Center for American Progress

Modernizing the Federal Coal Program

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The United States' federal coal-leasing program has existed for nearly a century, beginning with the enactment of the Mineral Leasing Act of 1920.[1] The U.S. Department of the Interior's Bureau of Land Management, or BLM, oversees this longstanding program, which encompasses both surface and underground coal-mining activities on federal lands. Since its inception, however, the federal coal program has been laden with oversight challenges, scandal, and controversy.

Currently, approximately 40 percent of all U.S. coal is mined on federal lands, with almost 90 percent of this coal originating in the Powder River Basin, or PRB, which stretches across Wyoming and Montana.[2] Although BLM collects more than $1 billion annually in bonus bids and royalty revenues from coal-mining operations on federal lands, the government is not collecting the full value of this coal owed to U.S. taxpayers. In fact, in 2013, both the Department of the Interior's, or DOI, inspector general and the Government Accountability Office, or GAO, issued reports assessing the DOI's coal-leasing program and discovered a lease sale process that is largely noncompetitive and reliant on a valuation system that is not transparent and potentially open to industry manipulation. At the root of this problem is an outdated and broken program, governed by regulations that have not been updated in more than 25 years, and a flawed decision to decertify every major federal coal region in the country, including the PRB, which has made certain reforms to the coal program essentially meaningless.

In addition to concerns that taxpayers are being denied a fair return on the sale of federal coal, the coal program presents a threat to the Obama administration's efforts to reduce greenhouse gas emissions and combat climate change both domestically and abroad. Increasing environmental restrictions and low natural gas prices have shifted the focus of companies from domestic markets to the export market, particularly in Asia, presenting an added problem of so-called carbon leakage. While the Obama administration has taken major strides toward meeting climate goals and should be commended for these actions—which include the implementation of the Climate Action Plan—fundamental reforms to the federal coal program are needed in order to ensure that the United States is able to meet national carbon-pollution reduction goals.

To pinpoint the policy changes required and successfully overhaul the program, the Obama administration should commission a thorough, expeditious, and independent high-level review of the federal coal program. This issue brief will examine the appointment of a presidential commission or task force to conduct this high-level review, as well as explore potential policies that should be considered when reforming the program.

The need for a high-level review of the federal coal program

The reports by the GAO and the DOI inspector general documented major deficiencies in the federal coal-leasing program, including a lack of oversight and rigor over the leasing process.[3] Bipartisan lawmakers have raised serious concerns about the integrity of the coal program and have called for federal regulators to ensure taxpayers are receiving the full and fair value for coal mined from federal lands.[4] Some of these lawmakers have also called for a moratorium on any new coal leasing under the current program until reforms are enacted. Even the BLM's director has acknowledged that leasing reforms are necessary to meet the recommendations of the GAO and the DOI inspector general.[5] As indicated by these calls for action, there is little question that the federal coal program is flawed and in dire need of reform.

However, criticism of the program isn't new. In 2012, an analysis by the independent Institute for Energy Economics and Financial Analysis estimated that over the past 30 years, the consistent undervaluation of federal coal has cost taxpayers upwards of $30 billion in lost revenue.[6] The perpetuation of flawed leasing practices and the gaming of regulatory loopholes by coal companies for the payment of royalties on federal coal may be adding to these staggering losses.

As a consequence of the federal government's outdated valuation and leasing process, PRB coal sells at a severe discount when compared to other U.S. and international coal. At $13 per ton, PRB coal sells for approximately one-fifth of the cost of coal produced in the Appalachian region, which sells at roughly $63 per ton.[7] Even when accounting for the higher energy content of Appalachian coal, PRB coal is still drastically cheaper, selling at less than one-third of the cost—a mere $0.74 per million British thermal units, or BTUs, compared to $2.46 per million BTUs for Appalachian coal.[8] PRB coal also sells for as much as one-tenth of the price of coal that was shipped to southern China just a couple of years ago.[9] Over the last five years, the benchmark delivery price for coal sold in the industrial southeastern region of China has fluctuated between roughly $70 and $135 per ton; however, prices have dropped as China's coal economy has slowed.[10] If Chinese coal prices return to these recent highs, PRB coal would be economical to export so long as its mine-mouth price remains below $53 per ton.[11]

Since the early days of the federal coal program, lawmakers and regulators have struggled to ensure taxpayer-owned coal is sold for a fair return and not exploited. As a result, the coal program has undergone three separate moratoriums. The first occurred during President Theodore Roosevelt's administration, when evidence came to light that companies had fraudulently acquired quantities of valuable coal and lands through abuses of the 1873 Coal Lands Act.[12] In response President Roosevelt, withdrew more than 66 million acres of coal lands from sale, effectively instituting the first moratorium.

