# Taxation of Coal: A Comparative Analysis

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## Executive Summary

Taxation of coal and firms in the coal economy is a productive source of revenue for state and local governments with significant levels of coal production. For example, revenue collected from coal industry taxation is an important factor in West Virginia's public finance. According to a 2010 study by the Bureau of Business and Economic Research (BBER) and the Center for Business and Economic Research (CBER), taxes paid by the coal industry to the State of West Virginia exceeded $676 million in 2008 alone (BBER and CBER 2010). Following personal income taxes, severance taxes on coal in West Virginia were the second largest source of income for the state's general fund.

This report provides a comparative analysis of coal industry taxation methodologies in West Virginia and 12 other coal producing states. Information is collected from state-level agencies and state statues. The states studied produced 92.2 percent of the coal mined in the U.S. in 2008. The study shows a lack of uniformity among the states as to what taxes are applied to coal, how the tax bases are determined, what the rates and which level of government administers them.

In each state studied, the method of imposing real and personal property taxes, severance taxes, corporation income taxes, and a reclamation taxes or fees are examined.

<u>Property taxes.</u> Three states do not impose a real property tax on either active or reserve coal property. Indiana imposes a real property tax on reserve coal property only and Montana imposes a real property tax on active coal property only. Five states do not impose a personal property tax. Localities in four states impose real and/or personal property taxes on coal mining at their discretion but there are no statewide standards.

West Virginia's real property tax on active coal property uses a method which is unique in considering the 13 states in this study. The appraisal formula used to value reserve coal property in West Virginia was adopted in large part in Kentucky's coal assessment calculation formula and Colorado's income formula. Kentucky's formula is used for valuing both active and reserve coal property in the State while Colorado's income formula is used for valuing active coal property only.

The State of West Virginia appraises personal property related to coal mining by considering the three approaches to market value and then assesses the property at 60 percent of value. Montana values personal property related to coal mining at only three percent of market value. Indiana values personal property related to coal mining at 33 and 1/3 percent of the true tax value.

<u>Severance taxes.</u> Three states do not impose severance taxes on the privilege of producing coal. Localities in one state, Virginia, are responsible for determining and collecting the severance tax.

<u>Corporate income taxes.</u> Only one state, Wyoming, does not impose a corporation income tax on coal mining corporations. The current corporate income tax rate imposed on coal mining corporations doing business in West Virginia is 8.75 percent. Indiana's corporation income tax rate is similar at 8.5 percent. The lowest corporation income tax rate among states in this study is North Dakota's 2.6 percent imposed on corporations with $3,000 or less of taxable income in

one year; the largest is 9.99 percent taxable income in Pennsylvania. In contrast, Ohio's commercial activities tax (CAT) imposes $150 for gross receipts between $150,000 and $1,000,000 and $150 plus 0.26 percent for gross receipts in excess of $1,000,000.

Reclamation fees. Every state included in this report but Wyoming imposes a reclamation tax or fee in addition to the federally regulated Surface Mining Control and Reclamation Act (SMCRA) Abandoned Mine Land fee. The reclamation taxes or fees imposed consist of bonds, permit fees, per ton taxes, per acre fees, or a combination of these. These fees are dedicated to the cleanup of abandoned mine sites or those where the bonds were forfeited and insufficient to cover reclamation costs.

West Virginia imposes a reclamation tax of $0.144 per ton coal produced, a permit fee of $1,000, and requires a penal bond of between $1,000 and $5,000 per acre with a $10,000 minimum total bond. The $10,000 minimum bond amount is imposed among six other states examined in this study. Permit fees range from $125 in Illinois to $5,000 in Texas.

The variations in approaches to taxation of the coal industry in the major coal producing states may be explained by a variety of reasons. Among them appear to be the importance of coal in the State's economy. The more important coal is as an industry in the State's economy, the more likely the higher and more uniform the taxes will be. Geographic location also appears important. In states where coal is produced only in a limited number of locations, local control is more likely to be used. Variations also reflect the State's philosophy regarding taxes in general as some states place more emphasis on certain taxes or do not employ certain taxes that do others. Lack of uniformity, particularly in property taxation, raises legal questions as well as economic ones which are beyond the scope of this study.

## Introduction

Coal is subject to a variety taxes in states which produce significant amounts of coal. These taxes include:

- Real property tax;
- Personal property tax;
- Severance tax;
- Corporation income tax; and
- Reclamation tax (or fee).

The methods of coal taxation, on the mineral itself as well as on the equipment and corporations that produce it, vary greatly by state. When in situ, coal is often subject to a real property tax separate from real property taxation of surface land. Of the 13 states studied in this report, four do not impose a real property tax on coal. In three states, this real property tax can vary depending on whether the coal property is currently actively producing coal or if the property is considered reserve coal property and currently not in production. Four other states determine the conditions for coal real property taxation at the local level.

Once in production, coal is usually subject to a severance (or production) tax. A severance tax is a tax on the privilege of severing and producing coal. The amount of severance tax levied is based on various criteria as determined by each state. Only four of the states studied in this report elect to not impose a severance tax on coal. Severance taxes in one state, Virginia, are imposed at the local level only.

A reclamation fee is also imposed by 12 states studied in this report to cover the costs of reclaiming forfeited mining sites. This fee collects funds to reclaim the land from surface mining and to correct the effects of acid mine drainage (AMD) from underground mining methods. In seven states, the reclamation fee is a single fee that covers both surface and underground mining. In four other states, a separate fee is imposed depending on the mining method. The state-imposed reclamation fees are in addition to the federal fees levied on coal production through the Surface Mining Control and Reclamation Act of 1977 (SMCRA), which will be discussed in the next section.

Other taxes and fees are levied on equipment and material involved in the processing and distribution of coal. While six states levy a personal property tax on the machinery and equipment used to extract and process coal for sale or use, five states no longer levy a personal property tax. Two others determine personal property taxes at the local level. Every state in this study except Wyoming imposes a corporation income tax upon the income earned by the mining company, including those involved in the production and sale of the coal. The amount of the corporation income tax rate and base is determined by each state as well although most follow the federal tax in large degree.

## Surface Mining Control and Reclamation Act of 1977

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) is federal regulation which defines the minimum reclamation fee to be imposed on coal mining operations. The funds collected from this fee are used to reclaim abandoned mine lands (AML) where surface mining operations have altered the preexisting contour and environmental balance of the area. The fee imposed by this Act is currently equal to $0.315 per ton of coal which is produced by surface mining methods and $0.135 per ton or 10 percent of the coal value, whichever is less, of coal produced by underground mining methods, according to the 2006 Amendments to SMCRA.[1] Additionally, a reclamation fee of $0.09 per ton or two percent of the coal value, whichever is less, is imposed on the production of lignite coal.

The AML fees are regulated by the Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE). Coal mine operators pay the fees directly to the Secretary of the Interior. The money collected is pooled in the Abandoned Mine Reclamation Fund. The Secretary has the responsibility of reallocating money in the fund to certain states and Indian tribes with jurisdiction over land where coal has been extracted. Funds redistributed to states and Indian tribes aid in reclaiming mine lands which were abandoned prior to the 1977 passage of SMCRA.

Those states which produce coal can submit a State Reclamation Plan[2] to the Office of Surface Mining Reclamation and Enforcement (OSMRE) to establish primacy. Primacy states are then responsible for:

- Permitting mining operations;
- Inspecting mine sites;
- Enforcing mining laws; and
- Bond repayment after proper site reclamation has been completed (OSMRE 2010).

As of 2007, 24 coal producing states, including the 13 examined in this report, have established primacy (OSMRE 2010). Each fiscal year, eligible states receive half of the total collections made during the previous fiscal year. Per SMCRA regulations, the amount received is reduced to 75 percent[3] of the total 50 percent collections for the FY 2010 distribution.

Three states included in this study, Montana, Texas, and Wyoming, are considered "certified" states and are therefore ineligible to receive the distribution.[4] A certified state is one which has submitted a letter to the Secretary of the Interior stating that reclamation of land mined prior to the 1977 passage of SMCRA has been completed (Whitehouse 2010). Distribution amounts for both eligible and ineligible states studied in this report are provided in Appendix A.

## Taxation Methods of Coal Producing States

In this report, the differences in taxation methods of the largest coal producing states, as well as those states which border West Virginia, are examined. To determine which states to study, coal production figures are collected from the Energy Information Administration (EIA). Appendix B lists coal producing states in the U.S., each state's production figures, and the percentage of total U.S. production. These states are ranked from largest coal production in 2008 to smallest. This report is focused on 13 states determined by the ten largest coal producing states in the U.S. and the remaining three states which border West Virginia but are not among the largest coal producers. In 2008, the 13 states produced a combined total of 92.2 percent of coal produced in the US.

