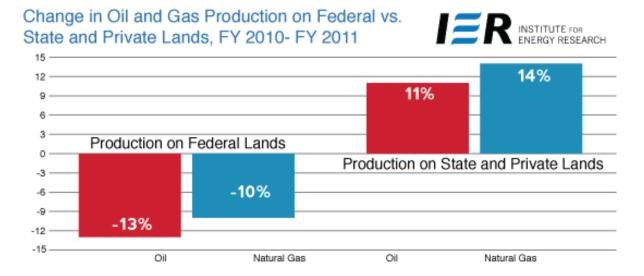


During the town hall presidential debate in Hempstead, New York on Oct. 16, 2012, Governor Mitt Romney and President Barack Obama squared off on many issues, and energy policy was one of the most contentious of the evening. Energy policy deserves a comprehensive, fact-based national conversation. IER has analyzed the responses of both candidates and has fact checked their statements during last night's debate.

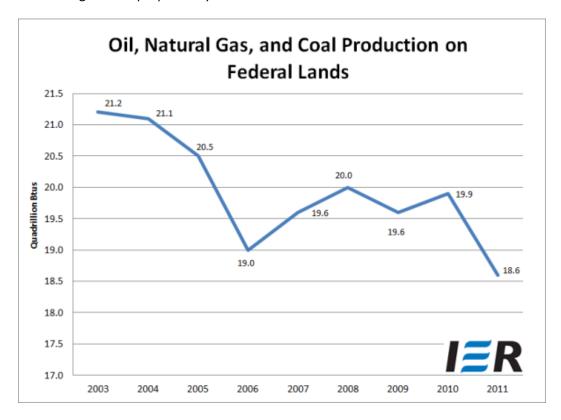
OBAMA: The most important thing we can do is to make sure we control our own energy. So here's what I've done since I've been president. We have increased oil production to the highest levels in 16 years.

FACT: Oil and gas production occurs on both federal and non-federal lands in the United States. On federal lands the government has all the authority; on non-federal lands, it has little or no authority. According to the Energy Information Administration, total U.S. oil production in 2012 is averaging 6.21 million barrels per day, the highest since 1998 when it averaged 6.25 million barrels per day, 14 years ago. But, Federal offshore production hit a high in 2009 at 1.56 million barrels per day, and declined in 2010 and again in 2011, only reaching 1.316 million barrels per day. The decline between 2009 and 2011 was 17 percent. In the first 7 months of 2012, oil production on offshore federal lands is still declining. It is 7.6 percent less than in the first 7 months of 2011. Data for total federal production (both onshore and offshore) is available on a fiscal year basis. Total federal production declined by 13 percent between fiscal year 2010 and 2011 due largely to Obama Administration policies, particularly the moratorium placed on all offshore drilling after the Macondo accident in the Gulf of Mexico, while oil production on non-federal lands increased 11 percent according to the Congressional Research Service.



OBAMA: Natural gas production is the highest it's been in decades.

FACT: Natural gas production is not only the highest it has been in decades, it is the highest it has been since recorded data began in 1949. In 2011, it was 23 trillion cubic feet, 7.8 percent more than in 2010. However, that increase in production has been on state and private lands, not federal lands. On federal lands, natural gas production fell by 16 percent between fiscal years 2008 and 2011 due to the significant red tape for leasing and permitting required by the federal government, and may fall further because of new regulations proposed by the Obama Administration on federal lands.



See: Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/03/15/fossil-fuel-production-on-federal-lands-at-9-year-low/

OBAMA: We have seen increases in coal production and coal employment.

FACT: According to the Energy Information Administration, coal production dropped by <u>6.5 percent</u> <u>between 2008 and 2011</u>, although it had a slight uptick in some of the intervening years due mainly to increases of U.S. coal exports of <u>38 percent</u> between 2009 and 2010 and <u>31 percent</u> between 2010 and 2011. Coal production is still declining in 2012. For the first 8 months of this year, coal production is almost 5 percent lower than the first 8 months of last year.

Unfortunately coal-related unemployment is going to increase due to Obama Administration policies. According to a report from the United Mine Workers of America, job losses associated with the closure of EPA-targeted coal units could be significant, amounting to more than 50,000 direct jobs in the coal, utility and rail industries, and an indirect job loss figure exceeding 250,000.

