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Coal And Conservation—Tax Policy

By FREDERICK W. WHITESIDE, JR.* and JOHN S. GILLIG**

I. INTRODUCTION

Energy tax policy as applied to coal raises complicated issues. We must ask: A. What are the goals for energy production and consumption in the United States? B. What are the goals for environment in relation to these energy goals? C. What is the proper role of taxation in the resolution of these questions?

A. *National Goals For Energy Production*

An abundant supply of energy has long been viewed as essential for a prosperous and expanding economy, and energy needs have in fact increased with economic growth and higher standards of living. An abundant, cheap supply of energy for heating, electric power, and transportation has made this industrial growth possible. With this growth and prosperity came the economy of abundance, including waste and conspicuous consumption. Summer or winter, cheap fuel enabled the American consumer to drive in his climate-controlled automobile from home to office or club (likewise climate-controlled). The prevailing energy policy was to live it up by drawing from the ground a supposedly inexhaustible supply of oil and gas. Since World War II the excess of consumption over domestic production of oil has accelerated, however, and as early as 1960, there were warnings of potential dangers—too rapid an exhaustion of petroleum supplies and a dependence upon foreign oil.¹ The increased aggressiveness of OPEC,² the oil embargo, and a five-fold increase in the price of imported oil from 1973 to 1975, made the public aware of an “energy crisis.” In response, Presi-

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¹ See statements of coal spokesman in 2 COMPENDIUM OF PAPERS ON BROADENING THE TAX BASE, H.R. 86th Cong., 1st Sess. 1041 (1959), A report submitted to the Committee on Ways and Means. [hereinafter cited as 2 COMPENDIUM].

² Organization of Petroleum Exporting Countries.

dent Nixon announced Project Independence in 1973, and in late 1975 President Ford called on Congress for a national energy program.

Independence from foreign energy supplies calls for massive research in the development of other energy sources, nuclear, geothermal, and solar, and greater use of abundant coal reserves. The part to be played by coal as the chief alternative source of energy in this project has long been recognized. The total fossil mineral energy reserves in the United States are approximately 98 percent coal and 2 percent oil and gas. Hence, as early as 1959, coal industry spokesmen informed the Ways and Means Committee that future energy must come largely from coal reserves because of "the approaching exhaustion and ensuing higher prices of our petroleum and natural gas supplies."³ President Ford has also pointed out the need to utilize coal, our most abundant fuel and energy resource, more fully.⁴ The most recent statement of energy goals has called for a doubling of coal production in 10 years.⁵ The huge capital investment required to finance this goal creates a financing problem which can be aided, but not wholly solved, by a favorable tax climate.⁶

³ *Supra* note 1, at 1050. Estimates vary widely, both as to the extent of known reserves, and their accessibility for extraction without unreasonable damage to the surface land and streams. One source states: "The U.S. holds 437 billion tons of known reserves. That is . . . enough energy to keep 100 million large electric generating plants going for the next 800 years or so. It's 10 times as much energy as is contained in Saudi Arabia's oil and 2.6 times as much as is available from the entire world's known oil supply." *FORBES*, Dec. 15, 1975, at 28. *See also* 2 COMPENDIUM 6041-1059. The U.S. Geological Survey estimates the nation's coal resources at 3.2 trillion tons. Of this total, about 150 billion tons of recoverable coal are presently known in formations of comparable thickness and depth to those being mined by present technology. Maximum projected production in the next 15 years would use less than 10 percent of the 150 billion tons. This modest utilization of total cost reserves included the output of coal for making synthetic fuels.

Potential production of coal in 1985 was projected to range from 1,570 million tons to 1,004 million tons, depending upon the projected growth rate in conventional use. NATURAL RESOURCES, PANEL DISCUSSION BEFORE THE COMMITTEE ON WAYS AND MEANS, H.R. 93rd Cong., 1st Sess. part 9, at 1284 (1973).

⁴ *Ky. Coal Journal*, Dec. 1975, at 9, col. 3.

⁵ *See FORBES*, Dec. 15, 1975, at 28.

⁶ The tax climate desired by the coal industry was outlined in a paper for the House Ways and Means Committee by Rolla D. Campbell, of the Island Creek Coal Company. *See* 2 COMPENDIUM 1041. *See also* statement of E. B. Leisenring, Tax Committee, National Coal Ass'n, in PANEL DISCUSSION BEFORE THE WAYS AND MEANS COM-

Along with continued growth in production and consumption, small but increasingly vocal forces have called for conservation. Some commentators say, for example, that standards of living cannot continue to rise forever, agreeing with former Secretary of Interior Udall, who has stated that growth based on rapid exhaustion of supply cannot continue. Today many of the same business interests which formerly urged the consumer toward ever-increasing consumption now advertise the necessity of conserving all forms of energy—“[c]oal and conservation” is the slogan.⁷

B. *Goals For the Environment*

The goal for the environment is to produce the needed energy without unnecessary environmental sacrifice. Industry promoters point out that coal can be mined and the earth restored to a condition at least as good as before mining, and that it can be burned without harmful air pollution.⁸ The recent dramatic increase in coal production has accentuated environmental problems, however. Controls to reduce environmental damage are unquestionably expensive, and additional capital is required. Necessary environmental protection may be accomplished only at the expense of some energy production and conversely, top energy production is likely to be at the expense of some environmental damage. These are the necessary trade-offs, for neither the announced energy goals nor rigid environmental control can be had without some sacrifice of other values.⁹ In fact, some economists view achievement of the environmentalists' goals as inconsistent with adequate energy, at least in the short run.¹⁰

The tardiness of government intervention has further complicated the problem. Had government regulation of land reclamation and water and air pollution come 20 years earlier, more

MITTEE, H.R. 99th Cong. 1st Sess. part 3 (1975) [hereinafter cited as 1975 PANEL DISCUSSION].

⁷ Advertisement of American Electric Power Co., Inc., in *TIME*, Nov. 3, 1975, at 81.

⁸ *Id.*

⁹ G. BRANNON, *ENERGY TAXES AND SUBSIDIES* 10, 47 (1974).

¹⁰ Griffen, *Environmental Quality and Rising Energy Needs*, *STUDIES IN ENERGY TAX POLICY* 253, 266. (G. Brannon ed., 1974).

might have been accomplished with less waste of needed energy production. Instead, when action finally came, many of the pollution control devices required by regulatory agencies proved inadequate and new starts had to be made. This problem has been further compounded since 1974 by the unanticipated "energy crisis" and the national goal of independence from foreign energy supplies.

Recognizing the tremendous capital expenditure required for "more energy and a cleaner environment," Treasury Secretary Simon recently directed attention to the spiralling need of additional capital investment.¹¹ The increased activity, with its accompanying need of more machinery and equipment, is not the only reason for additional money. Inflation has tripled the cost of replacing depreciated equipment, so that reserves based upon original cost are inadequate. High interest rates, combined with greater need to borrow, has caused the interest cost of return to capital to rise from 10 to 30 percent.¹² Increased debt leaves any business such as coal mining vulnerable to economic downswings and crumbling price levels, risks which inhibit new investment. These economic facts must be considered in relation to harnessing resources for energy while protecting the environment.

C. *Role of Taxation*

In the area of federal income tax a rapidly growing number of reformers urge a return to the principle that the purpose of taxation should be primarily the raising of revenue. They advocate the elimination of the complexities and inequities which have multiplied as the federal income tax machinery has been used increasingly as a tool to accomplish nonrevenue objectives. This point of view has recently been articulated by an increasing number of the nation's statesmen and scholars.¹³

¹¹ NATIONAL OBSERVER, Jan. 17, 1976, at 1, 15.