The largest coal producing states are not necessarily the states with the largest coal reserves. Wyoming and West Virginia are the top coal producing states as well as the states with the largest coal reserves as of 2008. North Dakota is tenth in production but holds the third largest coal reserves. Pennsylvania, which is fourth in overall production, ranks ninth in recoverable reserves. As a whole, the thirteen states hold a combined total of nearly 90 percent of total U.S. recoverable coal reserves. Appendix C provides recoverable coal reserves in the 13 states identified for this report as well as the percentage of total U.S. reserves from 2008.

The 13 states can also be ranked by the Gross Domestic Product (GDP) related to the mining industry. Based on the NAICS classification for Mining (Except Oil and Gas), coal and other metal and non-metallic minerals represent nearly 16.5 percent of GDP for the total NAICS mining classification. Within the Mining (Except Oil and Gas) classification, the 13 states studied in this report represent approximately 54.4 percent of GDP in this classification nationwide. Appendix D provides 2007 GDP by state for this NAICS classification.

Metals included in the NAICS classification make up an undetermined portion of GDP. According to the U.S. Geological Survey, states such as Colorado and Montana mine gold, silver, copper, lead, and/or zinc. Pennsylvania mines titanium and tungsten. Other mined metals include beryllium, silicon metal, niobium, and tantalum (USGS 2006).

The list of non-metallic minerals mined by these thirteen states is much more complex. Every state included in this study mines at least one type of stone, including crushed and dimension stone (USGS 2006). Types of stone mined include:

- Limestone;
- Granite;
- Marble; and
- Sandstone (USGS 2006).

Other non-metallic minerals commonly mined within these states include construction-grade sand and gravel, industrial sand, clay (ball, common, and fire clay), gypsum, cement, lime, and peat (USGS 2006).

The following subsections discuss the taxation methods utilized by the coal producing states selected for this study. Following the subsections, a matrix is provided in Appendix E to supply a brief summary of each state's coal taxation methods.

## *Colorado*

*Real Property Tax*

Colorado values coal real property dependent on its use classification (Colorado Division of Property Taxation 2010). In this state, coal property can be considered either producing or nonproducing. If a coal mine is producing, production occurred during the last calendar year. If a coal mine is nonproducing, no production occurred during the last calendar year but the mine is also not "abandoned." To be "abandoned," a coal mine must file a map of abandonment through the Division of Mines. Abandoned coal mines are valued at surface rights only.

Producing coal mines are valued using an income formula. This formula is calculated by multiplying seven factors to find the actual value of the property. These factors are:

- Raw tons of coal extracted;
- Royalty rate[5] based on mining method (surface or underground);
- Discount rate (currently set at 12.07 percent);
- Coal price per ton[6] based on type of coal mined (steam or metallurgical);
- BTU content (steam coal only);
- Whether coal has been washed;[7]
- Estimated remaining economic life of the mine.

Once calculated, the income formula provides the value of the producing coal mine.

Coal property which is being leased by a mining company to produce coal is termed producing coal leaseholds and lands. To value this type of coal property, the three approaches to value are considered:

- Income approach;
- Cost approach;
- Sales comparison (market) approach.

Producing coal leaseholds and lands are valued by using an income formula similar to the producing coal mine income formula discussed previously. The income formula is calculated by multiplying four factors to find the actual value of the property. These factors are:

- Production (in tons);
- Steam coal price per ton;
- Royalty rate;
- Hoskold factor.

The coal price per ton and royalty rate factors used in this formula are the same as those used in the producing coal mine income formula. The last element, the Hoskold factor, is calculated through a separate formula.

The Hoskold factor used to determine the actual value is primarily comprised of the capitalization rate. The capitalization rate is calculated by adding:

- Discount rate;
- Sinking fund factor;
- Effective tax rate.

The Hoskold factor is then calculated by dividing one by the capitalization rate determined. Once the appraised value of the coal leaseholds and lands is determined, the assessment rate of 29 percent is applied to arrive at the assessed value.

The cost approach to determining value can be used before the mine is actually producing coal by considering the costs associated with developing the property for mining. This approach involves the summation of two factors: the cost of development and the market value of the land. The sales comparison (market) approach to value involves sales information of comparable coal leaseholds and lands. These values are often represented as value per ton of reserves available (Colorado Division of Property Taxation 2010).

Nonproducing coal mines are classified as "other real property" and are valued considering the income, cost, and sales comparison (market) approaches to market value (Colorado Division of Property Taxation 2010).

*Personal Property Tax*

Personal property, including equipment and machinery, used to produce coal in Colorado is classified as commercial and industrial.[8] This type of personal property is assessed at 29 percent of the actual value of the equipment. The determination of actual value of the personal property is made by considering the equipment's replacement cost and the expected economic life of the property.

*Severance Tax*

In Colorado, a severance tax is levied on coal extracted since January 1, 1978. The base tax rate for the severance of coal in Colorado is $0.54 per ton (Bjur 2009). This base rate is then adjusted on a quarterly basis to reflect changes in the Producer Price Index (PPI) for all commodities as provided by the Bureau of Labor Statistics (BLS). Once an adjustment has been made in any given quarter, no other adjustments can be made until the next quarter regardless of changes in the PPI. The adjustments are determined at one percent of the base rate of $0.54 for every 1.5 percent change in the PPI.

Colorado also offers three discounts to the severance tax. For this tax, the first 300,000 tons severed by each coal operator per calendar quarter are exempt from taxation. The State also issues two credits:

- 50 percent credit for severance taxes levied on lignitic coal produced;
- 50 percent credit for severance taxes levied on coal mined underground.[9]

*Corporation Income Tax*

Colorado's corporation income tax rate is currently set at 4.63 percent of the Colorado taxable income (Bjur 2009).

*Reclamation Fee*

A permit must be acquired to mine coal in Colorado to ensure the affected land is reclaimed after mining terminates. To receive a mining permit, a permit fee[10] of $25 plus an additional $10 for each affected acre, up to a maximum of $2,500 total, must be paid and the total deposited in the General Fund. The application for a permit must include a map of the area to be affected by mining and a reclamation plan for the property after mining ceases. Before the permit is issued, a bond[11] of at least $10,000 must also be filed.

## *Illinois*

*Real Property Tax*

Illinois classifies coal as "developed or "undeveloped". Developed coal is property permitted under the federal Surface Coal Mining Land Conservation and Reclamation Act. The land must contain coal "anticipated to be mined during the lesser of five years following the current assessment date, the term of the permit, or the life of the mine, if initial extraction of coal from the land will occur in the year immediately following the assessment date."[12] Illinois taxes developed coal at 33 1/3 percent of the coal reserve economic value, which represents the present value of anticipated net income during the life of the property.[13] There are three variables used to determine the coal reserve economic value:

- Interest rate;
- Net income;
- Recoverable coal tons per acre.

The **interest rate** used represents three percent added to the average prime interest rates provided by the four largest US banks. **Net income** is represented by four percent of the Illinois coal average spot market price. Both the interest rate and net income are determined using the current assessment date and the two preceding assessment dates.

Recoverable coal tons per acre, which is the equivalent of 1,742 tons per foot acre, is multiplied by the net income to determine the coal reserve economic value. The recoverable coal tons per acre variable is made up of three parts:

- Seam thickness;
- Tons per foot acre conversion;
- Recovery ratio.

The conversion of 1,742 tons per foot acre is multiplied by seam thickness and the recovery ratio to calculate the recoverable coal tons per acre. The recovery ratio is equal to the least of either the “actual historical recovery ratio for the mining operation”[14] or the recovery percentage applicable to type of mining occurring. The applicable recovery percentages are equal to 80 percent for surface mining and 50 percent for underground mining.

Once the coal reserve economic value is determined for developed coal, the assessed value is applied to the acreage amount of coal being mined. The assessment value of both developed and undeveloped coal is prorated when mining begins after the assessment date or ends prior to the end of the calendar year.

Undeveloped coal in Illinois is valued using the coal reserve economic value as well. Property where the coal is located must not have been mined during the previous year. The value of the undeveloped coal reserve economic value is set at a maximum cap of $75 per acre.[15]

Conditions exist for the proportionate assessment of coal in Illinois when the coal is mined for only part of the year. The first condition[16] involves mining which begins after the assessment date. In this case, the assessment is made proportionate to the part of the year in which mining occurred. Therefore the coal is assessed as undeveloped coal from the assessment date to the date mining began, and as developed coal from the date of mining forward. The other condition[17] involves mining operations which were mining coal during the previous assessment date but ceased operations by the following assessment date. The unmined coal is then assessed as undeveloped coal from the time of cessation of mining.

*Personal Property Tax*

Personal property in the State of Illinois is exempt from taxation (Bjur 2009).