The EPA rules target mercury from coal-fired power plants (the Mercury and Air Toxic Standards), which many call Utility MACT because the rule requires "Maximum Achievable Control Technology" for mercury at coal-fired power plants. These technologies must be installed over a tight 3-year period between 2012 and 2015, raising the cost of generating power from existing coal-fired plants where the economics make sense to install the technology, or forcing those plants to retire or to convert to natural gas. The National Economic Research Associates found compliance costs to be \$21 billion per year and lost jobs amounting to 183,000 per year. Because the increased costs will be passed to consumers through higher electricity rates, businesses will be forced to reduce jobs as well. Studies project that retail electricity prices will increase between 10 and 20 percent in most of the country and over 20 percent in the coal-dependent states in the Midwest. Even the EPA's notoriously low cost estimates project that implementing the Utility MACT Rule will cost \$9.6 billion in 2016, while mercury reductions will provide only \$500,000 to \$6 million in health benefits in the same year.

Further, pending greenhouse gas regulations that are to take effect after this year's elections will require all coal-fired plants undergoing major modifications to reduce their greenhouse gas emissions (even though there is no cost effective way to do so), shut down, or convert to natural gas. New coal-fired plants are essentially banned because the technology does not exist commercially for them to meet natural gas carbon dioxide levels that are required by the EPA regulation. Because Utility MACT requires most existing coal plants to undergo major modifications, the two rules together will force mass coal plant retirements, causing mass unemployment at coal-fired power plants and coal mines.

Potential Job Losses Due to Closure of Coal "Units at Risk"

25-400 MW, > 40 years old w/o existing or planned scrubbers

	No. of units	Direct jobs	Total jobs
New England	11	1,975	6,552
Middle Atlantic	34	2,564	13,101
E. No. Central	146	17,605	82,873
W. No. Central	74	6,868	29,880
So. Atlantic	98	14,324	63,304
E So. Atlantic	55	9,141	46,570
Mountain	15	1,675	9,010
Total U.S.	433	54,151	251,291

Source: http://www.intellectualtakeout.org/library/chart-graph/potential-job-losses-due-closure-coal-units-risk

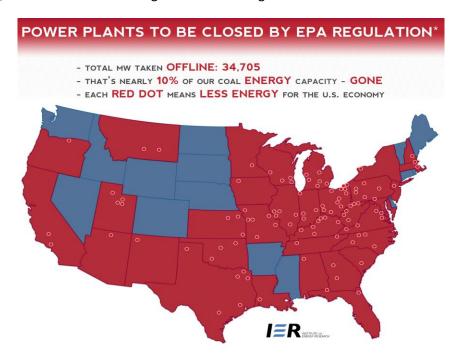
Layoffs are already occurring at some mines as a result of coal-fired generation's declining share of electricity production, mostly to natural gas-fired generation. Major declines in coal miner employment tend to lag demand by 3 to 6 months because of coal inventories. Since March, there have been reports in the news media that planned layoffs in West Virginia total 600, and in Kentucky, 900, for example.

Recent Announcements of Mine Closures and Layoffs at Coal Mines in Kentucky

Coal Company Name	County	Date Announced	Number Laid Off	Reason Given by Company
Perry County Coal	Perry	Jan-12	85	"Low market demand"
Arch Coal	Perry	Mar-12	44	"Low market demand"
Arch Coal	Hazard, Knott, Breathitt, Pike	Dec-11	117	"Weakness in steam coal market"
Consol Energy	Washington	Mar-12	66	"No one is buying steel making coal"
Oxford Mining Co	Henderson	Mar-12	121	"Soft market"
Patriot Coal	Henderson	Apr-12	156	"Continued weakness in market demand"
Alpha Natural Resources	Harlan, Knott	Feb-12	168	"Poor market conditions"
Sapphire Coal Co	Letcher	Apr-12	163	"Market conditions"
TOTAL		***	920	

Source: http://appvoices.org/resources/Appalachian Coal Jobs Update 2.pdf
See Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/08/21/wind-vs-coal-the-obama-legacy/

