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# State Mineral Taxes, 1982

Thomas F. Stinson
George S. Temple



# Northern Great Plains Coal Mining

What are the likely effects of expanded coal mining in Montana, Wyoming, and North Dakota on the small towns and communities there? Mining activity in the sparsely populated region has grown dramatically over the last decade—from less than 20 million tons of coal in 1970, to 100 million tons in 1978, with projections for 350 million tons per year by the mid-1980's.

The Fort Union coal formation, which straddles those three States contains nearly 40 percent of the Nation's coal reserves. Its coal is highly desirable because:

—It is low in sulfur, meaning that it can be burned by utility companies with less air pollution than other coal.

—It is in thick seams (some seams up to 200 feet thick), and can be recovered by strip mining.

To try to ascertain the effects of development on the region, the authors of this report used computerized simulations of various levels of coal activity to see if the communities could afford the increased level of government services and upgraded infrastructure required by new energy projects and the larger population attracted by those projects.

In the long run (10 years or more), most communities in the region will be able to pay for the services required by the new coal-related development, provided that they can tax the new developments. Without taxing authority (for instance, if the mine lies outside the taxing district of a locality), they will have problems.

*Northern Great Plains Coal Mining: Regional Impacts* (by Thomas F. Stinson, Lloyd D. Bender, and Stanley W. Voelker; AIB-452; July 1982; 36 pages; color illustrations; $5; stock no. 001-000-04265-3).

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## Preface

This report updates two earlier reports published in 1977 and 1978.* When those reports were written, the major concern was whether sufficient revenues would be available to meet the needs of State and local governments during periods of rapid growth. Reflecting that concern, the reports stressed the form of mineral taxes and discussed the advantages and disadvantages of the alternative types of taxes.

Policy concerns have changed since then. The issue is no longer whether sufficient revenues are available, but rather whether rates in some States are excessive. Reflecting this change in the policy debate, sections discussing the amount of revenue collected in major mineral-producing States, the factors which must be considered when setting a rate, and the recent U.S. Supreme Court cases involving State severance taxes were added, while the analysis of alternative types of taxes was shortened. Anyone wishing a more complete discussion of alternative taxes or impact aid programs should consult the earlier reports.

State summaries were updated to reflect changes in law between 1978 and 1982. Seven States enacted new severance taxes during that period. Significant modifications were made to existing taxes in a number of other States. Although the summaries provide useful information about the details of State mineral tax systems, they cannot substitute for the careful reading of each statute. Taxpayers needing details of the laws are urged to consult State or local tax officials. Summarizing legislation of so many States is difficult; errors of omission may have occurred. The authors will appreciate having these called to their attention.

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**State Taxation of Mineral Deposits and Production*, RDRR-2, Econ. Stat. Coop. Serv., U.S. Dept. Agr., 1978, and *State Taxation of Mineral Deposits and Production*, EPA-600/7-77-008, U.S. Environmental Protection Agency, 1977.

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## Summary

The 17 major mineral-producing States collected more than $4 billion in mineral taxes in 1980. Those revenues amounted to more than 20 percent of total State tax revenue in seven States. Texas collected more than $1.5 billion in such taxes (representing 22 percent of total tax collections) and Louisiana and Alaska each collected more than a half billion dollars (representing 22 and 35 percent, respectively, of total State tax revenue). The large amount of revenue collected, coupled with the great variation in State tax rates, has provoked challenges to mineral taxes in both the courts and Congress.

Two of those challenges recently reached the U.S. Supreme Court. The Court ruled in 1981 that such taxes are within the domain of the State's taxing authority, so long as the taxes are not overtly discriminatory. The Court also refused to limit tax rates to those necessary to raise the funds needed to provide the additional government services required by the project and its employees. A concurring opinion, however, left little doubt that Congress, if it chose to, could limit State severance tax rates.

No one seriously questions a State's right to levy a severance tax. Disputes arise over the appropriate amount of revenue collected. There is general agreement that such revenues should at least equal the direct costs of the local government services consumed by the mine and its employees. Out-of-State consumers object, however, when revenues are collected which substantially exceed that level, whether they are justified as a reserve to offset potential future costs or as a way of preserving a share of the State's natural heritage for future generations.

Four types of mineral taxes may be used: an *ad valorem* property tax, a per-unit tax, a gross production tax, and a net production tax. The gross production tax appears best except when a market price for the mine's output is difficult to establish. In those instances, a per-unit tax is preferable.

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## Introduction

State mineral taxes, particularly those on coal, have provoked heated debate since the midseventies. One side, composed primarily of residents of energy poor States, asserts that current severance tax rates in some States are so high that they transfer income from energy consumers to residents of energy-producing States. Others, typically from producing States, cite the costs of providing services to new mines and miners and the responsibility of the State to provide for the welfare of future generations in justifying existing tax rates.

The intensity of this debate is illustrated by recent action in Congress and the courts. Congressional hearings have been held on legislation designed to place a cap on severance tax rates in each of the last three sessions of Congress, and the U.S. Supreme Court ruled on two cases involving State mineral taxes during its 1980-81 term: *Maryland v. Louisiana* (69 L Ed 2d 156) and *Commonwealth Edison v. Montana* (69 L Ed 2d 884). There were also attempts to change the definition of locally raised revenues or local tax effort (used in formulas for distributing some Federal funds) to exclude revenue raised by severance taxes. The controversy has focused on coal severance tax rates but any change in national policy is likely to affect mining for all minerals as well as drilling for oil and natural gas.

Current interest in mineral taxes stands in sharp contrast to that of the past. Until the midseventies, severance tax rates and revenues were so low that in most States, few outside the mineral industry had heard of them. Since then, rapid increases in prices and exploration and development activity have made mineral taxes much more visible.

Public awareness of these taxes began to increase when many, especially in the West, began to question whether localities could afford to build the new schools, roads, and water and sewer systems necessary to serve

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the new residents attracted by new mines. Several States enacted laws coupling new or increased severance taxes with impact aid programs for communities with rapid growth due to mineral development. The form of the tax was the issue at that time. Policymakers searched for a tax which would provide the funds needed for impact aid without unduly discouraging mineral development.

Continued increases in prices for coal, oil, natural gas, and uranium created what many considered to be windfall profits for owners of existing mines and wells. Inflationary pressures on State and local government budgets, reflected in high individual tax bills, stimulated an interest in ways in which the State could capture a share of those profits. Some States increased their tax rates or added an escalator clause so that revenues would keep pace with inflation. Others shifted from a tax levied at a fixed rate per ton or barrel to one based on the value of production. State severance tax revenues increased substantially, producing the current demands for a limit on the rates on which such taxes may be levied.

This report provides background for the current policy debate. Its initial sections provide general information about severance taxes including the rationale for a special minerals tax, the forms which the tax may take, and the importance of the tax as a revenue producer. Sections examining considerations in setting severance tax rates and discussing the implications of recent U.S. Supreme Court decisions follow. The report concludes with detailed summaries of existing severance tax laws in each major mineral-producing State.

## Why Severance Taxes?

Severance taxes, unlike the well-known, broadly based taxes on sales, income, and property, apply only to extractive, resource based industries such as mining, forestry, and fisheries. Any attempt to evaluate existing State mineral taxes must begin with an understanding of why mineral production is singled out from other industries for a special tax.

Before severance taxes were introduced, States relied almost exclusively on the property tax to raise revenues. Mining companies, like all other firms, were taxed on the value of their property. Applying an *ad valorem* property tax to mineral property, however, created several significant problems.

The most obvious difficulties were with assessments. Estimating the value of a mineral deposit is difficult even for trained geologists. For local assessors, it was often impossible.[1] The resulting wide variation in assessed values made the entire property tax system subject to question on equity grounds. Many began to believe that almost any other system of taxing mineral property would be fairer. The volatility of mineral prices, the largely unknown nature of the deposit, the unpredictability of future extraction costs, and the dependence of future mine output on capital investment in the mine all led States to move gradually toward using net income or some measure of gross output as a substitute for the full value of the deposit.

*Ad valorem* taxes were also criticized as contributing to the unduly rapid depletion of the resource.[2] Such taxes depend entirely on the value of the deposit and come due whether or not the mine is operating. Consequently, profit-maximizing producers accelerate their recovery rates in an attempt to mine out from under the tax. Under a property tax system, total taxes on two identical mineral deposits, one mined over a period of 10 years and one mined over 20 years, are quite different. Severance taxes, based on the amount or value of production during the year avoid this problem.

*Ad valorem* taxes accelerate the depletion of the Nation's resource base by creating an incentive to produce more rapidly from each mine than would be the case with more neutral taxation. This increases supplies of the mineral beyond what they would otherwise have been. The excess supply lowers the price for the mineral, which in turn produces two effects. First, consumption of the mineral increases due to the lower price. Second, and more important, the cutoff grade for the ore at the mine increases, reducing the amount of ore economically feasible to mine. Because of large startup costs, substantially higher prices will be necessary to justify re-opening a mine—prices much higher than might be expected in the future. Although the lower grade ore is not lost, the economics of mining make it highly unlikely that those minerals will ever be used.

The *ad valorem* tax's administrative problems and its adverse effects on resource use led State officials to seek an alternative. Use of the mine's output as a proxy for the value of the mine was one solution. In 1846, Michigan enacted a severance tax to reduce the tax burden on the mineral industry.[3] Today, more than a century later, 31 States make use of some form of that tax.

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[1] G. Howard Spaeth, "Iron Ore Taxation in Minnesota," *Proceedings National Tax Association,* 1948, pp. 230-243, gives a more complete description of the process.

[2] Harold Groves, *Financing Governments* (5th ed.), Holt and Co., New York, 1958, pp. 314-317.

[3] *Financing Goverment in Colorado,* 1959, Report of the Governor's Study Group, p. 351.

## Types of Severance Taxes

States levy three types of special mineral taxes—the traditional (per-unit) severance tax, the gross production tax, and the net production tax.[4] In this section, these alternative forms of severance taxes are compared with each other and with the *ad valorem* property tax on the basis of administrative convenience, effects of resource use, and equity.

None of these taxes is clearly superior in all criteria. However, the per-unit tax and the gross production tax, the two most popular forms, appear to obtain the best overall rating. Choosing between a per-unit tax and a gross production tax is more difficult. There, the decision depends on how difficult it is to determine a sales price for the mineral. If market prices can be easily determined for each mine's or well's output, a gross production tax is advantageous. If, however, an appropriate market price is not available, the State will probably be better served by a per-unit tax.

### Per-Unit Taxes

The oldest form of the severance tax is the per-unit tax. With it, no attempt is made to determine the value of mineral holdings or of output. Instead, the tax is levied on the volume of production from the mine or well. North Dakota's coal severance tax, $1.07 per ton in 1982, is an example of these taxes. Such a tax reduces administrative problems to a minimum. All the State requires is a measure of the year's output.

These taxes also have the advantage that they provide no incentives to accelerate production. Since no tax is due until after production begins, the firm's decision about when to begin mining depends only on factors related to the demand and supply of the mineral. Tax costs are not a factor in that decision. But, while a per-unit tax is an improvement over the *ad valorem* tax, it is still not perfectly neutral with respect to resource use. Since this tax is levied at a constant dollar amount per ton, the mining firm will extract minerals only to the point at which its marginal cost *plus* the severance tax is equal to the market price. This means that some portions of the deposit,

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[4]The distinction made here between per-unit severance taxes, gross production taxes, and net production taxes is not always made at the State level. For example, Montana's tax on oil and gas is officially titled the Oil and Gas Producers' Severance Tax even though its base is the gross value of petroleum extracted. Under the classification system used in this paper, such a tax would be considered a gross production tax. Some States call their severance taxes occupation or privilege taxes, as well, although they are really per-unit or gross production taxes.

where the actual costs of extraction are less than the expected market price, are not mined. Deposits for which the market price minus the cost of extraction is less than the severance tax will be left in place, even though in the absence of a tax they would be mined. This result is often termed high-grading.[5] Its importance for a specific mineral deposit cannot be determined without a specific study. In most instances though, where the amount of the tax is only a small percentage of the mineral's value, such taxes probably have only limited impacts on the amount of the resource it is economical to mine.

Per-unit taxes also offer some improvements over *ad valorem* taxes on matters of equity and ability to pay. With a severance tax, no taxes are due until after production begins. Problems still remain, however. Since the same flat tax rate applies to all production, mineral deposits of different values may not be taxed at the same percentage of revenues. Taxes can be a higher percentage of gross revenues for mines located on lower grade deposits.

Finally, per-unit taxes do not respond automatically to changes in mineral prices or to inflation. Since the tax is levied at a fixed dollar amount per ton, the tax rate is a declining percentage of the mineral's value as mineral prices increase. More disturbing, if prices turn down, the tax rate (as a percentage of mineral value) increases. And, during a period of inflation, the quality of government services paid for by the tax will decrease, even though the same dollar amount of revenue is obtained.

Several States, recognizing this problem and the difficulties of returning annually to the legislature for small increases in the tax rate, have linked the severance tax rate to a price index.[6] Then, a one-point increase in the Consumer Price Index, or whatever index is chosen, increases the tax rate by a set amount, allowing tax revenues to keep pace with inflation and mineral prices.

### Gross Production Taxes

Another way of maintaining a constant relationship between the tax take and mineral prices is to use a gross production tax. This is the most common

[5]Karl E. Starch, *Taxation, Mining and the Severance Tax,* Bureau of Mines Inf. Circ. 8788, U.S. Dept. Int., 1979, p. 26.

[6]See, for example, the Minnesota Taconite, Iron Sulfides, and Agglomerates Tax, Minn. Statutes of 1957, Sec. 298.26.

form for severance taxes. Instead of taxing on the basis of the number of physical units of output, the tax is based on the value of the product extracted from the ground. Many States also use gross proceeds as a proxy for the value of the mine, or the mine and its equipment, for the local property tax. The following discussion also applies to those instances.

Gross production taxes have many of the same effects as the per-unit tax. But, since the tax is levied at a percentage of the value of the product, there are also some important differences. Chief among them are equity considerations. Gross production taxes allow for fairer treatment of mines or wells producing different qualities of output as well as for fairer treatment of mineral extraction activities during periods of rapid price changes.

Gross production taxes also have the advantage of automatically increasing State revenues as mineral prices increase. During a period of general inflation, the State will receive approximately the same amount of purchasing power as before, without increasing the tax rate. During periods of declining mineral prices, State revenues will, of course, decline, but such a reduction in taxes may allow the mine to remain in operation, helping to stabilize the local economy.

Gross production taxes may also slightly reduce incentives for high-grading deposits.[7] Unlike the per-unit tax, which, as noted earlier, acts like a fixed charge on each ton of mineral produced, gross production taxes are lower for lower quality output or lower prices. Where the quality of a mineral varies considerably across a State (as with coal) use of a gross production tax rather than a per-unit tax is likely to allow more development of the lower quality resource.

There is a potential administrative problem with use of the gross production tax. In some instances, there are no market transactions from which the price of the mineral can be determined. Some coal mines, for example, are part of vertically integrated electric generating plants. All coal from a single mine goes directly to the powerplant and both the mine and powerplant are owned by the same company. Here, determining value of production from the mine can be a problem. Similar difficulties can occur when iron ore and other minerals are mined and beneficiated in one location, then shipped elsewhere for smelting or refining.