*Severance Tax*

The State of Illinois does not levy a severance tax on the extraction or production of coal.[18]

*Corporation Income Tax*

Corporations in the State of Illinois are subject to a corporation income tax. This tax is equal to 4.8 percent of the corporation’s net income for an income tax and 2.5 percent of the corporation’s net income for a replacement tax (Bjur 2009). The replacement tax refers to a personal property replacement tax, of which S corporations in the State pay a reduced rate of 1.5 percent of net income.

*Reclamation Fee*

The State of Illinois imposes a permit fee[19] based on the surface acreage of land where coal is to be produced for the first five years of the permit. For surface mining operations, the permit fee is equal to $125 per acre. For other permitted areas, the fee is $5 per acre.

## *Indiana*

*Real Property Tax*

In Indiana, coal that is still in the ground prior to extraction is valued at $60 per acre. Once coal is extracted, the mineral is considered inventory and no longer subject to any type of taxation in Indiana (Lukomski 2010).

A special condition exists in Indiana with regard to strip mined[20] agricultural land after mining has ceased. If coal was extracted before December 31, 1977, the land is subject to a productivity factor of 0.50. For strip mined agricultural land where coal was extracted after December 31, 1977, the land is subject to a productivity factor of 0.68. These factors are applied to the value of the land. To illustrate, if the value per acre of a hypothetical piece of strip mined agricultural land is $1,000, and coal was mined on that property after December 31, 1977, then the adjusted value of that property would be $680 per acre.

*Personal Property Tax*

Mining equipment and machinery used in the State of Indiana to extract and process coal are considered business tangible personal property[21] and assessed for taxation based on the true taxable value of the personal property. Business tangible personal property is valued by considering the true tax value[22] of the property and assessed at 33 1/3 percent.

In order to calculate the appraised value, called the true tax value in Indiana Code, information is collected on the personal property including the date that the mining equipment and machinery is put into service and the taxable life of the personal property. Depending on the tax life, the property is placed in one of four categories (called "pools"). The "pools" are defined below:

- Pool 1: depreciable property with a life of 1-4 years;
- Pool 2: depreciable property with a life of 5-8 years;
- Pool 3: depreciable property with a life of 9-12 years;
- Pool 4: depreciable property with a life of 13 or more years;

A true tax value percentage is applied to the cost of the mining equipment and machinery depending on the life of the personal property and the date in which it is put into service. The applicable percentage varies by the year of acquisition and the "pool" number of the personal property (see Table 1).

## Table 1: Indiana True Tax Value Percentages

| Year of Acquisition | Pool 1 | Pool 2 | Pool 3 | Pool 4 |
|---|---|---|---|---|
| 1 | 65% | 40% | 40% | 40% |
| 2 | 50% | 56% | 60% | 60% |
| 3 | 35% | 42% | 55% | 63% |
| 4 | 20% | 32% | 45% | 54% |
| 5 | | 24% | 37% | 46% |
| 6 | | 18% | 30% | 40% |
| 7 | | 15% | 25% | 34% |
| 8 | | | 20% | 29% |
| 9 | | | 16% | 25% |
| 10 | | | 12% | 21% |
| 11 | | | 10% | 15% |
| 12 | | | | 10% |
| 13 | | | | 5% |

Source: 50 IAC 4.2.

To calculate the true tax value, the base year cost of the business tangible personal property is multiplied by the appropriate true tax value percentage. This value is then assessed at 33 1/3 percent.

*Severance Tax*

Indiana levies a severance (production) tax[23] on tons of coal mined in the state. The rate varies for coal extracted by surface and underground mining methods. For surface mined coal, the rate is $0.055 per ton. The rate decreases to $0.03 per ton for coal mined through underground methods. Total production taxes collected are paid into the Natural Resources Reclamation Division Fund.

*Corporation Income Tax*

The State of Indiana levies a corporation income tax at 4.8 percent of the corporation's income (Bjur 2009).

*Reclamation Fee*

The State of Indiana requires a bond[24] to be filed before a coal mining operation can receive a surface coal mining and reclamation permit. The amount of the bond must be a minimum of $10,000, which covers the entire permit. The purpose of the bond is to ensure that the area of land affected by coal mining operations will be reclaimed as detailed in the reclamation plan after mining ends. The amount of each bond for a surface coal mining and reclamation permit will be determined by considering four key factors:

- Topography;
- Geology of the site;
- Hydrology; and
- Revegetation potential.

The mining and reclamation history[25] of the applicant will also be considered in determining the bond amount.

## Kentucky

### *Real Property Tax*

Both active and reserve coal property in Kentucky are valued by the income approach using the Coal Assessment Calculation Formula (Murray 2009). This formula involves seven factors:

- Mineable acres;
- Coal thickness (in inches);
- Density factor (in tons per acre inch) equal to 145;
- Mine recovery rate;
- Royalty rate;
- Discount factor (dependent on mine life);
- Capitalization rate.

The recovery rate factor designates a different rate dependent on the type of mining. The recovery rate for surface mining is 90 percent, because more coal is expected to be recovered. Deep mines have a smaller recovery rate of 50 percent. The royalty rate varies by county and mining method. Royalty rates for deep mines range from $2.76 per ton to $3.45 per ton. Surface mine royalty rates range from $2.76 per ton to $3.68 per ton.

The discount factor depends on the mine life of the property. A smaller mine life classification, one year, for example, receives a discount factor of 94.15 percent. A longer mine life of 15 years, however, receives a smaller discount factor of 28.84 percent. The capitalization rate is calculated in the same fashion as in West Virginia's reserve appraisal formula.

Once each of the above factors has been identified for each reserve coal property, the factors are multiplied to calculate the property's value.

### *Personal Property Tax*

Manufacturing machinery used to crush, size, blend, chemically treat, and wash[26] coal is taxed at a rate of $0.15 on every $100 of assessed value. Machinery used to extract, sever, dredge, or mine coal in Kentucky is not considered "manufacturing machinery" and thus not taxed at the same rate. Instead, machinery used to extract, sever, dredge, or mine coal is taxed at a rate of $0.45 per $100 of value.[27]

There is a restriction[28] imposed on taxing districts[29] to limit the amount of a rate increase on personal property. The percentage increase in revenue from the change of the personal property tax rate cannot be greater than the change in revenue which would result from increasing the real property tax rate. If the personal property tax rate increase would create more revenue than a similar increase in the real property tax rate, then the increase is not permitted.

*Severance Tax*

In Kentucky, the severance tax imposed on the severance or processing of coal[30] is levied at a rate of 4.5 percent of the gross value of coal severed and/or processed. A minimum tax of $0.50 per ton is imposed for those operators who either extract coal from the ground or who extract and process the coal; however, this tax does not apply to taxpayers who only process the coal and who are not responsible for the extraction.

Severance tax credits are offered for thin seam coal mined through either deep or underground mining methods. The amount of the credit depends on whether the coal was extracted from above-drainage seams or below-drainage seams. An above-drainage seam refers to a coal bed which “outcrops at the surface within a mine permit area and that is accessed at the outcrop location.”[31] In contrast, a below-drainage seam refers to a coal bed which “does not outcrop at the surface within a mine permit area and that is accessed by mine slopes or other openings that penetrate the coal a minimum of 30 feet below the surface drainage level.”[32]

Table 2 provides the available tax credit amounts as a percentage of gross value.

## Table 2: Kentucky Thin Seam Coal Tax Credit

| | Seam Thickness | | | |
|---|---|---|---|---|
| | **32" to 36"** | **27" to 32"** | **27" to 30"** | **Less than 27"** |
| **Above-Drainage Seams** | None | None | 2.25% | 3.00% |
| **Below-Drainage Seams** | 2.25% | 3.00% | None | 3.75% |

Source: KRS 143.021(1).

The severance tax credit is only available on new production permitted after July 1, 2000. The tax credit is taken in conjunction with monthly returns.[33]

*Corporation Income Tax*

Beginning January 1, 2007, the Kentucky levies a corporation income tax[34] on the taxable income of corporations in the State in three income brackets. The first is a four percent income tax on the first $50,000 of taxable income. The second is five percent of the next $50,000 of taxable income. The third is six percent of taxable income that exceeds $100,000.

*Reclamation Fee*

To ensure coal property in Kentucky is reclaimed after mining operations cease, a permit fee and bond[35] are paid before the permit to mine is approved and issued. Permits may be issued for up to 5 years. The fee is comprised of a processing fee, not to be more than $375 per acre, and an additional fee, not to be more than $75 per acre. Appropriate proportions of the fees are used for fractional acreage. The amount of the bond is determined by the Environmental and Public Protection Cabinet and has a minimum bond amount of $10,000 total. Several factors are involved in determining the bond amount, including the costs estimated for grading and backfilling, and anticipated difficulty in reclaiming the land.

## *Maryland*

*Real Property Tax*

In Maryland, the only real property taxes imposed are for the surface rights. Neither the mineral rights on coal nor the coal itself are taxed (Arrington 2009).