Coal producer Alpha Natural Resources is closing eight mines in Virginia, West Virginia and Pennsylvania, laying off 400 workers now and 1,200 workers out of 13,000 by early 2013. Alpha indicated that the "regulatory environment that's aggressively aimed at constraining the use of coal" in Washington DC was clearly part of the cause for the layoffs. Other companies laying off workers are: Arch Coal laid off 10 percent of its work force in Appalachia in August (750 full-time jobs); PBS Coal and its affiliate, RoxCoal, laid off 225 workers in Pennsylvania in July; and Consol Energy cut 318 jobs in West Virginia this summer. According to the Baptist Press, ministries in Appalachia are being stressed with more needy people, as coal workers are being laid off or furloughed.



*EACH DOT REPRESENTS A POWER PLANT WHERE ONE OR MORE ELECTRIC GENERATING UNITS ARE EXPECTED TO CLOSE. SEE HTTP://INSTITUTEFORENERGYRESEARCH.ORG/EPA-POWERPLANT-CLOSURES See: Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/10/01/obamas-war-on-coal-other-countries-promote-its-use/

OBAMA: That's why we doubled fuel efficiency standards on cars. That means that in the middle of the next decade, any car you buy, you're going to end up going twice as far on a gallon of gas.

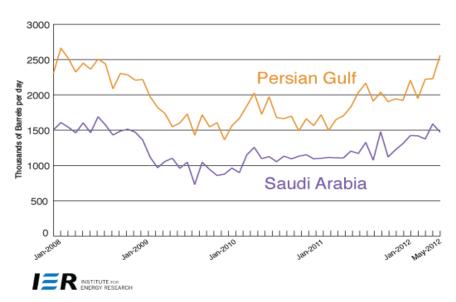
FACT: Increased fuel efficiency means less safety and higher automobile prices. The increase in fuel efficiency standards are estimated to increase the average cost of a vehicle by \$3,000, cutting 7 million car buyers out of the new vehicle market, and resulting in more highway deaths because of much smaller and lighter vehicles. President Obama also promised 1 million electric vehicles by 2015. In 2011, only 17,300 plug-in hybrid and electric vehicles were sold out of 12.8 million new light duty vehicles.

See Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/06/05/obamas-goal-one-million-electric-vehicles-by-2015-a-pipe-dream/

OBAMA: And all these things have contributed to us lowering our oil imports to the lowest levels in 16 years.

FACT: Net oil imports are the lowest they have been in 16 years, but the reasons are reduced oil demand due to high oil prices and a poor economy, increased domestic oil production on private and state lands, and increased ethanol production due to policies put in place before President Obama took office. Also, since President Obama took office, heavy oil imports from Saudi Arabia have increased due to declining production and imports from Mexico and Venezuela, decreased oil production in the federal Gulf of Mexico due to the Obama Administration's moratorium on offshore drilling, the configuration of Gulf Coast refineries to use heavy crude oil, and delays in approving the Keystone XL pipeline, which would provide more crude oil from Canada.

Oil and Petroleum Imports from the Persian Gulf and Saudi Arabia



See Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/08/28/u-s-oil-imports-from-the-persian-gulf-and-saudi-arabia-grow-in-2012-and-administration-policies-may-be-to-blame/



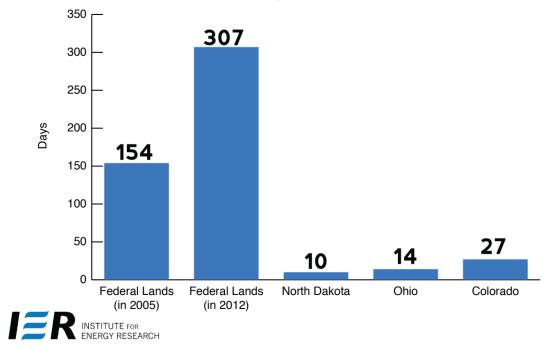
ROMNEY: As a matter of fact, oil production is down 14 percent this year on federal land, and gas production was down 9 percent. Why? Because the president cut in half the number of licenses and permits for drilling on federal lands, and in federal waters.