[7]Henry Steele, "Natural Resource Taxation: Resource Allocation and Distribution Implications," *Extractive Resources and Taxation,* Mason Gaffney (Ed.), Univ. Wisc. Press, Madison, 1967, p. 246.

## Net Production Taxes

The net production tax is more closely related to a net income tax on the mine than to a tax on mineral production, Under this tax, firms are allowed to deduct certain expenses from gross revenues. They are then taxed on the remaining income. Such a tax has significant advantages on equity and resource efficiency grounds. Its chief drawbacks are that, like all income taxes, it is more difficult to administer and monitor than the per-unit or gross production taxes and that its revenues fluctuate with the health of the economy.

The greater equity, or fairness, of a net income tax is well known. The advantages in resource efficiency require some explanation.

When a net income tax properly reflects both the income and the costs of production for the firm, it is neutral with respect to the timing of extraction and the amount extracted. But, if deductible costs do not include all relevant costs to the firm, the tax will be less satisfactory. Under some conditions, such a tax may even be worse than any alternative tax.

With a net production tax, there are no incentives to mine out from under the tax since no taxes are due until after production begins. In addition, since the levy is a percentage of net income and not a fixed amount per ton or per dollar of gross income, the net income tax produces no incentives to restrict production or to high-grade. With a net production tax, the marginal cost of producing a ton of the mineral remains the same as if there were no tax. Profit-maximizing producers cannot raise their net income by mining any more or less than they would in the absence of the tax.[8] The tax's only effect is to reduce profits of the mine.

A major disadvantage to the net production tax is that revenues flowing from it are often unstable. There likely will be periods when, due to fluctuating market prices, the mine will have little net income (and pay little or no taxes), even though it is operating with a full complement of workers.[9] These fluctuating revenues could create hardships for State and local budgets dependent on revenues from severance taxes. Potential administrative problems and uncertainty of revenues appear to outweigh advantages in equity and efficiency of resource use. Only three States have a net proceeds tax.

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[8]If mineral production is subject to a greater tax burden than other sectors of the economy, investments in that sector will decrease and the minimum grade of ore required will increase. Levying a net production tax will not affect this result.
[9]Groves, *op. cit.*, p. 317.

## Severance Tax Collections

Texas collected more than $1.5 billion in severance taxes in fiscal 1980, while Louisiana, Alaska, and Oklahoma collected $525 million, $507 million, and $436 million, respectively (table 1). Oil and natural gas revenues were

**Table 1—State revenues from mineral taxes**

| State | 1970 | 1975 | 1980 |
|---|---|---|---|
| | | *Million dollars*[1] | |
| Texas | 273.2 | 666.8 | 1,525.1 |
| Louisiana | 251.0 | 541.4 | 519.7 |
| Alaska | 10.8 | 26.6 | 506.5 |
| Oklahoma | 50.5 | 128.1 | 435.1 |
| New Mexico | 35.4 | 71.1 | 213.6 |
| Kentucky | .1 | 99.1 | 177.2 |
| Florida | .2 | 30.0 | 121.3 |
| Wyoming | 4.3 | 18.5 | 105.7 |
| Montana | 4.7 | 14.7 | 94.6 |
| Minnesota | 19.0 | 35.9 | 83.5 |
| Mississippi | 14.3 | 20.6 | 50.2 |
| North Dakota | 3.1 | 6.9 | 43.9 |
| Michigan | 1.0 | 4.5 | 43.5 |
| Colorado | 1.0 | 2.4 | 31.1 |
| Alabama | 1.4 | 9.6 | 30.6 |
| Arkansas | 3.4 | 6.3 | 16.2 |
| Utah | 4.3 | 6.2 | 10.6 |

[1]Revenues shown for fiscal years.

Sources: U.S. Department of Commerce, Bureau of Census, *State Government Tax Collections in 1971; State Government Tax Collections in 1976; State Government Tax Collections in 1980.*

the major sources of severance taxes in each of those States. New Mexico, Kentucky, Florida, and Wyoming each had revenues in excess of $100 million from severance taxes while Montana, Minnesota, and Mississippi each raised more than $50 million. Seventeen States had 1980 revenues in excess of $10 million from mineral taxes.

The amount of revenue raised was generally directly related to the value of minerals produced in the State, with some notable exceptions. California, a major oil producer, obtained only $3.5 million (to finance the activities of the State Oil and Gas Conservation Board) from its tax on oil production. Illinois, Pennsylvania, Virginia, and West Virginia, all major coal producers, levy no severance tax.

Growth in State severance tax revenues is also apparent. Total severance tax collections increased from $676.7 million in 1970 to slightly more than $4 billion in 1980 for the 17 States in table 1, due to a combination of higher prices, increased production, and new or increased taxes. In most States, increases in price and production were more important than higher tax rates. But, while this increase in revenues is impressive, it actually understates the extent of changes occurring during the past decade. Since the most recent data on tax collections is for 1980, the full impact of decontrol of domestic oil production is not evident. In addition, taxes on natural gas reflect controlled prices. After full decontrol of natural gas, one can expect significantly higher revenues in gas-producing States, even if tax rates, production, and world prices remain constant.

This increase in severance tax revenues and the further increases expected to accompany decontrol of natural gas have created fears that some States may take unfair advantage of their resource wealth. Some worry that severance taxes may allow producing States to shift a major portion of their tax burden to consumers in other States. The resulting interstate redistribution of income and the improvement in the producing States' business tax climate, it is argued, will harm good relations among States. While these issues are often portrayed as pitting energy have-nots against the haves, such is not entirely the case. Much of the original impetus for limits on coal taxes came from residents of Texas, the State collecting the most severance tax revenue.

Some perspective on these concerns can be obtained by examining severance taxes per capita and as a percentage of total State tax collections (table 2). Alaska stands out as a special case: 1980 taxes on the production of oil and gas were 35 percent of all State tax collections and totaled more than $1,300 per capita. Alaska eliminated some individual taxes, placed revenue in a permanent trust fund, and offered a partial rebate of previous income tax payments to the State's long-term residents. These major tax advantages do not, however, appear to have stimulated substantial migration of industry to the State. Markets and suppliers are too far away,

**Table 2—State severance taxes per capita and as a percentage of State tax collections, 1980**

| State[1] | Per capita mineral taxes | Percentage of tax collections |
|---|---|---|
| | *Dollars* | *Percent* |
| Texas | 110 | 22.6 |
| Louisiana | 127 | 21.7 |
| Alaska | 1,319 | 35.2 |
| Oklahoma | 149 | 24.6 |
| New Mexico | 167 | 23.1 |
| Kentucky | 50 | 8.3 |
| Florida | 13 | 2.5 |
| Wyoming | 228 | 27.2 |
| Montana | 123 | 21.7 |
| Minnesota | 21 | 2.6 |
| Mississippi | 20 | 4.0 |
| North Dakota | 70 | 11.8 |
| Michigan | [2] | .7 |
| Colorado | 11 | 1.7 |
| Alabama | 8 | 2.0 |
| Arkansas | 7 | 1.4 |
| Utah | 7 | 1.4 |

[1]States listed in order of the dollar value of collections in 1980.
[2]Less than $0.50 per person.
Source: Computed from U.S. Department of Commerce, Bureau of the Census, *State Government Finances in 1980.*

and potential tax savings do not appear to overcome differences in transportation costs.

Severance taxes in 1980 were more than 20 percent of State tax collection in 6 of the 48 contiguous States. In 1975, they were more than 20 percent only in Louisiana (33 percent), and greater than 10 percent of collections in Texas, Oklahoma, New Mexico, and Wyoming. In 1970, severance taxes were 25 percent of total State taxes in Louisiana, 12 percent in Texas and New Mexico, 11 percent in Alaska, and less than 10 percent in all other States.

Severance tax revenues in 1980 totaled $228 per capita in Wyoming and were in excess of $100 per capita in Texas, Louisiana, Oklahoma, New Mexico, and Montana. The remaining States received less than $25 per capita with the exception of North Dakota ($70) and Kentucky ($50).

A tax saving of $100 per capita is significant, yet unlikely to induce any substantial migration of industry or people. Deregulation of natural gas prices could increase the size of the tax incentives in some areas, but even a doubling of the severance tax take would produce tax differentials of $350 or less in every State but Wyoming. The actual saving to the taxpayer, of course, is likely to be considerably less since some revenue will go for services required by the mining firm and its employees. The deductibility of State taxes from Federal taxable income further reduces the actual disparity.

A redistribution of $100 or more to residents of producing States affects the welfare of both those receiving the income and those losing it. This potential income transfer has generated much of the controversy over severance taxes. Whether any regional redistribution of income actually occurs depends on who actually pays the tax and the costs associated with the new mine's opening. Both issues will be discussed below.

## Considerations in Setting Severance Tax Rates

No one seriously questions the right of States to levy a severance tax. But, there is substantial disagreement over how much revenue it is appropriate to collect. Most believe that rates should be set to produce at least an amount sufficient to offset costs of the new public services required by the mine and its employees. A limit on the amount of revenue collected beyond those direct service costs has become the public policy issue.

There is no well defined analytic framework for determining the appropriate tax rate. Rates are set as part of a political process in which policymakers try to balance needs of the public sector with those of the private sector. The decision which emerges reflects a set of weights implicitly assigned to a series of objectives. While the result in each State is likely to be different, some items affecting the tax rate decision include:

—The cost of needed government services.
—The amount of income redistribution intended.
—The likely effects of the tax on economic development.
—The compensation due for the depletion of the State's natural heritage.

Several technical points need to be made before discussing these four topics. First, debate over whether a tax is fair or not must focus on the amount of money paid in taxes by the industry or firm, not on the rate. Interstate comparisons cannot be based on rates alone because the base, the value of the product or activity taxed, is not the same for all minerals, or even for the same mineral, in different States. Wyoming, for example, taxes coal at 10.5 percent of its value while Kentucky taxes coal at only 4.5 percent. Wyoming, however, receives less revenue per ton of coal taxed because Wyoming coal sells for $8 per ton while Kentucky coal sells for $28 per ton.

Similarly, evaluations of the appropriate levels for taxes on the mineral industry must look not just at the severance tax, but at the sum of all taxes levied on the mining firm. When the severance tax is in lieu of all other State and local taxes on the firm—Minnesota's taconite taxes, for example—restricting the analysis to the severance tax rate is appropriate. But, when income and property taxes are also levied on the mine or well, the total level of taxation, not simply the severance tax, needs to be the focus of the discussion, since from the point of view of the mine owners and society, it is total tax revenue which is important, not simply revenue from a single tax. To simplify matters, the rest of this discussion assumes that the severance tax is the only tax levied at the State or local level on the mine.

**Cost of Services**

When severance taxes are limited to the costs of providing necessary public services for the mine and its associated employees, there is little controversy. There is general agreement that new industry should pay its share of the costs of government, including the cost of additional environmental monitoring required. Disagreements arise when revenues from severance taxes are considerably greater than the cost of the additional government services.

The mineral-producing States assert that limiting comparisons to out-of-pocket public sector costs is improper, reflecting a confusion between public sector costs and the full external costs associated with the new firm. Restricting the analysis to the public sector's costs, they argue, ignores other, very real costs to the State's residents, costs that must be taken into account if the producing State is to be treated fairly.

Most economists agree that compensation should be allowed for such costs as those of environmental degradation, increased congestion, and changes in life style attributable to the mine's opening. Some of these external costs (so named because they are external to the firm's balance sheet) are almost impossible to measure. But, if they are ignored, local residents will almost certainly be less well off. Equally important, if the firm does not reflect these social costs in the price of its products, too much of those products will be produced. Production taxes that raise the firm's marginal costs to equal the social costs are necessary for socially optimal levels of the resources to be mined. The problem for public policy is to reach agreement on the difference between the social and marginal costs of a particular operation.

Collapsing this social cost rule into one that takes into account only the additional costs to State and local government will almost always be inappropriate. For such a rule to produce desired results, the external costs of the firm must be limited to its public sector costs. While this could be possible for a small firm opening in a large metropolitan area, such an assumption appears tenuous for a mine in a rural area. There, out-of-pocket public sector costs may be only the smallest portion of the full social cost of the mine.

Compensation also appears required for a second type of cost: the potential costs after the mine closes. Large public sector costs due to unforeseen environmental damage or human or social problems may emerge after the mine shuts down. Premature shutdowns due to technological change, changes in public policy, or unanticipated shifts in market forces may also create unforeseen deficits for the public sector. States have not generally tried to protect themselves against such uncertainties in the past, but they need not act as if unanticipated costs are zero. Consequently, a suitable reserve to insure against uncertainty, obtained by taxing in excess of the full social cost of the mine, appears justifiable, Here, again, the policy problem becomes one of reaching agreement on what a proper reserve might be, then translating it into a tax rate. The total tax levied might be thought of as the sum of the social cost tax, the uncertainty cost tax, and taxes to cover redistribution and natural heritage objectives discussed below.

**Redistribution of Income**

States may also use their tax system to redistribute income. This redistribution may be either across a generation—from rich to poor, for example—or from one generation to another—a gift from those paying taxes today to those living in the future. Both are legitimate functions for State governments to engage in when only intrastate transfers occur.

Severance taxes are usually not thought to be good devices for carrying out income redistribution across a single generation. The incidence of the tax (who actually pays it as opposed to who is legally liable) is not always well defined. The result is considerable uncertainty about whose income is being affected. The actual incidence of the tax depends on the nature of markets for the particular mineral to be taxed and on supply and demand conditions in those markets. Under some assumptions, the tax will fall on consumers, while under other equally plausible assumptions, the transfer may be from the profits of the mining firm, the earnings of its workers, the profits of firms that use the product, or the royalties received by landowners.

Severance taxes, when dedicated to a trust fund, however, are particularly effective ways of effecting intergenerational transfers. By taking revenue from one generation and forbidding its use until the total reaches a sum considerably in excess of the expected annual contribution, intergenerational transfers may easily be accomplished. Other ways such transfers may occur is by investing heavily in the education of the State's youth or by dedicating a portion of the revenues to research on new technologies or items designed to replace the resource used.

Such redistribution is well within the right of the States as long as the redistribution is from the State's residents to other residents of the State. Objections emerge, however, when the redistribution is seen as coming from those living in other States to those living in the taxing State. In such a situation, it is argued, the interests of those living out of State are not effectively represented in the political decisionmaking process. Such might be the case for the severance tax, depending on the incidence assumptions.

### Effects on Economic Development

State policymakers also consider the potential negative effects of higher tax rates. Because higher tax rates discourage development, the legislature and the governor face the responsibility of evaluating relative benefits of higher taxes and increased economic activity in the State. The choice in some States may be for lower taxes and more development in order to eliminate unemployment or underemployment among the State's residents. Other States may use taxes to control the rate at which certain resources are developed, attempting to limit or smooth out the boom-and-bust cycles often associated with mining. In either instance, benefits of the particular policy choice are difficult to measure, so subjective judgments must be made.