The second moratorium on coal leasing, which lasted more than a decade, did not take place until 1971 when the BLM uncovered evidence of speculation in holding coal leases. By then, a formal leasing program for federal coal had been in effect for 50 years under the Mineral Leasing Act of 1920. Between 1945 and 1970, increasing amounts of coal tracts were leased with little consideration for demand. Upon review, the BLM found that coal leasing had increased by 10 times but production had decreased by 75 percent.[13] This prompted the passage of the Federal Coal Leasing Amendments Act, or FCLAA, and regulatory reforms to require competitive leasing and diligent development of coal leases and a fair market value, or FMV, return for taxpayer-owned coal. A major outgrowth of these reforms included the acknowledgement of regional leasing areas, or "coal production regions," and the appointment of regional coal leasing teams to ensure sound leasing practices in these areas.[14]

Despite these reforms aimed at reinstituting integrity into the federal coal-leasing process, more allegations of wrongdoing in the federal coal program surfaced in the early 1980s. These allegations included claims that employees of the now defunct Minerals Management Service had leaked appraisal information in advance of coal sales, failed to follow guidelines to ensure coal was sold at FMV, and improperly handled environmental assessments leading up to the sales.[15] Members of Congress called for an investigation into the federal coal program and uncovered that coal leases in the PRB sold for $100 million less than their FMV.[16] The findings of this congressional investigation spurred the creation of the Linowes Commission, or the Commission on Fair Market Value Policy led by David Linowes, which concluded that excessive amounts of coal had been leased at what was described as "firesale prices," thus leading to the program's third moratorium.[17]

No significant reforms to the federal coal program have occurred since reforms were implemented more than 25 years ago in response to the recommendations of the Linowes Commission. However, as history repeats itself, the federal coal program is now facing similar allegations of program dysfunction and mismanagement, with federal coal selling at bargain-basement prices at a great loss to taxpayers. These problems have revived the need for a high-level review and overhaul of the federal coal program.

Appointing a task force or commission to conduct a review of the federal coal program

The federal coal program has been the subject of numerous high-level reviews. Each of these critiques has been the catalyst for enacting reforms to the program. Similar to the Linowes Commission, the Obama administration should appoint a presidential task force or commission to conduct a comprehensive and expeditious review of the federal coal program.

This task force would be charged with identifying policies needed to improve the overall function of the federal coal program, with particular emphasis on the royalty rate and the point at which it should be assessed. The appraisal and sale of federal coal should also be reviewed in order to ensure accepted bids meet or exceed FMV in order to comply with the Mineral Leasing Act to foster competitive sales and to fully account for market externalities, such as export activity and carbon emissions. Appointing a task force would provide a balanced forum to review the federal coal program and would ideally be comprised of experts versed in both the coal-leasing process and coal markets.

As detailed below, proposed reforms by the task force should seek to achieve a number of goals, including but not limited to: modernizing an outdated program; enhancing competition in federal coal leasing; ensuring the public receives a fair return for federal coal; re-establishing the BLM's control over the federal coal program both externally, with regulated entities, and internally, with its state and field offices; helping the United States meet its energy and climate change goals; and leveling the playing field among domestic coal producers.

Specifically, core reforms that a presidential task force or commission should consider include:

- Increasing the royalty rate and minimum bid for surface-mined coal

- Accounting for the value of coal at the point of end use, including in instances of export, to appropriately determine the FMV for federal coal and to assess royalties

- Re-establishing BLM control over the leasing program by recertifying all federal coal production areas, and in particular the Powder River Basin, as "coal production regions"

- Addressing and accounting for the social cost of carbon in the FMV assessment for federal coal

Let's look at each in more detail.