*Personal Property Tax*

Maryland does not impose a personal property tax on the machinery and equipment used to produce coal (Bjur 2009).

*Severance Tax*

The severance tax rates levied on coal in Maryland are different depending on the type of mining method being used. For surface mining, open-pit, or strip mining methods, the rate is $0.17[36] per ton of coal produced. Of the amount collected for the severance tax by surface mining methods, $0.09 per ton is credited to the Bituminous Coal Open-Pit Mining Reclamation Fund. A bond supplement reserve surcharge of $0.02 per ton of coal produced is credited to the Bituminous Coal Open-Pit Mining Reclamation Fund as well. Additionally, the county where the coal was removed receives $0.06 per ton of coal produced.

For coal produced from deep mining methods, a severance tax is levied at the rate of $0.15[37] per ton. Of the total collected for this severance tax, $0.09 per ton is kept by the Secretary of the Environment for the Deep Mining Fund and the remaining $0.06 per ton of coal produced is given to the county where the coal was removed.

*Corporation Income Tax*

Maryland levies a corporation income tax at a rate of 8.25 percent of the Maryland taxable income (Bjur 2009).

*Reclamation Fee*

Maryland levies a special reclamation fee on every acre of land permitted for open-pit mining operations.[38] This rate is currently set at $75 per acre. Money collected from this fee benefits the Bituminous Coal Open-Pit Mining Reclamation Fund. This fund also receives funding from the severance tax as noted above.

## *Montana*

*Real Property Tax*

While no actual property tax is levied on coal real property in Montana, the coal gross proceeds tax[39] is implemented in lieu. The coal gross proceeds tax is equal to five percent of the coal's value. The value of coal is determined by considering the contract sales price,[40] which represents either the price of coal when extracted or a price imposed by the Montana Department of Revenue. The price may be imposed[41] by the Department of Revenue if:

- The extracted coal is used by the operator in a manufacturing process;
- The coal is refined to improve quality through either drying, cleaning, or additional processing;
- The coal is sold through a contract and that contract is not an arm's-length agreement; or
- The gross yield statement[42] for a mine is not filed.

There is no tax levied on reserve coal property in Montana.

*Personal Property Tax*

Coal-related personal property owned by coal companies in Montana, such as machinery, fixtures, and equipment, is classified as Class 8 property. Class 8 property in this State is taxed at three percent of its market value. Class 8 property in Montana also includes vehicles used to haul coal in the state. These vehicles are defined as non-highway vehicles primarily used for hauling coal. [43]

*Severance Tax*

Beginning January 1, 2006, the State of Montana levies the following severance taxes on each ton of coal produced. The rate of the severance tax, as provided in Table 3, depends on the heating content of coal, measured by the BTU content per pound of coal, and the type of mining method used. The value of coal represents the contract sales price, which is either the price of the severed coal or the price of coal as computed by the Montana Department of Revenue. The contract sales price includes royalties paid on the production of the coal, and is reduced to $0.15 per ton only when royalties are paid to any of the following groups:

- United States government;
- The State of Montana;

- A federally recognized Indian tribe.

The tax rates, which are measured as a percentage of the contract sales price of the coal, are provided in Table 3.

### Table 3: Montana Severance Tax on Coal

| Heating Quality | Surface Mining Method | Underground Mining Method |
|---|---|---|
| **Less than 7,000 BTU** | 10% of value | 3% of value |
| **7,000 BTU or greater** | 15% of value | 4% of value |

Source: MCA 15-35-103.

Certain conditions exist in which coal producers are exempt from the severance tax in Montana. If less than 50,000 tons of coal are produced during the calendar year, the producer is completely exempt. However, if more than 50,000 tons of coal is produced during the calendar year, the producer is required to pay the severance tax on all but the first 20,000 tons of coal produced that year.

*Corporation Income Tax*

The corporation income tax rate in Montana is currently set at 6.75 percent of the corporation's income (Bjur 2009).

*Reclamation Fee*

Surface mining operations in Montana are required to pay a fee[44] for abandoned mine reclamation. The fee is set at $0.09 per ton of lignite produced and $0.315 per ton of all other coal types produced.

## *North Dakota*

*Real Property Tax*

Coal reserves in North Dakota are exempt[45] from real property taxation. Coal is only taxed when it is extracted from the ground with the severance tax. No property tax is levied on active mining coal property in this State.

*Personal Property Tax*

Personal property owned by coal companies doing business in the State of North Dakota is exempt[46] from property taxation.

*Severance Tax*

The State of North Dakota levies a severance tax on the extraction of coal from the ground. The base tax is set at $0.375 per ton and must be paid monthly. The severance tax is exempt if the coal is to be used either for heating buildings in North Dakota or used by the State "or any political subdivision of the state."[47]

The severance tax may also be reduced by half if the coal is to be used in a cogeneration facility. However, the facility must use renewable energy to generate at least 10 percent of its energy. An additional $0.02 per ton tax is levied on the severance of coal. All funds collected from this additional tax benefit the Lignite Research Fund.

*Corporation Income Tax*

The corporation income tax rate levied on corporations doing business in North Dakota is dependent on the amount of annual taxable income. In this state, the tax rate and additional base tax (if applicable) change as income increases. There are five tiers of taxable income in North Dakota, each with a unique tax rate and additional base tax amount. The representation of income ranges and tax rates for North Dakota's corporation income tax are provided in Table 4.

## Table 4: North Dakota Corporation Income Tax

| Taxable Income (TI) | Tax Rate |
|---|---|
| $3,000 or less | 2.6% taxable income (TI) |
| $3,001 to $8,000 | $78 + 4.1% TI in excess of $3,000 |
| $8,001 to $20,000 | $283 + 5.6% TI in excess of $8,000 |
| $20,001 to $30,000 | $955 + 6.4% TI in excess of $20,000 |
| $30,001 or more | $1,595 + 6.5% TI in excess of $30,000 |

Source: State Tax Handbook 2009.

Corporations with an annual taxable income of $3,000 or less are taxed at a rate of 2.6 percent. If income increases to over $3,000 but less than $8,000, the taxable rate increases to 4.1 percent. In addition to paying 4.1 percent of taxable income, corporations in this taxable income bracket pay another $78 for corporation income tax.

*Reclamation Fee*

The State of North Dakota imposes a filing fee[48] of $500 plus $10 per acre to apply for a surface coal mining permit. A performance bond[49] of at least $10,000 total is also levied to ensure reclamation of land affected by surface mining operations. This bond is filed along with the completion of the surface coal mining and reclamation permit application.

### *Ohio*

*Real Property Tax*

Real property taxes on coal property in Ohio are determined solely at the county level (Shoup 2010). To better determine the different ways coal real property is taxed in Ohio, several Ohio coal counties were contacted and the collected methodologies are provided below. In all cases the methods used and often the values applied have not been changed for at least two decades.

Belmont County, one of the largest coal producing counties in the State of Ohio, taxes coal real property based on a number of classifications (Craig 2010). Coal real property is identified by whether a strip mine or deep mine is used. Additionally, the coal property is divided into either active or reserve coal property, depending on if mining has commenced.

With both mining methods, reserve coal property refers to coal which is not currently being developed and which is not currently assigned to an operating mine. The definitions for active coal property vary. Active coal property associated with a strip mine is considered property which will be mined over the next three years. Active coal property associated with a deep mine is considered property which will be mined over the next five years. In both cases, the first year of operation is estimated.

The value per acre of coal real property in Belmont County varies by the coal classification and the type of mining taking place. Table 5 provides the per acre valuation of coal real property in Belmont County by coal classification. This valuation was established in 1990.

**Table 5: Valuation of Coal Property per Acre in Belmont County, OH**

| Coal Classification | Value Per Acre | | | |
|---|---|---|---|---|
| | Strip Mine | | Deep Mine | |
| | Active | Reserve | Active | Reserve |
| **Number 12** | $400 | $140 | $300 | $70 |
| **Number 11**[1] | $2,000 | $140 | $400 | $70 |
| **Number 9** | $1,370 | $140 | $340 | $70 |
| **Number 8** | $1,600 | $140 | $400 | $70 |
| **Number 7** | $400 | $140 | $300 | $70 |
| **Number 6** | $1,600 | $140 | $300 | $70 |
| **Number 5** | $400 | $140 | $300 | $70 |

[1] Number 11 coal is low sulfur coal, which increases the value.
Source: Larry Craig, Belmont County, OH, Auditor's Office.

Noble County divides coal real property into three classifications:

- Active;
- Inactive; and

- Reserve (Warner 2010).