FACT: Between fiscal year 2010 and fiscal year 2011, oil production on federal lands (excluding Indian lands) was down 14 percent and gas production was down by 11 percent.

The number of new onshore leases fell by 42 percent from 9,661 between fiscal years 2006 and 2008 to 5,568 between fiscal years 2009 and 2011. During fiscal years 2006 to 2008, 20,479 federal drilling permits were approved for onshore drilling, compared to 12,821 for fiscal years 2009 to 2011, dropping by more than a third.

The rate of offshore permitting declined by 62 percent with 995 new well permits approved between January 20, 2006 and January 19, 2009 dropping to 374 new well permit approvals between January 20, 2009 and January 19, 2012. Further, it can be seen that the Obama Administration cancelled more lease sales than it has held by comparing the Outer Continental Leasing Program for 2007-2012 proposed in April 2007 and the lease sales schedule that the Bureau of Ocean Energy Management has on its website. And, according to the Congressional Research Service, the 15 lease sales to be offered in President Obama's newest offshore lease plan for 2012 to 2017 is the lowest number since the process began in 1980 and is over 60 percent less than the number held during President Reagan's first term.

Time Required for processing a Permit to Drill--Federal vs. States



See Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/09/24/u-s-oil-production-up-but-on-whose-lands-2/

ROMNEY: When the president took office, the price of gasoline here in Nassau County was about \$1.86 a gallon. Now, it's \$4.00 a gallon. The price of electricity is up.

\$1.879 per gallon in January 2009 and averaged \$4.043 per gallon in September 2012. According to AAA, on October 16, 2012, the price of regular gasoline was \$4.087 a gallon in Nassau and Suffolk counties on Long Island. Besides high oil prices, over regulation of refineries is adding to the cost of gasoline. The refining industry is one of the most highly regulated in the country and has been struggling for years to maintain minimal profit margins. In the face of even more regulations from the Environmental Protection Agency (EPA), who are imposing carbon-emission regulations as well as proposing overly strict ozone regulations and other regulations, refineries have closed and more

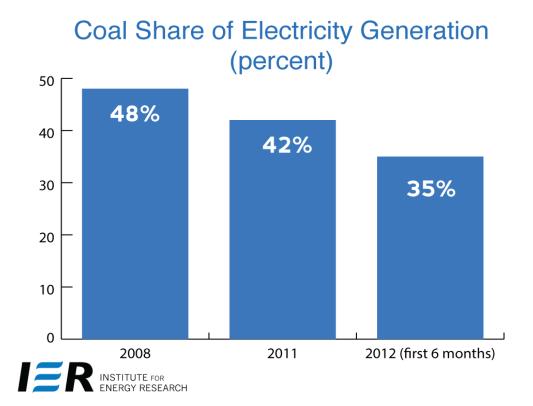
closures are likely. See Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/05/03/over-regulation-of-the-nations-refineries/

According to the Energy Information Administration, the average price of electricity is up by <u>2.6 percent</u> between 2008 and 2011, and the average residential price of electricity is up by <u>4.8 percent</u> between 2008 and 2011. In fact, residential electricity prices in nominal terms were the highest in recorded history (since 1949) in 2011 and are even higher for the first 6 months of 2012 (<u>11.79 cents</u> per kilowatt hour) than they were for the first 6 months of 2011 (<u>11.54 cents</u> per kilowatt hour).

ROMNEY: "The head of the EPA said, 'You can't build a coal plant. You'll virtually — it's virtually impossible given our regulations.' When the president ran for office, he said if you build a coal plant, you can go ahead, but you'll go bankrupt."

FACT: "If somebody wants to build a coal-fired power plant, they can. It's just that it will bankrupt them," then-Sen. Obama told the San Francisco Chronicle editorial board in January 2008, responding to a question about his cap-and-trade plan. He later added, "Under my plan ... electricity rates would necessarily skyrocket." Romney's comments about EPA Administrator Lisa Jackson refer to the agency's climate change regulations for new power plants mentioned above.

Due to new regulations from the Environmental Protection Agency (EPA) and low natural gas prices, coal fired generation in the United States has decreased from a <u>48 percent</u> share of the generation market in 2008 to a 42 percent share in 2011. And, for the first 6 months of 2012, it is down to a 35 percent share. Due mainly to lower demand from the generation sector, coal consumption in 2011 was <u>10.8 percent</u> lower than in 2008. Further, it is still dropping; it is 3 percent lower for the first 8 months of this year than the first 8 months of last year.