¹² *Public Hearings before Committee on Ways and Means on Tax Reform*, H.R. 94th Cong., 1st Sess. part 1 at 26 (Statement of Secretary Simon) (1975) [hereinafter 1975 Public Hearings].

¹³ A few highlights are these:

1) In 1959 the Ways and Means Committee of the House of Representatives published a massive compilation of ideas and suggestions by tax experts on income tax revision, PANEL DISCUSSION, BEFORE THE COMMITTEE ON WAYS AND MEANS, H.R.,

Despite this concept of a simple and efficient tax system designed solely to collect revenue, however, taxation is in fact widely used for regulation. Taxes are levied to give the economy a shot in the arm or to put on the brakes, to encourage activity deemed desirable, to encourage the use of some resources, and to discourage others. Nowhere is this more true than in the energy industry, where taxation has been used to allocate resources by influencing prices and investment decisions. Likewise, no area of tax policy has been more controversial than that affecting the oil, gas and coal industries.

86th Cong., 1st Sess., (1959), together with a three volume COMPENDIUM OF PAPERS ON BROADENING THE TAX BASE, *supra* note 1 for volume 2.

2) A running debate appeared in the HARVARD LAW REVIEW, in which four leading legal and economic scholars presented divergent views on the feasibility and extent of a truly "comprehensive tax base" for income tax. These views were later reprinted in a monograph. B. BITTKER, C. GALVIN, R. MUSGRAVE AND S. PECHMAN, A COMPREHENSIVE INCOME TAX BASE? A DEBATE (1968).

3) Many government officials have taken a stand in favor of radical simplification of the tax structure. They advocate elimination of all differentials and incentives favoring particular activities and groups of taxpayers to allow the income tax to serve its primary function, the collection of revenue more efficiently. Secretary of the Treasury Simon considers that the efficacy of the voluntary compliance system depends upon the income tax system being perceived by the public as based upon "principles of equity, simplicity and efficiency. And I think the American people perceive that it is not a fair system, and God knows it's not a simple system." He further deploras the tendency of politicians to try to overcome existing inequities in the tax structure by "letting new groups in on the loopholes." NATIONAL OBSERVER, Jan. 17, 1976, at 1, 15. A recent statement by Charles M. Walker, Assistant Secretary of the Treasury for Tax Policy is in point. He spoke of the goals of fairness, efficiency and simplicity, in the light of which proposals for broadening the tax base should be examined. 6 P-H 1976 FED. TAXES, Rep. Bull. 10 at 60, 115.

4) In 1973 Stanley S. Surrey authored PATHWAYS TO TAX REFORM (1973), urging elimination of government subsidies for particular interests and groups taking the form of tax relief and constituting a barrier to an equitable tax system. Provisions affording special relief to certain taxpayers or industries are described as "tax expenditures" costing the public the same as direct subsidy or welfare payments. See NEW YORK TIMES SUNDAY MAGAZINE, April 13, 1975, at 50-63. He states that the proponents of special tax incentives frame their arguments in terms of "assistance for this or that industry or activity or hardship," not in terms of proper tax structure or tax equity. On tax expenditures generally he argues, "When a Congressman votes a \$1,000 tax deduction, he's voting to give \$700 to the rich man, \$140 to a low wage worker, and nothing to the poor."

5) Congress enacted the "Budget Reform Act of 1974" requiring for the first time disclosure of amounts in the budget being spent as part of the tax system through special tax relief. This relief is in reality financed by the taxpaying public. See SPECIAL ANALYSES; BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 1976, (Special Analysis F).

Evaluation of existing or proposed tax policies affecting coal raises more problems than answers. First, the variety of taxes is great, each with underlying policy considerations to be viewed separately and as part of the total tax system. No doubt federal and state¹⁴ income taxation play the primary role, but state property and severance taxes must also be taken into consideration. Second, a complete treatment would require comparison of taxes on coal not only with oil and gas but also with other industries. Third, it is extremely difficult to measure the economic impact of most taxes. Many tax measures have been justified as providing incentives or deterrents to certain activity, yet experts differ widely in assessing the degree of burdens or benefits achieved by any given tax provision. In addition, the determination of who bears the burdens and who enjoys the benefits is primarily speculation.

II. COAL AND FEDERAL TAXES

Three main aspects of the federal income tax and the interrelationships between them are vital to understanding the impact of taxes on the coal industry: (1) The availability of capital gain treatment for profits, especially royalties under coal leases provided under certain conditions by § 631(c) for landowners and investors; (2) percentage depletion allowed an operator on his high gross income from extraction plus certain treatment processes; and (3) the tax treatment of expenditures and depreciation, particularly the taxpayer's option to expense exploration and development costs currently and to elect a fast write-off for certain investments. These aspects will be discussed separately.

A. *Capital Gain*

Where the value of a business enterprise has increased, the owner is sometimes afforded the opportunity to sell the business and have the profit taxed at more favorable capital gain rates. If the business is incorporated, the owners may be able to achieve this result either by selling the corporate stock or by

¹⁴ In general, state income taxes are patterned after and correspond with the federal law although with much lower rates.

liquidating the corporation.¹⁵ Producers of natural resources, however, ordinarily have greater opportunity for sales with favorable capital gain treatment than do manufacturers or most other entrepreneurs. Quite frequently a mining firm will develop a lease to the producing stage, deduct expenditures for development from ordinary income, and then sell the entire operation with the profit taxed as capital gain.¹⁶ Although ordinary income would have been realized by continuing the operation for only a short time, the sale converts the work product into capital gain. This kind of opportunity is open to the developer of any mineral property, including coal.

Coal owners or holders of leasehold interests, however, have available yet another very special statutory provision which provides the equivalent of the long-term capital gain tax advantage for a situation not even resembling a sale or liquidation. This provision, if properly utilized, enables the owner or investor to treat royalty profits derived from a lease conveying the operating rights to another as capital gain.¹⁷ Section 631(c) is one of many instances where Congress, to encourage certain activity, accords long-term capital gain treatment to receipts which would usually be ordinary income. The predecessor of § 631(c) came into the law in 1951, 8 years after enactment by Congress of a parallel provision providing special capital gain treatment for the sale of cut timber by the landowner.¹⁸ Its legislative history explains the reasons for its enactment. Oil and gas had been flowing from the wells in abundance, providing cheap gasoline and fuel for the consumer and profits for both operating and royalty interests. In contrast the coal industry was sick. Not only was the nominal 10 percent depletion for coal less than the allowance for oil and gas, but fre-

¹⁵ INT. REV. CODE OF 1954, §§ 331, 1221, 1231 [hereinafter cited as IRC].

¹⁶ See Agria, *Special Tax Treatment of Mineral Industries*, in *THE TAXATION OF INCOME FROM CAPITAL* (F.A. Harberger and M. Bailey eds. 1969).

¹⁷ Technically, § 631(c) relief provides capital gain by treating the amount received over the adjusted depletion base as profit from the sale included in § 1231. Under § 1231, sales of property used in the taxpayer's business are treated as capital gains and losses if the total gains from such property exceed total losses; otherwise the loss is treated as an ordinary business loss. Section 1231, in defining "property used in the trade or business," specifically includes coal with respect to which § 631(c) applies. IRC § 1231(b)(2).