Active coal property is property which is under permit and currently being mined. This type of coal real property is valued at $2,400 per acre. Inactive coal property is defined as coal which has previously been identified for mining, but on which there is not currently a mining operation in place. Inactive coal property is valued at $600 per acre. Reserve coal property in Noble County, which is valued at $400 per acre, is defined as property where the mineral interests are severed from the surface interests, but which has not yet been identified for mining. This valuation was established in the late 1980's and has remained unaltered.

Reserve coal property in Meigs County is valued at $60 per acre (Parsons 2010). This value has been the same for the past several decades. Currently, there is no coal being produced in Meigs County.

*Personal Property Tax*

The State of Ohio no longer taxes personal property including that owned by coal companies, effective 2009 (Bjur 2009).

*Severance Tax*

Three separate severance taxes are levied on the extraction of coal in Ohio. The first is the base tax of $0.10 per ton[50] of coal produced. The second is an additional $0.16 per ton[51] of coal produced. The third is an additional $0.012 per ton[52] of coal produced which is levied on surface mining operations in the State.

The amount of the additional severance tax of $0.16 per ton of coal produced fluctuates depending on the amount of money collected in the Reclamation Forfeiture Fund, as discussed below.

Money collected from the three severance taxes is distributed to four different funds established to reclaim coal mining sites. These four funds are:

- Coal Mining Administration and Reclamation Reserve Fund;
- Unreclaimed Lands Fund;
- Reclamation Forfeiture Fund;
- Geological Mapping Fund.

The base severance tax of $0.10 per ton of coal produced is divided into three portions, two of which benefit two of the reclamation funds listed above. A total of 80.95 percent of the base severance tax on coal is distributed to the Coal Mining Administration and Reclamation Reserve Fund. Another portion equal to 14.25 percent is distributed to the Unreclaimed Lands Fund. The remaining funds of the $0.10 per ton severance tax benefit the Geological Mapping Fund.

The full amount collected from both additional severance taxes, $0.16 per ton (and adjustments as necessary) and $0.012 per ton, are distributed to reclamation funds in the State. The full amount collected from coal mining operations using a coal mining and reclamation permit benefit the Reclamation Forfeiture Fund. The full amount collected from the surface mining operations benefits the Unreclaimed Lands Fund.

Beginning July 1, 2007, the amount of the additional severance tax on mining operations permitted under the coal mining and reclamation permit may increase or decrease depending on the amount held in the fund. If the balance exceeds $10 million at the end of any fiscal year, the amount of the additional tax decreases to $0.12 per ton produced. If the balance is less than $5 million at the end of any fiscal year, the amount of the additional severance tax increases to $0.16 per ton produced.

Beginning July 1, 2009, the balance of the Reclamation Forfeiture Fund is reported to the Tax Commissioner by the Chief of the Division of Mineral Resources Management within 30 days of the end of each fiscal year. Dependent on the balance of the Fund when reported, the levy rate of the additional severance tax will change accordingly. This change will be in effect on January 1st following the report.

*Corporation Income Tax*

Effective January 1, 2010, Ohio began using a commercial activities tax (CAT) in place of the corporation franchise tax (Bjur 2009). As defined by the State of Ohio, the CAT taxes $150 for gross receipts between $150,000 and $1 million. For gross receipts greater than $1 million, the tax is $150 plus 0.26 percent of the gross receipts multiplied by either 60 percent or 80 percent, depending on the time of the measurement.

If measurement of gross receipts occurs from January 1 through March 31, the value of the $150 plus 0.26 percent of the gross receipts is multiplied by 60 percent. If measurement occurs from April 1 through December 31, the value of the $150 plus 0.26 percent of the gross receipts is multiplied by 80 percent.

*Reclamation Fee*

No other reclamation fees exist in addition to the Ohio severance tax on coal.

### *Pennsylvania*

*Real Property Tax*

The State of Pennsylvania does not levy or collect property taxes at the state level. Instead, property taxation in its entirety is the decision of each county. To determine methodologies used by Pennsylvania counties to value coal property, the assessment offices of the top five[53] coal producing counties are contacted.

Greene County is the largest coal producing county in Pennsylvania, producing nearly two-thirds of total coal production in the State. In this county, coal property is appraised by using the income approach to determine market value (Frazier 2009). The formula used for the income approach is very complex, but involves the following factors:

- Ease of transportation;
- Quality of the coal;
- Quantity of the coal;
- Mineability;
- Sulfur content;
- Ash content;
- Moisture content;
- Location;
- Discount rate.

Once each factor has been identified, the factors are multiplied together and divided by the total acreage to determine the per acre value. Once the market value is determined, the tax rates of each municipality within the county are applied to assess the property. These mill rates vary by county and are change each year.

Coal property in Armstrong, Indiana, and Somerset Counties is valued on a per acre basis (Ingler 2009, Medvetz 2010, Renosky 2009). In each county, a value per acre is set depending on the classification of the coal property. These classifications include:

- Active;
- Permitted for future mining;
- Reserve;
- Reserved unmineable (overburden);
- Depleted (mined out);
- Barren.

Per acre values for each county and each property classification are provided in Table 6.

### Table 6: Valuation of Coal Property per Acre in Armstrong, Indiana, and Somerset Counties, PA

| Property Classification | Per Acre Value | | |
|---|---|---|---|
| | Armstrong County | Indiana County | Somerset County |
| **Active** | $400 | $143 | $2,856 |
| **Permitted for future mining** | $200 | None | None |
| **Reserve** | $100 | $87 | $238 |
| **Reserved unmineable (overburden)** | None | $0 | $115 |
| **Depleted (mined out)** | $1 | $7 | $17 |
| **Barren** | None | $0 | None |

Sources: Mike Renosky, Armstrong County; Martin Medvets, Indiana County; Harry Ingler, Somerset County.

Clearfield County also values coal property on a per acre basis, but does not differentiate between property classifications (Wooster 2010). The county levies a set per acre value of $47 per acre with a minimum of $790 levied in taxes for each coal property.

*Personal Property Tax*

The State of Pennsylvania does not levy a personal property tax (Bjur 2009). Personal property is not assessed for taxation in any Pennsylvania county contacted.

*Severance Tax*

The State of Pennsylvania does not impose a severance tax on the extraction or production of coal (Meehan 2010).

*Corporation Income Tax*

Pennsylvania's corporation income tax rate is currently set at 9.99 percent (Bjur 2009).

*Reclamation Fee*

In order to mine coal in Pennsylvania, the coal mine operator must pay permit application and reclamation fees and post a bond with the Department of Environmental Protection. To obtain a permit to mine coal in Pennsylvania, a permit application fee[54] of $250 must be paid. A reclamation fee[55] of $100 per acre is also to be paid. The per acre reclamation fee is waived for mining lands which were abandoned prior to December 19, 1980, when the law was adopted.

The amount of the bond[56] which must be paid prior to the commencement of mining will be determined by the Department of Environmental Protection based on the estimated cost of reclaiming the mining land if the bond is forfeited. The amount of the bond will be determined based on the following criterion:

- Cost to reclaim mining land;
- Cost related to mining method (surface or underground);
- Cost of moving or rebuilding roads and streams;
- Cost of labor to reclaim the site;
- Size of the mine site;
- Other costs or fees as available to the Department of Environmental Protection.

As with other states, the bond amount will be returned to the coal mine operator if the land is properly reclaimed after mining operations have ended.

## *Texas*

### *Real Property Tax*

In Texas, real property is valued for taxation at the local level. In contrast to such states as Pennsylvania, where local governments individually value coal property, many Texas coal counties contract with private firms[57] to assess the value of coal property (Henderson 2010, Davis 2009). Of the 10 counties in Texas which produce coal, three counties contract with Capitol Appraisal Group and four counties contract with Pritchard and Abbott. The remaining two counties contract with Wardlaw Appraisal Group. Property taxation information for Harrison County, the tenth Texas coal producing county, is not available at this time. The appraisal methods used by Capitol Appraisal Group and Pritchard and Abbott are discussed to better understand real property taxation of coal in Texas.

Both firms utilize the income approach to determine the market value of active mining coal property. Pritchard and Abbott projects the estimated income for four years and discounts to determine the current value. Capitol Appraisal Group uses current income of the coal property as an indicator for estimating net income between one and six years in the future.

Reserve coal property is valued by these two private firms slightly differently as well. Pritchard and Abbott discounts income of reserves for only four years. Capitol Appraisal Group utilizes both the market rate of coal and the estimated total production capability of the reserve coal property to determine estimated income potential.

### *Personal Property Tax*

As with real property, personal property related to coal mining in Texas is valued at the local level. This method of taxation is also contracted with the private firms mentioned previously. In both cases, the firms use either (or both) the cost approach or market approach to determining value.

*Severance Tax*

Texas does not levy a severance tax[58] on the production of coal in the State.

*Corporation Income Tax*

Texas levies a franchise tax[59] rather than a corporation income tax on coal companies. The rate of the Texas franchise tax is 0.5 percent of the taxable margin. The tax does not have to be paid if the total taxes owed are less than $1,000 or the company's revenue is $300,000 or less.
Four franchise tax discounts are available for small businesses in Texas.