Those demand losses mean coal plant closures and job losses. For example, the J. E. Corette coal-fired power plant in Montana will be shuttered in April 2015. According to Pete Simonich, PPL Montana vice president and chief operating officer, "Our detailed analysis has shown that to meet the emission reductions required by EPA's mercury and air toxics standards, we would need to invest \$38 million in the Corette plant. We simply cannot justify that level of spending in the current wholesale power market in the Northwest." The Mercury and Air Toxics Standards take effect in April 2015, but pending also is the Regional Haze Federal Implementation Plan for Montana, and other regulations regarding the disposal of Coal Combustion Residuals. The 154-megawatt Corette coal-fired plant opened in 1968 and currently employs 35 full-time workers.

PPL Montana is not the only company shuttering coal-fired power plants. In January, FirstEnergy announced the early retirement of <u>six coal-fired power plants</u> in Ohio, Pennsylvania and Maryland, due to the high cost and uncertainty associated with new EPA regulations. In February, GenOn announced that it would shutter 13 percent of its generating capacity by 2015 due to the new environmental regulations.

See: Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/10/01/obamas-war-on-coal-other-countries-promote-its-use/

OBAMA: You had a whole bunch of oil companies who had leases on public lands that they weren't using. So what we said was you can't just sit on this for 10, 20, 30 years, decide when you want to drill, when you want to produce, when it's most profitable for you. These are public lands.

So if you want to drill on public lands, you use it or you lose it.

FACT: The reality is that not every lease contains oil or gas. A <u>Department of Interior report</u> notes that "producing acres as a percentage of leased acres have averaged about 30 percent over the past ten years." After millions of dollars of investment, companies may find no resources to produce. Or they may find that, at current prices, the resources would not be economically viable to extract from the ground. See Institute for Energy Research,

http://www.instituteforenergyresearch.org/2011/05/18/high-gas-prices-are-part-of-the-plan/

ROMNEY: We're going to bring that pipeline in from Canada. How in the world the president said no to that pipeline? I will never know.

FACT: Canada has the third largest crude oil reserves in the world (175 billion barrels) and is the largest supplier of crude oil to the United States. The United States imported 2.998 million barrels per day of crude oil and petroleum products from Canada during the first 6 months of this year. Because of Canada's large oil reserves, TransCanada proposed an addition to its Keystone pipeline system, the Keystone XL, which would move oil from Alberta to U.S. Gulf Coast refineries, with a capacity of 830 thousand barrels per day. Because it would cross an international border, a presidential permit must be obtained from U.S. authorities indicating that the pipeline is in the national interest. The U.S. State Department denied TransCanada's original application, which would have supported 20,000 jobs and had oil flowing into the United States next year. TransCanada reapplied for a presidential permit in May 2012. According to the State Department, a decision is expected in the first quarter of 2013. If the permits are granted, TransCanada expects to begin operating the pipeline in 2015. Due to delays and indecision from the United States, Canadian companies are pursuing other outlets for Alberta's oil sands as demonstrated by the Chinese National Offshore Oil Company's \$15.5 billion bid for Nexen Energy.

The irony is that rather than importing 830 thousand barrels per day of heavy Canadian crude, the Obama Administration is promoting heavy oil imports from OPEC member Venezuela to the tune of 869 thousand barrels a day. The decision of whether to buy oil from Canada or Venezuela should be simple for the United States —a friendly neighbor in Canada or a state-controlled oil company in a country led by a quasi-dictator. However, by its actions the Obama Administration is choosing Venezuelan oil, which must come by tanker, rather than additional Canadian oil by pipeline. This is forcing our neighbor, ally and largest trading partner to seek out the Chinese and other Asian markets for their oil sands production.

See: Institute for Energy Research, http://www.instituteforenergyresearch.org/2012/10/10/venezuela-imports-to-united-states/ and http://www.instituteforenergyresearch.org/2011/09/29/keystone-xl-more-energy-and-more-jobs/