### Natural Heritage

The most controversial argument made for mineral taxes is that the resources represent the State's natural heritage, and the State and its residents have the right to share in the profits from their sale. Mineral extraction permanently reduces the wealth of the State, creating a need for reimbursement. The severance tax is seen as the ideal vehicle to obtain it. This philosophy is used to justify a tax that produces revenues in excess of the full social cost of production, including a risk premium for unforeseen events. Such a philosophy can be combined with a program to redistribute income to future generations, or it can be used to justify a transfer of income to the State's current residents.

The natural heritage argument differs from the pure redistribution argument in that it calls for a redistribution without regard to whether those being taxed are residents of the State or live outside it. Unlike the redistribution claim which can be thought of as a voluntary transfer from one group to another, enacted by representatives of the groups who pay the tax, taxes based on the natural heritage claim can be levied by those who will benefit against those with no effective say in the matter.

Individuals taking the natural heritage position assert that States are responsible for creating and insuring economic opportunity within the State.[10] Mineral resources are exhaustible, they argue, and when they are gone new sources of economic activity must be found. Because the wealth of a State is being depleted, the State's residents deserve an extra claim on the value of minerals.

Opponents point out that taxes in excess of social costs are difficult to justify. The natural heritage position claims for the State a property right in all unmined minerals on privately held lands over and above those inherent in property taxes. Such a claim, they say, directly challenges conventional concepts of private property.[11]

Application of the natural heritage principle, especially in conjunction with a program to redistribute income to future generations, has precedent. Minnesota put half of its severance tax on iron ore into a permanent trust fund for education under terms of a 1922 amendment to its constitution. A portion of its production tax on taconite is earmarked for permanent trust funds for northern Minnesota. Montana allocated 50 percent of its coal severance tax to a similar trust fund, as does Alaska with a portion of its oil severance tax.

There is no objective answer to the question of whether a natural heritage claim should be honored and, if so, how high a tax should be levied. Value judgments and one's perception of the incidence of the tax help determine where one stands on this topic. The issue is extremely controversial, with much of the justification for severance taxes in excess of public service cost based on this argument. The importance attached to this argument by State officials as they set rates for their severance taxes varies considerably.

## Constitutional Challenges

Until recently, the States' constitutional right to levy a severance tax was clear and unrestricted. The Supreme Court, in a 1922 decision, *Heisler v. Thomas Colliery Co.* (260 U.S. 245), ruled that severance taxes, regardless of their rate or ultimate incidence, did not violate the commerce clause of the Constitution since the taxable act, the severance of the mineral, occurred prior to the product's entry into interstate commerce.

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[10]See, for example, Michael Browde and Charles DuMars, "State Taxation of Natural Resource Extraction and the Commerce Clause, Federalism's Last Modern Frontier," *Oregon Law Review,* Vol. 60, 1981, pp. 47-49.

[11]Starch, *op. cit.,* pp. 26-27.

This interpretation has recently been challenged. The Court, taking note of the interstate nature of most business today and recognizing the impracticality of excluding from State taxation all activity that touches on interstate commerce, established a new test to ascertain which State taxes restrict interstate commerce. The standards, set down in 1977 in *Complete Auto Transit, Inc. v. Brady* (430 U.S. 274), are as follows:

1. The activity taxed must have substantial nexus, or connection, to the taxing State.
2. The tax must be fairly apportioned to the amount of value derived in the State.
3. The tax shall not be discriminatory.
4. The tax must be fairly related to services provided by the State.

Two recent decisions have helped redefine the Court's position on State mineral taxes. The first, *Maryland v. Louisiana* (69 L ED 2d 156), dealt with Louisiana's first-use tax on natural gas. The more important case, *Commonwealth Edison v. Montana* (69 L ED 2d 884), was a challenge to Montana's 30-percent coal severance tax.

Louisiana levied a severance tax on all natural gas produced in the State and its waters. It also levied a first-use tax on all gas brought into the State not subject to tax in other States. This tax, levied at the same rate as the State severance tax, was justified as a way of allowing the State to gain compensation for costs associated with workers living in Louisiana, but working on large offshore rigs. The first-use tax applied almost exclusively to gas produced on the Federal Outer Continental Shelf (OCS) and piped into Louisiana for processing. Louisiana consumers of OCS gas, however, were effectively excluded from having to pay the tax through a system of credits and exemptions.

The Court took the case on original jurisdiction and declared it unconstitutional without even requiring hearings at the State Court level or development of a factual record. The tax was found to violate both the supremacy clause—due to a clause requiring the burden of the tax be borne either by consumers or the pipeline companies—and the commerce clause. The commerce clause violation was due to the difference in treatment between Louisiana's residents and those in the rest of the world. The Court also dismissed Louisiana's claim that the tax was compensatory, levied to balance the severance tax on gas found in Louisiana, noting that since the State had no interest in the Federal OCS, no compensating tax could be allowed.

In *Commonwealth Edison v. Montana,* 11 midwestern utilities and 4 Montana coal-mining companies challenged Montana's 30-percent severance tax rate on coal as excessive. The utilities, arguing that the Complete Auto Transit test was now the operative rule, stipulated that the first two prongs of the test (nexus and fair apportionment) were satisfied. They also agreed that, unlike Louisiana's first-use tax, the Montana tax was on its face neutral. The issues raised were whether the fact that over 90 percent of Montana's coal is exported to other States made the tax discriminatory, and whether the tax was fairly related to the services provided by the State. The suit was originally filed in Montana State Court where the tax was upheld and the complaint dismissed without receiving any evidence. The Montana Supreme Court affirmed the lower court's action. The U.S. Supreme Court had the option of upholding the Montana Courts' decision or remanding the case to a lower court for trial.

In its decision upholding the lower court's decision, the Supreme Court verified that the precedents under the Heisler case no longer held. Instead, it noted, severance taxes must pass the test specified in the Complete Auto Transit decision. It then rejected the claim that the tax violated the commerce clause.

With respect to the claim that the tax was discriminatory because most of Montana's coal is exported to other States, the Court noted that the purpose of the commerce clause was to make State borders irrelevant as barriers for trade. Using those same barriers, which are supposed to be irrelevant in discrimination cases, to find the Montana tax unconstitutional would, the Court felt, be inconsistent. It noted that the appellants were implicitly assuming that the commerce clause gives one State access to another's minerals without regard to the terms on which the mineral rich State has them. The Court refused to grant such access.

The major impact of the decision, however, came in the discussion of the meaning of the fourth prong of the Complete Auto Transit test: the requirement that a tax must be fairly related to the value of services provided by the State. This, it was thought, was the mechanism by which taxes which were far in excess of social costs and yet on their face neutral could be controlled.[12] The decision, however, sidestepped problems of establishing a proper rate, noting that an earlier ruling on the due process clause imposed no requirement that tax revenues collected from any particular activity be reasonably related to the value of government services provided

[12]Browde and DuMars, *op. cit.,* p. 40.

to that activity. Citing its 1937 decision in *Carmichael v. Southern Coal and Coke Co.* (301 U.S. 495), the Court noted:

> A tax is not an assessment of benefits. It is a means of distributing the cost of government. The only benefit to which a taxpayer is entitled is that derived from his enjoyment of the privileges of living in an organized society, established and safeguarded by the devotion of taxes to the public purpose.

The Court further indicated that the fair relationship to services test is little more than an extension of the nexus criterion, and that any tax levied on a percentage basis is in the proper proportion to services. It also emphasized its determination to avoid getting entangled in judging whether specific rates are excessive:

> Appellants argue that the fourth prong of the Complete Auto test must be construed as requiring a factual inquiry into the relationship between the revenues generated by the tax and the costs incurred on account of the taxed activity. . . . This assertion reveals that the appellants labor under a misconception about the Court's role in cases such as these. *The simple fact is that the appropriate level or rate of taxation is essentially a matter for legislative, not judicial resolution.* . . . Appellants ask this court to prescribe a test for the validity of State taxes that would require State and federal courts to calculate acceptable ranges or levels of taxation. This we decline to do. (emphasis added).

The Montana tax decision has clear implications for State mineral taxes. The Court has, in effect, removed itself from the difficult area of determining what rate is appropriate, while reserving the right to rule on whether or not a tax is discriminatory on its face, as was the first-use tax in Louisiana. It also retained the right to judge the form of the tax and to determine whether there was sufficient contact with the State. But, the Court clearly indicated that it did not wish to be involved in the weighing and balancing of tradeoffs necessary to decide upon a proper tax rate. Those problems were left specifically to the State legislatures and the U.S. Congress. Justice White emphasized this point:

> Congress has the power to protect interstate commerce from intolerable or even undesirable burdens. . . . The Constitutional authority and the machinery to thwart efforts such as those of Montana, if it was thought acceptable, are available to Congress and surely Montana and other similarly situated States do not have the political power to impose their will on the rest of the country.

## Summaries of State Mineral Tax Laws

Thirty-one States had special mineral taxes as of January 1983. This section summarizes mineral tax laws in each of those States and notes whether mineral tax revenues are dedicated to any special use.

### Alabama

Alabama taxes oil, natural gas, coal, and iron ore. In 1981, the State received more than $60.7 million from these taxes and taxes on forest products, about 2.8 percent of its total tax revenue.

Two separate taxes are levied on the extraction of oil and gas; an oil and gas production tax and an oil and gas privilege tax [9:17.25, 40:20.2(a)].[13] The production tax is levied at 2 percent of gross value at the point of production. Revenue from it goes to the State's general fund [9:17.31].

The oil and gas privilege tax is levied at a rate of 6 percent of gross value, including royalty interests, at the point of production. However, all wells producing less than 40 barrels per day are taxed at 4 percent, as are all wells coming into production after September 1, 1979. The 4-percent rate on new wells applies for 10 years after production begins. After that time, the rate is 6 percent for wells from between 15,000 and 15,800 feet deep in the Smackover formation.

Net revenue from the privilege tax is distributed according to the following schedule:

1. 16⅔ percent to the State's general fund.
2. 16⅔ percent to the county in which the wells are located.
3. 66⅔ percent according to the following schedule:
    a. Twenty-five percent of the oil and gas production taxes collected in any county shall be allocated to the county to be expended at the discretion of the county government. However, in counties with populations between 34,875 and 36,000 in the 1970 Federal census, the funds are to be prorated to boards of education based on the number of children in net enrollment in the district. In counties with a population between 16,000 and 16,250, the first $150,000 shall

[13]Numbers in brackets in this section refer to particular sections of the State's tax laws.

be paid to the custodian of the school funds. The balance remaining shall be allocated two-thirds to the county general fund and one-third to the school fund.

b. Ten percent of the taxes levied on oil and gas wells located within the corporate limits or the police jurisdiction of any municipality shall be allocated to the municipality.
c. Fifty percent of the first $150,000 remaining goes to the State, 42.5 percent to the county, and 7.5 percent to municipalities on a population basis [40:20.8].

All oil or gas produced, all leases in production including mineral rights on producing properties, and all oil or gas under the ground on producing property within the State are exempt from all *ad valorem* taxes of the State, counties, or municipalities. No additional assessment shall be added to the surface value of such lands by reason of the presence of oil or gas thereunder or production therefrom [40:20.12]. Cities and counties are also expressly forbidden from levying any additional taxes on oil and gas produced in Alabama.

A severance tax is also levied on iron ore. This tax, in the form of a license or privilege tax, is imposed at a rate of $0.03 per long ton [40:12.128].

Since 1971, a severance tax of $0.135 per ton has been levied on coal mined in Alabama [40:13.2]. The revenue goes to a special bulk-handling facility trust fund and pays principal and interest on revenue bonds issued to construct the State docks bulk-loading facility.

An additional severance tax of $0.20 per ton on the mining of coal or lignite was enacted in 1977. Proceeds from this tax are returned to local governments according to the following formula:

1. For mines located within the police jurisdiction or municipal limits of a municipality, 50 percent of the tax collected goes to the municipality and 50 percent to the county.
2. For mines located outside the police jurisdiction or municipal limits of a municipality, 100 percent of the tax collected goes to the county government.

Three counties levy county severance taxes on coal at rates of $0.50 per ton. Two other counties levy taxes on stone or sand and gravel.

**Alaska**

Alaska received more than \$1.1 billion, about 50 percent of total State revenue, from gross production taxes on petroleum and natural gas in 1981.

The 1981 Alaska Legislature raised the oil and gas production tax rate from 12.25 percent to 15 percent of gross value at the point of production, effective July 1, 1981. For leases or property coming into production after June 30, 1981, the percentage rate remains at 12.25 percent during the first 5 years of production, then is 15 percent thereafter [Ch. 116, Laws 1981; Sec. 43:55.013].

The actual tax levy is the greater of \$0.60 per barrel of old crude oil (\$0.80 per barrel for all other oil) or the amount due under the percentage rate, adjusted as follows [43:55.012(b)]:

1. The original cents-per-barrel rate applies to oil of 27 degrees API gravity. For each degree of API gravity less than 27 degrees, the per-barrel amount shall be reduced by \$0.005 and for each degree of API gravity greater than 27 degrees the per-barrel amount shall be increased by \$0.005 except that oil above 40 degrees API gravity shall be taxed as 40-degree oil.
2. The base rate adjusted for API gravity is then multiplied by an economic limit factor to obtain the actual tax rate. The economic limit factor acts to reduce taxes as production falls or as production costs rise.

The economic limit factor for oil production equals:

$$(1 - [PEL/TP])\exp(460 \cdot WD/PEL)$$

where: PEL = monthly production rate at the economic limit,
TP = total production during the month for which the tax is to be paid,
WD = Total number of well days in the month for which the tax is to be paid, and
exp indicates that the expression following is an exponent [43:55.013(d)].

If for any month during the first 10 years of commercial production the economic limit factor is 0.7 or less, the value is used. If the value is greater than 0.7, the value used is 1.0. After the first 10 years of production, the actual values are used.

The economic limit factor for gas equals: 1 - PEL/TP [43:55.013(a), (c)].

The monthly production rate at the economic limit for oil property is presumed to be 300 barrels times the number of well days for the property during the month for which taxes are to be paid. The taxpayer may rebut this presumption at a formal hearing [43:55.013(d)].

The monthly production rate at the economic limit for gas is presumed to be 3,000 mcf times the number of well days for which the tax is to be paid. The taxpayer may rebut this at a formal hearing as well [43:55.013(g), (h), (c)].

The base tax rate for gas is $0.064 per 1,000 cubic feet of taxable gas or 10 percent of the gross value of taxable production calculated at the point of production [43:55.016 (b), (c)].

The tax levied under this section is in place of all taxes imposed by the State or its municipalities except franchise taxes, income taxes, taxes upon the retail sale of oil and gas, and the one-eighth cent per barrel oil and gas regulation and conservation tax [43:57.010].

**Arizona**

The 1982 Arizona Legislature replaced the existing gross proceeds taxes on metalliferous mining with a net proceeds severance tax, effective January 1, 1983 [Ch. 230, Law of 1982]. Those producing oil, natural gas, limestone, sand, gravel, and other nonmetalliferous minerals are still taxed under a gross proceeds framework.

The metalliferous mineral severance tax is levied at 2.5 percent of the net severance base [42:1462], where net severance base is defined to be the greater of:

1. *The weighted mineral value*—the gross value of production multiplied by the ratio of the costs actually incurred in mining to the total production costs, including mining and production costs and site specific costs of support services and administration. Depletion, interest on corporate debt, and corporate salary expenses are among items not included in total production costs.
2. *The Arizona Value*—50 percent of the difference between the gross value of production and out-of-State processing costs [42:1464].