¹⁸ INT. REV. CODE OF 1939, § 117(k)(2) (now IRC § 631(b)).

quently depletion provided no help because the maximum was limited to 50 percent of taxable income. Furthermore, many long standing coal leases provided royalties in stated amounts per ton rather than as a percentage of the value of coal taken from the mine, thus preventing lessors from sharing in rising prices.¹⁹

The statutory requirements under § 631(c) for the special tax favor to royalties of coal and iron ore²⁰ are relatively clear cut: (1) The taxpayer must be an "owner" of coal with an economic interest in the mineral in place, (2) he must dispose of this interest, while (3) at the same time retaining an "economic interest" in the coal in place, and finally (4) he must have held the coal for 6 months prior to disposing of his ownership interest. The disposal or conveyance may be "under any form of contract or agreement."²¹ The 6 month holding period requirement is easily complied with because the date of disposal is deemed to be the date when actual mining is begun rather than the date of the lease. The term "owner" is not limited to the original landowner, but may include a successor in interest such as a devisee, legatee, donee, or purchaser or a shareholder receiving a corporation's assets upon liquidation.²²

The benefits of § 631(c) extend even to a taxpayer in the business of buying and selling coal leases in the ordinary course of his business.²³ In keeping with the purpose of giving capital

¹⁹ In the language of the contemporaneous committee report:

Most leases on coal properties are long-term and call for royalty payments expressed in cents per ton. Therefore, the lessor does not receive the automatic adjustment for price changes which occurs when a royalty is expressed as a percentage of the value of the mineral extracted from the property. Many of the existing coal leases are old and the royalty payment called for under them is small.

H.R. REP. No. 586, 82nd Cong., 1st Sess. 30 (1951).

²⁰ The provision for iron ore was added to the statute in 1954.

²¹ IRC § 631(c); Treas. Reg. 1.631-3(b)(5)(i); T. D. 6841, 1965-2 CUM. BULL. 207.

²² Rev. Rul. 59-416, 1959-2 CUM. BULL. 159. See Treas. Reg. 1.631-3(b)(4); Rev. Rul. 55-621, 1955-2 CUM. BULL. 277.

²³ Treas. Reg. 1.631-3(a)(2) T.D. 6841, 1965-2 CUM. BULL. 207:

In the case of such disposal, the provisions of § 1231 apply, and the coal . . . shall be considered to be property used in the trade or business for the taxable year in which it is considered to have been sold . . . regardless of whether the coal or iron ore is property held by the taxpayer primarily for sale to customers in the ordinary course of his trade or business.

See the discussion in Coggins, *Disposition of Coal Interests: Section 631(c)*, 29 TAX LAWYER 95, 101 (1975).

gains to owner-investors, not operators, however, the statute specifically excludes the income realized "by any owner as a co-adventurer, partner, or principal in the mining of such coal" ²⁴ The owner entitled to § 631(c) treatment cannot in addition deduct percentage depletion; capital gain under § 631 and percentage depletion are mutually exclusive.

Section 631(c) embraces within its benefits not only the original owner of the coal, but also the lessee who complies with its terms by securing an economic interest from the original owner and, as sublessor, or even a sub-sublessor, leases to the operating miner. A typical situation described in the regulations assumes a landowner with underlying coal who leases to a lessee, for a royalty of \$1.00 per ton. The lessee in turn leases to a mining company for \$1.50 per ton. The disposition of coal by the landowner to his lessee and by the lessee, as sublessor, to the mining company both qualify for § 631(c) treatment. The \$1.00 royalty received by the landowner is capital gain; the net profit received by the lessee, 50 cents per ton, is likewise capital gain. ²⁵ Profits from sales made by the sublessee, the mine operator, do not qualify for § 631(c) treatment; rather they constitute ordinary income subject to depletion.

Standard form leases usually meet the statutory requirements, including the requirement that the lessor retain an economic interest in the coal in place. The lease will convey to the miner or operator an economic interest to which the lessor must look for his royalties. A qualified economic interest may take the form of royalties, advance royalties, minimum royalties, or bonuses, provided the owner-lessor must look to the production of the coal itself to satisfy the payments. Thus it is possible for a landowner with underlying coal, or for a lessee of the landowner's coal rights, or even a sub-lessee, by contractual arrangement with the operator, to enjoy some of the mining profits at capital gain rates. The operator, while denied capital gain treatment and although required to report his profits as ordinary income, is nevertheless entitled to reduce the amount of his income by his depletion allowance.

²⁴ IRC § 631(c).

²⁵ The lessee's net profit is computed by subtracting from the gross amount of \$1.50 received from the operator, his cost ("adjusted depletion basis") of \$1.00 which he must pay the owner.

The special break which § 631(c) provides for the owner of coal is a unique aspect not enjoyed by the owners of oil or other minerals. The noncoal mineral owner must ordinarily make a complete sale of his entire interest as a prerequisite to capital gain treatment. For example, an oil and gas lease with royalties retained does not qualify as a sale and the royalties retained receive ordinary income treatment.²⁶ For coal, however, Congress has seen fit to favor the owner or lessee with special capital gain treatment for royalties received.

This special benefit for coal royalties is no easier to defend than many of the other special tax provisions which stretch the capital asset concept to cover special situations. The provision might be justified by a slight twist to one of Louis Eisenstein's three famous ideologies of taxation — ability to pay. Even though coal operators were receiving more for their coal, the royalties remained the same. Therefore, the lessors' "inability to obtain larger royalties had to be compensated by the benefit of lower taxes."²⁷ As tax expenditures go, however, the cost is relatively slight. The United States budget for fiscal 1976 estimates the cost of the tax benefit to be about \$5,000,000 for coal and iron ore combined, about the same as in each of the two previous fiscal years, with the lion's share of the benefit accruing to corporations rather than to individuals.²⁸

B. *Depletion*

A deduction for exhaustion of minerals through extraction from the earth began with the first income tax law under the equitable principle that such exhaustion of taxpayer's investment should be restored to him by permitting a deduction from profits over the lifetime of the mineral. As the deduction developed subsequently, however, it came to serve yet another purpose—to accelerate the extraction and consumption of some energy sources over others. The present statutory provision states that in the case of mines, oil and gas wells, and other

²⁶ The leading case is *Burnet v. Harmel*, 287 U.S. 103 (1932); *cf. Freund v. United States*, 367 F.2d 776 (5th Cir. 1966) (the court will examine substance of transaction to determine whether it is in reality a sale or a lease).

²⁷ L. EISENSTEIN, *THE IDEOLOGIES OF TAXATION* 51 (1961).

²⁸ SPECIAL ANALYSES; BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 1976, (Special Analysis F) at 108.

natural deposits, a taxpayer may deduct, in arriving at taxable income, "a reasonable allowance for depletion and depreciation of improvements, according to the peculiar conditions of each case."²⁹ While the depreciation deduction is designed to compensate for the wearing out of equipment and other property used in the taxpayer's business, depletion serves a similar purpose in compensating for the exhaustion of the mineral itself.

The early income tax statutes limited the total deduction to the taxpayer's cost of his investment in the mineral. This cost depletion method was designed to restore the taxpayer's cost through an annual deduction spaced over the extraction period. Under this method the amount of deduction each year was the cost per unit mined during the year.³⁰ As an incentive to encourage new exploration during World War I, Congress permitted an annual deduction each year based on the value of the mine or well at the time of discovery, or 30 days thereafter.³¹ This discovery value method, however, was abandoned in 1954.

