, consumers will see electricity rates continue to rise.



Americans should not be surprised that President Obama wages a war on coal. The linchpin of his energy strategy is to pursue policies that disadvantage time-tested, affordable, reliable energy products derived from our abundant, domestic resources of coal and other fossil fuels. The President wants 80 percent of U.S. electricity to come from renewable energy sources by 2035 and has already invested billions of taxpayer dollars, created more than 700 government programs, and populated his administration with environmental radicals and Wall Street bankers to ensure his success.

EPA Administrator Lisa Jackson [admitted](#) that the President's regulatory agenda is intended to "level the playing field" against coal. Vice President Biden [proclaimed](#) coal power not only is "causing people to die," is "going to ruin your lungs," and is "killing you," but poses a more serious threat than terrorism. Despite the best efforts of the President and his administration to handicap coal, the Energy Information Administration (EIA) [projects](#) that coal will still generate 39 percent of electricity in 2035 – compared to 16 percent for renewable fuels (including conventional hydropower).

One tactic the President and his energy team repeatedly [embrace](#) in their war on coal and other fossil fuels is increasing the price Americans pay for coal-based electricity and oil-based [gasoline](#). They want to raise energy prices to create demand for (and force Americans into) an idyllic, green economy that consists of renewable fuels, negligible emissions, and energy efficiency. Their strategy has not only [increased](#) energy prices over the past three years, but has brought us spectacular failures in green energy investments, like the \$535 million taxpayers lost to solar company Solyndra. This was an irresponsible program that ended up hurting American taxpayers. Documents show the White House knew that the company was on the path to bankruptcy but loaned them taxpayer money anyway. The federal government even restructured the deal so that taxpayers would be on the hook if the company went under.

President Obama talks a lot about his “all-of-the-above” approach to energy, but he does not pursue it. His vision for our nation’s energy portfolio clearly excludes coal and other fossil fuels. The President’s campaign platform excluded it in 2008, and then-vice presidential candidate Biden [declared](#), “We’re not supporting clean coal.” The President’s campaign platform excluded it in 2012, too – until West Virginians [shamed](#) him by handing more than 40 percent of the vote in the state’s Democratic primary to a federal inmate.

Less Coal Power Means Higher Electricity Costs

Coal is the cheapest fuel source

- Coal generates electricity at significantly more affordable rates than other energy sources, leaving consumers more money to spend on other things.
- In 2011, consumers [paid](#) an average of 8.7 cents per kilowatt-hour in 30 states where coal generated at least 60 percent of the electricity – *30 percent less* than consumers in 20 states where coal generated no more than 10 percent of the electricity, who paid an average of 12.7 cents per kilowatt-hour. Last year, coal generated an average of 40 percent of all U.S. electricity, costing consumers on average 10 cents per kilowatt-hour.
- A Heritage Foundation [report](#) concluded that renewable power is 80 percent to 280 percent more expensive than coal-fired electricity. It found that using renewable energy systems to provide 100 percent of electricity could double or triple household electric bills. The analysis estimated that a family of four getting 100 percent of its electricity from plants powered by:
 - Coal would pay an average of \$2,264 annually, or \$189 monthly;
 - Solar would pay \$6,048 to \$8,614 annually, or \$504 to \$718 monthly.
- The U.S. shale gas boom has driven down natural gas prices to their [lowest](#) in a decade.
 - Coal is still less expensive as a fuel for electricity generation. In January 2012, electricity generators paid an average of \$2.41 per million British thermal units (MMBTU) for [coal](#) compared to \$3.73 per MMBTU for [natural gas](#).
 - Historically, coal prices have been cheaper and considerably less volatile than natural gas prices, [according](#) to the EIA. During the past 30 years, electricity generators have [paid](#) an annual average between \$1.20 and \$2.48 per MMBTU for coal, and \$1.98 and \$9.01 per MMBTU for natural gas.
 - By 2035, EIA projects that [coal](#) prices paid by electric generators will rise to \$4.49 per MMBTU in nominal dollars, while [natural gas](#) prices paid by electric generators will rise to \$11.21 per MMBTU in nominal dollars.¹
 - Thomas Farrell, CEO of Dominion Resources, [warned](#) recently that switching power generation from coal to natural gas could overwhelm the supply, driving up natural gas prices. “We’re having a debate now whether it’s 100 years of gas or 200 years of gas ... there’s a lot of gas, and it’s going to flood the market,” Farrell said. “That’s good for now, but if we all go run and get rid of all our coal plants and nuclear plants ... and we’re just going to build natural gas, about 20 years from now, my successor will be up here worried about gas prices that are \$15 [per MMBTU] all the time.”

