Working Paper 76

2-1-1983

Energy Development and Government Policy

Murray L. Weidenbaum
Washington University in St Louis

ENERGY DEVELOPMENT AND GOVERNMENT POLICY

by

Murray L. Weidenbaum

Working Paper Number 76

February 1983

Center for the Study of American Business
Washington University
St. Louis, Missouri

ENERGY DEVELOPMENT AND GOVERNMENT POLICY

by Murray L. Weidenbaum

This article examines the relationship between government policy and energy needs, with special attention to the taxation and regulation of gasoline. It concludes with a series of proposals for reducing or eliminating the special treatment -- both supportive and punitive -- that now characterizes public policy in the United States toward the energy sector of American industry.

The U.S. petroleum industry's stock of plant and equipment far exceeds that of any other sector of American industry. But the industry's mass of capital is not merely a reflection of its large size. As the nation's major energy sector, it is extremely capital intensive. As shown in Table 1, oil companies use far more capital per worker than any other industry.

In 1981, the petroleum refining industry reported $314,801 in assets per employee, and mining and crude-oil producers reported $383,787. In striking contrast, the chemical industry reported $94,299, and the all-industry average was a modest $60,437 in assets per worker. But these figures are not a matter of the energy industry resting on its economic laurels.

The U.S. Department of Energy has estimated that the domestic oil and gas industry will need to invest an average of $25-30 billion annually during the 1980s for exploratory development, production, and refining capacity to achieve modest energy goals. Other private estimates range as high as $35

Dr. Murray Weidenbaum is Mallinckrodt Distinguished University Professor and Director of the Center for the Study of American Business at Washington University.

TABLE 1

Capital Intensity, For Selected Industries, 1981

Industry	Assets Per Employee
Mining and Crude-oil Production	$383,787
Petroleum Refining	314,801
Beverages	95,828
Chemicals	94,299
Paper, Fiber and Wood Products	92,023
Metal Manufacturing	82,380
Tobacco	78,730
Pharmaceuticals	74,388
Publishing and Printing	57,924
Soaps and Cosmetics	57,175
Average For All Industries	$ 60,437

Source: Computed from data in Fortune, May 3, 1982.

billion a year.[1] The magnitude of that financial task can be better appreciated when we consider that comparable expenditures were less than $13 billion in 1972 and approximately $20 billion in 1978. The Energy Department also estimates that the domestic coal industry will have to invest between $5 and $6 billion annually during the 1980s to achieve modest energy goals. This compares to actual investments of less than $1 billion in 1972 and $2.4 billion in 1978.

Review of Government Policy and the Energy Industry

Any balanced review of the development of the federal government's tax and regulatory policy toward the energy industry would conclude that it has had a checkered past.[2]

The first major development in energy policy in the United States was the establishment in 1926 of the system of depletion allowances for oil and gas. In that year, Congress amended the recently enacted Internal Revenue Code to set percentage depletion allowance rules, permitting oil and gas producers and royalty owners to receive, tax-free, 27.5 percent of the wellhead value of oil and gas production (up to 50 percent of the net income from each property). These rules stayed in effect until the Tax Reform Act of 1969. A related tax provision permits the immediate write-off of intangible drilling costs which occur in oil and gas exploration and development, such as the wages of drilling crews.

---

[1] Economic Report of the President, January 1980, Washington, D.C., U.S. Government Printing Office, 1980, p. 115.

[2] Walter J. Mead, "The Use of Taxes, Regulation, and Price Controls in the Energy Sector," National Tax Journal, September 1978, pp. 229-235; and Murray L. Weidenbaum, Business, Government, and the Public, second edition, Englewood Cliffs, N.J., Prentice-Hall, 1981, pp. 114-128.

Over the years these two tax incentives -- depletion allowances and expensing of intangible drilling costs -- had a strong effect on the energy industry. They led to high levels of domestic investment, large new oil discoveries, a low average price of energy, and a resultant high consumption pattern of energy in the United States. But the tax incentives did not operate independently. These conditions resulted in the passage of important regulatory legislation in the 1930s. The Interstate Oil Compact Commission Act authorized states to limit (or "prorate") all oil production within their borders in order to avoid "wasteful" levels of production and market "gluts." The Connally Hot Oil Act was the enforcement mechanism; it denied producers the right to sell their product in interstate commerce in violation of state prorationing laws.

From 1960 through 1965, for example, prorating by the Texas Railroad Commission limited production to 27-29 percent of the basic maximum allowable rate of production by well. The operation of the prorationing system served, in effect, to offset much of the impact that the tax incentives had on petroleum prices and output.