This tax is to be phased in from 1983 to 1985. From January 1, 1983, to June 30, 1983, the net severance base is defined as the difference between the gross value of production and out-of-State processing costs. For fiscal 1984, net severance base is the greater of 83.3 percent of the difference between the gross value of production and out-of-State processing costs or the weighted mineral value. For fiscal 1985, net severance base is defined as the greater of 66.7 percent of the difference between the gross value of production and out-of-State processing costs or the weighted mineral value [Ch 230, sec. 12; Laws of 1982, 2nd regular session].

Revenues will be distributed as follows:

1. 20 percent to the State's general fund, to be appropriated for public education purposes.
2. Of the remaining 80 percent:
   a. 4 percent for administrative expenses.
   b. 15 percent to the Department of Economic Security.
   c. 25 percent to incorporated cities.
   d. 22.4 percent to the State's general fund.
   e. 33.6 percent to counties to be allocated on the basis of the counties' assessed values and the amount of privilege tax and severance tax collected in the county [42:1342].

The legislature also imposed a temporary tax on the processing of purchased metallic products and metallic products severed out of State. The tax is levied at 2.5 percent on the following basis:

1. For the period January 1, 1983, through June 30, 1983, the tax is levied on the difference between the gross value after processing and the sum of the costs of purchasing the product and processing it in the State.
2. For fiscal 1984, the base is 66.7 percent of the difference found in (1) above.
3. For fiscal 1985, the base is 33.3 percent of the difference found in (1) above.

Revenue from this tax will be distributed according to the same schedule as is the 80-percent share of the metalliferous mineral severance tax.

Those extracting nonmetalliferous and energy minerals are subject to two gross proceeds taxes. The first, levied at 1.5 percent of gross proceeds, goes to the State's school fund [42:1361, 1371]. During 1982 and 1983, however, taxpayers are allowed a credit equal to the full cash value of mining property multiplied by:

$$0.75 * \left( \frac{\text{Property taxes current year}}{\text{Full cash value current year}} - \frac{\text{Property taxes 1979}}{\text{Full cash value 1979}} \right)$$

Revenue from the Mining Privilege Tax, levied at 1 percent of gross proceeds, is distributed in the same way as the 80-percent share of the metalliferous mineral severance tax.

The State Department of Revenue has responsibility for taxing all producing and closed mining claims [42:126]. Value of the mine is determined by estimating probable gross revenue and deducting the probable cost of extraction, reduction, and sale of the ore product. The net value is then converted to its present worth. Eight classes of property are established in Arizona for assessment purposes. Mines, smelters, railroads, mills, and timber are all assessed at 52 percent of market value, the highest rate of any class.

Assessment rates are scheduled to decrease to 44 percent of full cash value for 1983-1985, 36 percent for 1986-1988, 28 percent for 1989-1991, and 25 percent for 1992 and beyond. In contrast, all other commercial and industrial property is currently assessed at 25 percent of full value (residential property at 10 percent)[42:136, 227].

**Arkansas**

Arkansas levies a per-unit severance tax on most natural resources removed from the soil or water. Among those taxed are natural gas, coal, barite, bauxite, titanium, manganese, zinc, cinnabar, lead, crushed stone, gypsum, sand, and precious stones [84:2102]. Oil production is taxed by a gross proceeds tax. During fiscal 1981, these taxes provided slightly over $26.7 million, or about 2.2 percent of State tax revenues.

Taxes are levied at a fixed rate per volume for most minerals: $0.15 per short ton of barite, bauxite, titanium, manganese and manganiferous ores, zinc, cinnabar, and lead; $0.02 per short ton of coal, lignite, and iron ore; and $0.15 per short ton of gypsum not used for manufacturing in Arkansas, chemical grade limestone, silica sand, and dimension stone [84:212(a) - (d)]. However, diamonds, other precious stones, native sulfur, salt, and an assortment of less important stones and resources are taxed at 5 percent of the value of the product at time of severance [84:2102(h)].

Natural gas and oil are also subject to tax. Natural gas is taxed at $0.003 per 1,000 cubic feet. Oil from a well producing an average of 10 barrels or more is taxed at 5 percent of market value at the time of production. For wells averaging below 10 barrels, the tax is computed at 4 percent [84:2102(e)]. Three small taxes, totaling $0.02025 per barrel, are also levied on oil production [84:2102(3)].

Severance taxes are in addition to the general property tax. Payment of the tax does not affect the liability of the producers for all State, county, municipal, or special district taxes upon their real and corporeal property. However, no other privilege or excise taxes are to be imposed upon the right to use the natural resource [84:211]. This provision appears not to apply to the Arkansas Oil and Gas Conservation Tax which is limited to 25 mills per barrel of oil or 5 mills per 1,000 cubic feet of natural gas [53:125, 53:106].

Although the State collects all severance taxes, the State Treasurer is required to return a large portion of the funds to local governments. The general revenue fund receives 3 percent; the remaining 97 percent is distributed as follows:

1. All severance taxes, penalties, and costs on timber and timber products go the State forestry fund.
2. Of the severance taxes, penalties, and costs, except those on timber, 75 percent shall be general revenues and shall be allocated to the various State Treasury funds participating in general revenues in the proportions provided by the Revenue Stabilization Law of Arkansas.
3. The county aid fund receives the remaining 25 percent.

The State Treasurer prorates the county aid fund among the counties based on the proportion of the State's severance tax revenues produced by that county. On receipt of these funds, the county treasurer credits 50 percent of the money to the county general school fund and 50 percent to the county highway fund.

## California

California levies a small tax on oil and gas production which in 1980 raised $26 million, about 0.01 percent of total State tax revenue. The tax is levied on the number of barrels of oil and thousands of cubic feet of natural gas extracted at a rate determined annually by the California Department of Conservation [Pub. R. 3404]. The value of minerals in place is subject to local property taxes, however.

## Colorado

Colorado taxes the extraction of metallic minerals, coal, oil and gas, molybdenum, oil shale, carbon dioxide, rock, sand, gravel, limestone, and dolomite. In fiscal 1981, the State received more than $31 million from these taxes, approximately 2 percent of total revenue. Mineral property is also subject to an *ad valorem* property tax.

The tax rate on metallic minerals is 2.25 percent of gross income in excess of $11 million. *Ad valorem* taxes assessed during the taxable year are allowed as a credit against this tax in an amount up to 50 percent of the severance tax levied [39:29.103]. The tax on molybdenum ore is 15 cents per ton.

Oil and natural gas are taxed at a percentage of gross income according to the following schedule:

| *Gross income* | *Tax rate (%)* |
|---|---|
| Under $25,000 | 2 |
| $25,000 to $99,999 | 3 |
| $100,000 to $299,999 | 4 |
| $300,000 and over | 5 |

Gross income is defined as the market value of production at the wellhead or the value of the severer's income as computed for Federal income tax depletion purposes, whichever is higher. Wells producing less than 10 barrels per day are exempt from the tax.

A credit equal to 87.5 percent of all *ad valorem* taxes assessed by State and local governments during the taxable year on the leaseholds, royalties, and royalty interests may be applied against the severance tax. *Ad valorem* taxes, however, do not qualify for inclusion if levied on equipment and facilities used in drilling for crude oil or natural gas or producing, storing, or transporting through a pipeline [39:29.105].

Coal is subject to a severance tax of $0.60 per ton, but no tax is levied on the first 8,000 tons per quarter. In addition, coal produced from underground mines qualifies for a credit of 50 percent of the tax. An additional credit equal to 50 percent of the tax is provided those mining lignite. Beginning January 1978, each three-point change in the producers' price index prepared by the U.S. Department of Labor increases or decreases the tax by 1 percent [39:29.106]. In September 1982, the tax rate was $0.798 per ton.

Gross proceeds from the severance of oil shale are subject to tax at a maximum rate of 4 percent. The tax does not apply until 180 days after the shale facility begins commercial production. The tax rate schedule is:

| *Year* | *Percent* |
|---|---|
| First | 1 |
| Second | 2 |
| Third | 3 |
| Fourth and each succeeding year | 4 |

Production of the first 15,000 tons per day of oil shale, or 10,000 barrels per day of shale oil, is exempt from the tax.

Gross income from severance of carbon dioxide became subject to tax as of January 1, 1983. Rates are the same as those applying to gross income from oil and natural gas [Ch. 158 Laws of 1982].

Fifty percent of revenues from severance taxes on minerals and mineral fuels realized after June 30, 1981, go to a State severance tax trust fund. This perpetual fund is to serve as a replacement for the State's depleted natural resources. Only the income from investment of the trust fund is available to be spent. That income is deposited in the State's general fund.

The other 50 percent of revenues goes to the local government severance tax fund administered by the Department of Local Affairs. Fifteen percent of this fund's receipts are returned to counties and municipalities in proportion to the number of residents of the municipality or unincorporated area of the county employed in mines or retorting facilities. The other 85 percent of the funds are distributed to local governments affected by energy or mineral development. This revenue is to take the place of property tax revenues lost when severance tax payments were allowed as a deduction in determining the value of the mine. These funds may be used for either operating or capital expenditures by the localities.

The State created an energy impact advisory committee to recommend to the Department of Local Affairs actions needed to assist impacted areas, including problems faced by local governments in providing services, the extent of available local government tax resources, and other problems such as housing and environmental deterioration that may result from energy impacts. The executive director of the Department of Local Affairs is the chairman of this committee. Other members include the Commissioner of Education, the Executive Director of the Highway Department, the Executive Director of the Department of Natural Resources, and five residents from energy impact areas, two of whom must reside east of the Continental Divide [39:29.110].

Colorado law allows taxpayers a credit against their severance taxes equal to the amount of approved contributions made to assist in solving the impact problems of local government. Credit is only allowed, however, for contributions made before first severance of the mineral, or before increased production [39:29.107.5].

Approved contributions for such credits include the donation of property or payments to units of local government for use in planning, constructing, or expanding public facilities. Such facilities are limited to county or municipal roads, schools, water facilities, sewage facilities, police and fire protection facilities, and hospitals deemed to be required because of a new mine or by an increase in production from an existing one.

To receive credit, the following requirements must be fulfilled:

1. Each contribution shall be based on an agreement between the taxpayer and a unit of local government specifying the need for contribution and its nature, value, and purpose.
2. Each contribution must be acted on for credit, within 90 days after joint submission by the taxpayer and the impacted local government by the Executive Director of the Department of Local Affairs upon recommendation of the energy impact assistance advisory committee. Failure to act within 90 days shall be deemed as approval.
3. Certification of eligibility for the credit must be transmitted from the Executive Director of the Department of Local Affairs to the Executive Director of the Department of Revenue, the impacted unit of local government, and the taxpayer [39:29.107.5].

In 1981, the Colorado Legislature added an additional credit equal to ¾ of 1 percent of approved contributions for each month which the contribution precedes the month in which the contribution is credited against the taxpayer's severance tax liability. This credit applies only to contributions for which credit has not been used prior to July 1, 1983. The total amount of approved contributions may not exceed 50 percent of the taxpayer's severance tax liability during the first 10 years of severance from a new mine, or 50 percent of the increased liability to be incurred during the first 10 years of an expansion, plus any amounts of credit [39:29.107.5].

All mines are also subject to an *ad valorem* property tax. Each mine owner or operator is required to file with the county assessor a statement showing, among other things, the gross value of the product extracted; costs of extracting, treating, reducing, and transporting the product; gross proceeds of the mine; and net proceeds of the mine. Metallic mines are then assessed at 25 percent of gross proceeds, or at net proceeds, whichever is greater [39:6.106].

For coal and other nonmetallic minerals, producing leasehold reserves are evaluated by capitalizing imputed annual income. The mineral property so valued is then taxed at the rate established by the county.

**Florida**

Florida levies a per-unit severance tax on solid minerals, defined broadly to include clay, gravel, phosphate, rich lime, shells, stone, sand, and rare earths as well as the mineral ores. The State also has a gross production tax on oil and natural gas. In 1980, the State received more than $169 million from these taxes, or about 3.2 percent of its budget.

Oil from wells yielding more than 100 barrels per day is taxed at 8 percent of the gross value of production. Wells producing less than 100 barrels per day and oil produced by tertiary methods are taxed at 5 percent of the gross value. Of the revenue raised from this tax three-eighths goes to the State's general fund, one-eighth to the general fund of the county in which the oil was produced, and one-half to the State Conservation and Recreation Lands Trust Fund [211:02.1].

Natural gas production is taxed at 5 percent of gross value of production. Thirty percent of this revenue goes to the State's general fund, 20 percent to the general fund of the county where it was produced, and 50 percent to the State Conservation and Recreation Lands Trust Fund [211.02.1].

The solid minerals severance tax is levied at a rate of 5 percent of all solid minerals except phosphates and heavy minerals. In 1982, phosphate rock was taxed at $1.84 per ton. Heavy minerals were taxed at $0.92 per ton. The tax on phosphate rock will be adjusted annually to keep pace with the producer price index for phosphates. The heavy metals tax rate will be adjusted by the change in the annual producer price index for titanium dioxide. These taxes are in addition to any property taxes levied on the mineral interests on the property on which the mine site is located [211:325, 211:326].

Fifty percent of the revenue from the tax on solid minerals goes to the State's General Revenue Fund. The rest goes to the Land Reclamation Trust Fund [211:31.3]. Revenues from the phosphate tax are distributed as follows:

1. 50 percent to the Conservation and Recreation Lands Trust Fund.
2. 30 percent to the General Revenue Fund.
3. 10 percent to the Nonmandatory Land Reclamation Trust Fund.
4. 5 percent to the Phosphate Research Trust Fund.
5. 5 percent to counties in proportion to the number of tons of phosphate rock produced within the county. These revenues are to be used only for phosphate-related expenses.

Taxpayers are entitled to a reduction in taxes under this section if they institute a reclamation and restoration program on the mine site. Other alternatives include the reclamation of land other than the mine site, or the transfer of the site to the State for use as State land. In the case of reclaimed land, the taxpayer will receive an amount equal to 100 percent of the costs of reclamation and restoration subject to a maximum limit of the amount of taxes paid by the taxpayer that is deposited in the Land Reclamation Trust Fund. With regard to the transfer of land to the State, a refund equal to 100 percent of the fair market value of the land, up to an amount equal to the taxes paid by the owner deposited in the Land Reclamation Trust Fund, is allowed.

**Idaho**

In 1981, Idaho received more than $2 million, about 0.4 percent of its budget, from mineral taxes. Taxes are levied on oil and gas production and on mining for gold, silver, copper, lead, zinc, coal, phosphate, limestone, and other valuable metals or minerals.

Oil and gas production is taxed at a rate of 2 percent of market value at the site of production [47:331]. An additional tax of 5 mills per barrel of oil or 50,000 cubic feet of gas is also levied [47:330].

All other minerals are taxed at 2 percent of net value, where net value is computed by one of the following methods [47:1201].

1. By deducting from the gross value of the ore all costs of mining and processing such ore using the formula prescribed in section

613 of the Internal Revenue Code and Treasury Regulation 1.613-5 for computation of the net income from mining for depletion purposes, less the deduction of Federal depletion.