In 1926 Congress introduced percentage depletion, a new method for the petroleum industry, computed at 27½ percent of gross income (computed upon value at the mouth of the well), but not in excess of 50 percent of the net income from the property and not less than the amount of depletion allowable under the cost method.³² Percentage depletion was initially allowed only for oil and gas. In 1932, however, it was extended to other minerals with varying rates, but subject to the same limitation of 50 percent of net income as applied to the petroleum industry.³³ At this time the depletion rate for coal was set at 5 percent; it was not until 1951 that the present rate of 10

²⁹ IRC § 611.

³⁰ Detailed examples of the computation are set out in Treas. Reg. 1.611-a(2) (1960); see also P-H 1976 FED. TAXES, OIL & Gas ¶ 2036.4(2).

³¹ Revenue Act of 1918, ch. 18, 40 Stat. 1056, §§ 214(a)(10) and 234(a)(9). Resumes of the history of discovery of value depletion appear in Burke, *Incentives to Develop Natural Resources: Factors Affecting Industries Involved in Natural Resources Exploitation; Oil and Gas; Hard Minerals; Timber*, 33 N.Y.U. INST. ON FED. TAX., part 2, 1541, 1547 (1975)[hereinafter cited as Burke]; and in B. BITTKER AND L. STONE, *FEDERAL INCOME AND ESTATE GIFT TAXATION* 331-32 (1971).

³² Revenue Act of 1926, ch. 27, 44 Stat. 9, § 204(c)(2). The 50 percent limitation upon the maximum amount of percentage depletion is based upon the net income from the property computed without the allowance for depletion.

³³ Revenue Act of 1932, ch. 209, 47 Stat. 169, § 114(b)(4).

percent came into the law.

The most important feature of percentage depletion is that it is not limited to the taxpayer's cost. On the contrary, it is based upon gross income or the value of production each year and may thus rise with the market. In this way the deduction often continues to reduce taxable profits long after the taxpayer has recovered his cost. The deduction rises as income rises, saving more taxes as profits rise and the taxpayer reaches higher income tax brackets. It also eliminates the difficult problem, encountered under the cost method, of estimating the total number of future recoverable units in the mineral deposit.

Undoubtedly the chief beneficiary of the controversial percentage depletion deduction has been the oil and gas industry. The rate initially was 27½ percent of gross income, or in the absence of sale, an amount determined by the value of the oil and gas at the mouth of the mine. The rate remained 27½ percent until 1969 when it was reduced to 22 percent.³⁴ Although percentage depletion has been abolished for large producers by the Tax Reform Act of 1975,³⁵ the allowance is retained for operators presently producing under 2,000 barrels a day, 1000 barrels a day by 1980. As a result, oil and gas ventures will continue as tax shelters for wealthy individual investors, small corporations, and individual entrepreneurs.³⁶

Percentage depletion is generally justified by the need to provide an incentive for capital investment and to encourage risk-taking and exploration for new reserves.³⁷ The nation's defense needs have also been cited as justification, even before higher prices for foreign oil forced us to reexamine our depend-

³⁴ Section 501 of the Tax Reform Act of 1969, H.R. 10612, 94th Cong., 1st Sess. (1975), amended § 613(b)(1) of the IRC. One reason, as stated by the Ways and Means Committee report, was to create a more equitable distribution of the heavy tax burden among all industries and taxpayers. Further, the benefits of the 27½ percent rate for the industry had increased with the substantial rise in tax rates since its first enactment in 1926; so that there was a need for a better balance than now exists between the objectives of encouraging the discovery of new reserves and the revenue costs. H.R. REP. NO. 413, 91st Cong., 1st Sess. 289 (1969).

³⁵ Tax Reform Act of 1975, H.R. 10612, 95th Cong., 1st Sess. (1975), § 501. No change was made in existing rates for minerals other than oil and gas.

³⁶ Tax lawyers should draw some profitable business from the reform since parts of the Act are vague and no published studies were made by Congressional committees to throw light on its intent. See FORBES, May 1, 1975, at 40.

³⁷ See Burke *supra* note 31.

ence upon foreign energy sources.³⁸ It has been pointed out that an abundant supply of energy is needed for economic growth and to maintain a higher standard of living.³⁹ Critics of percentage depletion point out, however, that it has failed in its objective to encourage exploration for new reserves, promoting instead the exploitation and exhaustion of proven oil and gas fields. The assured taxable income produced in an established field alleviates all risk that the 50 percent limit on taxable income may deprive the operator of any depletion allowance in a given year, an event which happens all too frequently to operators who seek to develop unknown fields.⁴⁰ They also note that the greatest benefits have gone to the producers with the greatest profits and not to the marginal producers. To the extent that percentage depletion exceeds the taxpayer's cost basis in his mineral deposit, it has been aptly described as: "The special deduction for imaginary costs."⁴¹

Another argument against percentage depletion is that it has resulted in a misallocation of resources. In the case of petroleum, for example, it resulted in rapid exhaustion of known reserves. Instead of encouraging exploration, it has discouraged geological and geophysical exploration in favor of easily drilled new wells in proven fields where high profits assure a high deduction. Furthermore, ideals of neutrality and equity in a tax system are violated by special benefits to certain taxpayers. The result has been higher taxes for all taxpayers as a group and deterioration of taxpayer morality, a most undesirable consequence in an income tax system based upon self-assessment.⁴²

The same arguments in defense of percentage depletion for petroleum have also been made for coal. When the 5 percent allowance was first extended to coal in 1932 the announced

³⁸ *Id.*

³⁹ See Campbell, *Percentage Depletion and Exploration and Development Costs*, 2 COMPENDIUM 1041.

⁴⁰ R. MANCKE, *THE FAILURE OF U.S. ENERGY POLICY* 85 (1974); Miller, *Percentage Depletion and the Development of Domestic Mineral Production* 15 NATURAL RESOURCES J. 241, 254-55 (1975).

⁴¹ The phrase is from the chapter heading for chapter 5 of Louis Eisenstein's masterful work, *THE IDEOLOGIES OF TAXATION* 123 (1961).

⁴² Agria, *Special Tax Treatment of Mineral Industries* in *THE TAXATION OF INCOME FROM CAPITAL* 78 (A. Harberger and M. Bailey eds. 1969). See also NATIONAL OBSERVER, Jan. 17, 1976, at 1, 15.

justification was that the coal industry was in desperate condition.⁴³ Nineteen years later the raising of the maximum rate to 10 percent and the simultaneous extension of capital gain treatment to coal royalties were thought to be needed to protect the coal industry from the competitive forces of oil and gas.⁴⁴ Thus at the same time percentage depletion was used to stimulate the prosperous petroleum industry, it was also advocated as necessary to save the ailing coal industry. Industry representatives have correctly pointed out that in many years the full benefit of the percentage limit is not actually enjoyed due to the 50 percent of taxable income limitation. This tends to reduce or eliminate the deduction. The oil and gas industry on the other hand, more nearly averages the full statutory rate because its taxable income from proven fields is usually higher.⁴⁵ Available estimates indicate that the average effective percentage depletion actually allowed coal mines has approximated 4 to 5 percent although it might approach 6 percent or better for a more prosperous year such as 1974.⁴⁶ Coal industry spokesmen consistently urge that the allowance should be 15 percent instead of the present 10 percent.⁴⁷ After all, where percentage depletion is still available for alternative sources of power, uranium and oil and gas, the deduction is 22 percent.⁴⁸

In evaluating the real benefit from depletion, the cutoff point is very important. For oil and gas the percentage computation has always been on the gross value when drawn from the ground at the well. The base, however, for computation of percentage depletion on coal, is the "gross income from mining," although that base has been enlarged by statutory amendment to include the following post-extraction treatment processes: "cleaning, breaking, sizing, dust-allaying, treating to prevent freezing, and loading for shipment."⁴⁹ Furthermore, for all hard

⁴³ 75 Cong. Rec. 10418-19 (1932).