To make matters worse, market-demand prorationing supported domestic oil prices at levels that substantially exceeded the price of imported oil. This relationship, of course, encouraged the growth of petroleum imports into the United States. With rising imports, the market supply restrictions imposed by the prorationing system became increasingly difficult for domestic producers to bear. In 1959, President Eisenhower, by executive proclamation, imposed mandatory quotas on oil imports. The import quotas led to more rapid exploitation of domestic oil reserves than would have occurred otherwise. Previously, in 1954, the Federal Power Commission (now the Federal Energy

Regulatory Commission) had set wellhead prices for natural gas flowing into interstate commerce at levels substantially below world market prices. The FPC action thus encouraged more domestic consumption of energy.

Thus, during the years of rapid economic growth that characterized much of the period following World War II, the United States had available energy below world market prices. As a result of government policy, therefore, this nation on balance consumed far more oil and natural gas than would have been the case under a free market situation.

The regulatory atmosphere began to change dramatically in the 1970s. In August 1971, President Nixon imposed price controls on the economy generally (exempting special sectors such as agriculture). In 1973-74 the controls were lifted on everything except crude oil and petroleum prices.

The combination of tax subsidies and import quotas stimulated domestic oil production for decades. This encouraged the rapid utilization of domestic energy and the growing dependence on foreign sources. The economic impacts of the import restrictions became increasingly difficult to live with, and President Nixon eliminated them effective May 1, 1973.[3]

But the growing dependence of the United States on foreign energy in recent years has been accompanied, oddly enough, by a shift in tax policy away from encouragement of domestic energy development and production. The 1969 Tax Reform Act reduced depletion allowances to 22 percent. Subsequently, the Tax Reduction Act of 1975 eliminated percentage depletion almost entirely for major integrated producers of oil and gas. That Act also provided for phased reductions of tax depletion benefits for smaller producers, which are defined

---

[3]Mead, op. cit., p. 231.

as producers that neither refine more than 50,000 barrels of oil a day nor have a retail outlet. Beginning in 1984, the applicable rate of percentage depletion for those producers which are covered will be reduced from 22 percent to 15 percent, and the maximum amount of oil which is granted tax exemption will be cut to 1,000 barrels a day; the maximum allowable exemption for gas will be reduced to 6 million cubic feet of gas a day. In 1976 and 1977, Congress enacted technical amendments to the Internal Revenue Code which limited the tax advantages of intangible drilling costs.[4]

Meanwhile, beginning in late 1973 and extending through part of 1974, the Organization of Petroleum Exporting Countries (OPEC) embargoed the shipment of oil to many nations, including the United States, and when it lifted the embargo, it quadrupled world oil prices. This situation led to the establishment of a Federal Energy Administration, as well as a series of actions by the federal government to increase domestic energy supply and reduce demand. However, those efforts were restricted by pressures both to limit price increases to American consumers and to contain "windfall" profits on the part of American oil producers.

In December 1975 President Ford signed the Energy Policy and Conservation Act. The law provided for price controls on crude oil ranging from a low of $5.25 a barrel on "old" oil (oil from fields in operation in 1973) to $11.28 a barrel for "new" oil. At the time, the world price of oil delivered to the United States was $13.50 a barrel. Under this act refiners were required to make cost-equalizing payments to one another -- so-called "entitlements." These resulted in each refiner paying the same average price for a barrel of oil, regardless of whether it was classified as "old" or new," or whether it

---

[4]The Federal Budget for Fiscal Year 1981, Special Analyses, Washington, D.C., U.S. Government Printing Office, 1980, p. 218.

was produced domestically or imported. The average price established by the combination of price controls and entitlements was below the imported price. Each company importing foreign oil in effect received a subsidy from American producers to cover the difference between the higher world price and the lower and controlled price. In May 1979 that subsidy came to $2.56 a barrel.

In the fall of 1977 Congress established a permanent Department of Energy, thus making it clear that federal intervention in this area of economy was not a transient matter, limited only to short-term factors such as the OPEC embargo.

In November 1978 Congress passed a substantially modified version of President Carter's energy plan. The new law gave the President authority to phase out price controls on oil over an extended period of time. Under this approach, a growing proportion of oil from "old" wells could be sold at "new" prices. Thus, by December 1979 an "old" well producing 100 barrels of oil a day could sell 12 barrels at "new" prices; by December 1980 it could sell 54 barrels at the higher price. In January 1981, President Reagan used the authority of the 1978 law to eliminate price and allocation controls over gasoline and petroleum products.

The 1978 law was more ambivalent on natural gas, extending price controls to cover previously exempt intrastate gas. In general, the 1978 act contained price escalation provisions which permitted increases only at the general rate of inflation. Three exceptions were provided: (a) new gas, (b) high-cost gas produced from depths of 15,000 feet or greater, and (c) small wells (so-called stripper well production). These latter categories were allowed additional price increases of 3 1/2 to 4 percent a year.