2. By deducting the following from the gross value determined by the U.S. Department of the Interior for computation of the value of minerals on public lands for Federal royalty purposes:
   a. All costs of mining the ore to the point at which valued: the costs to include only those directly incurred in and attributable to the mining operation in Idaho.
   b. The applicable portion of the Federal deduction for depletion, allocated on the ratio of gross value of ore used for this computation to the gross value of ore for the Federal depletion computation.

All revenue from this tax is credited to the State's general fund.

**Kentucky**

Severance taxes in Kentucky produced nearly $189 million, about 8.3 percent of State revenues in 1981. Gross production taxes are levied on coal and petroleum production and other resource extraction, although almost all revenues are derived from the coal tax.

The coal severance tax, enacted in 1972, is levied at a rate of 4.5 percent of the gross value of all coal severed or processed during a reporting period [143:020]. The tax is in addition to all other taxes levied by the State or local government. Oil production is also taxed at 4.5 percent of market value when first transported [137:120]. In addition, the 1980 Kentucky Legislature approved a 4.5-percent tax on the value of all other resources severed from the State, including natural gas [143A.020].

Beginning July 1, 1981, 50 percent of the severance tax revenues collected on all minerals but coal, and 50 percent of all severance tax revenues on coal in excess of $177.6 million go to a local government assistance fund. The remainder of the revenues goes to the State's general fund. [42.450].

Revenues in the local government assistance fund are to be distributed to coal-producing and coal-impacted counties. The funds attributable to the coal severance tax are distributed as follows:

1. 60 percent to each county on the basis of the ratio of tax collected on coal severed in each county to statewide severance tax collections.

2. 30 percent to each coal-producing county on the basis of per capita income (inverse order), ton-miles of coal, and population, equally weighted.
3. 10 percent to counties not producing coal but impacted by the transport of coal on the basis of geographic area, ton-miles, and per capita income (inverse order) weighted on a basis of 0.3, 0.4, 0.3, respectively). To qualify for this assistance, a county must have within its boundaries 0.25 percent of the total coal ton-miles within the coal impacted counties [42.470.1].

Fund receipts attributed to the severance taxes on oil and other natural resources are to be distributed among the mineral-producing counties on the basis of the severance tax collections in each county [42.470.2].

Grants from the local government assistance fund are to be spent on priority expenditures. Thirty percent of the fund is to be spent on the coal haul road system. The remaining 70 percent is to be spent on priority items in the following categories: public safety; environmental protection; public transportation; health; recreation; libraries; educational facilities; social services for the poor, aged, and handicapped; financial administration; government management; industrial and economic development; and vocational education.

**Louisiana**

Louisiana taxes the production of oil and natural gas as well as the extraction of several other minerals. In 1981, the State received more than $815 million from these levies, more than 29 percent of the State's tax revenues.

Severance taxes are levied in addition to all other State, parochial, municipal, district, and special district taxes levied on real estate and other corporeal property. However, no further taxes or licenses may be imposed on oil or gas leases or rights, nor can any additional value be added to the assessment of land by reason of the presence of oil or gas on the property. In addition, no parish or other local government can levy a severance tax or license fee [47:643].

The tax is levied at the following rates [47:633].

1. Oil, 12.5 percent of its value at time of severance.
   a. On wells incapable of producing more than 25 barrels per day, and which also produce at least 50 percent saltwater,

6.25 percent.
   b. For wells incapable of producing more than 10 barrels per day, 3⅛ percent.
2. Distillate, condensate, or similar resources, 12.5 percent.
3. Natural gasoline, ethane, or methane, $0.10 per 42-gallon barrel.
4. Butane and propane recovered through processing, $0.05 per 42-gallon barrel.
5. Natural gas, $0.07 per 1,000 cubic feet. If the gas comes from an oil well with pressure of 50 pounds per square inch or less, the rate is $0.03 per 1,000 cubic feet. If the well is judged incapable of producing an average of 250,000 cubic feet of gas per day, the rate is $0.013 per 1,000 cubic feet. The tax is not levied on gas injected into a formation for storage, used for drilling fuel, consumed as fuel in the operation of a gasoline or a recycling plant, or in the production of natural resources in the State. Gas produced from oilfields vented or flared into the air is also not taxed.
6. Sulfur, $1.03 per long ton.
7. Salt, $0.06 per short ton.
8. Coal and ores, $0.10 per short ton.
9. Marble, $0.20 per short ton.
10. Stone, sand, and gravel, $0.03 per short ton.

The revenue collected through the severance tax is distributed as follows:

1. One-third of all severance taxes are credited to the State's general fund.
2. One-third of the severance tax on sulfur and 20 percent of the severance taxes on oil, gas, coal, ores, shells, marble, stone, sand, and gravel is allocated to the parish within which the taxes are collected. These credits are subject to a limit of $100,000 per parish from the sulfur tax and $200,000 per parish from all mineral taxes.

Severance taxes not otherwise allocated are credited to the Severance Tax Fund [47:645].

## Maine

The 1982 Maine Legislature enacted an annual excise tax on all mining companies in the State. This tax is in lieu of all property taxes on the mining property except for real property taxes on the buildings, excluding fixtures, and the land, excluding the value of minerals or mineral rights [2854].

The annual excise tax on each mine site is the greater of the following:

1. The value of facilities and equipment multiplied by 0.005.
2. The mine's gross proceeds multiplied by:
   a. If net proceeds are greater than zero, the greater of 0.009 or [0.045 – Gross Proceeds/(Net Proceeds *100)]
   b. If net proceeds are less than zero, .009 [2856].

In computing a company's tax, gross proceeds and net proceeds are to be computed as if each mine site were a separate taxpayer [2857].

Credits are allowed against the mine excise tax for property taxes paid on land and buildings and for a portion of property taxes paid on the value of mineral lands during the year mining commences. The amount of the credit for taxes paid on the value of mineral land is equal to the number of days between the date mining commences and the next March 31st, divided by 365, multiplied by the property taxes paid during that property tax year [2858.1].

Estimated taxes equal to the lesser of last year's tax liability or 80 percent of the liability for the current year are to be paid on or before the dates Federal corporate estimated income taxes are due [2859.1].

Revenues from the excise tax are to be used to reimburse municipalities for a portion of the revenue lost due to the exemption of mining property, other than land and buildings, from the property tax [2861]. Revenues remaining after municipal reimbursement shall be distributed as follows:

| *Year after mining commences* | *General fund* | *Mining impact assistance fund* | *Mining excise tax trust fund* |
|---|---|---|---|
| | | *Percent* | |
| 1 | 20 | 80 | 0 |
| 2 | 15 | 75 | 10 |
| 3 | 20 | 65 | 15 |
| 4 | 25 | 50 | 25 |
| 5 | 25 | 45 | 30 |
| subsequent | 30 | 10 | 60 |

The mining excise tax trust fund is to be used to purchase and develop land for park and recreational areas, to purchase wildlife or marine habitats and unique natural areas, and to restore the quality of marine waters, lakes, rivers, and streams [455].

The mining impact assistance fund makes grants to municipalities, counties, and the unorganized territory education and services fund for providing new or additional public facilities and services related to mining [2863].

**Michigan**

Michigan levies a production tax on individuals severing oil or gas. This tax produced nearly $83 million in 1981, or slightly more than 1.3 percent of State tax revenues. The tax is levied at 5 percent of gross value of gas severed. Oil is taxed at a rate of 6.6 percent, except for stripper well crude and crude oil from marginal properties which is taxed at 4 percent [205:30]. There is also an additional fee not to exceed 1 percent of gross market value [319:22]. These taxes are in lieu of all other taxes, State or local, on the oil or gas, the property rights attached to them, or the values created and upon all leases or the rights to develop any land for oil or gas [205:303].

Michigan also has a tax on low-grade iron ore production; a similar tax on copper mining was removed in 1960. While plants for the beneficiation or treatment of low-grade iron ore are being constructed, the property is subject to an annual tax equal to the rated annual capacity of the plant in gross tons multiplied by 0.55 percent of the value per gross ton, multiplied by the percent completion of the mining property [211:622]. After production has been established on a commercial basis, the property tax is equal to the average annual production during the preceding 5-year period multiplied by 1.1 percent of the value of the ore [211:623]. If at any time, however, the specific tax as determined in section 623 (above) is less than the tax determined under section 622, the provisions of section 622 become controlling [211:624].

The tax provided in this act is in lieu of *ad valorem* taxes on the low-grade iron ore, the low-grade iron ore mining property, and the lands used in mining, quarrying, transporting, and beneficiating the ore, as well as taxes on mining or producing concentrate from the ore or on iron ore pellets or other concentrated products [211:624].

## Minnesota

Minnesota received nearly $98.9 million from mineral taxes during 1981. This sum amounted to slightly more than 2.9 percent of State tax revenues. The major revenue source is the tax on production of iron ores and low-grade iron ores such as taconite.

An occupation tax of 15 percent of the value of production is levied on production of taconite, semitaconite, and iron sulfides; all other iron ores are taxed at 15.5 percent [298:01]. Gross value of the ore is defined as the Erie pellet or ore price adjusted for iron content [298:03].

To encourage employment and the utilization of lower grade and underground ores, a credit is allowed against the occupation tax if the ore is beneficiated in the State. The credit per ton is equal to 10 percent of labor costs in excess of $0.70 per ton and less than $0.90 per ton, and 15 percent of labor costs in excess of $0.90 per ton. For ore from open pit mines not beneficiated in the State, the credit per ton is 10 percent of labor costs between $0.80 and $1.05 per ton plus 15 percent of labor costs in excess of $1.05 per ton. Both credits apply only to the first 100,000 tons per year. For underground and taconite operations, the credit may not exceed 8.25 percent of the taxable value of the ore; for other operations, the limit is 6.2 percent [298.02].

If allowable costs for mines other than taconite and semitaconite exceed the value of the ore at the surface, a tax credit is allowed. The credit is computed by applying the current tax rates to the excess of such costs over the value, limited to 53.68 percent of the credit for open pit mine and 42.1 percent for underground mines [298:027]. A credit is also allowed for pollution control equipment.

Minnesota also taxes all royalties received for permission to explore, mine, take out, and remove ore. Royalties on taconite, semitaconite, and iron sulfides are taxed at 15 percent; royalties on natural iron ores are taxed at 15.5 percent. The labor credit allowed under the occupation tax is also allowed for the royalty tax [299:01]. Copper-nickel royalties are taxed at 1 percent with an additional tax of 1 percent on gold, silver, or other precious metals [299:013].

In addition to the occupation and royalty taxes, the production of merchantable iron ore concentrates from taconite and iron sulfides is taxed. Minnesota levies a base tax of $1.25 per ton of merchantable iron ore concentrate produced. In 1978 and beyond, this base is multiplied by the ratio of the steel mill products index during the production year divided by that index for 1977. In no event, however, will that tax ever be less than $1.25 per ton. A surtax is levied at 1.6 percent of the total tax above for each 1 percent that the iron content of the concentrate exceeds 62 percent when dried at 212°F [298:24, 298:393]. Also, there is a $0.10 per-ton tax on tailings discharged into water [298:24(2)]. In 1982, the production tax rate was $1.94 per ton plus any applicable surtax.

The production taxes imposed on taconite and iron sulfides are in addition to the occupation tax imposed on the business of mining and producing iron ore, the royalty tax, the taconite railway tax, and an *ad valorem* tax on unmined taconite ore. The production tax is in lieu of all other taxes on taconite or iron sulfides, the lands in which they are contained, their mining, quarrying, and concentration, or upon the machinery, equipment, tools, supplies, and buildings used. In addition, firms receive a credit of up to $0.04 per ton for direct taxes paid for principal and interest on bonds issued by a school district or a city.

Proceeds from the taconite production tax are divided as follows [298:28]:

1. $0.025 per ton to the city or town in which the taconite was mined or beneficiated.
2. $0.125 per ton to the taconite municipal aid account to be distributed to cities on Minnesota's Iron Range.
3. $0.06 per ton to the school district in which the mine is located.
4. $0.23 per ton to Iron Range school districts to be distributed in proportion to the district's permitted levies.
5. $0.155 per ton to the county in which the taconite was mined.
6. $0.004 per ton to the county road and bridge fund in the county where the taconite was mined.
7. $0.24 per ton to the taconite property tax relief account.
8. $0.01 per ton to the State.
9. $0.03 per ton to the Iron Range Resources and Rehabilitation Board.
10. The remaining proceeds are to be divided equally between the taconite area environmental protection and economic development fund and the northeastern Minnesota economic protection fund.

Ten percent of all occupation taxes are distributed to the University of Minnesota, 40 percent to foundation aids, and 50 percent to the State's general fund [298.17].

The mining of semitaconite and agglomerates and the production of ore concentrate are also taxed. Concentrates from agglomerates are taxed at $0.05 per gross ton; concentrates from semitaconite not sintered within the State are taxed at $0.10 per ton. To both of these rates is added a tax of $0.001 per gross ton for each 1 percent that the iron content of the product exceeds 55 percent when dried at 212°F [298:35]. Again, this tax is in addition to the occupation tax. If, however, at least 1,000 tons of concentrate are not produced during the year, the tax may be levied at the local millage rates, provided that the tax will not be greater than that on the assessed value assigned to semitaconite in 1958 or an amount sufficient to raise $1 per acre.

Proceeds of the semitaconite tax are returned to the various taxing districts where the semitaconite was mined according to the following formula [298:39]: 22 percent to the city or town, 50 percent to the school district, 22 percent to the county, and 6 percent to the State.

Other low-grade iron ores which must be separated from other detrimental compounds and elements before processing are taxed at the same rate as semitaconite [298:428].

The combined occupation, royalty, and excise taxes imposed on taconite cannot be increased to exceed the greater of (1) the amount which would be payable if such taxes were computed under 1963 law or (2) the amount which would be payable if the person or corporation were taxed with respect to the income, franchise, and excise tax laws generally applicable [298:40, art. XXII Minn. Const.].

Minnesota also levies occupation and production taxes on copper-nickel mining. The occupation tax, levied at 1 percent of value, is based on the value of ore produced less costs of labor and supplies, costs of overburden removal or tunnel construction, and royalties. The value of the ore is also net of the tax on ore transported to a concentrating mill [298:61]. A credit is allowed against the tax for intrastate processing and for research experimentation and exploration [298:54,55].

Copper-nickel production is also subject to a production tax of $0.025 per ton [298:61]. The base tax increases by 10 percent for each 0.1 percent that the average copper-nickel content per each gross ton of ore exceeds 1 percent. The proceeds from the copper-nickel occupation and production taxes are distributed in the same way as the taconite taxes.

A county option severance tax on gravel pits, at up to $0.10 per cubic yard, also exists [298:75].

### Mississippi

Mississippi received nearly $85.7 million in oil and gas production taxes in 1981. These taxes accounted for more than 6.1 percent of State tax revenue.

The severance tax on oil is levied at $0.06 per barrel or 6 percent of value, whichever is greater [27:25.503]. Natural gas is taxed at 6 percent of value or 3 mills per 1,000 cubic feet, whichever is greater [27:25.703].

