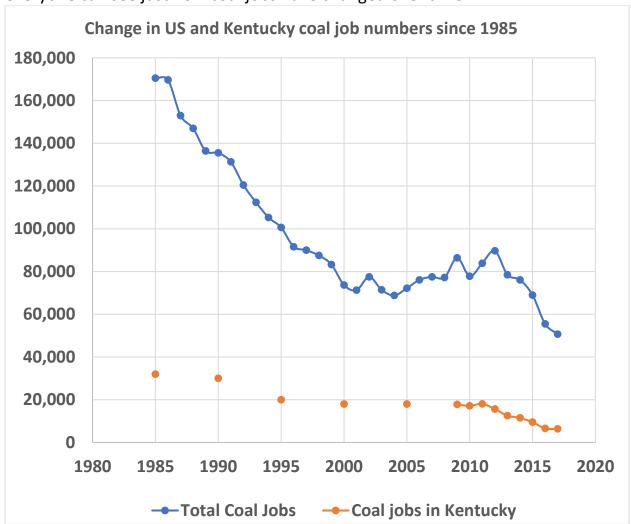
The War on Coal, McConnell and Barr's dishonesty and hypocrisy. Why Coal Jobs Will Not Come Back to Kentucky

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Historical political rhetoric and realities about coal jobs

McConnell and Barr have complained about the "War on Coal" by Obama all throughout his time in office. They campaigned on protecting coal jobs. They complained about the "war on coal". Thus, it is worth looking at how coal jobs have changed during the ENTIRE TIME McConnell has been a Senator of this state and while Barr has been if office (2013- Present). Below is a plot of data from both the Federal Reserve which has records going back to January 1985 (the first month McConnell took office) to the present for total coal jobs in the US. Kentucky also keeps records on coal jobs. These have been combined so everyone can see just how coal jobs have changed over time.



There were 32,000 coal jobs in Kentucky when McConnell took office in January 1985, and 12,550 when Barr took office in Jan 2013. By January 2009, when Obama took office the number of Kentucky coal jobs had declined by almost half, to just 17,812. This was down significantly from the peak in 1948 of 75,633 coal jobs. Automation, open pit mining (now nearly half of Kentucky coal production), expansion of coal production by other states, declining access to higher quantity coal seams and replacement of older coal fired power plants with cheaper, cleaner natural gas and renewable energy, have contributed substantially to a decline in coal jobs, particularly those done by underground mine workers.

Regulations, coal use, its true costs and health problems

That is not to suggest that regulations had no effect on coal jobs, they did. However, that impact has been relatively minor in comparison to the far larger economic forces in play during McConnell, Barr and Obama's time in office. Consequently, any push to eliminate regulations on coal will have little or no impact on coal jobs in Kentucky. Coal jobs are up just 1,000 in the entire US since December of 2016 or about 2%. In Kentucky, the total number of coal jobs has actually declined since December of 2016- June 2017.⁷

Coal is an important resource. It is used to power electrical plants (21 in Kentucky alone).9 It is a critical component in steel production and it is used in cement and liquid fuel. However, coal is a fossil fuel. Embedded within coal are toxic elements like arsenic, lead, mercury, cadmium, traces of uranium and sulfur. Burning coal produces lots of carbon dioxide, carbon monoxide, sulfur dioxide, nitric oxide and hydrocarbons that pollute the air, create smog and directly contribute to breathing problems like asthma. This may be a primary reason Kentucky is second in the nation in its per capita asthmatic population (11.9% of Kentuckians have asthma). An average coal power plant produces about 3.5 million tons of carbon dioxide/yr, 720 tons of carbon monoxide/yr, 220 tons of hydrocarbons, 14,100 tons of sulfur dioxide/yr, 10,300 tons of nitric oxides/yr and 500 tons of fly ash/yr.8 Each of these contributes to altering the atmosphere, in some cases contributing to acid rain, smog, breath difficulties and even death. In addition to these common byproducts of coal there are also toxic metals within the coal that are released by burning coal. Mercury is a brain toxin, and even 1/70th of a teaspoon in a 25 acre lake will contaminate fish in the lake sufficiently to make them toxic to humans. The average coal power plant emits 170 LBS/yr of Mercury. Arsenic can cause cancer in 1% of the population that drinks water

containing just 50 parts per billion of Arsenic. The average coal power plant generates 225 LBS/yr of arsenic. Lead also produces brain damage and was outlawed in gasoline. Gas was changed to its present unleaded form because of that environmental contamination. An average coal power plant releases 114 LBS/yr of lead. It releases 4 pounds of cadmium each year, another environmental and human toxin. With 21 coal fired energy plants in Kentucky multiplying each of these pollutants by 20 gives an approximation of the total pollutants Kentucky coal fired power plants are producing each year a significant portion of which ends up in the air we breathe and the water we drink.⁹