⁴⁴ See H.R. REP. No. 586, 82d Cong., 1st Sess. 30 (1950); S. REP. No. 781, 82d Cong., 2d Sess. (1951).

⁴⁵ This is explained in a discussion of the economic effects of depletion, in Miller, *Percentage Depletion and the Level of Domestic Mineral Production*, 15 NATURAL RESOURCES J. 241-55 (1975).

⁴⁶ G. BRANNON, *STUDIES IN ENERGY TAX POLICY* 14 (1975); G. BRANNON, *ENERGY TAXES AND SUBSIDIES* 33 (1974).

⁴⁷ See Campbell, 2 COMPENDIUM 1049 *supra* note 6.

⁴⁸ IRC §§ 613(b)(1)(A) and (B).

⁴⁹ IRC § 613(c)(4)(A). Note that § 613(a) states that the percentage rates are

minerals “mining” is now defined to include transportation not in excess of 50 miles from the point of extraction to the plant where the treatment processes are applied.⁵⁰ Thus considerable value is added to the coal after it is removed from the ground, resulting in a higher dollar amount of depletion. The allowance of depletion on the limited transportation and enumerated treatment processes does not, however, include value added by manufacturing processes performed by an integrated miner-manufacturer. An example of such is the generating of coal into electricity by a utility. Nor would it apply to the process by which coking coal is produced for use in the manufacture of steel. Clearly the value added to coal in plants engaged in liquefaction or gasification of coal is beyond the cutoff point, although some suggestion has been made that the depletion tax advantage should be extended to these processes also.⁵¹ The same argument can be made if an efficient and pollution-free method of burning coal is developed such as the “fluidized combustion” process developed in England.⁵²

Percentage depletion for the mineral industry as a whole has been estimated to cost the public more than \$3 billion a year,⁵³ but this cost is not broken down between coal and other minerals. One source has described the cost of the provisions for percentage depletion and the expense of development outlays affecting coal as “insignificant” when compared to the total.⁵⁴

C. *Treatment of Expenditures*

Coal mining has been described as a capital intensive industry; underground mines especially require large capital investment before profitable production is reached. Naturally,

applied to the “gross income from the property” and that § 613(c)(1) states that the latter term means gross income from mining (for minerals other than oil and natural gas).

⁵⁰ IRC § 613(c)(2).

⁵¹ For a more complete discussion see the Louisville Courier-Journal, April 10, 1976, at 1, sec. B. A recent meeting was held at the Kentucky Center for Energy Research with British coal authorities preparatory to a cost-benefit analysis of the feasibility of using the newly developed British process in this country.

⁵² See P-H 1976 FED. TAXES, OIL & Gas ¶ 2034.

⁵³ Special Analysis F. *supra*, note 28, at 10.

⁵⁴ G. BRANNON, ENERGY TAXES AND SUBSIDIES 34 (1974).

the tax treatment of such capital outlays is a vital factor in an operator's profitable operations. May a given expense be deducted from current income or should it instead be capitalized and depreciated over the useful life of the asset? If the tax deduction must take the form of depreciation, what methods and rates of depreciation are allowed? What kinds of expenditure benefit by a special tax favor in the form of a fast write-off or amortization?

1. *Exploration and Development Expenses*

For tax purposes exploration expenses are those paid or incurred for the purpose of "ascertaining the existence, location, extent or quality" of the coal deposit prior to the beginning of the development of the mine.⁵⁵ Development expenses, incurred to make the coal accessible to extraction, are "all expenditures . . . for the development of a mine . . . paid or incurred after the existence of ores or minerals in commercially marketable quantities has been disclosed."⁵⁶ In accounting and tax theory, both exploration and development expenditures are capital outlays, not part of the cost of current operations but attributable to future operations. Yet similar favorable income tax treatment is accorded to both types of expenditures by allowing the coal operator either to deduct against current income or to capitalize and deduct the expenditure through amortization from profits as the coal is mined.⁵⁷

The present tax treatment of development expenses, and a somewhat more limited deduction for exploration expenses, first came into the income tax law in 1951.⁵⁸ Contemporary legislative committee reports point to the reason for the legislation: a need to encourage increased exploration and development of mineral deposits by the smaller operators.⁵⁹ Denial of a current tax deduction for development expenditures was viewed as a serious obstacle to expansion of the mining industry, especially acute at this time because of the Korean War

⁵⁵ IRC § 617; Treas. Regs. 1.617-1(a).

⁵⁶ IRC § 616(a); Treas. Regs. 1.616-1(a).

⁵⁷ IRC §§ 616, 617.

⁵⁸ See Burke, *supra*, note 31; INT. REV. CODE OF 1939 § 23 *et seq.*

⁵⁹ S. REP. NO. 781, 82nd Cong., 1st Sess. 44 (1951).

effort.⁶⁰ The 1951 provision for deducting development expenses has remained substantially unchanged. The taxpayer makes an annual election with respect to each separate mine or mineral property to deduct such expenses currently or to capitalize and spread the deduction over the period when the minerals benefited by such expenses are extracted and sold.⁶¹

Today, the operator is allowed to deduct exploration expenditures from operations without any monetary limit except for operations outside the United States for which the statute retains a total limit of \$400,000 previously applicable to all operations. However, a price exacted by the Tax Reform Act of 1969 for allowing the unlimited deduction is that all such expenses deducted after January 1, 1970 are subjected to a new recapture rule as soon as there is production from the mine. Under this recapture taxpayers must either include as gross income in the first year at the mine's commercial production the entire amount of exploration expense previously deducted, or forego any depletion allowance until the allowable depletion in subsequent years has completely offset the previously deducted exploration expense.⁶² Although this election is made annually, a taxpayer who elects to include the previously deducted amounts in the first productive year's income must adhere to his election with respect to all mines which reach the productive stage at any time during that year.⁶³

2. Depreciation

Depreciation is the form of business expense deduction for capital outlays and permanent additions or improvements which will last beyond the year of expenditure. The deduction is spread over the useful life of the property to the taxpayer, as distinguished from repairs and other annual expenditures which are deductible in the year incurred. Since application of depreciation principles to coal mining is the same as for any other business, no special discussion is required.⁶⁴

⁶⁰ H.R. REP. NO. 82d Cong., 1st Sess. 30-1 (1951); *see also*, Burke, note 31 *supra*.

⁶¹ IRC § 616(a); Treas. Reg. 1.616-1(a); P-H 1976 FED. TAXES, OIL AND GAS ¶ 2036.3; Wright, *Tax Practice in the Mining Industry*, J. OF REAL ESTATE TAXATION 441 (1975).

⁶² IRC § 617(b); Treas. Reg. 1.617-3(a).