Proceeds from the severance tax on oil are distributed as follows:

1. On the first $600,000, 90 percent to the State and 10 percent to the county.
2. On the next $600,000, 66⅔ percent to the State and 33⅓ percent to the county.
3. Above $1.2 million, 95 percent to the State and 5 percent to the county.

If oil-producing properties exist within the corporate limits of a municipality, the municipality shares the funds returned to the county in the proportion in which severance tax proceeds from properties located within the municipality bear to the total tax proceeds of the county. In no event, however, shall the amount allocated to municipalities exceed one-third of the tax produced in the municipality. The balance of the funds returned to the county is to be divided among the various funds and districts at the discretion of the board of supervisors.

The tax levied on gas production is distributed slightly differently. Two-thirds of the revenue goes to the State's general fund and one-third to the county [27:25.705]. Again, if gas-producing property lies within the territorial limits of any municipality, the municipality receives a pro rata share (not to exceed one-third of the tax) based on the proportion of the tax collected in the county that is derived from property located in the municipality.

All gas produced in the State and all gas-producing properties are exempt from *ad valorem* taxes levied by the State or any taxing district in the State [27:25.721]. This exemption does not apply to personal property used to drill for or gather gas, nor does it apply to the surface rights of land. However, no additional assessment may be added to the surface value of the lands by reason of the presence of gas.

The State also levies a charge of 10 mills per barrel of crude oil and up to 1 mill per 1,000 cubic feet of gas produced to pay expenses incurred in the administration and enforcement of the oil and gas conservation laws [53:1.73].

The State also levies a license fee on all individuals mining clays, lignite, or other earth products. The tax is $75 if output is more than 1,000 tons per year; $25 if output is less.

There is also a salt severance tax at 3 percent of the value of production [27:25.305].

**Missouri**

The 1982 Missouri Legislature enacted a limited per-unit tax on surface coal mining. Revenues from this tax go to the Coal Mine Land Reclamation Fund and are to be used to complete reclamation of any surface coal mine after proceeds from any applicable performance bond have been exhausted. Each permittee is assessed $0.30 per ton for the first 50,000 tons sold in each calendar year and $0.20 per ton for the next 50,000 tons sold. No further assessments are due thereafter in that calendar year [444:965.1].

Whenever the total balance in the fund exceeds $3 million as of the close of the State's fiscal year, no assessments are required except from new permittees [444:965.1]. Whenever an expenditure is made from the fund for reclamation activities, a surcharge of 25 percent is levied in addition to the regular assessment. This surcharge remains in effect until the reclamation expenses have been recovered or until the fund reaches $3 million, whichever comes first [444:965.3].

**Montana**

Montana levies gross proceeds taxes on the production of most minerals. Coal, metals, oil and gas, micaceous minerals, cement, and gypsum are subject to individual taxes and there is a general tax on the gross product of any type of mining. In addition, since these taxes are not in lieu of the *ad valorem* taxes, all mines are subject to local property taxes. In 1981, Montana received about $92 million or about 19.6 percent of State tax revenues from special mineral taxes.

Minerals are also taxed through a series of selective license taxes levied on the privilege of mining. These tax rates differ, allowing the State to take account of differences in production costs for different types of minerals.

The license fee for mining metals, precious or semiprecious stones, or gems is based on the gross value of the products. The annual fee is $1 plus the gross production levy. Rates for the gross production levy are: first $100,000, 0.15 percent; above $100,000 not exceeding $250,000, 0.575 percent; above $250,000 not exceeding $400,000, 0.86 percent; above $400,000 not exceeding $500,000, 1.15 percent; above $500,000, 1.438 percent [15:37.103].

The State license tax on micaceous minerals such as vermiculite, perlite, kerlite, and masonite is $0.05 per ton. A tax of $0.22 per ton is levied on each ton of cement produced, used, or imported for use in the production of cement, gypsum, gypsum plaster, stucco, wallboard, land plaster, or other products. Gypsum produced, manufactured, or used is taxed at $0.05 per ton [15:37.201, 15:59.201, 15:59.102].

Every person producing or extracting oil or natural gas in Montana must also pay a tax on the total gross value of all merchantable or marketable natural gas produced. Natural gas is taxed at a rate of 2.65 percent of total gross value—where total gross value is defined as the average value at the mouth of the well during the month the gas is produced, less any amount used in production operations. There is, however, no severance tax for 3 years on gas wells that are greater than 5,000 feet deep and drilled between 1976 and 1983. To qualify for this exemption, the gas must be sold to consumers, either the majority of whom or at least 10,000 of whom are Montana residents [Ch. 265, Laws 1981].

All oil produced is taxed at 5 percent of total gross value until March 31, 1983, and at 6 percent thereafter [Ch. 536, Laws 1981].

The amount by which the oil production tax from any county exceeds the total amount collected from within that county during the previous fiscal year, by reason of increased production and not because of increase in or elimination of Federal price ceilings on oil and gas, is allocated to the general fund of the county for distribution [15:36.112(2)(a)].

A privilege and license (formerly conservation) tax on oil and gas is levied at rates set by the State Oil and Gas Commission. The maximum rate is 0.2 percent of market value [82:11.131-135].

The Montana coal severance tax is designed to take account of differences in the heating value of coals and differences in the cost of mining. The rates are:

| *Btu's/lb* | *Surface mine* | *Underground mine* |
|---|---|---|
| 7,000 or less | $0.12/ton or 20% of value | $0.05/ton or 3% of value |
| 7,000 to 8,000 | $0.22/ton or 30% of value | $0.08/ton or 4% of value |
| 8,000 to 9,000 | $0.34/ton or 30% of value | $0.10/ton or 4% of value |
| more than 9,000 | $0.40/ton or 30% of value | $0.12/ton or 4% of value |

The Montana coal severance tax is levied on the contract sales price of the coal—the f.o.b. mine price less any taxes levied on a per ton basis—not on the full value of the coal [15:35.103].

Revenue from the coal license tax is allocated as follows:

1. The State Coal Trust fund receives 50 percent of all revenues.
2. The Alternative Energy Research and Development Account receives 2.25 percent of collections.
3. The Local Impact and Education Trust receives 18.75 percent of total collections [28.125].
4. The State School Equalization Fund receives 5 percent of all collections.
5. The County Land Planning Account receives 0.5 percent of collections.
6. The Renewable Resource Development Account receives 1.25 percent of collections until July 1, 1983. After that time, it receives 0.625 percent.
7. Parks acquisition, operation, and management receive 2.5 percent of collections.
8. The State Library Commission receives 0.5 percent of collections.
9. Conservation districts receive 0.25 percent of collections.
10. After July 1, 1983, the Water Development Account receives 0.625 percent of collections.
11. All other revenues are deposited to the State general fund.

The same act established a Coal Board to make grants to local governments affected by coal development. The board has seven members, all appointed by the Governor. Two are required to have expertise in school matters and two others must reside in coal impact areas.

The general mineral mining tax is levied on all individuals or firms mining, extracting, or producing a mineral from the surface or subsurface of the State.

This tax is levied at a rate of $25 plus 0.5 percent of the gross value of the production in excess of $5,000. The revenue from this tax goes to a special State fund [15:38.104, 15:38.106(2)]. When the fund reaches $10 million, interest may be used to rectify environmental damage caused by coal mining. When the fund reaches $100 million, revenue from the tax as well as the interest generated can be used.

Taxes imposed on mineral production in Montana are in addition to the *ad valorem* taxes due. Montana has a classified property tax system in which all property is put in one of 11 classes. For class 1 property, which includes annual net proceeds of all mines except coal and metal mines, and the right of entry upon mining land, the taxable percentage is 100 percent of market value. Gross proceeds from strip mines are taxed on 45 percent of full value; proceeds from underground mines are taxed at 33.3 percent. The metal mines are taxed on 3 percent of net proceeds [15:6.131 to 15.6.141].

The 1981 legislature enacted a measure requiring any person intending to construct a large-scale mineral development to prepay three times the estimated property tax due the year the facility is completed. This prepayment is then allowed as a credit against future tax liabilities [15:16.201, HB718, Laws 1981].

**Nebraska**

Nebraska levies a gross proceeds tax on oil and gas production at a rate of 3 percent of the value of resources at the time of severance. Oil from wells producing 10 barrels per day or less is taxed at 2 percent [57:703, L.B. 257, 1981]. Oil and gas is also subject to a conservation tax at a rate set by the State Oil and Gas Commission, but not to exceed 4 mills per dollar on the value of the oil and gas at the well [57:919].

In 1981, these taxes produced approximately $4.2 million or about 0.5 percent of the State's revenue.

Revenue from the oil and gas severance tax goes to the Severance Tax Fund [57.705]. The portion of the Severance Tax Fund received from school lands goes to the Permanent School Fund. Of the balance, $500,000 annually is to be allocated to the Nebraska Energy Research Fund and the remainder to the School Weatherization Fund. After July 1, 1983, that portion of the severance tax fund revenues coming from other than school lands is to be credited to the School Foundation and Equalization Fund [57:705].

## New Mexico

New Mexico's mineral tax system is extensive and complicated. All minerals extracted are subject to severance and resource excise taxes whose rates depend on the mineral produced. Coal and natural gas are subject to a per-unit tax. All other minerals are taxed through a gross production tax. In 1981, the State received more than $322.5 million in severance taxes, about 27 percent of total State tax revenue.

For minerals other than potash, molybdenum, uranium, coal, oil, and gas, the tax is based on the sales value of the severed product at the first marketable point without deductions. For minerals with a posted or field price at the point of production, however, gross value is its posted field or market price, less the expenses of hoisting, crushing, and loading necessary to place the severed product in a marketable form in a marketable place. These deductions are limited to an amount less than 50 percent of the gross sales price. For products that must be beneficiated, the gross value is the sales value after deducting freight charges from the point of severance to the point of first sale and the cost of beneficiation.

The gross value of potash and molybdenum is determined slightly differently. For potash, the gross value is 33⅓ percent of the proceeds realized from the sale of muriate of potash and sulfate of potash magnesia and 33⅓ percent of the value of those products consumed in the production of other potash products, less 50 percent of the reported value as a deduction for the expense of loading, crushing, processing, and beneficiating. For molybdenum, the gross value is the value of the molybdenum contained in concentrates shipped from a mine site, less 50 percent of that value as a deduction for the expenses of hoisting, loading, crushing, and beneficiating [7:26.4].

Severance tax rates on minerals are as follows:

| *Class* | *Mineral* | *Tax rate (%)* |
|---|---|---|
| A | Potash | 2.5 |
| B | Copper | .5 |
| C | Timber | .125 |
| D | Pumice, gypsum, sand, gravel, clay, fluorspar, and other nonmetallic minerals | .125 |
| E | Gold, silver, manganese, lead, zinc, thorium, molybdenum, rare earth, and other metals | .125 |

The severance tax on coal is levied on a per-ton basis. Severance of steam coal is taxed at $0.57 per ton ($0.55 per ton for underground mines). The coal severance tax is increased each year by a surtax computed by multiplying the dollar amount of the severance tax in 1976 by the percentage increase in the consumer price index from calendar 1976 to the calendar year just prior to the year in which the surtax rates are computed [7:26.9]. In July 1982, the surtax was $0.34 per ton ($0.328 underground). Uranium production ($U_3O_8$) is taxed according to the following schedule:

*Taxable value of $U_3O_8$*

| *Over* | *But less than* | *Tax per pound* |
|---|---|---|
| 0 | $ 5.00 | 2% |
| $ 5.00 | $ 7.50 | $0.10 + 4% of excess over $5.00 |
| $ 7.50 | $10.00 | $0.20 + 6% of excess over $7.50 |
| $10.00 | $15.00 | $0.35 + 7% of excess over $10.00 |
| $15.00 | $20.00 | $0.70 + 8% of excess over $15.00 |
| $20.00 | $25.00 | $1.10 + 9% of excess over $20.00 |
| $25.00 | $30.00 | $1.55 + 10% of excess over $25.00 |
| $30.00 | $40.00 | $2.05 + 11% of excess over $30.00 |
| $40.00 | | $3.15 + 12.5% of excess over $40.00 |

If, however, the taxpayer registers with the Department of Revenue an arm's length contract entered into prior to January 1, 1977, which does not allow the taxpayer to obtain reimbursement for all of the additional taxes imposed by this section, the severance tax on the material covered by that contract is 1.25 percent of the sales price of each pound of $U_3O_8$ contained in and recovered from the uranium ore [7:26.7].

Until June 30, 1984, the taxable value for severed and saved uranium-bearing material is 60 percent of the sales price per pound of the $U_3O_8$ contained in the uranium ore. After June 30, 1984, the taxable value will be the full sales price [Ch. 169, Laws of1981].

There are also credits against the severance tax for those mining uranium on or before January 1, 1980. In fiscal 1983, the credit is equal to 50 percent of the tax on the first 50,000 pounds [7:26.71].

A resource excise tax is also levied on the severing of hard minerals. This tax is really three mutually exclusive taxes: a resources tax, a processors tax, and a service tax. For all resources except timber, molybdenum, and potash, the resources tax and the processors tax is 0.75 percent. For potash, the resources tax is 0.5 percent and the processors tax is 0.125

percent. For timber, the resources tax is 0.75 percent and the processors tax is 0.375 percent. For molybdenum, both the resources and the processors tax are 0.125 percent [7:25.4, 7:25.5]. In the case of both timber and potash, the tax is designed to encourage in-state processing of the resource. A service tax is levied against natural resources severed or processed and owned by another individual which are not otherwise taxable. It is imposed at the same rate as the resources tax [7:25.6].

Unlike many States, the mineral taxes in New Mexico are not in lieu of other State and local taxes. Any individual who sells nonrenewable natural resources other than for subsequent sale in the ordinary course of business or for use as an ingredient or component of a manufactured product is subject to the gross receipts and compensatory tax [7:9.1-9].

Mineral property is also not exempt from the *ad valorem* tax in New Mexico. Mineral properties, other than those producing potash or uranium, are classified as class 1 nonproducing mineral property if they are held under private ownership and known to contain commercially workable minerals, but are not presently being mined. Class 1 producing mineral property is property meeting the requirements for class 1 nonproducing mineral property, except that it is being mined. Class 2 mineral property is defined as minerals taken from property where the United States holds the mineral rights.

Class 1 productive mineral property is valued at 300 percent of the annual net production value of the property [7:36.23]. The surface value for agricultural or other purposes also is included when the surface interest is held by the same owners as the mineral rights.

Class 1 nonproductive mineral property is valued for *ad valorem* tax purposes by applying a per-acre value determined by the Department of Revenue to the surface areas of the property. This per-acre value is to be based on the bonus bids accepted by the Commissioner of Public Lands for the latest period in which bids were accepted for the sale of mineral leases.

Class 2 mineral property is valued at an amount equal to 300 percent of the annual net production [7:36.23].

Oil and gas production in New Mexico is subject to several taxes. The State imposes an oil and gas severance tax [7:29.4], an oil and gas equipment tax [7:34.4], an oil and gas consumption tax [7:30.4], an oil and gas privilege tax [7:31.4], a gas processors tax [7:33.4], and an oil and gas *ad valorem* tax [7:32.4]. The conservation tax, privilege tax, and the *ad valorem* tax also apply to carbon dioxide.