When Congressmen like McConnell or Barr state EPA regulations are hurting coal producers and coal jobs, what they are complaining about are regulations aimed at REDUCING the amount of these toxins coal fired power plants can release into the air and water. Coal fired electric power plants remain the largest user of coal in the US. The real question is whether fewer regulations and protections are actually cheaper. Electricity will be somewhat cheaper if coal fired power plants don't have to be concerned with reducing pollutants their power plants spew into the air or leak and deposit into ground and fresh water. But, fewer protections shifts the smaller cost of regulation and prevention and transfers the consequences and cost of less regulation to the more costly consequence of doing nothing. Either way, the public pays. It pays a higher cost for electricity or it pays a far, far higher cost for increased health problems and environmental damage.

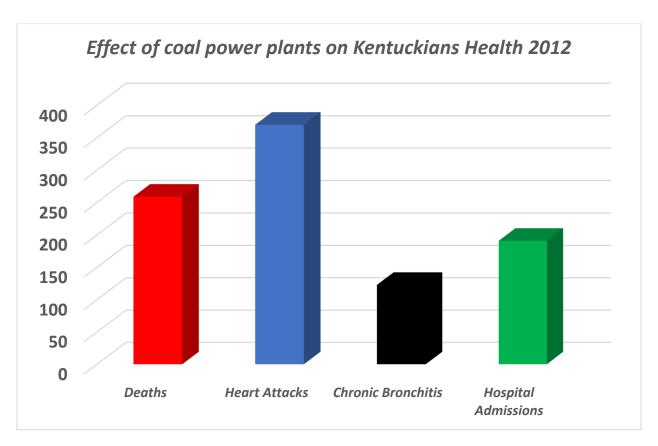
Even ignoring the health effects, a cost benefit analyses of coal in Kentucky working with data from 2006 indicated coal has a net negative impact on Kentucky of about \$115 million/yr. State tax revenues from coal mining of \$527.8 million/yr are less than the \$642.6 million in direct cost to the state that supports coal production. That negative \$115 million in costs from coal to the state, did not even attempt to calculate the added cost of coal on health care, lost productivity, water treatment and infrastructure, air quality or social expenses due to economic hardships created by lost jobs. It is likely most of those costs have increased even more since 2006 as coal production has declined and health and other costs have risen.

Health effects of coal

The most recent information on the health effects from coal power plants was reported in 2012.⁹ In Kentucky alone, power plants are estimated to produce

thousands of asthma attacks in Kentuckians each year, 191 hospital admissions to the ER for Kentuckians, 370 heart attacks a year for Kentuckians; 123 additional cases of chronic bronchitis in Kentuckians and 259 deaths of Kentuckians. Total healthcare costs were estimated at over \$3 billion in lost life and medical costs for 2012 alone. Tighter controls on coal power plant emissions, starting after 2004, have been associated with a decrease in deaths by more than 2/3rd. Yet, the cost of coal powered plant emissions still extracts a heavy toll, and further efforts are justified to lower these costs further.

Fewer regulations on coal power plant emissions will only aggravate the health effects from coal burning and shift that cost directly to Kentuckians. Saving a nickel on one's electric bill¹¹ only to shift billions in costs to the public hardly seems to justify the modest savings achieved. Congressman Barr seems to be more interested in being a penny wise and a pound foolish with regard to his efforts to support greater deregulation of coal power plant emissions.



The health consequences and costs of coal burning just for the constituents of the 6th District are enormous. In 2012, it was estimated that the burning of coal contributed to 53 more deaths, 73 more heart attacks, 59 more admissions to the

ER and 1079 asthma attacks costing 6th District constituents an estimated \$451 million that year. The 6th District doesn't even have coal mining jobs. Should Kentuckians suffer greater health problems, more serious health complications and early death so coal plants and producers do not have to concern themselves with the true cost and consequences of coal? Imagine if drug companies didn't have to worry about the consequences to people when making and selling drugs. That would make drugs cheaper to produce, but do we really want an industry to produce products that totally ignores the harm it does the public just so the product they produce is cheap? Barr, McConnell and even Rand Paul believe so, and have done their best to eliminate business regulations meant to protect the health of their constituents.