⁶³ *Id.*

⁶⁴ Accelerated methods may be used for mining machinery and equipment. Pro-

3. *Special Provisions for Rapid Write-offs*

The federal income tax statute contains a number of provisions whereby taxpayers are permitted by Congressional largesse to elect a modification of their usual depreciation rates by either a current deduction or a more rapid write-off of outlays to purchase or improve certain business property. For coal the two most important elections concern the amortization of the cost of qualified air and water pollution control equipment and coal mining safety equipment.⁶⁵ Both are taken over a 60 month period instead of the usual depreciable life of the property. Both provisions were enacted by the Tax Reform Act of 1969, and the effects and technical requirements for qualifying each are closely parallel. Section 169, pertaining to the amortization of pollution control equipment, requires that the expenditure be for a "certified pollution control facility," defined as a "new identifiable treatment facility" "to abate or control water or atmospheric pollution or contamination by removing, altering, storing, or disposing of pollutants, contaminants, wastes, or heat."⁶⁶ Federal certifying agencies, the Department of Interior for water pollution and the Department of Health, Education and Welfare for air pollution, must certify to the IRS that the facility complies with applicable federal environmental control regulations and furthers policies of federal-state cooperation under the Federal Water Pollution Control Act.⁶⁷

This faster-than-normal depreciation deduction is one of the few income tax provisions focusing upon environmental rather than energy needs. The deduction becomes increasingly more important to the coal operator as he buys or constructs new equipment to meet the higher standards of pollution control imposed by federal and state agencies. Furthermore, it may even provide operators with some incentive to invest in pollution control equipment beyond the minimum standards set by regulatory agencies.

In electing these special write-offs, however, an astute coal

mulgation of the optional Asset Depreciation Range (ADR) regulations permits an operator to shorten guideline estimates of useful life by 20 percent and thus increase the annual deduction.

⁶⁵ IRC §§ 169, 187.

⁶⁶ IRC § 169(d)(i).

⁶⁷ IRC § 169(d)(i)(B).

operator should not overlook arithmetic. The 60 month amortization is computed on a straight line basis in lieu of any depreciation, including additional first year depreciation and optional accelerated methods. The election also precludes taking investment credit on that part of the cost of the improvements for which the 60 month write-off is applicable.⁶⁸ In many cases, if not most, the benefits otherwise obtainable such as the investment credit against the tax itself, plus normal depreciation deductions will exceed the benefits from choosing the fast write-off.

Discussion of rapid write-offs requires mention of one section of the current version of the "Energy Conservation and Conversion Act of 1975" which passed the House of Representatives.⁶⁹ This provision permits taxpayers to elect a 60 month amortization of "qualified energy use property," which is defined to include coal processing equipment and coal slurry pipelines as well as certain waste equipment and shale oil conversion equipment. Coal processing equipment is defined as any depreciable machinery or equipment for processing coal into a liquid or gaseous state. Interestingly enough, the first version of this legislation (which did not pass the House) contained a much broader 60 month write-off for the coal industry, encompassing all depreciable machinery or equipment used in any phase of mining—equipment used for example, to reach, extract, and bring the coal to the mouth of the mine, to restore the overburden, or otherwise restore the property to a long-term stable condition.⁷⁰ As previously noted, the coal industry already enjoys the general depreciation rates applicable to equipment, and it is therefore questionable whether the proposed rapid write-off is needed.

⁶⁸ IRC § 48(a)(8); P-H 1976 FED. TAX HANDBOOK ¶ 2045, 2050(b). Several commentators evaluating the efficacy of § 169 consider that it fails to provide the "significant economic incentive needed for the acquisition of pollution control facilities," Millett, *Pollution and the Federal Revenue Code*, 8 WAKE FOREST L. R. 535, 548 (1972); see also, McDaniel & Kaplinshy, *The Use of the Federal Income Tax System to Combat Air and Water Pollution*, 12 B.C. IND. & Com. L. Rev. 351 (1971); Reitze & Reitze, *Tax Incentives Don't Stop Pollution*, 57 A.B.A.J. 127 (1971); Comment, *Tax Incentives to Combat Pollution*, 50 J. URBAN L. 273 (1972).

⁶⁹ H.R. 6860, 94th Cong., 1st Sess. § 521 (1975); see H.R. REP. No. 94-221, 94th Cong., 1st Sess. (1975).

⁷⁰ H.R. 5005, 94th Cong., 1st Sess. § 721 (1975).

4. *Investment credit*

Coal operators, whether doing business as corporations, partnerships or sole proprietors, may obtain a tax benefit in the form of a credit against the tax itself by purchasing depreciable business property and using it in mining. The investment credit, a stimulus to investment in business property, was discontinued as a part of the Tax Reform Act of 1969, but was restored in 1971 and increased in 1975.⁷¹ Any new qualified property acquired and placed in service during the tax year now entitles the taxpayer to a credit not in excess of 10 percent of the property's cost depending upon the kind of property, but subject to a dollar limitation of \$100,000 for taxpayers filing a joint return in 1975 and 1976.⁷² Industry representatives generally feel that even greater inducements to invest in coal should be provided as part of our national energy policy.⁷³

D. *A Perspective on Coal and Federal Taxes*

The federal income tax provisions discussed so far are the major taxes affecting the coal industry, and their impact has been great. These provisions are all intended to provide a tax incentive to encourage investment. While most of them relate to energy goals, the rapid write-off of pollution control equipment relates primarily to environmental quality. Although it would be difficult to assess accurately the extent of tax favors enjoyed by coal compared with oil and gas, to what parties the benefits accrue, or their merits as compared with direct subsidies or expenditures, a few opinions may nevertheless be ventured.

Historically, income tax incentives have been more favora-

⁷¹ IRC §§ 38, 46. The maximum percentage is derived when the equipment has a useful life of 7 years or more. The provisions for qualification are technical and will not be discussed here.

⁷² IRC § 48(a)(1).

⁷³ For example, see remarks of Rolla D. Campbell, General Counsel, Island Creek Coal Company, before the House Ways & Means Committee, 2 COMPENDIUM 1041 at 1050, "we must have sufficient capital, knowhow, and personnel to enable us to make the vast expansion of plant capacity which inevitably will be required. This productive capacity cannot be attained if the tax climate makes investment in coal mining unattractive." Similar comments are legion. *E.g.*, statement by E.B. Leienring, Jr., Chairman, Tax Committee, National Coal Association, 1975 PANEL DISCUSSION, *supra* note 6.

ble to the petroleum industry than the coal industry; since 1975 when percentage depletion was eliminated for the larger oil and gas operations, the benefits have been more nearly equal. This tilt is evidenced in the fact that petroleum exploration and production declined during 1975 while coal production increased. Economists who have attempted to estimate the total impact of tax benefits upon investment in coal have concluded that the combination of benefits approximates a 50 percent investment tax credit, compared with the present 10 percent investment credit for industry as a whole.⁷⁴ There is considerable difficulty with respect to the degree of benefit to different persons or groups from these tax reductions, however. Experts recognize the difficulty in determining the proportion of subsidy enjoyed by the mineral operator as compared with the benefit passed on to the public in the form of lower prices, the employees through higher wages, or the landowner or other mineral owner through increased royalties. One economist has estimated that the combined income tax figures for all the mining industries when viewed together are spread approximately 50 percent to lower prices, 40 percent to royalties for owners of mineral industries, and 10 percent to increased operators' profits.⁷⁵

An unanswered question is the advantage of tax incentives compared with direct expenditures. Public interest tax groups view tax subsidies designed to influence specific business and personal decisions as generally undesirable. "Direct government expenditures, which are subject to periodic accounting and review, are almost always a less expensive way of attaining public goals than are tax subsidies."⁷⁶ Furthermore, the use of incentives to achieve economic goals has been attacked on grounds of erosion of the tax base in favor of special

⁷⁴ See Agria, *Special Tax Treatment of Mineral Industries* in *THE TAXATION OF INCOME FROM CAPITAL 77* (N. Harberger and M. Bailey eds. 1969). The estimates were made for both coal, oil and gas, but were made prior to the elimination of percentage depletion for large producers in 1975. See also G. BRANNON, *STUDIES IN ENERGY TAX POLICY* (1975).