The oil and gas severance tax was modified in 1980. Oil, liquid hydrocarbons, and carbon dioxide are taxed at a rate of 3.75 percent of the product's value less any royalties paid to the United States, New Mexico, any Indian tribe or pueblo, or any Indian who is a ward of the United States, and less the expense of trucking any product from the production unit to the first place of market [7:29.4].

For natural gas, the rate is $0.087 per 1,000 cubic feet [7:29.4]. There is also a surtax on natural gas equal to the percentage rise in the consumer price index since 1976 times the fixed rate of $0.087 [7:26.9]. In July 1982, the surtax was $0.052 per 1,000 cubic feet of gas.

Taxpayers liable for the payment of additional taxes imposed by the surtax are entitled to a credit against that tax if they entered into a contract prior to January 1, 1977, for the sale of oil or gas which does not allow the taxpayer to obtain reimbursement for any additional taxes levied, or if a Federal regulation prevents reimbursement. The credit is equal to the amount of increased taxes for which the producer is not reimbursed. A similar credit is available to producers of metallurgical coal on which severance taxes have increased if the contract was entered before June 1, 1979 [7:26.61].

Since 1980, oil and gas production has been subject to a second severance tax at a rate of 2.55 percent of the value of production, less royalties to the United States, New Mexico, or Indian tribes; the expense of trucking the product to market; and the value of any products of a person taxed under the occupational gross income tax [7:31.2, 4, 5].

Oil, gas, liquid hydrocarbons, geothermal energy, coal, and uranium are also subject to a conservation tax [7:30.4]. This tax is levied at 0.19 percent of taxable value. Taxable value for all items except coal and uranium is defined as the value at the point of first sale less transportation expenses, and royalties due the United States, the State, and any Indian tribe. For coal, taxable value is the value under the resources excise tax less royalties to any Indian tribe. For uranium, taxable value is 25 percent of the value under the resources excise tax less any royalties to Indian tribes [7:30.4].

Gas processors are also subject to tax at a rate of 0.45 percent of the value of the products less the value of those products used for plant fuel by the processor, returned to the lease, or sold to the United States, New Mexico, local government, nonprofit hospitals, or religious and charitable organizations.

Finally, the State applies an oil and gas production tax in place of an *ad valorem* property tax. The tax is imposed on the assessed value of production, which is an amount equal to 150 percent of the value of the products after deducting royalties paid to the United States, the State, or any Indian tribe, and a reasonable expense for trucking to the place of first marketing. Taxable value is determined by applying the uniform tax ratio to the assessed value of the product [7:32.4].

**North Dakota**

North Dakota has a gross production tax on oil and natural gas and a per-unit severance tax on coal. In 1980, these taxes produced more than $103 million, almost 23 percent of total tax revenues.

The gross production tax on oil and gas is levied at 5 percent of the gross value of production at the well [57:51.02]. This tax is in lieu of all *ad valorem* taxes imposed by the State, counties, cities, townships, school districts, and other taxing jurisdictions on the property rights attached to producing oil or gas, upon machinery or equipment used in the production of gas or oil, or on the gas or oil produced [57:51.03].

Twenty percent of the revenue collected is credited to the State's general fund. The remaining 80 percent of the production tax revenue is divided as follows:

1. The first $200,000 of revenue from each county is divided with 75 percent going to the county and 25 percent to the State's general fund.
2. The second $200,000 of revenue from each county is divided with 50 percent going to the county and 50 percent to the State.
3. All annual revenue above $400,000 produced in any county is allocated 25 percent to the county and 75 percent to the State's general fund.

Forty percent of all revenue allocated to each county is to be credited to the county road and bridge funds. However, the county commissioners may use this money for projects dealing with the control and utilization of water resources. Forty-five percent of all revenues allocated to any county shall be apportioned to the school districts on the basis of average daily attendance. Fifteen percent of all revenues allocated to the counties shall be paid to the incorporated cities of the county based on the population of the cities [57:51.15].

In 1980, an initiative was approved which levied an oil extraction tax of 6.5 percent of gross value. Oil from stripper wells and the first 100 barrels per day of royalty interests in the production from each well are exempt from this tax.

Revenues collected under the oil extraction tax are to be credited to the oil extraction tax development fund and apportioned quarterly as follows:

1. 45 percent to the State school aid program.
2. 10 percent to a special trust fund to be established in the State treasury. The first $15 million is to be appropriated for the remodeling and reconstruction of the Grafton State School. After that, the principal of this trust fund shall not be used for any purpose. The income, however, shall go for programs of energy conservation and energy development from renewable resources.
3. 45 percent to the State general fund.

In 1975, the legislature placed a severance tax on coal and provided that a portion of the funds collected be available to assist local governments feeling the impacts of development. This tax, which was to have a life of only 2 years, was reenacted in 1977 and again in 1979. Coal mining is now taxed at a rate of $0.85 per ton, plus an additional $0.01 per ton for each 4 points the wholesale price index increases. For 1982, the actual rate was $1.00 per ton. This tax is in lieu of any sales or use taxes collected on the sale of coal. It is not in lieu of *ad valorem* taxes on the mine site, however [57:61.01].

All money collected from the severance tax on coal goes to a specially created Coal Development Fund. Deposits in the fund are to be apportioned according to the following formula [57:62.02]:

1. 35 percent of the funds are credited to a special fund for distribution through grants by the Coal Development Impact Office to affected cities, counties, school districts, and other taxing districts. Funds available are limited to the amount appropriated biennially by the legislature.
2. 15 percent of the revenue is credited to a special fund to be held in trust by the State Treasury and administered by the Board of

University and School Lands. This fund is available for loans to affected units of local government. Before making a loan, however, the Board of University and School Lands must receive the recommendation of the Coal Development Impact Office. The board has the power to prescribe the terms and conditions of these loans, and it is to require a warrant from the unit of local government as evidence of the loan. The warrants are to bear interest at a rate not exceeding 6 percent, and are to be payable only from money allocated from the Coal Development Fund to the borrower. The warrants are not to be considered a general obligation of the local government nor as indebtedness of the unit of government. If the future allocation of money to the borrowing unit of government ceases, the loan shall be canceled. Funds not loaned may be invested by the Board of University and School Lands as provided by law. The income, including interest payments on loans, is to be deposited in the State's general fund. Loan principal payments are to be redeposited in the trust fund.

3. 20 percent of the revenue is to be allocated to the coal-producing counties in proportion to the number of tons of coal produced in each county. Within the county, the allocation is to be distributed as follows:
   a. 30 percent to incorporated cities of the county based upon the population of each city.
   b. 40 percent to the county government.
   c. 30 percent to school districts in the county apportioned on an average daily membership basis.
   d. If the coal tipple is within 15 miles of a county where no coal is mined, that county shares the revenue [57:62.02].
4. 30 percent of the revenue is deposited in the State's general fund.

The same act created the Coal Development Impact Office, the director of which is appointed by the Governor. The office is empowered to develop a plan to provide financial assistance to local governments in coal development impact areas, to study and report to the Governor and the legislature on the impact of coal development on local government, to establish procedures and provide proper forms for use in making application for funds for impact assistance, and to make grants to counties, cities, school districts, and other taxing districts. In determining the size of the grant for which a political subdivision is eligible, that revenue is considered which the local government will receive from taxes on the real property of coal development plants and from other tax or fund distribution [Ch. 563, Laws 1975, Sec. 14.4].

North Dakota also taxes coal conversion facilities, in lieu of an *ad valorem* tax on any of the property except the land on which the facility is located. This tax is designed to provide additional revenue for communities where electric generating plants or plants that convert coal from its natural form into a substantially different form will be located.

The tax is levied at a rate of 2.5 percent of gross receipts for facilities other than gasification plants or electric generating plants. Gasification plants are taxed at $0.10 per 1,000 cubic feet of gas produced or 2.5 percent of gross receipts, whichever is greater. For electric generating plants, the tax is 0.25 mill per kilowatthour produced.

Proceeds from the coal conversion tax on each facility are apportioned 65 percent to the State's general fund and 35 percent to the county in which the plant is located. The amount received by each county is apportioned as follows:

1. 30 percent is divided among all incorporated cities in the county according to the population of each as shown by the last regular or special census.
2. 40 percent is deposited in the county's general fund.
3. 30 percent is divided among all school districts in the county on the basis of average daily membership.

**Ohio**

Ohio levies a per-unit severance tax on certain natural resources to provide revenue necessary to meet the environmental management needs of the State and the reclamation of land affected by strip mining [5749:02]. In 1981, the State received about $4.1 million from this tax.

The tax is levied at a fixed rate per ton according to the following schedule: $0.04 for coal; $0.04 for salt; $0.01 for limestone and dolomite; and $0.01 for sand and gravel. Oil is taxed at $0.03 per barrel and natural gas at $0.01 per 1,000 cubic feet. The money collected through these taxes is for strip mine reclamation and oil and gas well plugging.

In 1975, as part of the legislation establishing a State energy office, coal conversion facilities were exempted from corporate taxes and personal property taxes for up to 30 years [5709:35]. Under the provisions of this section, a coal conversion facility was defined to be a gasification plant built under the auspices of the Federal Government, pursuant to a contract with the

Energy Research and Development Agency, now part of the Department of Energy [5709:30].

**Oklahoma**

Oklahoma levies gross production taxes on oil, natural gas, and several other minerals. The tax yielded more than $601 million or about 27 percent of total State tax revenues in 1981.

Every person engaged in the production or mining of asphalt, petroleum, natural gas, or ores bearing lead, zinc, jack, gold, silver, or copper is liable for the severance tax. The tax is levied at a rate of 0.75 percent on the gross value of asphalt and ores bearing the above minerals and 7 percent on the gross value of petroleum and natural gas [68:1001]. Uranium-bearing ore is taxed at 5 percent of gross value [68:1020]. These taxes are in lieu of all taxes by the State, counties, cities, towns, school districts, and other taxing districts on any property rights to any of the above minerals [68:1001(f), (g)]. The State also levies an oil excise tax of 0.085 percent of the value of oil and gas produced.

The gross production tax is apportioned as follows [68:1101, 1102]:

1. 78 percent of the severance taxes collected on oil, asphalt, or ores bearing uranium, lead, zinc, jack, gold, silver, or copper and 2/7 of the oil and gas excise tax goes to the State's general fund.
2. 78 percent of 5/7 of the excise taxes collected on oil and natural gas is distributed among funds as directed by the Oklahoma State Teachers Retirement System.
3. 10 percent of the severance taxes collected from each county is returned to the county treasury to be credited to the County Highway Fund.
4. 10 percent of 5/7 of the excise taxes collected from each county is paid to the county treasurer of the county and credited on the basis of average daily attendance to the school districts of the county, provided that the district makes an *ad valorem* levy of at least 15 mills per year and maintains 12 years of instruction.
5. 2 percent of the severance tax and 2 percent of 5/7 of the excise tax is placed to the credit of the Oklahoma Tax Commission Fund.

Oklahoma also levies a conservation tax on natural gas and casinghead gas. The tax is levied at $0.07 per 1,000 cubic feet, less 7 percent of the gross value of each 1,000 cubic feet of gas provided that this tax shall not exceed one-third the gross value of the natural gas nor be less than zero [68:1108]. The receipts from this tax go to a Special Conservation Fund to be spent pursuant to legislative appropriation.

**Oregon**

In 1981, Oregon enacted a gross production tax on oil and natural gas. The tax is levied at a rate of 6 percent of the gross value at the well of all oil and gas produced, less the value of any portion of which the ownership is exempt from taxation [324:070]. The first $3,000 in gross sales from each well during each calendar quarter is exempt from this tax as are any royalty or other interests in the oil or gas owned by the State, counties, cities, towns, school districts, or other municipal corporations or political subdivisions [324:080,090].

All *ad valorem* taxes imposed by the State, counties, cities, towns, school districts, and other municipal corporations and subdivisions on any property rights attached to the right to produce oil or gas shall be allowed as a credit against the severance tax due. *Ad valorem* taxes on producing gas leases; on machinery, appliances, and equipment used in and around any well producing oil or gas and actually used in the operation of the well; and on oil or gas produced in the State or upon any investment in such property are also allowed as a credit against the tax [324:090(2)].

The revenues from this tax, after the payment of refunds and expenses of the Department of Revenue in administering this tax, are paid into the Common School Fund and are continuously appropriated to the Division of State Lands for the purposes for which other monies in the Common School Fund may be used [324:340].

**South Dakota**

In 1981, the South Dakota Legislature repealed the State's existing mineral extraction tax, which was based on the net income of the mining firm, and replaced it with a 6-percent gross production tax on the gross yield from the sale of gold and silver mined in South Dakota. The 4.5 percent gross production tax on energy minerals was retained. In 1980, the former tax and the energy minerals severance tax raised about $6 million for the State, 2 percent of tax revenues.

The precious metals severance tax applies to all persons severing gold and silver in the State. If the processes of refining, finishing, or smelting are carried on by someone other than the one who mined the ore, the tax will be allocated among the parties involved on the basis of the value of the product at each stage of production, as determined by the Secretary of Revenue. The tax is levied at a rate of 6 percent of the value of the finished product. The tax does not apply to anyone severing less than 1,000 ounces of precious metal in any calendar year [HB 1311, 1981].

South Dakota imposes an energy minerals tax on all producers of coal, lignite, petroleum, oil, natural gas, uranium, thorium, and any other mineral fuel used in the production of energy. This tax is levied at a rate of 4.5 percent of taxable value of the product, where taxable value is defined as the sale price less any rental or royalty due the United States, South Dakota, or any local government [10:39A.2].

Proceeds from the energy minerals tax are distributed as follows:

1. One-half of the proceeds are returned to the county in which the tax was collected.
2 One-sixth of proceeds go to the State Energy Development Impact Fund.
3. One-third of proceeds go to the State general fund [10:39A.8].

**Tennessee**

Tennessee levies gross production taxes on oil and natural gas and a per-unit tax on coal. Oil and gas are taxed at 1.5 percent of the sales price [60:1.301]. Proceeds from these taxes go to the State's general fund. Counties and other local governments are prohibited from levying a similar tax.

Coal mining is presently taxed at $0.29 per ton. The rate is scheduled to increase to $0.32 per ton on July 1, 1983, and to $0.35 per ton on July 1, 1984 [67:5902]. All revenue collected under this tax, less 3 percent to cover administrative and collection expenses, is returned to the counties in which the collection is made. Half the revenue returned goes to the educational system of the county. The other half goes for highway maintenance and water pollution control.

**Texas**

The gross value of minerals extracted in Texas is larger than that of any other State. The revenues from gross production taxes on oil and natural gas, and a per-unit severance tax on sulfur are also much larger than those of any other State. In 1981, the State received nearly $2.2 billion from this source, approximately 27 percent of the State's tax revenue.

An occupation tax on the business of producing natural gas has been in effect since 1931. The tax is 7.5 percent of the market value of the gas produced [3:01(1) Gen. Tax]. Revenue from this tax is distributed as follows: 0.5 percent for administration and enforcement, 25 percent of net revenues to the available school fund, and 75 percent of net revenue to the Omnibus Tax Clearance Fund, no portion of which can be allocated to any other fund until the needs of the Medical Fund have been fully met [3:02].