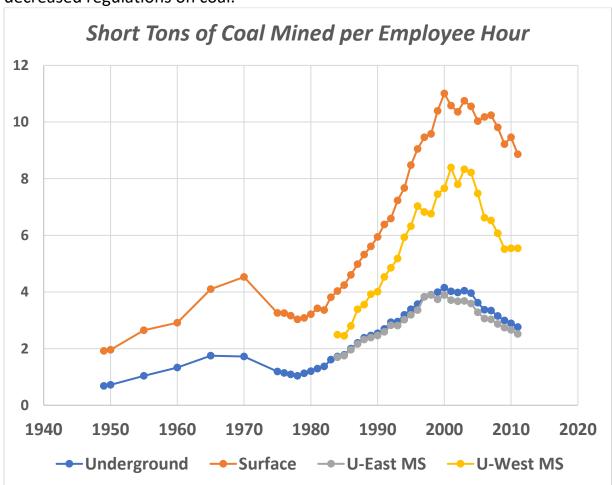
Political contributions and Constituent Interests

There is a reason for this madness. McConnell has received over \$827,000 in political campaign contributions from coal interests while in office. McConnell's politics has always been driven far more by his coal donors than his constituents. Andy Barr's proclamations about fighting for coal jobs by resisting the "war on coal" through its deregulation does not reflect an interest in his own constituents, as there are no "coal jobs" in the 6th District. Rather, Barr's rabid support of coal has far more to do with his payback to coal donors who have contributed \$435,000 to his campaign just since 2010. Barr's total campaign contributions from coal interests over the last 6 years are less than 1/1000th what his constituents are paying *each year* in early deaths, heart attacks, asthma and Emergency Room visits because of coal related damage to their health. It hasn't been the Constituents of Kentucky who have benefitted from Barr or McConnell's Congressional activity in support of coal interests. Their votes are clearly aligned with the well healed donors who support their political campaigns, not the constituents they were sent to Washington to represent.

Why less coal regulation won't increase coal jobs in Kentucky

The primary beneficiary of fewer coal regulations are coal owners. If the true cost of coal is not reflected in its use, coal owners can sell more coal and reap increased coal profits. Our Congressmen tout this owner benefit with its obvious negative consequences for their Constituents, as being done for OUR benefit. They have proclaimed coal regulations are killing jobs, so less regulations will lead to increased coal jobs. But, is that really the case for Kentucky, since even McConnell has indicated of late, coal jobs may not be coming back to Kentucky. ¹⁴⁻¹⁶

Coal production/employee hr has been examined both East and West of the Mississippi. In the figure below, the total short tons of coal mined per employee hour increased dramatically after 1949. However, since about 2005, coal production/employee hr has been falling, particularly for *underground* coal mining *East* of the *Mississippi* (U-East MS). One should reasonably ask, if a coal miner in the West can mine twice what a coal miner in Kentucky can mine, and a surface mine worker can produce 3 times what an underground miner produces, where do you think coal owners are going to invest money to create new coal jobs? Eastern Kentucky? Hardly, which is why Kentucky coal jobs have fallen, not risen even with decreased regulations on coal.



Most <u>underground</u> coal mining is done <u>East</u> of the <u>Mississippi</u> (U-East MS). What little of the total <u>underground</u> coal mining is done <u>West</u> of the <u>Mississippi</u>, is far more productive in terms of short tons of coal produced per employee hour. Surface coal mining, while far more damaging to the environment, is preferred by coal owners because of the higher coal short ton yield per employee hour. This

graph was generated from the tabular data found on p. 211 of the Department of Energy's Annual Energy Review, published on Sept. 2012. https://www.eia.gov/totalenergy/data/annual/pdf/aer.pdf

The reality is, coal jobs are not coming back to Kentucky, regulations or no regulations. Kentucky has been mining coal for over 260 years, and the easy to reach, rich coal seams are no longer in abundance in this State, particularly in Eastern Kentucky. Kentucky was displaced as the largest coal producer by Wyoming in 1988, and knocked to third place by West Virginia in 1994. Today, Kentucky ranks as the 5th largest coal producer after Wyoming, West Virginia, Pennsylvania and Illinois. This steady decline in Kentucky coal production relative to other coal producing states has nothing to do with coal power plant regulations. Fewer protections just leaves Kentuckians with all the health problems from coal burning and little or none of the benefits from more coal jobs. The only beneficiaries of that outcome are owners of coal mines and coal plants, and of course our Congressmen who do their bidding. Due to this reality, Kentucky coal jobs will slowly wither away as Kentucky coal mines finish their useful life and coal operators shift their attention to more productive coal regions of the country.

Final reality about Kentucky coal

Kentucky cannot extricate itself from its dependence on or the cost of coal to its economy overnight. However, let's admit one thing about the "war on coal". It was nothing more than a political catchphrase by our Congressional representatives. It was just a way to shift blame instead of solving the real problems facing Kentucky coal miners. Coal jobs are not coming back to Kentucky, because Kentucky is not a very cost-effective place to mine coal relative to many other locations in the US. At least it isn't unless we allow coal operators to destroy the environment by embracing mountain top mining.