¹ To convert natural gas prices from one thousand cubic feet (Mcf) to one million British thermal units (MMBtu), divide the price per Mcf by 1.025. See <http://www.eia.gov/tools/faqs/faq.cfm?id=45&t=7>

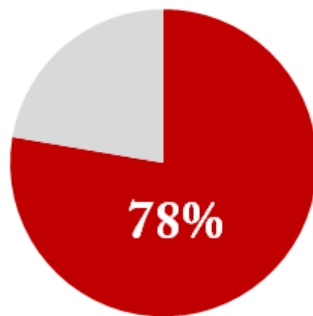
- Nick Akins, president of American Electric Power, [warned](#), “Betting on just one fuel to power our energy isn’t smart.” He pointed to historic price volatility, possible federal regulation of hydraulic fracturing, and unpredictable weather as factors that may raise natural gas prices, underscoring the continued need to utilize coal as a fuel source.
- In 2010, the Congressional Research Service [reported](#): “Natural gas markets have historically been exceptionally difficult to forecast ... In the 1990s gas prices were expected to be low; by 2004 prices were much higher than expected and major gas buyers were reported to be ‘increasingly critical of the nation’s system for forecasting natural gas supply and demand.’”
- Consumers will [pay](#) higher electricity rates to fund building new power plants that burn natural gas.

Energy costs are regressive, disproportionately burdening low-income families and seniors

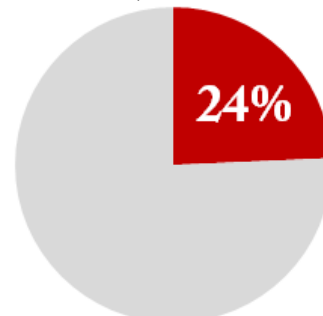
- Lower-income families and fixed-income seniors are more [vulnerable](#) to energy costs than higher-income families because energy represents a larger portion of their household budgets. In 2012, the average American family will spend 11.4 percent of its after-tax income on energy.

Percentage of Household Budgets for Energy in 2012

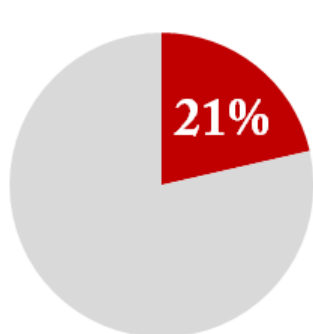
Less than \$10,000



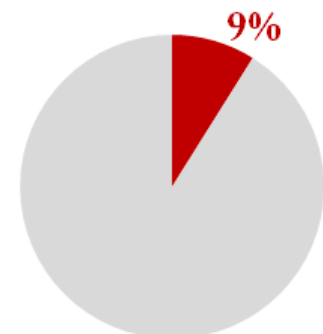
Between \$10,000 and \$30,000



Less than \$50,000



Greater than \$50,000



Source: [American Coalition for Clean Coal Electricity](#)