The 1978 law provided partial decontrol of natural gas in the following manner: In November 1979 the price of new, high-cost gas was decontrolled. Moreover, on January 1, 1985, three more categories are to be decontrolled, including gas produced from wells drilled after February 19, 1977, and at least two-and-a-half miles from the nearest existing well or at least 1,000 feet below the deepest well within two-and-a-half miles. On July 1, 1987, decontrol is provided for new wells from depths of 5,000 feet or less. The prices for all other categories of natural gas will continue to be controlled permanently. Table 2 shows the complexity of federal regulation of natural gas pricing.

The Energy Tax Act of 1978, on the other hand, did create a variety of specialized tax incentives -- but limited them to non-petroleum energy sources. For example, after September 30, 1978, production from geothermal deposits became eligible for percentage depletion at the same rate as that for oil and gas, but with no limit on output and no restriction with respect to the size of qualifying producers. In lieu of percentage depletion, royalties from coal deposits are treated as capital gains rather than ordinary income.

The 1978 Act also provides a 15 percent income tax credit to individuals for home insulation and other energy conserving components, up to a maximum credit of $300. A credit of 30 percent on the first $2,000 of expenditures and 20 percent on the next $8,000 is allowed for solar and other renewable energy source property. For business, the Act sets an additional 10 percent credit on such specified energy property as recycling equipment, shale oil equipment, equipment for producing natural gas from geopressurized brine, and so forth.[5]

TABLE 2

Complications in Decontrolling the Price of Natural Gas

Type of Production	Price as of Jan. 1979 (per million BTUs)	Date of Deregulation
Stripper well	$2.24	Not deregulated
New outer continental shelf leases (after 4/20/77)	2.10	1/1/85
New onshore wells	2.10	1/1/85
New onshore reserviors	2.10	1/1/85
Gas from reservoirs discovered after 7/26/76 on pre-4/20/77 shelf leases	2.10	Not deregulated
Production from below 15,000 feet from wells drilled after 2/19/77	2.10	Deregulated on effective date of FERC incremental pricing rule
Onshore - below 5,000 feet	1.98	1/1/85
Onshore - above 5,000 feet	1.98	1/1/87
Interstate commerce gas - before enactment - wells started 1/1/75-2/18/77	1.64	Not deregulated
Prodhoe Bay - Alaska gas or gas not otherwise covered	1.64	Not deregulated
Interstate commerce gas - before enactment - wells started 1/1/73-12/31/74		
Small Producer	1.39	Not deregulated
Large Producer	1.06	Not deregulated
Sales under "rollover" contracts - intrastate	1.00 or more	1/1/85 if > $1.00
Replacement contract or recompletion - small producer	.78	Not deregulated
Interstate rollover contracts - small producer	.72	Not deregulated
Interstate rollover contracts - large producer	.61	Not deregulated
Replacement contract or recompletion	.60	Not deregulated
Certain Permian Basin gas - small producer	.47	Not deregulated
Certain Rocky Mountain gas - small producer	.47	Not deregulated
Certain Permian Basin gas - large producer	.41	Not deregulated
Certain Rocky Mountain gas - large producer	.40	Not deregulated
Certain Appalachian Basin gas - north sub area - contract after 10/7/69	.37	Not deregulated
Other contracts	.35	Not deregulated
Minimum rate gas - all producers	.20	Not deregulated
Sold unter existing intrastate contract	Contract Price	1/1/85 if > $1.00; not deregulated if lower than $1.00

Source: Natural Gas Policy Act of 1978

In 1980, the Congress enacted a "windfall profits" tax to siphon off to the Treasury a large part of the increased revenue resulting from both the rising world oil prices and the phased decontrol of domestic oil prices. Price and allocation controls were eliminated in January 1981, and the windfall profits tax is scheduled to expire in 1990 (unless the revenue objectives are achieved sooner). The tax is a specified percentage of the difference between the sales price in the field and the base price for each category of oil, adjusted for inflation after June 1979, using the GNP deflator with a six-month data lag. For example, oil from Prudhoe Bay is taxed at a 70 percent rate on revenue above a $12.80 a barrel (adjusted for inflation), while stripper oil is taxed at a 60 percent rate on revenue above $15.20 a barrel (adjusted for inflation) and new, tertiary, and heavy oil is taxed at a 30 percent rate on revenue above $16.55 a barrel (adjusted for inflation plus two percent). State severance taxes of up to 15 percent are deductible. The tax is limited to 90 percent of net income from the property.

The windfall profits tax is scheduled to be phased out over a 33-month period at a rate of three percent a month, beginning in January 1988 or the month after cumulative tax revenues have reached $227 billion, whichever is later. If the $227 billion figure is not attained, the phaseout would start no later than January 1991.