Increase the royalty rate and minimum bid for surface-mined coal

The Mineral Leasing Act and the Federal Coal Leasing Amendments Act give the secretary of the interior broad authority to issue and regulate coal leases, including the collection of royalties and minimum payment, or bonus bid, for coal mined from public lands. The DOI's regulations prescribe that the government "may conduct lease sales using cash bonus—fixed royalty bidding systems or any other bidding system adopted through rulemaking procedures."[18] Currently, lease sales are conducted using a bonus with royalty-bidding system, by which the BLM receives revenues from coal mining on federal lands in three ways: the bonus bids offered by coal companies at lease sales; the royalties paid on the value of coal mined; and annual rental payments of $3.00 per acre.

The FCLAA and the Department of the Interior's regulations prescribe a floor royalty rate for surface-mined coal, but no ceiling. The current royalty rate for surface-mined federal coal is 12.5 percent—the absolute minimum royalty rate that can be collected for surface-mined coal, except in rare instances when the secretary of the interior deems it necessary to further reduce the rate.[19] The lack of a ceiling for the royalty rate means the secretary has the latitude to increase the currently mandated royalty rate with little administrative effort. Thus, because the FCLAA and the BLM's implementing regulations provide the Secretary with the authority and discretion to charge royalty rates in excess of 12.5 percent, the secretary could raise the royalty rate for surface-mined coal without a rulemaking. This new royalty rate for surface-mined coal would be applied to new leases or leases renewed in the future; leases in production are subject to renewal after the first 20 years of production and every 10 years thereafter.[20]

In comparison to other publicly owned natural resources, such as offshore oil and gas that has a royalty rate of 18.75 percent, the royalty rate for federal coal is seemingly low and has not been updated in decades.[21] Onshore oil and gas rates are similarly set at 12.5 percent, but both the GAO and the DOI have acknowledged that these rates need to be revisited.[22] As a result, the BLM should raise the royalty rate for surface-mined coal to better mirror rates for offshore oil and gas production.

Additionally, the BLM should raise the minimum bid for federal coal sales to at least $1 per ton—or the average price for publicly-owned coal leased under the Obama administration—so that the floor price for federal coal is set at a meaningful level and is reflective of its true market value.[23] Similar to royalty rates, DOI's regulations prescribe that the agency shall set a minimum bid for lease sales in order to ensure that taxpayers receive at least the threshold amount for federal coal from the auction. According to the regulations: "[m]inimum bids shall be set on a regional basis and may be expressed in either dollars-per-acre or cents-per-ton. In no case shall the minimum bid be less than $100 per acre or its equivalent in cents-per-ton."[24]

The current minimum bid requirements are clearly inadequate, as federal coal continues to sell in single-bidder auctions at rates that do not reflect the resource's true market value. For example, in the most recent federal coal sale that took place in July 2014, the Spruce Stomp lease sale, federal coal was auctioned off to only one bidder at one-third of the average price for federal coal—a mere $0.36 per ton.[25] Even DOI's Inspector General Mary L. Kendall has confirmed that, in particular, the BLM is not obtaining a fair return for taxpayer-owned coal, citing 45 federal lease sales for lease modifications since 2000 that averaged more than 80 percent lower in price than other lease sales during the same period.[26]

An increased royalty rate and minimum bid for federal coal would mean not only greater revenues for taxpayers for the sale of federal coal, but would also mean greater returns for states in which federal coal development takes place. Royalties and bonus bids collected on coal are an important part of both federal and state budgets, especially for Wyoming and Montana, which are home to the coal-rich PRB. The bonus bids and royalties received by the federal government from coal production are split roughly equally between the U.S. Treasury Department and coal-originating states.[27] As a result, there is a direct benefit to states from which federal coal is extracted. These bonus bid and royalty payments to states provide a significant source of funding for schools, universities, highways, and construction statewide.