The President's regulatory assault on coal will raise electricity prices

- One [study](#) concluded that electricity prices would rise by an average of 6.5 percent between 2012 and 2020 solely due to the EPA's Cross State Air Pollution, Utility MACT, Coal Combustion Waste, and Cooling Water Intake Rules. Electricity prices could increase more than 10 percent in Delaware, Illinois, Kentucky, Maryland, Missouri, New Jersey, Pennsylvania, Tennessee, and Oklahoma.
- Another [study](#) found increased regulation of coal-fired power plants is a “major factor” in rising electricity costs, and “electricity generated from renewable sources generally costs more – often much more – than that produced by conventional fuels such as coal and natural gas.” It showed states with renewable portfolio standards (RPS) requiring increased percentages of electricity to be generated from green sources (in lieu of coal) paid an average residential electricity rate 32 percent higher than non-RPS states in 2010.
- For more than half of American families, the cost of everyday living (electricity, home heating, and transportation) nearly [doubled](#) as a share of income during the last decade. Prices increased partly due to “capital, operating and maintenance costs associated with meeting clean air and other environmental standards.”
- Several energy producers recently [testified](#) at a joint Senate and Congressional Western Caucus hearing about the impact of EPA regulations on electric prices:
 - Owners of the Big Stone Power Plant in South Dakota will spend \$490 million on an environmental retrofit project. That cost will be added to consumers' bills, meaning a rate increase of about 15 percent.
 - Representatives from Tri-State Generation and Transmission Association, a rural electric cooperative, worried that federal regulations are “imperiling our ability to continue to provide reliable and affordable electricity to our members.” They said, “Increasing upward pressure on electric rates has a direct impact on the ability of businesses to remain profitable and, in some cases, survive.”
 - Arch Coal executives said EPA is trying to “drive power generation away from coal by dramatically raising the cost of coal-fired electricity.” Among other examples, the company highlighted a case in which the EPA retroactively vetoed a mining permit previously issued by the U.S. Army Corps of Engineers. A federal judge found the EPA [overstepped](#) its authority and reversed the move.

Retiring Coal Plants Reduces Electric Reliability

Coal generates “baseload” power critical to electric reliability

- Coal provided [20](#) percent of all U.S. energy, and [42](#) percent of electricity generation, in 2011. Importantly, coal provides baseload power necessary to keep the electricity grid energized to meet constant demand 24 hours per day, regardless of the weather.
- The President's green energy sources produce electricity intermittently, only when there is sufficient sunlight or wind. They provide “peaking” power, or supplemental energy that comes on and off throughout the day in response to increased electricity usage and energy demand.

The President's regulatory assault on coal threatens electric reliability

- The North American Electric Reliability Council (NERC), the leading organization responsible for ensuring the reliability of the electric grid, stated in a recent [report](#) that

“environmental regulations are shown to be the number one risk to reliability over the next one to five years.” EPA’s Cross State Air Pollution, Utility MACT, Cooling Water Intake, and Coal Combustion Waste Rules alone could expose the U.S. to significant energy vulnerabilities:

- Reserve margins account for the spare capacity above what is required to meet peak demand. NERC prefers reserve margins to remain at 10 to 20 percent of peak demand to meet surges in demand for power caused by unexpected power outages. Reserve margins could be reduced to unacceptable levels as coal plants retire because they do not meet environmental standards or reduce capacity after adding equipment to comply with those rules.
- To retrofit coal plants with equipment necessary to meet new environmental standards, they must be taken offline for about 18 months, reducing electricity generation for a sustained period of time.
- Mandating rapid compliance with environmental rules complicates coordination of plant outages, putting unnecessary strain on the electric grid that threatens its reliability.
- Only a few companies design and install emissions controls. They will be unable to retrofit all coal plants with required equipment within an abbreviated timeframe. Additional coal-fired electricity generation could be taken offline, further lowering reserve margins, as it waits for the installation of required environmental controls.
- Numerous officials from the Federal Energy Regulatory Commission (FERC), state public utility commissions, and electric utilities are concerned about the impact of EPA’s regulations on electric reliability, public health and safety, and the national economy.
 - One FERC Commissioner [wrote](#) last August: “The recent and enduring heat wave ... underscores the essential and life-saving importance of electric reliability. With economic weakness and closed factories throughout the nation, you might have expected the available power plants to easily handle the heat wave. Yet the operators of the power grid relied on all of their available resources, including coal plants that are expected to be shut down because of EPA decisions, in order to ensure the reliability of the grid and health and safety of the public.”
 - The Pennsylvania Public Utility Commission [found](#) that EPA regulations “could lead to expensive upgrades at greater cost to ratepayers or premature retirement of fossil units which could compromise system reliability.”
 - Southern Company and American Electric Power (AEP), utilities providing power to Southern and Midwestern states, believe electricity [rationing](#) is almost inevitable due to EPA’s environmental rules. AEP’s president recently [said](#) EPA regulations would “unnecessarily increase electricity prices and put the reliability of the grid at risk in several parts of the country.”
 - Michigan-based Consumers Energy will close seven coal-fired units at three plants in 2015 due to the cost of upgrades required to meet new EPA standards.