- Discount equal to 80 percent if total revenue is above $300,000 but less than $400,000;
- Discount equal to 60 percent if total revenue is at least $400,000 but less than $500,000;
- Discount equal to 40 percent if total revenue is at least $500,000 but less than $700,000;
- Discount equal to 20 percent if total revenue is at least $700,000 but less than $900,000.

*Reclamation Fee*

The Railroad Commission of Texas is responsible for managing surface coal mining permits for the State. Three application fees[60] are imposed on surface coal mining operators for application, renewal, or revision of permits. These fees are:

- Permit application fee of $5,000;
- Permit renewal fee of $3,000;
- Permit revision fee of $500.

Additionally, three annual fees[61] are imposed on surface coal mining operators. These fees are:

- A fee of $130 for each acre of land where coal or lignite was removed during the calendar year;
- A fee of $5.50 for each acre of land covered by a reclamation bond on December 31st of the year;
- A fee of $4,250 for each permit in effect on December 31st of the year.

Surface coal mining operators must also post a bond for each approved permit to reclaim the land if the bond is forfeited. While the total bond amount cannot be less than $10,000,[62] the amount of the bond is determined by a number of factors,[63] such as:

- Topography;
- Geology of the site;
- Hydrology; and
- Revegetation potential.

## Virginia

*Real Property Tax*

Real property taxes levied on coal property in Virginia are determined at the local level. Coal-related real property is assessed by determining the fair market value.[64] To determine the methodologies used by counties in Virginia to value coal property, the assessment offices of three of the largest coal producing counties in the State are contacted.

Wise County, VA, assesses coal under development using an income formula. This formula includes such factors as:

- Acreage;
- Amount of coal removed (tons);
- Capitalization rate (Mullens 2010).

Coal mineral rights which are owned but not currently under development are also assessed for real property taxation in this county. However, no further explanation of the formula or mineral rights assessment could be provided at this time (Mullens 2010).

Actively mined coal property in Dickenson County, VA, is assessed using an income formula. The factors involved in calculating this formula include:

- Seam height;
- Tonnage mined;
- Acreage;
- Years left to mine;
- BTU/sulfur content.

Other factors used to calculate the income formula could not be provided at this time. Mined out coal property in Dickenson County is assessed at a flat per acre rate of $100 per acre.

Russell County, VA, assesses reserve and residual coal property based on a per acre flat rate. Reserve coal property is assessed at $500 per acre and residual coal property is assessed at $100 per acre (Ferguson 2010).

*Personal Property Tax*

Personal property in Virginia is subject to taxation at the local level only.[65] In this State, tangible personal property of coal companies has not been specifically exempted from taxation.

*Severance Tax*

Virginia does not levy a severance tax on the privilege of severing coal in the State. Severance taxes are instead the decision of each county and municipality. However, Virginia does specify a maximum rate for the severance tax as no more than one percent of gross receipts received from coal severed.[66]

Of the 39 cities required to report revenue data to the Auditor of Public Accounts in the Commonwealth of Virginia, only the City of Norton reported revenue from combined coal, oil and gas taxes in 2009 (Virginia Auditor of Public Accounts 2009). Similarly, five of the 95 counties or equivalents reported similar revenues. A report concerning the effects of coal haul roads suggests that the coal severance tax applies to two additional counties in Virginia, but these two did not supply information for inclusion in the Auditor's report. Further, two towns reported revenues from the same tax types in 2009 (Virginia Auditor of Public Accounts 2009).

*Corporation Income Tax*

The rate of the corporation income tax levied on Virginia taxable income is set at six percent for each tax year.

*Reclamation Fee*

A reclamation fee is levied on coal operators dependent on the type of permitted mine operation. For a surface mining operation, the fee is equal to $0.04 per ton of clean coal produced. For a deep mining operation, the fee is equal to $0.03 per ton of clean coal produced. A final fee is levied equal to $0.015 per ton of clean coal processed or loaded by a permitted loading facility. Taxes collected are deposited into the Coal Surface Mining Reclamation Fund.

Deposits are made quarterly when less than $1.75 million, including interest, is in the Fund 30 days after the end of any give calendar quarter. Payments into the fund will continue until the end of any quarter in which the balance is greater than $2 million.[67] In any calendar year, a coal operator is required to pay the reclamation fee on up to five million tons of coal. The maximum tonnage is not dependent on or limited by the number of permits the operators has. If an operator has multiple permits, he or she cannot be charged a tax rate higher than $0.055 per ton for surface mining and $0.045 per ton for deep mining.

To receive a mining permit in Virginia, a performance bond must also be paid. The amount of the bond is contingent on the difficulty in reclaiming the permitted area after mining ceases. The amount of the bond must be at least $10,000.[68]

## ***West Virginia***

*Real Property Tax*

The real property tax[69] is levied on subsurface minerals separately from the surface value of the land, as coal reserves are defined a separate class of real property in West Virginia. The severed mineral interest is appraised differently based on the type of coal property and where the coal bed is located. The assessed value of property is 60 percent of the appraised value. The levy rate, determined for each county, is then applied to the assessed value to determine the amount of property taxes levied.

West Virginia defines five types of coal property to be subject to property taxation. Active mining coal property is appraised by taking a three-year weighted average of production figures. These production figures are then converted to an income stream and the present worth is determined through discounting.

Reserve coal property is appraised through a "reserve appraisal formula." Ten factors are considered to determine the present value per acre of each coal bed in the State and include:

- Present value per acre of a coal bed;
- Coal price per million BTU;
- Average royalty rate;
- BTU and sulfur adjustment factor;
- Mid-year present worth factor;
- BTU content in one pound of dry coal;
- Tonnage conversion factor;
- Tonnage per acre foot conversion factor;
- Clean coal recovery rate;
- Coal bed thickness (in feet).

Unmineable coal property in West Virginia, which is a coal bed with a thickness of less than 30 inches, is appraised at a base rate of $5 per acre. Mined-out and barren coal properties, the last of the five types of coal property, are each appraised at $1 per acre. Certain conditions must be met when a site includes more than one type of coal property.

*Personal Property Tax*

Personal property related to coal in West Virginia for taxation purposes is considered commercial and industrial personal property.[70] This property is appraised at fair market value of the property based on the consideration of three valuation methods: the cost approach, the income approach, and the market data approach. Because of information availability, the cost approach is often the most effective method used for appraising coal-related personal property. As with real property, personal property is assessed at 60 percent of the appraised value and then subject to the current levy rate.

*Severance Tax*

The severance tax[71] is levied on the privilege of severing coal in West Virginia is five percent of the gross value of coal produced. The base tax is decreased to two percent if the thickness of the coal seam is between 37 inches and 45 inches thick and one percent if the thickness of the coal seam is less than 37 inches. Money collected from this tax is distributed into five funds. These funds are the General Revenue Fund, Infrastructure Fund, Local Governments fund, Tax Department Administration fund, and the Excess Coal Transfer fund.

A total of 0.35 percent is taken from the total taxes collected from the severance tax to fund the "county coal revenue fund" and the "all counties and municipalities coal revenue fund." Initially, $35,000 of the money set aside is given to the State Tax Department for administration of these funds. Specific formulas are calculated to determine how much each county and municipality in the state will receive from the remaining funds collected each year.

The county coal revenue fund benefits each coal producing county and is equal to 75 percent of the funds remaining after the deduction of the administration funds. The all counties and municipalities coal revenue fund benefits all counties and municipalities in the State regardless of whether coal has been severed in that area. The remaining 25 percent is distributed to local governments.

*Corporation Income Tax*

In West Virginia, coal companies are taxed no differently than other corporations doing business in the State. The corporation net income tax[72] on coal companies utilizes adjustments to determine the West Virginia taxable income from the federal taxable income for all companies doing business in the State. A base tax rate is then applied and a three factor state-specific apportionment formula calculated to determine the amount of income to be taxed by West Virginia. The three factors are sales, property, and payroll with sales being double weighted.

The State has instituted a number of changes to the corporation net income tax rates. While the full list is included in Code, the base rate is currently being reduced from 8.5 percent, effective on January 1, 2009 to 6.5 percent on January 1, 2014. The base tax rate had increased previously from six percent on June 30, 1967 to the highest rate of 9.75 percent on July 1, 1987.

*Reclamation Fee*

The Special Reclamation Tax[73] is levied on each ton of "clean coal" mined. Clean coal has been processed and cleaned prior to being shipped. Beginning July 1, 2009 the tax is set as $0.144 tax per ton of clean coal mined in the State. The proceeds from this tax benefit the Special Reclamation Fund and the Special Reclamation Water Trust Fund. These funds are used to reclaim forfeited mining sites and to correct the negative effects of acid mine drainage (AMD) on the surrounding environment.