Account for the value of coal at the point of end use, including in instances of export, to accurately determine the FMV for federal coal and to assess royalties

Currently, the BLM's coal-leasing program is neither competitive nor results in a fair return for taxpayers. Under the Federal Coal Leasing Amendments Act, the BLM is required to hold "competitive lease sales" for coal and ensure that the bids reflect "fair market value." The BLM's lease sales, however, have been noncompetitive for decades, with roughly 90 percent of all federal coal-lease sales since 1990 having only one bidder.[28] As the Department of the Interior DOI's inspector general noted in her 2013 report, "the FMV determination is critical in coal leasing because a competitive market generally does not exist for coal leases, therefore, the FMV serves as a substitute for competition."[29] Furthermore, the BLM's methodology for calculating the FMV for lease sales is inadequate and lacks transparency.

The BLM determines FMV by using either the comparable sales approach, which is based in part on bids from previous noncompetitive lease sales, or the income method, which is an estimation of annual costs and revenues associated with the development of the coal.[30] Under the more commonly used, and more problematic, comparable sales approach, the BLM values the coal based on previous noncompetitive lease sales within the same region rather than on the market prices for where the coal is shipped and utilized.

In the case of PRB coal, more often than not, the delivery price or market price for the point of end use is much higher than the mine-mouth price of the coal, or the market price for coal at its point of origin. As a consequence, companies are often able to win single-bid auctions with bottom-of-the-barrel bids yet sell the same coal at much higher prices, in turn reaping huge profits. For example, PRB coal is shipped both domestically and internationally. Domestically, the average mine-mouth price of this coal is $11.50 a ton but is sold for more than triple the price downstream in the Midwest at roughly $37 a ton.[31]

Internationally, the profit margin is even greater. The GAO has confirmed that the BLM does not fully account for the export potential of federal coal when assessing its FMV. In 2012 alone, the amount of coal exported from the United States was 125 million tons—twice the export levels in 2007.[32] Another report by the Sightline Institute—a think tank based in Seattle, Washington—surveyed the failure of the BLM to assess the economics of coal exports in its FMV calculation. The report concluded that companies are readily buying low-cost federal coal and reselling it overseas at much higher prices and at a loss to taxpayers.[33] The report outlined several instances of this happening; in one example, Cloud Peak Energy purchased coal at its Spring Creek Mine for $0.11 and $0.18 per ton and sold much of this coal abroad for more than $60 per ton.

To make matters worse, because royalties are assessed on the sale price of coal at the first point of sale—which is usually at the mine mouth and does not reflect the market price—taxpayers are losing out on additional royalty payments due to depressed prices that do not reflect the true value of federal coal on the market. For example, a 12.5 percent royalty rate for a ton of coal priced at $60 per ton—minus deductions for transportation and washing allowances—yields a royalty of as much as $7.50 per ton. However, a ton of coal sold at $13 per ton only yields a royalty of $1.63 a ton.[34] These royalty losses are magnified when selling millions of tons of federal coal annually.

This discrepancy in pricing has also potentially been the source for companies to game an existing regulatory loophole and avoid paying the full amount of royalties due on federal coal. DOI's Office of Natural Resource Revenue is currently reviewing existing regulations for valuing federal coal for royalty purposes in order to close a regulatory loophole by which coal companies have been engaging in "captive transactions."[35] In these transactions coal companies sell coal to their affiliates at lower prices in order to dodge royalty payments, and then resell the coal on the market at higher prices—thereby avoiding payment of the royalty on the higher price. Through this proceeding, the Office of Natural Resource Revenue should clarify that royalty payments should be assessed on the price at the final point of sale, which is usually the sale to a utility, rather than the mine-mouth price so coal companies are required to pay royalties on the true market value of federal coal.

Re-establish BLM control over the federal coal-leasing program by recertifying the Powder River Basin and other federal coal production areas as "coal production regions"

In 1979, the BLM's Federal Coal Management Program established six "coal production regions" in the United States, including the Powder River Federal Coal Production Region that included the PRB.[36] DOI's regulations do not define what constitutes a coal-production region, but the coal-production regions were designed to facilitate the establishment of regional leasing levels for federal coal.[37]

In 1990, the BLM decertified these regions, explaining that its decision was the result of decreasing market values for raw coal and dwindling industry interest in new federal coal leasing. Specifically, the BLM reasoned that:

> *This decision to decertify the PRCPR [Powder River Coal Production Region] recognized that the PRB was a mature coal production region where a sufficient number of mining operations were in place to meet demand. Leasing demand in the decertified PRCPR was anticipated to be limited to replacement of exhausted reserves, which could be accomplished through maintenance leasing.*[38]

BLM's rationale for decertifying the PRB has not held true. Rather than proceeding with strictly "maintenance leasing" in the PRB, interest in new coal mining in the PRB has skyrocketed since 1990, with coal-leasing amounts almost doubling between 1983 and 1993—from 151 million to 275 million tons of coal—with over 7.3 billion tons of coal offered for sale in the PRB since its decertification.[39]

As a result of BLM's misguided decision in 1990, the PRB is no longer deemed a "coal production region," even though it produces almost 90 percent of all federal coal.[40] Practically speaking, the decertification of the PRB and other coal regions has effectively given coal companies control over the federal leasing process, allowing them to select which tracts to lease rather than having to follow a regional leasing plan as was envisioned by Congress when it enacted the Federal Coal Leasing Amendments Act.

Specifically, this means that federal coal is only leased through the lease-by-application, or LBA, method by which an applicant nominates a parcel for development. Usually federal coal-lease sales can take place through two types of competitive leasing processes: regional coal leasing or the LBA process. Regional coal leasing only applies to certified coal-production regions and has not applied to federal coal leasing since 1990 due to the decertification of all coal-production regions in the United States.

The planning process for leasing federal coal is supposed to be applied in order to maximize both competition and financial return to the federal government for a taxpayer-owned resource. Nevertheless, because of decertification, since 1990 roughly 90 percent of all federal coal sales have only had one bidder despite a clear mandate under the Mineral Leasing Act that federal coal leases be offered competitively.[41] Also, the LBA method does not take into account cumulative impacts of other coal-mining operations in the area and lacks the same environmental rigor that is applied through regional coal leasing, which considers environmental impacts at a regional and landscape level. The LBA process only requires the BLM to analyze the environmental impacts of leasing on a parcel-by-parcel basis and not on a regional level.

A recent federal lawsuit by environmental groups, Friends of the Earth and the Western Organization of Resource Councils, raises similar concerns.[42] The groups allege that BLM has failed to exercise its duty under the National Environmental Policy Act to consider the cumulative or direct and indirect effects of the federal coal management program on climate change. The groups call for BLM to issue a supplemental programmatic environmental impact statement in order to take into account the climate change effects of greenhouse gases from the mining and burning of coal from federal lands before conducting any additional coal leasing under the federal program.

As it follows, regional coal leasing, has many added benefits. It applies to certified coal-production regions and is, according to the Department of the Interior, "a vehicle through which BLM makes multiple federal coal tracts available for sale based on the need for leasing as assessed by an analysis of national and regional coal markets."[43] In contrast to the LBA process, regional leasing requires that DOI consider the economic, environmental, and social effects of leasing, industry interest, level of competition in the region, U.S. coal production goals, projections of future coal demand, and national energy needs.[44]

Additionally, regional coal leasing requires consultation with the local government and the public through the Regional Coal Team, a team of federal and state representatives appointed to make leasing recommendations for the region, which allows for extensive opportunity for public participation.[45] Applying a landscape-planning approach is also in sync with DOI's Mitigation Policy, issued in April 2014, which promotes incorporating a landscape-scale approach into all facets of development, conservation planning, and mitigation.[46]

The coal market has changed significantly since the BLM decided to decertify coal-production regions, as the coal industry has expressed increased interest in mining coal, particularly for exports. As a result, the BLM should recertify the PRB as a coal production region. The BLM could readily do so by simply publishing a notice in the *Federal Register* recertifying the region. DOI's regulations provide that "[a] coal production region may be changed or its boundaries altered by publication of a notice of change in the Federal Register."[47]

The first phase of a coal sale for the recertified region would require the completion of a land use plan, also known as a Resource Management Plan, by which the BLM determines the development potential of the area in question, whether the land may in fact be unsuitable for leasing or other multiple-use tradeoffs that could be incompatible.[48] As part of this land-use planning process, a "Call for Coal" is made in order to formally solicit indications of interest and information on coal-resource development in the area.[49]