EPA’s aggressive environmental restrictions force coal-fired power plants out of business

- The U.S. [has](#) more than 1,400 coal-fired electric generating units at more than 600 power plants. Together, they traditionally generate about half of the electricity produced in the U.S. and consume approximately 1 billion short tons of coal per year.

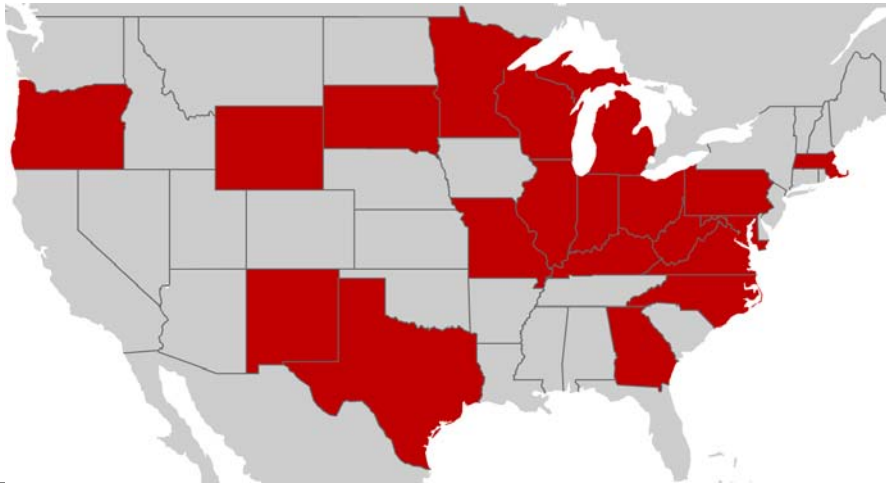
- According to NERC, up to 677 coal-fired units would need to shut down temporarily to install emissions control equipment to comply with new EPA regulations. This would affect more than 70 percent of U.S. coal-fired power capacity and result in a short-term loss of as much as 258 gigawatts of electricity.
- EPA's Cross State Air Pollution and Utility MACT rules have already forced 57 coal-fired power plants in 20 states to shut down, according to the National Mining Association. That is 25.1 gigawatts, considerably more than the 4.8 gigawatts to 9.5 gigawatts of coal-fired power plant retirements projected by the EPA.

"If somebody wants to build a coal plant, they can – it's just that it will bankrupt them, because they are going to be charged a huge sum for all that greenhouse gas that's being emitted."