Since 1933, Texas has also levied an occupation tax on the business of producing oil in the State. The tax rate is 4.6 percent of gross value [202.052]. There is also an additional tax of three-sixteenths of $0.01 on each 42-gallon barrel [Sec 81.11, Nat. Res. Code].

The State has also levied a tax on sulfur producers since 1930. This tax is levied at $1.03 per long ton of sulfur [5:01].

## Utah

Utah collects a gross production tax on metals, oil, and natural gas. In 1981, the State received more than $16 million from this revenue source, about 1.9 percent of the State's tax revenue.

The most important source of revenue is the State's mining occupation tax. Every person engaged in mining or extracting ore or metal containing gold, silver, copper, lead, iron, zinc, tungsten, uranium, or other valuable metal in the State must pay an occupation tax equal to 1 percent of the gross amount received for the product. For oil, gas, or other hydrocarbons, the occupation tax is 2 percent of value. The law provides for an annual exemption from payment of the occupation tax for the first $50,000 in gross value from each mine or well [59:5.67]. The taxes collected under this provision go to the general fund [59:5.84]. There is also an oil and gas conservation tax levied at a maximum rate of 2 mills on market value [40:6.14].

In 1975, the legislature took steps to minimize the impact of future resource development on local communities. The legislature recognized that:

1. The development and utilization of natural resources in the State, particularly in rural areas, may have a significant financial impact on State agencies, local communities, and government unless financing is available so that necessary public works and improvements can be provided.
2. That it may be necessary and in the public interest of the State to provide through utilization of prepaid sales or use taxes funds for these necessary public works and improvements.
3. These necessary public works and improvements may in part be of benefit primarily to the person developing or utilizing the natural resource in this State [63:51.2].

As a result, the legislature provided that any person engaged in the development of a resource facility may prepay all or a portion of the sales taxes anticipated with the construction of the facility, including sales or use taxes anticipated to be imposed upon contractors, agents, and subcontractors [63:51.3]. All revenues collected under this provision go to a prepaid sales and use tax construction account. This account is to be used to finance State-related public improvements including but not limited to highways and related facilities and schools and related facilities [63:51.5].

Funds for construction of the facilities needed as a result of the development of natural resources shall be appropriated by the legislature to the State Board of Education and the State Road Commission [63:51.6]. Appropriations to the school fund shall be returned to the State's general fund by the school district in which the new facility is located within 6 years after the facility is completed.

**Virginia**

The 1982 Virginia Legislature enacted a limited per-unit severance tax on coal mining to support its coal surface mining reclamation fund. Operators participating in the fund are subject to a reclamation tax in any quarter during which the balance in the fund is less than $500,000.

The tax rates are as follows:
1. $0.02 per clean ton of coal produced by surface mining.
2. $0.01 per clean ton of coal produced by a deep mining operation.
3. $.005 per clean ton of coal processed or loaded by preparation or loading facilities permitted [45:1-270.4].

Any operator not having 5 years satisfactory operation in the Commonwealth prior to application for permit shall pay taxes at twice the rates above for a period of 1 year after permit.

At the end of any calendar quarter in which the total balance in the fund exceeds $1 million, payments shall cease until the balance is less than $500,000. No operator is to pay tax on production in excess of 5 million tons per year. Any operator holding a permit upon which coal is mined and processed or loaded shall only pay the tax applicable to mining.

Counties and municipalities are authorized to tax coal or gas severance at a rate of up to 1 percent of value [58:266.1].

**Washington**

Washington levies a tax of $0.05 per pound of uranium and thorium compound milled from raw ore. The total charge from each radioactive materials licensee shall not exceed $1 million from each licensee. Funds from this tax go to the Department of Social and Health services to defray the estimated costs of monitoring the mill site [70:121.050].

**West Virginia**

The West Virginia tax structure relies heavily on a series of annual taxes on the privilege of doing business in the State. The extraction of coal and other natural resources is one of the occupations covered under this tax, which is really a gross production tax.

The gross product of mines is taxed at the following rates: 3.5 percent for coal; 2.2 percent for limestone or sandstone; 4.34 percent for oil; 8.63 percent for natural gas in excess of the value of $5,000; 4.31 percent for blast furnace slag; 4.34 percent for sand, gravel, or mineral products not quarried or mined; and 2.86 percent for other natural resource products [11:13.2a].

In 1975, an additional tax on the severance of coal was enacted. This act added 0.35 percent to the tax previously imposed. Seventy-five percent of the net proceeds of this additional tax is distributed to the county. The remaining 25 percent of the net proceeds is deposited in the county and municipal fund [11:13.2l].

## Wisconsin

Wisconsin has a single comprehensive net proceeds tax with a progressive rate schedule for all metallic mineral mining. This tax, revised in 1981, replaced previously existing taxes on the mining of low-grade iron ore and copper.

In Wisconsin, taxable net proceeds are computed as follows [70:375.4]:

1. Gross proceeds are equal to the company's production of ore or ore concentrate during the taxable year multiplied by the appropriate price. For taconite pellets, copper, lead, zinc, silver, and gold, the price is computed from the monthly prices published in the *Engineering and Mining Journal.* For other metallic minerals or other forms of metallic minerals, the price is determined administratively by the Secretary of Revenue [70:375.3].
2. Net proceeds are gross proceeds less deductions for expenses incurred by the mining company in converting the ore in the ground to the product to which the published price applies. Deductions allowed include:
    a. Costs of labor, tools, appliances, and supplies used in mining.
    b. Costs of transporting, milling, concentrating, smelting, reducing, assaying and sampling, inventorying, and handling the ore.
    c. Expenses for administration, accounting, appraising, legal, medical, engineering, clerical, and technical services directly related to mining in the State.
    d. Expenses related to repair and maintenance.
    e. General and personal property taxes, Federal and State income taxes, sales and use taxes, and other taxes deductible under the income tax, excluding the metalliferous minerals tax.
    f. Rents paid on personal property used in mining.
    g. Costs of employee relocation within the State.
    h. Premiums for bonds required by State law.
    i. Premiums for insurance on persons or tangible assets.
    j. Losses from uninsured casualty losses and the sale of personal property used in mining.
    k. Straight-line depreciation on machinery, mill, and reduction works, buildings, structures, and permit fees, license fees, and other fees required by the State.
    l. Royalties paid to owners of mineral rights to the land where the mine was located.
    m. Amortization by a straight-line method over the life of the mine beginning with production of premining costs and expenses of mining.

n. Necessary and actual reclamation costs.
o. Interest (not to exceed 5 percent of total gross proceeds for the year).
p. An allowance for depletion based on actual original cost.

Net proceeds, as calculated above, are then subject to tax at the following rates [70:375.5]:

| *Net proceeds* | *Tax rate (%)* |
|---|---|
| 0 to $ 250,000 | 0 |
| $ 250,001 to $ 5,000,000 | 3 |
| $ 5,000,001 to $10,000,000 | 7 |
| $10,000,001 to $15,000,000 | 10 |
| $15,000,001 to $20,000,000 | 13 |
| $20,000,001 to $25,000,000 | 14 |
| over $25,000,000 | 15 |

For calendar year 1983 and beyond, the dollar bracket amounts will be changed to reflect the percentage change between the gross national product deflator for June of the current year and June of the previous year, except that no increase may be greater than 10 percent.

The Investment and Local Impact Fund receives 60 percent of the taxes collected under the metalliferous mining tax or the "first dollar" amount, whichever is greater. The remainder goes to the Badger Fund. The "first dollar" amount is defined as equal to $100,000 for each county, municipality, and native village eligible to receive payment from the impact fund. If tax collections in any 1 year are less than the prescribed "first dollar" payment for that year, the entire amount of taxes collected under the metalliferous minerals tax becomes the "first dollar" amount [70:395.1(a), (b)].

The Investment and Local Impact Fund is administered by a special board attached to the Department of Revenue for administrative purposes, but with independent administrative rulemaking authority. The board has 11 members including the Secretary of Local Affairs and Development, the Secretary of Revenue, 3 public members, 2 municipal officials, 2 county officials, 1 school board member, and 1 native American. The members are appointed by the Governor for staggered 4-year terms. One of the public members shall reside in a town in which a metalliferous ore body is known to exist. One of the public members shall reside in a county in which metalliferous mineral development is occurring or in an adjacent county. One of the local officials shall reside in a county or school district in which metalliferous mineral development is occurring or in an adjacent county or school district, and one local official shall reside in a county or school district in which metalliferous minerals are extracted or an adjacent county or school district. The native American shall reside in a municipality in which a metalliferous mineral ore body is known to exist [15:435(1)].

The Investment and Local Impact Fund is to be distributed as follows:

1. Each county in which metalliferous minerals are extracted receives the "first dollar" amount plus 20 percent of the metalliferous minerals tax collected from mines in the county or $250,000, whichever is less.
2. Each city, town, or village in which metalliferous minerals are extracted receives the "first dollar" amount minus any payments during the year under item 4 below.
3. Each native American community that has tribal lands within a municipality qualified to receive payments receives $100,000 minus any payments under 4 below. The amount shall be adjusted annually using the same method as is used to index the tax brackets.
4. Each municipality (and any native American community contained within such municipalities) which contains a metalliferous mining site for which a mining permit has been made prior to January 1, 1986, shall receive $100,000 per year for 4 years, or until the permit is granted, whichever is shorter. Each municipality containing a mining site on which construction has begun prior to January 1, 1989, but at which extraction has not been engaged in for at least 3 years, shall also receive $100,000 annually. The construction payment is to be financed by an annual construction fee levied on the person constructing the mine. The construction fee can be used as a credit against future metalliferous minerals taxes due, provided that it does not reduce the taxpayer's liability below the amount needed to make the first dollar amount payments.
5. The Investment and Local Impact Fund receives an amount equal to 10 percent of the taxes paid by each mine to hold as a project reserve fund. Funds withdrawn are to be used to insure payments to municipalities where mining is occurring which are equal to the average received by that municipality, to reimburse municipalities for costs associated with the cessation of mining, and to indemnify municipalities for reclamation expenses [70:395.2].

If the Investment and Local Impact Fund has a balance of over $20 million on January 1 of any year, the excess over $20 million shall be transferred to a separate account to be administered by the Badger Board. The funds are not to be commingled with the Badger Fund, however. [70:395.1].

The Badger Board makes the guaranteed payments to counties, towns, villages, and cities; certifies the eligibility of school districts for assistance; and makes discretionary payments to counties and municipalities. The board's power in this area is limited by statutes which list the types of projects eligible for funding.

Purposes for which the board may make discretionary payments include:

1. Protective services, such as fire and police.
2. Highway repair or construction necessitated by the construction or operation of the mining facility.
3. Studies and projects for local development.
4. The monitoring of the effects of the mine on the environment.
5. Extraordinary community services and facilities necessitated by the mining activity.
6. Legal counsel and technical consultants to represent and assist municipalities appearing before State agencies on matters relating to mining.
7. Other expenses associated with the construction and operation of the mining facility.
8. The preparation of areawide community service plans.
9. Educational services in a school district.
10. Expenses attributable to a permanent or temporary shutdown of a mine, including costs of retraining and the cost of operating a job referral service.

**Wyoming**

Wyoming levies gross production taxes on coal, oil and gas, precious metals, and other minerals. The gross proceeds from all mines also are included in the State and local property tax base. The special mineral taxes produced more than $138 million during fiscal 1981, nearly 30 percent of State tax revenues.

All mineral extraction is subject to a mining excise tax. This tax is levied at 2 percent of the value of the gross product extracted for gold, silver, other precious metals, soda, saline, coal, petroleum or other crude mineral oil, and natural gas. Revenues from this tax go to the State's general fund [39:6.302].

In addition, the extraction of coal, uranium, trona, oil, and natural gas are subject to several other excise taxes. The rates and the disposition of the revenues are given below [39:6.303]:

| *Minerals* | *Tax rate (%)* | *Disposition of revenues* |
|---|---|---|
| Coal, uranium, trona, oil, natural gas, oil, shale | 2.0 | Wyoming Mineral Trust Fund |
| Coal, uranium, trona | 1.5 | Capital Facilities Revenue Account |
| Coal | 1.0 | Highway Fund |
| Coal | 1.5 | Water Development Account |
| Coal | 2.0 | Impact Tax Revenue Account |
| Coal | .5 | Wyoming Mineral Trust Fund |
| Oil | 2.0 | 3/8 to cities in the State on per capita basis<br>1/8 to counties on a per capita basis<br>1/3 to State Highway Fund<br>1/12 to permanent minerals trust fund<br>1/12 to Wyoming Water Development Account |

The tax going to the Capital Facilities Revenue Account will expire on January 1 following the year in which the taxes collected total $250 million. The tax going to the Impact Tax Revenue Account is to expire on January 1 of the year following that in which total tax collections from this tax total $160 million [39:6.303(b)].

The distribution of the revenues obtained from the special severance tax is under the jurisdiction of the Farm Loan Board. Revenue is to be used to assist in areas affected by the production of coal. At least 50 percent of the revenue must be used for highways and streets, while the remainder may be used for water and sewer projects. The board has complete freedom in the choice of terms for the grants or loans.

An oil and gas production tax is levied on the value at the well of all oil and gas produced, saved, sold, or transported. This tax may not exceed 0.8 mill per dollar of value [30:5.116].

The Wyoming Legislature has approved a series of bills designed to reduce the local fiscal impact of new development. The program includes the issuance of revenue bonds to finance a State community development authority, a special coal tax for impact assistance, and an industrial development information and siting act which forbids issuing a permit for the construction and operation of the facility if a means of alleviating negative impacts is not specified.

The Wyoming Community Development Authority was created and authorized to issue up to $100 million of revenue bonds so that the State can provide assistance in areas where there have been major development impacts and where needed facilities and services cannot be financed through existing sources.

This agency is unique because it has the power to make loans to the private sector to provide financial institutions in the affected area with additional mortgage money as well as the power to loan to public agencies. Because the Community Development Authority has the power to set terms for repayment of loans to local governments, the act may channel new funds into the local community during the early stages of the development.

Such a program has several advantages over the coal impact board programs used in other States. It allows the mobilization of a considerable amount of capital relatively quickly—not dependent on the actual mineral production in the State—and it allows some aid to the private sector in communities feeling the impact. The $100 million of funds made available for impact assistance appears more likely to be an adequate amount than that provided in other States. However, the community has no certainty about receiving funds. There could be considerable delay before the loan is granted, depending on the action of the Community Development Authority.

The 1981 Wyoming Legislature modified the allocation of State sales tax revenues in order to provide additional front-end assistance to localities. Wyoming law now provides that during the construction period—defined as the time between the commencement of construction and that when the physical components are 90 percent complete—the county and its cities will receive an additional share of the sales tax revenue generated by development.

The additional amount returned directly to the county for distribution is equal to the difference between one-third of the State sales taxes collected in the county—less 1 percent for administrative costs—and the base period amount. The base period amount is the average over the previous 12 months of one-third of sales tax collections in the county less 1 percent for administration. A new base period amount is established on each anniversary of the date of construction by multiplying the previous base period amount by 1.08. No revenue from this program is to go to counties not imposing the full 1-percent local sales tax [Ch. 145, Laws 1981].



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