After a Resource Management Plan is in place, the secretary of the interior establishes regional leasing levels with the help of the Regional Coal Team and input from the BLM state director. Preferred and alternative leasing levels are sent to the secretary of the interior for consideration prior to establishing the regional leasing level. The Regional Coal Team then engages in coal-lease activity planning, by which it configures possible lease tracts, including tracts that will meet the leasing level set by the secretary of the interior.[50] This critical phase includes a review of the land-use plan and long-range market analysis of the need for leasing. If it decides to move forward, the Regional Coal Team identifies, ranks, and analyzes selected tracts for review in an environmental impact statement, which is published in the *Federal Register* for public comment.[51] Prior to adopting a lease-sale schedule, the secretary of the interior consults with other relevant agencies, governors, Native American tribes of affected states and, the U.S. attorney general. Finally, the lease sale is scheduled, with public comment solicited on the FMV and appropriate mining method.

Because regional leasing considers the need and market for leasing coal, this method of leasing is a useful tool to ensure the market is reflective of the true value of coal and is not being flooded with a natural resource that results in prices being depressed. Currently, under the LBA system, the BLM merely responds to requests to lease coal without regard for market demand, which ultimately means the BLM rarely says no to leasing federal coal and companies are able to control a long-term supply of this taxpayer-owned resource at depressed prices. In spite of a drop in demand for coal domestically, many coal companies are currently seeking to lease more federal coal based on speculation that an export market for coal will continue to exist in the future.[52]

Recertification of coal-production regions in the United States would eliminate the LBA method for federal coal leasing, with the exception of emergency situations.[53] Thus, federal coal leasing would largely only take place on a regional level.

Address and account for the social cost of carbon in the FMV assessment for federal coal

The BLM's current FMV methodology also does not account for externalities associated with the mining and burning of coal, such as the social cost of carbon pollution. In addition to the billions of dollars in lost revenue that the federal government fails to collect on behalf of U.S. taxpayers due to the undervaluation of PRB coal, the mining and burning of PRB coal has a cost to society. Burning coal emits significant pollutants with significant social cost—principally carbon pollution, smog-forming pollutants, and heavy metals. These pollutants degrade our air and our health and accelerate climate change, adversely affecting the environment now and well into the future.

An issue brief released by the Center for American Progress earlier this year found that the social cost of carbon for mining and burning PRB coal is $62 per ton.[54] In 2012 alone, this meant the social loss for the 388 million tons of federal coal sold from the PRB was more than $19 billion.

The applicability of the social cost of carbon to PRB coal is not merely speculative. The BLM and federal courts have determined that the costs of carbon emissions from the mining and combustion of coal result in impacts that must be accounted for as the social cost of carbon. Most recently, a district court in Colorado held that the government's failure to consider the social cost of carbon in an environmental impact statement for coal-mining activities on national forest lands was arbitrary and capricious. Specifically, the judge held that the BLM and the U. S. Forest Service overlooked the costs of carbon emissions from the mining and combustion operations associated with a coal mine's expansion, even though the agencies acknowledged that expanding the mine's operations would likely result in greater greenhouse gas emissions.[55]

The BLM should revise its guidance for calculating the FMV of federal coal to account for the social cost of carbon in order to ensure that the price at which federal coal is sold accurately reflects the externalities associated with the mining and burning of coal, including its effects on climate change. Specifically, the BLM should update its handbook, *H-3070-1 – Economic Evaluation of Coal Properties*, and other relevant guidance on FMV to enact this change.

Conclusion

The federal coal program as it exists today is broken and outdated, with the last review and reforms to this important program occurring almost three decades ago. A thorough review by a presidential task force or commission is needed to fully review and modernize this program. At a minimum, efforts must be undertaken to ensure taxpayers receive a fair return on this publicly-owned resource and that current climate policies are not undermined.

Nidhi Thakar is the Deputy Director of the Public Lands Project at the Center for American Progress.

Acknowledgements

Thanks to CAP Senior Fellow and Director of the Public Lands Project Matt Lee-Ashley and CAP Economist Michael Madowitz for their contributions to this report.

Endnotes

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