– Barack Obama

Already, Coal Plants Are Retiring Due to Utility MACT and CSAPR EPA Regulations

20 States



57 Plants

25,138 megawatts generating capacity

Source: National Mining Association

- Estimates vary for the total number of coal-fired power plants projected to *permanently* retire because of the President's regulatory agenda, but *all* estimates [agree](#) that it will be a significant portion.
 - The Edison Electric Institute found that as many as 266 coal-fired power plants in 32 states, generating 53 gigawatts of electricity, have been slated for retirement between 2010 and 2022, largely because of EPA regulations.
 - Separate studies by FBR, Credit Suisse, NERC, the Brattle Group, Bernstein Research, and Wood Mackenzie project that new EPA rules will cause the retirement of up to 22 percent of the U.S. coal power plant fleet, resulting in the loss of 60 to 75 gigawatts of electric capacity capable of powering 45 million to 56 million homes.
 - An informal assessment by FERC [found](#) 81 gigawatts of coal-fired electric generating capacity was "likely" to "very likely" to retire due to EPA regulations.

- The Sierra Club's Beyond Coal campaign [brags](#) about its role in helping President Obama shut down 109 coal-fired power plants generating enough electricity for 32 million homes. They hope to shut down an additional 413 coal-fired power plants.

Diminishing electric reliability could result in even higher gas prices

- By threatening electric reliability, the President's environmental rules will not only raise electricity prices, but will increase the cost of other products manufactured with large amounts of electricity, like [gasoline](#). Refineries dedicate 43 percent of their operating costs to energy purchases, and few are able to generate material amounts of electricity on their own. According to the Electric Reliability Coordinating Council: "As the risk of outages proceeds, so too does the risk of even more prolonged gasoline shortages ... Given that the power sector rules can be expected to shorten electricity supply and increase electric rates, it is an absolute certainty that its current implementation schedule will increase the cost of delivering gasoline to already-strapped American consumers."

Attacking Coal Attacks Red, White, and Blue Energy

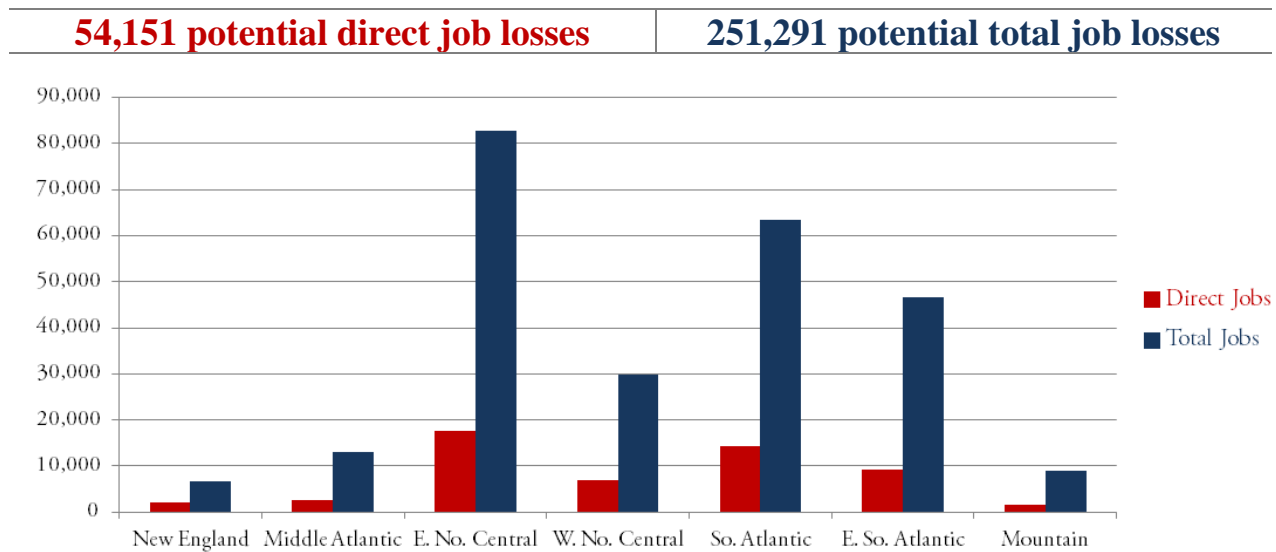
The U.S. has the most abundant supply of coal in the world

- America's coal reserves are larger than the total crude oil reserves in the Middle East.
- The U.S. has:
 - A [staggering](#) 486.1 billion short tons in demonstrated coal reserves, nearly half the world's supply;
 - 262 billion short tons of recoverable coal reserves, the [largest](#) in the world;
 - Twice the recoverable reserves of China;
 - 1.5 times the reserves of Russia;
 - Enough coal to fuel America for 230 years at today's consumption rates.