In addition to the per ton tax, a permit fee[74] and penal bond[75] must be paid. The permit fee is $1,000 and is paid with the initial permit application as well as any permit renewals. The amount of the bond must be at least $1,000 but no more than $5,000 per acre with a minimum bonding amount of $10,000 must be paid. The bond covers every acre included in the permit area and must be enough to reclaim the permit area if the bond is forfeited.

## *Wyoming*

*Real Property Tax*

All minerals, including coal, produced in Wyoming are exempt from property taxes (Grenvik 2009). The only tax levied on coal is a production (severance) tax.

*Personal Property Tax*

Wyoming values personal property related to surface coal mining by determining the market value for above ground equipment and then subject to a rate of 11.5 percent (Bjur 2009). However, equipment used to mine coal underground is not taxed in this State (Grenvik 2009).

*Severance Tax*

The severance tax is levied when the mining and production process of coal is finished and the coal is brought to the mouth of the mine.[76] The mining and production process does not include any processing and cleaning of the coal. The severance tax levied on the value of the gross product from surface mines is seven percent. The severance tax levied on coal extracted from underground mining operations is 3.75 percent of the value of the gross product.

Certain caps apply to the taxes levied on the value of the gross product of coal. When the seven percent tax on coal mined with surface mining operations exceeds $0.60 per ton, the amount in excess of $0.60 per ton is exempt from taxation. Similarly, when the 3.75 percent tax on coal mined underground exceeds $0.30 per ton, the amount in excess is exempt from taxation.

*Corporation Income Tax*

Wyoming does not levy a corporation income tax on the taxable income of corporations doing business in the state (Grenvik 2009).

*Reclamation Fee*

No reclamation taxes or fees are imposed in Wyoming (Grenvik 2009).

## Endnotes

[1] Public Law 109-432, Section 202(a)(1).
[2] Public Law 95-87, Section 503.
[3] Public Law 109-432, Section 201(f)(5)(B)(iii).
[4] Public Law 109-432, Section 201(f)(3)(B).
[5] The royalty rate is equal to 6 percent of the market price for coal produced through underground mining methods and 9 percent of the market price for coal produced through surface mining methods.
[6] Coal prices per ton are available in Addendum 6-B of the Land Valuation Manual.
[7] If coal has been washed, the tonnage after washing is used to compensate for the sand and gravel removed and a higher BTU price is used. If the coal has not been washed, the BTU price will be reduced by $3.00 per ton.
[8] Colorado Department of Local Affairs, Division of Property Taxation.
[9] Because lignite coal is almost always extracted using surface mining methods, the chances of an operator being able to claim both 50 percent tax credits are highly unlikely.
[10] Colorado Revised Statutes §34-33-110.
[11] Colorado Revised Statutes §34-33-113.
[12] 35ILCS200/1-45.
[13] 35ILCS200/10-180.
[14] 35ILCS200/10-180(e).
[15] 35ILCS200/10-175.
[16] 35ILCS200/10-185.
[17] 35ILCS200/10-190.
[18] Verbal statement, IL Department of Revenue.
[19] 62 Illinois Administrative Code 1777.17(c).
[20] Not all strip mined land is considered agricultural land.
[21] 50 IAC 4.2.
[22] The calculations for determining the true tax value are detailed in Form 103 Long which is to be completed for all business tangible personal property of each taxpayer. This form is made available from the Indiana Department of Local Government Finance (DLGF).
[23] Indiana Code §14-34-13.
[24] Indiana Code §14-34-6.
[25] Indiana Code §14-34-6-2(3).
[26] 103 KAR 8:130.
[27] KRS §132.020(1)(r).
[28] KRS §132.024.
[29] Taxing districts do not include state, counties, school districts, cities, or urban-county governments.
[30] KRS §143.020.
[31] KRS §143.010(13).
[32] KRS §143.010(14).
[33] KRS §143.021(3).
[34] KRS §141.040(6).
[35] KRS §350.060(11).
[36] Annotated Code of Maryland §15-509 (Environment Article).
[37] Annotated Code of Maryland §15-615 (Environment Article).
[38] Annotated Code of Maryland §15-505(e) (Environment Article).
[39] Montana Code Annotated §15-23-703.
[40] Montana Code Annotated §15-35-102(7).
[41] Montana Code Annotated §15-35-107(1).
[42] Montana Code Annotated §15-23-701.
[43] Montana Code Annotated §15-6-138(2).
[44] Montana Coal Council.
[45] North Dakota Century Code §57-02-08(32).
[46] North Dakota Century Code §57-02-08(25).
[47] North Dakota Century Code §57-61-01.1.
[48] North Dakota Century Code §38-14.1-13(1)(a).

[49] North Dakota Century Code §38-14.1-16(1).
[50] Ohio Revised Code (ORC) §5749.02(A)(1).
[51] ORC §5749.02(A)(8).
[52] ORC §5749.02(A)(9).
[53] The top coal producing counties in Pennsylvania were determined by 2008 production figures collected from the EIA. These counties are Greene, Somerset, Clearfield, Armstrong, and Indiana, in order of 2008 production.
[54] Pennsylvania Code §86.17(a).
[55] Pennsylvania Code §86.17(e)(3).
[56] Pennsylvania Code §86.149(b).
[57] Information from Wardlaw Appraisal Group is not available at this time.
[58] The only natural resources subject to a severance tax in Texas are oil, gas, and sulfur (Texas Tax Code, Title 2, Subtitle I).
[59] Texas Tax Code, Title 2, Subtitle F, Chapter 171.
[60] Texas Administrative Code, Title 16, Part 1, Chapter 12, Subchapter G, Division 2, §12.108(a).
[61] Texas Administrative Code, Title 16, Part 1, Chapter 12, Subchapter G, Division 2, §12.108(b).
[62] Texas Administrative Code, Title 16, Part 1, Chapter 12, Subchapter J, Division 2, §12.304(c).
[63] Texas Administrative Code, Title 16, Part 1, Chapter 12, Subchapter J, Division 2, §12.304(a).
[64] Virginia Code §58.1-3286.
[65] Virginia Code §58.1-3500.
[66] Virginia Code §58.1-3286.
[67] Virginia Code §45.1-270.4.
[68] Virginia Code §45.1-241(A).
[69] West Virginia Code of State Rules (CSR) 110-1I.
[70] West Virginia CSR 110-1.
[71] West Virginia Code §11-13A.
[72] West Virginia Code §11-24.
[73] West Virginia Code §22-3.
[74] West Virginia Code §22-3-8(4).
[75] West Virginia Code §22-3-11(a).
[76] Wyoming State Statutes §39-14-104.

## Appendix A: SMCRA Allocation by State FY 2010

| Rank | State | 50% of FY 2009 Total Collections | FY 2010 Distribution[1] |
|---|---|---|---|
| 1 | Wyoming[2] | $69,302,621.75 | - |
| 2 | West Virginia | $14,151,169.52 | $10,613,377.14 |
| 3 | Kentucky | $11,509,023.12 | $8,631,767.34 |
| 4 | Pennsylvania | $4,803,570.31 | $3,602,677.73 |
| 5 | Montana[2] | $5,209,622.60 | - |
| 6 | Texas[2] | $1,623,999.38 | - |
| 7 | Indiana | $4,422,390.46 | $3,316,792.85 |
| 8 | Illinois | $2,708,957.57 | $2,031,718.18 |
| 9 | Colorado | $2,474,569.31 | $1,855,926.98 |
| 10 | North Dakota | $1,354,097.35 | $1,015,573.01 |
| 11 | Ohio | $2,622,825.30 | $1,967,118.98 |
| 13 | Virginia | $1,996,076.45 | $1,497,057.34 |
| 18 | Maryland | $368,435.35 | $276,326.51 |
| **Subtotal** | | **$122,547,358.47** | **$34,808,336.06** |

Source: Office of Surface Mining Reclamation and Enforcement (OSMRE).

[1] FY 2010 Distribution amounts are 75 percent of FY 2009 Total Collections pursuant to §401(f)(5)(B)(iii).

[2] These states are certified and therefore ineligible to receive State share.

## Appendix B: Coal Producing States 2008

| Production Rank | State | Number of Mines 2008 | Production (short tons) | Percentage of Total US Production |
|---|---|---|---|---|
| 1 | Wyoming | 20 | 467,644,000 | 39.956% |
| 2 | West Virginia | 301 | 157,778,000 | 13.481% |
| 3 | Kentucky | 469 | 120,323,000 | 10.281% |
| 4 | Pennsylvania | 266 | 65,414,000 | 5.589% |
| 5 | Montana | 6 | 44,786,000 | 3.827% |
| 6 | Texas | 11 | 39,017,000 | 3.334% |
| 7 | Indiana | 30 | 35,893,000 | 3.067% |
| 8 | Illinois | 19 | 32,918,000 | 2.813% |
| 9 | Colorado | 12 | 32,028,000 | 2.737% |
| 10 | North Dakota | 4 | 29,627,000 | 2.531% |
| 11 | Ohio | 48 | 26,251,000 | 2.243% |
| 13 | Virginia | 114 | 24,712,000 | 2.111% |
| 18 | Maryland | 21 | 2,860,000 | 0.244% |
| **Subtotal** | | **1321** | **1,079,251,000** | **92.212%** |

Source: Energy Information Administration (EIA).