We are not going to replace all our coal burning power plants overnight. However, we should seriously consider improving regulations that prevent them from doing more harm than good. We also need to slowly transition away from coal to cleaner more renewable energy forms that will have far lower health complications for Kentuckians.

Finally, the "war on coal" was never really about any effort to destroy coal jobs. It was a battle between entrenched coal interests and their politically paid for Congressmen who have worked tirelessly to end protections of the public. They have worked to terminate government incentives to further investments in renewable energy and a future that uses less polluting energy sources.

Their effective roll back of public protections from coal waste and toxic metals it releases into the environment is not a win for Kentuckians or even Kentucky coal miners. We all lose, as we fail to make investments we need to eventually replace fossil fuels as our primary energy source. Coal operators like Bob Murray may complain that such investments are designed to pick winners and losers in the energy sector. The reality is, the failure to invest, continuing to embrace the status quo and live in a future powered by coal is also a choice. It just happens to be a choice we cannot afford to make, and it will cost us dearly in deteriorating health and lost lives. There is also substantial evidence the health effects from coal are just half the problem. Climate change driven by fossil fuel use may end up costing just as much in environmental damage each year.

REFERENCES:

- Barr Joins members of the Kentucky Delegation in filing Amicus Brief at U.S. Supreme Court to support Kentucky Coal Jobs. Dec. 16, 2016. https://barr.house.gov/media-center/press-releases/barr-joins-members-of-the-kentucky-delegation-in-filing-amicus-brief-at
- 2. Barr on loss of coal jobs. WMKY, D. Conti, Feb. 6, 2014. http://wmky.org/post/barr-loss-coal-jobs
- 3. Department of Energy, Annual Energy Review 2011. U.S. Energy Information Administration. Pg. 211, Sept. 2012. https://www.eia.gov/totalenergy/data/annual/pdf/aer.pdf
- 4. Centers for Disease Control and Prevention. Most Recent Asthma State or Territory Data. Adult Current Asthma Prevalence by State or Territory, 2014. https://www.cdc.gov/asthma/most recent data states.htm
- The impact of coal on the Kentucky State Budget, Executive Summary. M.
 F. Konty and J. Balley. 2009.
 http://www.maced.org/coal/documents/Impact of Coal-Exec Summary.pdf
- Federal Reserve Economic Data. Current Employment Statistics (Establishment Data): Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail, seasonally adjusted. https://fred.stlouisfed.org/release/tables?rid=50&eid=4881&od=
- 7. Kentucky Coal Facts. 16th Edition (2016). Kentucky Energy and Environment Cabinet, Department for Energy Development and Independence in Partnership with the Kentucky Coal Association. http://energy.ky.gov/Coal%20Facts%20Library/Kentucky%20Coal%20Facts%20-%2016th%20Edition%20(2016).pdf
- 8. Environmental impacts of coal power: air pollution. Union of Concerned Scientists. 2014. http://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/coal-air-pollution#.WcwLlciGOM8
- 9. Problems of Coal. Death and Disease from Power Plants. Clean Air Task Force. http://www.catf.us/fossil/problems/power_plants//
- 10. Category: Existing coal plants in Kentucky.

 https://www.sourcewatch.org/index.php/Category:Existing coal plants i
 https://www.sourcewatch.org/index.php/category:Existing coal plants
 https://www.sourcewatch.org/index.php.category:Existing coal plants
 <a href="https://www.
- 11. Andy Barr Town Hall Meeting, Lafayette High School Auditorium, Lexington, KY. April, 2017. Andy Barr related a personal story about an

- elderly woman who didn't wish to pay a nickel more in electricity costs as his justification for eliminating EPA regulations on coal power plants.
- 12.Open Secrets.org. Coal mining: Top Recipients 1990-2018.

 https://www.opensecrets.org/industries/recips.php?ind=E1210&recipdetail=S&sortorder=U&mem=Y&cycle=1990
- 13. With just 2 terms, Ky. Rep Andy Barr high on list of coal contributions. C. Tate, Lexington Herald Leader, Dec. 21, 2015.

 http://www.mcclatchydc.com/news/politics-government/congress/article50918060.html
- 14.McConnell: It's 'hard to tell' if ending 'war on coal' will bring back jobs. D. Desrochers, Herald Leader, Nov. 11, 2016.

 http://www.kentucky.com/news/politics-government/article114197923.html
- 15. Coal Reality. Grist, K. Herzog, Nov. 14, 2016. http://grist.org/briefly/mitch-mcconnell-has-already-admitted-gop-promises-to-out-of-work-coal-miners-wont-come-true/
- 16. Even Mitch McConnell now says repealing Obama's rules alone won't bring back coal. C. Tate. The Charlotte Observer, Jan. 18, 2017. http://www.charlotteobserver.com/news/politics-government/article127337384.html