⁷⁵ See Agria *supra* note 74.

⁷⁶ The quotation is from a brochure published by *Taxation with Representation*, a group of tax experts representing the public interest, located at 2369 N. Taylor St., Arlington, Va. 22207.

groups and interests and possible misallocation of resources.⁷⁷

A small chapter in the debate over the use of tax incentives instead of direct subsidies to achieve desirable objectives is concerned with pollution control bonds. The statutory provision excepting interest on state and municipal bonds from federal income tax was recently extended to include the interest on certain bonds issued by utilities to raise money for pollution control. Though easily overlooked in discussion of tax policy, this exemption has a significant effect upon the volume of investment dollars channeled in control equipment.⁷⁸ In 1974 it was estimated that pollution control bonds alone accounted for 15 percent of total funds used for this purpose.⁷⁹ It is no wonder that interest rates rose and states and municipalities had difficulty borrowing for essential governmental functions. Nor is it surprising that the Treasury and the Municipal Finance Officers Association have joined in viewing with alarm any further proliferation of pollution control issues and in calling for an end to the exemption.⁸⁰ This relatively less important tax provision is one example of the difficulty with taxes as a policy tool. Incentives to further special objectives and aid special groups can have unintended effects.

Despite the growing swell of opinion that the federal income tax system should be neutral to better serve its primary objective of raising revenue outlined earlier in this article, tax laws continue to be used to exert economic pressure to accomplish goals deemed worthy. One prime example is the latest version of the Ullman bill, the "Energy Conservation and Conversion Act of 1975."⁸¹ The Act now contains a wide variety of tax mechanisms designed to encourage conservation and also

⁷⁷ See S. SURREY, *PATHWAYS TO TAX REFORM* (1973); Agria, *supra* note 74; L. EISENSTEIN, *THE IDEOLOGIES OF TAXATION* (1961).

⁷⁸ IRC § 103. Combined with the growth of investment in exempt industrial development bonds before Congress enacted restrictions limiting their use in 1968, there has been rapid growth in money invested in exempt bonds.

⁷⁹ See Secretary Simon's testimony in *PUBLIC HEARINGS BEFORE COMMITTEE ON WAYS AND MEANS ON TAX REFORM*, H.R. 94th Cong., 1st Sess. part 1, at 14 (1975).

⁸⁰ "The Municipal Finance Officers Association views the proliferation of pollution control issues as a prime factor [in driving up interests rates on tax exempt bonds] and has called for repeal or restriction of such financing. The [Department of] Treasury shares that judgment." *Id.*

⁸¹ H.R. 6860, 94th Cong., 1st Sess. (1975), which recently passed the House of Representatives was subjected to numerous amendments in the Senate.

to allocate resources to production and consumption of desired energy sources. For example, an investment tax credit is proposed for home insulation;⁸² solar energy equipment or machinery placed in service;⁸³ and recycling of glass, paper, textiles and metal.⁸⁴ In addition the act would eliminate the investment credit currently allowed for electric generating facilities fueled by petroleum⁸⁵ and for heating and air conditioning units.⁸⁶

The bill also contains numerous excise tax modifications designed to encourage conservation including an excise tax on gasoline with future hikes dependent upon whether consumption is held to 1973 levels, a hike in the tax on automobiles with low fuel efficiency, and a repeal of the excise tax on buses in intercity transportation.⁸⁷ There is also the rapid amortization of "qualified energy use property," including coal processing equipment and coal slurry pipelines.⁸⁸

The tax incentives proposed by the Ullman bill have not gone without criticism. It is said that these tax incentives, like other preferences, erode the tax base, constitute "backdoor spending" not subject to the safeguards of appropriations and budget procedures, benefit the well-to-do taxpayers more than the poor who are unable to incur expenditures for credit entitlement, and reward individuals through the tax system for what they probably would have done anyway as a result of the operation of the price system.⁸⁹ All in all the numerous preferences "would prove costly and ineffective in trying to achieve energy savings."⁹⁰ The Ullman bill, which includes higher taxes on imported oil, is estimated to produce a net increase in revenues of \$8.7 billion by 1980, of which about \$5 billion will go into an

⁸² *Id.* Section 331 would allow an investment credit equal to 30 percent on qualified insulation expenditures to the extent that such expenditures do not exceed \$500.

⁸³ *Id.* Section 332 would place a maximum credit of 40 percent of the first \$1000 spent on qualified solar energy expenditures and 20 percent on the excess over \$1000 but not to exceed \$2,000.

⁸⁴ *Id.* § 533(3)(1).

⁸⁵ *Id.* § 532(a), amending IRC § 48.

⁸⁶ *Id.* § 531(b), amending IRC § 48(a)(1)(A).

⁸⁷ *Id.* §§ 211, 311, 321.

⁸⁸ *Id.* § 521.

⁸⁹ H.R. REP. No. 94-221, 94th Cong., 1st Sess. 224-26 (views of Reps. Sam M. Biggins, Abner K. Mikva, James C. Corman, and Pete Stark) (1975).

⁹⁰ *Id.* at 224. .

Energy Conservation and Conversion Trust Fund.⁹¹

Some of the Ullman proposals, such as the excises on gasoline and the denial of investment credit for heating and air conditioning units, are intended to deter undesirable activity rather than encourage desired activity. These provisions could evoke the much debated question of the merits of control through taxation as compared with direct control through government regulation.

III. STATE TAXATION

The coal industry is taxed by the states chiefly through income, property, and severance taxes. While state income taxes are set at lesser rates, they closely parallel the federal model in policy effects, and, therefore, are not discussed in this article. In addition neither property nor ad valorem taxes on coal interests will be discussed at any length. It should, however, be noted that most states have had extreme difficulty in reaching a fair system of assessment and collection. In the counties there is both the political problem of fair assessment by locally elected assessors who often are beholden to the industry, and there are unusually difficult valuation problems as well. Even where exploration has revealed the quantity and quality of coal seams, its accessibility must be evaluated. The coal industry points out that coal assessment cannot be based solely upon its value in the ground without also taking into account the cost and feasibility of commercially profitable mining operations at the particular site.⁹² These difficulties with property taxation of coal led many states to enact a kind of excise tax, known as a severance tax, on the value of the mineral upon extraction.

A. Severance Taxes

A severance tax is an excise tax on the production of coal or other minerals and has been broadly defined "as a levy

⁹¹ H.R. REP. NO. 94-221, *supra* note 88, at 21, 54.