## Appendix C: Recoverable Coal Reserves by State 2008

| Reserve Rank | State | Recoverable Reserves | Percentage of US Total Reserves |
|---|---|---|---|
| 1 | Wyoming | 7,010,000,000 | 39.217% |
| 2 | West Virginia | 1,908,000,000 | 10.674% |
| 3 | North Dakota | 1,225,000,000 | 6.853% |
| 4 | Illinois | 1,189,000,000 | 6.652% |
| 5 | Kentucky | 1,167,000,000 | 6.529% |
| 6 | Montana | 925,000,000 | 5.175% |
| 7 | Texas | 752,000,000 | 4.207% |
| 9 | Pennsylvania | 526,000,000 | 2.943% |
| 10 | Indiana | 421,000,000 | 2.355% |
| 12 | Colorado | 325,000,000 | 1.818% |
| 13 | Ohio | 308,000,000 | 1.723% |
| 14 | Virginia | 217,000,000 | 1.214% |
| 17 | Maryland | 22,000,000 | 0.123% |
| **Subtotal** | | **15,995,000,000** | **89.483%** |

Source: Energy Information Administration (EIA).

## Appendix D: GDP by State for Mining (Except Oil and Gas)

| Industry GDP Rank | State | 2008 Industry GDP | Percentage of Total Industry GDP U.S. |
|---|---|---|---|
| 1 | West Virginia | $5,310,000,000 | 10.885% |
| 3 | Kentucky | $3,812,000,000 | 7.814% |
| 4 | Wyoming | $3,582,000,000 | 7.343% |
| 6 | Pennsylvania | $3,237,000,000 | 6.635% |
| 7 | Texas | $1,946,000,000 | 3.989% |
| 9 | Colorado | $1,867,000,000 | 3.827% |
| 10 | Virginia | $1,850,000,000 | 3.792% |
| 12 | Illinois | $1,485,000,000 | 3.044% |
| 16 | Montana | $1,047,000,000 | 2.146% |
| 18 | Indiana | $964,000,000 | 1.976% |
| 19 | Ohio | $940,000,000 | 1.927% |
| 31 | North Dakota | $246,000,000 | 0.504% |
| 32 | Maryland | $244,000,000 | 0.500% |
| **Subtotal** | | **$26,530,000,000** | **54.383%** |

Source: Bureau of Economic Analysis (BEA).

## Appendix E: Taxation Methods of Coal Producing States

| Real Property Tax: Active Coal Property | Real Property Tax: Reserve Coal Property | Property Tax: Personal Property | Severance Tax | Corporation Income Tax | Reclamation Tax or Fee |
|---|---|---|---|---|---|
| **Colorado (9)** | | | | | |
| Income formula | Three approaches to market value | 29% of actual value | $0.54 per ton after 300,000 tons produced each quarter | 4.63% taxable income | Fee: $25 + $10 per acre<br>Bond: $10,000 minimum |
| **Illinois (8)** | | | | | |
| 33 1/3% developed coal reserve economic value | $75 per acre maximum | No tax imposed | No tax imposed | 4.8% taxable income | Surface permit fee: $125 per acre<br>Other area permit fee: $5 per acre |
| **Indiana (7)** | | | | | |
| No tax imposed | $60 per acre | Assessed at 33 1/3% true tax value | Surface: $0.055 per ton<br>Underground: $0.03 per ton | 8.5% taxable income | Bond: $10,000 minimum |
| **Kentucky (3)** | | | | | |
| Coal Assessment Calculation Formula | Coal Assessment Calculation Formula | $0.15 per $100 value for manufacturing machinery | 4.5% gross value with minimum of $0.50 per ton | 4% on first $50,000 taxable income<br>5% next $50,000 taxable income<br>6% taxable income exceeding $100,000 | Fees: less than $450 per acre (total)<br>Bond: $10,000 minimum |

## Appendix E: Taxation Methods of Coal Producing States (*continued*)

| Real Property Tax: Active Coal Property | Real Property Tax: Reserve Coal Property | Property Tax: Personal Property | Severance Tax | Corporation Income Tax | Reclamation Tax or Fee |
|---|---|---|---|---|---|
| **Maryland (18)** | | | | | |
| No tax imposed | No tax imposed | No tax imposed | Surface: $0.17 per ton<br>Deep mine: $0.15 per ton | 8.25% taxable income | Open pit mine: $75 per acre permitted |
| **Montana (5)** | | | | | |
| Coal Gross Proceeds Tax: 5% of value in lieu | No tax imposed | 3% market value | Surface: 15% (10%) value high (low) energy coal<br>Underground: 4% (3%) value high (low) energy coal | 6.75% taxable income | Surface: $0.09 per ton for lignite<br>Surface: $0.315 per ton for all other coal |
| **North Dakota (10)** | | | | | |
| No tax imposed | No tax imposed | No tax imposed | $0.375 per ton plus additional $0.02 per ton | Tiered rates for 5 income ranges | Fee: $500 + $10 per acre<br>Bond: $10,000 minimum |

## Appendix E: Taxation Methods of Coal Producing States (*continued*)

| Real Property Tax: Active Coal Property | Real Property Tax: Reserve Coal Property | Property Tax: Personal Property | Severance Tax | Corporation Income Tax | Reclamation Tax or Fee |
|---|---|---|---|---|---|
| **Ohio (11)** | | | | | |
| Determined at the local level | Determined at the local level | No tax imposed | $0.10 per ton base | $150 for gross receipts between $150,000 and $1,000,000 | 14.25% and 80.95% of $0.10 tax |
| | | | $0.14 per ton with coal mining and reclamation permit | $150 plus 0.26% for gross receipts greater than $1,000,000 | 100% of both $0.14 tax and $0.012 tax |
| | | | $0.012 per ton for surface mining | | |
| **Pennsylvania (4)** | | | | | |
| Determined at the local level | Determined at the local level | No tax imposed | No tax imposed | 9.99% taxable income | Permit fee: $250 |
| | | | | | Reclamation fee: $100 per acre |
| | | | | | Bond: amount determined by DEP |
| **Texas (6)** | | | | | |
| Determined at the local level | Determined at the local level | Determined at the local level | No tax imposed | Franchise tax: tiered rates for 4 income ranges | Permit fees: $500 to $5,000 |
| | | | | | Bond: $10,000 minimum |

## Appendix E: Taxation Methods of Coal Producing States (*continued*)

| Real Property Tax: Active Coal Property | Real Property Tax: Reserve Coal Property | Property Tax: Personal Property | Severance Tax | Corporation Income Tax | Reclamation Tax or Fee |
|---|---|---|---|---|---|
| **Virginia (13)** | | | | | |
| Determined at the local level | Determined at the local level | Determined at the local level | Determined at the local level; rate cannot exceed 1% of gross receipts | 6% taxable income | Surface: $0.04 per ton produced<br>Underground: $0.03 per ton produced<br>Loading facility: $0.015 per ton processed<br>Bond: $10,000 minimum |
| **West Virginia (2)** | | | | | |
| Present worth through discounting from 3 year weighted average of production | Reserve appraisal formula | Three approaches to market value | 5% gross value<br>2% gross value (seam thickness between 37 and 45 inches)<br>1% gross value (seam thickness less than 37 inches) | 8.75% taxable income | $0.144 per ton produced<br>Permit fee: $1,000<br>Bond: $1,000 to $5,000 per acre, $10,000 minimum bond total |

## Appendix E: Taxation Methods of Coal Producing States (*continued*)

<table>
<tr><th>Real Property Tax: Active Coal Property</th><th>Real Property Tax: Reserve Coal Property</th><th>Property Tax: Personal Property</th><th>Severance Tax</th><th>Corporation Income Tax</th><th>Reclamation Tax or Fee</th></tr>
<tr><td colspan="6">Wyoming (1)</td></tr>
<tr><td rowspan="2">No tax imposed</td><td rowspan="2">No tax imposed</td><td>Above ground equipment assessed at market value</td><td>Surface: 7% taxable value</td><td rowspan="2">No tax imposed</td><td rowspan="2">No tax imposed</td></tr>
<tr><td>Underground equipment not taxed</td><td>Underground: 3.75% taxable value</td></tr>
</table>

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