The coal industry supports hundreds of thousands of jobs

- U.S. coal production alone [supports](#) approximately 600,000 jobs.
 - 135,000 people are directly employed by the coal mining industry.
 - Each coal mining job creates another 3.5 jobs – 472,500 indirect jobs.
 - The average coal miner earns \$73,000 per year.
 - Every \$1 billion invested in electric generation from coal [creates](#) 9,166 total jobs, including 806 permanent jobs.
 - As President Obama attacks coal, he threatens jobs in the transportation industry. Total U.S. carloads of coal transported by rail during the first quarter of 2012 were the [lowest](#) for any quarter since 1994.
- Production, transportation, and use of domestic coal to meet the nation's electric generation needs will support 6.8 million American jobs in 2015, according to one [study](#).
 - If 33 percent of coal-based generation were displaced in 2015, an estimated 1.2 million jobs would be lost.
 - If 66 percent of coal-based generation were displaced in 2015, an estimated 2.7 million jobs would be lost.
- A coalition of 15 major unions representing 3.2 million workers in electric power, transportation, coal mining, construction, and other industries believes as many as 433 coal-fired electric generating units may [close](#), leading to catastrophic job losses.

Unions: 433 Coal Units and More Than 250,000 Jobs “At Risk”



Source: [Unions for Jobs and the Environment](#)

- A National Economic Research Associates (NERA) [analysis](#) estimates that EPA’s Cross State Air Pollution, Utility MACT, Cooling Water Intake, and Coal Combustion Waste Rules will lead to an annual loss of 183,000 jobs between 2012 and 2020.
- A University of Montana [analysis](#) found that developing Otter Creek coal in southeastern Montana could make the state economy significantly larger and more prosperous. It estimated that as many as 2,648 temporary construction jobs and 1,740 permanent operations jobs would be created.

The coal industry contributes billions to the national economy.

- In 2008, coal [generated](#) nearly \$30 billion in sales and paid \$14.2 billion in direct wages and salaries.
- One [study](#) found that U.S. coal-fired electric generation in 2015 will contribute \$1.05 trillion in gross economic output and \$362 billion in household income.
 - If 33 percent of coal-based generation were displaced in 2015, an estimated \$166 billion reduction in gross economic output, and a \$64 billion reduction in household income would occur;
 - If 66 percent of coal-based generation were displaced in 2015, an estimated \$371 billion reduction in gross economic output, and a \$142 billion reduction in household income would occur.
- The NERA [analysis](#) estimates that EPA’s Cross State Air Pollution, Utility MACT, Cooling Water Intake, and Coal Combustion Waste Rules will cause annual losses of \$29 billion in GDP, \$34 billion in disposable personal income, and \$270 in disposable personal income per household. From 2012 to 2020, these rules will lead to cumulative losses of \$190 billion in GDP, \$222 billion in disposable personal income, and \$1,750 in disposable personal income per household.

- The University of Montana [study](#) found that the Otter Creek mine's impact on personal income would be \$103.5 million during the construction phase, and \$125.4 million in permanent increases during mine operation. Montana households would see a \$167.9 million increase in purchasing power every year the mine is in operation.

The President's efforts to regulate coal out of existence mean higher electricity prices, less American energy production, and fewer U.S. jobs. His exclusion of coal from his so-called "all-of-the-above" energy plan is already shrinking America's energy industry and threatens to do irreparable damage to our economic health in the coming years.