⁹² See Brightwell, *Ad Valorem Taxation of Mining Properties*, 15 ROCKY MT. M.L. INST. 281 (1969). Kentucky recently enacted a law taxing interests in unmined coal. Ky. Acts 167 (1976) amending Ky. REV. STAT. § 132.200 (1971) [hereinafter cited as KRS].

assessed at flat or graduated rates by a government on the privilege, process, or act of commercially severing or extracting natural resources . . . and measured by the physical amount or the gross or net value of the natural resources produced or sold.”⁸³ The primary justification made for severance taxation is the raising of revenue. Another supporting rationale is that severance taxes represent a claim by the state to a part of the value of its underground wealth lost by mining, and, to a lesser degree, the taxes are justified as substitutes for property taxes where the taxable property is minerals.⁸⁴ Severance taxes differ, however, from ad valorem taxation in that the former tax is levied not upon the value of the mineral deposit in the ground but only upon its value when extracted. Severance taxes also differ considerably from income taxes in that the tax base of the former is on total production while the latter is on profit. Although a severance tax at the federal level has been proposed, such taxes now are exclusively imposed by the various states.⁸⁵ One important characteristic, from the viewpoint of exporting states, is that the burden of the tax is borne by consumers outside the state in the form of additional cost passed on by the coal operator.

In recent years the incidence of severance taxes by state governments has rapidly increased. These taxes vary widely in form and in each state the rate is different; however in every case the rate is nominal in comparison to the value of the coal extracted. Instead of a progressive rate varying with the amount extracted, the general rule is to impose a flat rate per ton of material mined.⁸⁶

⁸³ Lockner, *The Economic Effect of the Severance Tax on Decisions of the Mining Firm*, 4 NATURAL RESOURCES J. 468, 469 (1965).

⁸⁴ See generally STUDIES IN ENERGY TAX POLICY (G. Brannon ed. 1974).

⁸⁵ *Hearings on Surface Mining Before the Subcomm. on Minerals, Materials and Fuels of the Senate Committee on Interior and Insular Affairs*, 92d Cong., 1st Sess., ser. 92-13, pt. 1, at 492 (1971).

⁸⁶ ALA. CODE tit. 51 § 431(15) (Cum. Supp. 1973) (13½ cents per ton of coal); ARK. STAT. ANN. § 84-2102 (1947) (2 cents per ton); COLO. REV. STAT. ANN. § 34-23-101 (1973) (.7 cents per ton); KRS § 143.020(1971) (4 percent of the gross value); LA. REV. STAT. § 47:633(13) (1970) (10 cents per ton); MONT. REV. CODES ANN. § 84-1314 (Cum. Supp. 1975) (a progressive tax correlated to the heating quality of the coal and differentiating between surface and underground mining); N.D. CENT. CODE § 57-61-01 (Supp. 1975) (50 cents per ton with increases dependent upon increases in the U.S. Dept. of Labor's wholesale price index for commodities); S.D. COMPILED LAWS ANN. § 10-39-24

Although severance taxes are designed primarily for the raising of revenue, they can be a very flexible tax which can be utilized for nonrevenue purposes.⁹⁷ Even the public interest tax groups which deplore the use of tax subsidies to influence specific business decisions are likely to recommend the use of tax sanctions in the form of severance or other user and effluent taxes. The reason for this is simple. Because of damage done to the environment, they believe there is need to bring social and private costs into closer correspondence and see this tax as a method of accomplishing this purpose. It is analogous to the fabled tax on bachelors, where collections were earmarked for children born out of wedlock; the underlying tax policy was that the parties causing the problem should compensate society for some of the damage. Increased severance tax rates are also urged to provide revenue to repair damage caused by access roads, to fund reclamation, and to repair or rebuild public roads damaged by coal trucks.

An example of the use of the severance tax to achieve policy objectives can be found in proposals that Congress enact a severance tax on a national level, perhaps with a higher rate imposed on coal extracted by stripping than by deep mining. One original proposal developed would establish a severance tax progressively correlated to the degree of slope on which strip mining is conducted.

It is a general rule that as the degree of slope on which mining operations occur increases, the environmental damage increases.⁹⁸ A progressive severance tax corresponding to the

(Interim Supp. 1975)(4 percent of net profits); TENN. CODE ANN. § 67-5902 (Cum. Supp. 1975)(20 cents per ton); WYO. STAT. ANN. § 39-227.1 (Cum. Supp. 1975)(.4 percent-.2 percent with the expiration of the tax after a total of \$120 million dollars have been collected).

⁹⁷ Kentucky has recently provided several methods to return funds gained from the severance tax to the coal producing counties. Ky. H.R. 674, *amending* KRS § 42.330 (coal severance economic aid fund), and KRS § 42.350 (area development fund), and KRS § 177.960 (energy road fund). Although the use of the severance tax may be inefficient to repair the damage caused by the mining and transportation of coal, it is one way to compensate the coal producing counties for their loss.

⁹⁸ Kentucky, as do most mining states, prohibits mining above a certain degree of slope; 402 Ky. ADM. REG. 1:030 § 2(2)(b) prohibits contour mining except for auger mining above a slope of 27 degrees. See *Hearings on the Regulation of Strip Mining Before the Subcomm. on Mines and Mining of the House Comm. on Interior and Insular Affairs*, 92d Cong., 1st Sess., ser. 92-96, at 157 (1971).

degree of slope would provide an incentive for coal operators to extract coal that underlies less steep slopes, thus reducing environmental damage and compensating the public for the environmental damage caused by surface mining on steep hillsides. Although it is still undetermined whether a tax directly proportionate to increases in slope would be appropriate or whether a progressive rate that would increase at a greater rate with the increase in slope would best compensate the public for the additional disruption of the environment, such a tax might be an appropriate use of a tax as a policy tool.⁸⁹

IV. CONCLUSION

For many years the primary goal of energy tax policy was to encourage the development of petroleum and natural gas—a policy reflected by the depletion allowance and the deduction for intangible drilling and development expenses. It is now recognized, however, that oil and natural gas reserves will be exhausted despite new discoveries long before the known coal deposits, forecasted to last several hundred years, are seriously depleted. In recognition of this inevitable development, and to relieve America's dependence on foreign energy sources, tax policies affecting coal are being modified to boost coal production and consumption. The previously developed statutory capital gain accorded coal royalties, the evolution of the depletion allowance for coal, the tax treatment of exploration and development expenses, and the tax credit and depletion deduction for investments in the coal industry support this new objective. In addition, the rapid write-off of pollution control equipment and the state severance tax can be used to further protection of the environment.

In the past, however, taxation designed to provide economic incentives has resulted in misallocation of resources. Recent governmental policy has been to keep the price of oil high enough to encourage investment in coal and coal conversion plants. If, however, it should become cheaper to produce electricity from coal than from nuclear plants,¹⁰⁰ the imposition

⁸⁹ See, e.g., Binder, *A Novel Approach to Reasonable Regulation of Strip Mining*, 34 U. PITT. L. REV. 339 (1973).

¹⁰⁰ See B. COMMONER, *THE POVERTY OF POWER* (1976). Commoner argues that government and industry policy with primary emphasis upon profits has produced the

of a national tax on coal in order to protect government-sponsored investment in nuclear energy would be a mistake. A neutral tax system with direct expenditures for activity deemed desirable would be the preferable alternative.

wrong kinds of energy. The neglect of solar energy and emphasis upon oil and the development of nuclear energy is energy wasteful since, for example, approximately 90 percent of the energy potential of oil is wasted when it is converted to use in home heating or automobile fuel. The same argument is applied to the development of coal liquefaction plants, in which 1/3 of the coal energy is wasted to produce fuel that is itself inefficient. *See also* Commoner, *Energy, appearing in* three installments in *THE NEW YORKER*, Feb. 2, 1976 at 38, Feb. 9, 1976 at 38, Feb. 16, 1976 at 64.