Although we cannot estimate precisely the negative effects on domestic oil production of the new excise tax levied under the guise of "windfall profits taxation," the direction of the impact is clear: the less revenue to a producer from a barrel of oil, the lower the resultant supply will be. Surely, a lower domestic supply of oil will be economically feasible at a net

---

[5] Ibid, p. 219.

revenue of $20 per barrel (after payment of the tax) than would have been forthcoming at, say, $30 per barrel, without the tax. We do not know the precise "elasticity" or responsiveness of supply to price, but clearly the relationship is positive. The higher the price, the greater the supply forthcoming, and vice versa.

Clearly, this special tax -- levied in addition to the regular taxes paid by petroleum and other companies -- also reduces the amount of funds that the industry has available for investment in domestic equipment, development, production, and refining. For example, Exxon estimates its "windfall profits" tax in 1980 at $800 million. This sum is the equivalent of drilling 800 wells at an average cost of $1 million each or investing over 3,000 crew-months of seismic exploration.[6] Simultaneously, of course, the windfall profits tax increases the ability of the government to take a more active role in financing energy activities.

This tax is, moreover, an extremely complex piece of legislation when viewed in terms of the costly administrative burdens that it imposes on the private sector. For example, hundreds of thousands of informational documents have to be exchanged between royalty owners, producers, operators, and purchasers.[7] Table 3, containing an approximation of the computation of the tax on selected categories of oil, may provide the reader with some indication of the intricacies involved in complying with the windfall profits tax.

The law instituting the windfall profits tax also provides for a $3 per barrel tax credit for producers of designated alternative energy sources:

---

[6]McCarter Middlebrook, Testimony for the American Petroleum Institute et al. to the Internal Revenue Service Re: Costs, Etc., of Collecting Windfall Profits Tax, July 25, 1980, p. 2.

[7]Issues in Review, Exxon Company, USA, June 1980, p. 2.

TABLE 3
Computation of Windfall Profit Tax on
Selected Crude Oil Categories for March 1980(1)

		Tier 1				Tier 2		Tier 3	
		40° South Louisiana		40° West Texas Sour					
	27° ANS (Sadlerochit)	Upper Tier	Market Tier	Upper Tier	Market Tier	So. La.	W. Tex. S.	So. LA.	W. Tex. S.
Posted price (3/12/80 posting ANS estimated average net back)	15.45	14.18	38.00	13.93	36.00	38.00	36.00	38.00	36.00
Base price -- tier 1-5/79 U.T. ceiling minus $.21	12.70	13.03	13.03	12.78	12.78				
Tier 2 - $\frac{15.20}{35.00}$ x highest 1/14/80 posting for 12/79						16.07	15.20		
Tier 3 - $\frac{16.55}{35.00}$ x highest 1/14/80 posting for 12/79								17.50	16.55
Inflation adjustment Tiers 1 & 2 - .0195372(2) Tier 3 - .0246348(3)	.25	.25	.25	.25	.25	.31	.30	.43	.41
Adjusted base price	12.95	13.28	13.28	13.03	13.03	16.38	15.50	17.93	16.96
TAPS adjustment	.08								
Severance tax adjustment on price increment(4)	.29	.11	3.09	.04	1.06	2.70	.94	2.51	.88
"Windfall profit"	2.13	.79	21.63	.86	21.91	18.92	19.56	17.56	18.16
Windfall profit tax	1.49	.55	15.14	.60	15.34	11.35	11.74	5.27	5.45
Wellhead realization net of WPT and severance tax	12.18	11.86	18.11	12.69	19.00	21.90	22.60	27.98	28.89

(1) Ignoring net income limitation

(2) *GBO 79-111, 166.99 minus GNP 79-11, 163.79) : 163.79

(3) (GNP 79-111, 166.99 times 1.005 minus GNP 79-11, 163.79) : 163.79

(4) Using 11.5% effective rate for ANS, 12.5 for So. La., 4.6% for W. Tex. Sour.

(1) oil from shale and tar sands,

(2) natural gas from tight sands, geopressured brine, coal seams or Devonian shale,

(3) synthetic fuels (other than alcohol) from coal, and

(4) certain energy from biomass, wood, and agricultural products.

This credit will be phased out as the average wellhead price for uncontrolled domestic oil rises from $23.50 a barrel to $29.50 a barrel (measured in 1979 dollars). Other tax credit provisions include extension of gasohol's exemption from the four cents a gallon federal excise tax from 1984 to 1992, and additional tax credits for business investment in solar, wind, and geothermal equipment, in cogeneration equipment, and for residential solar, wind and geothermal investments.

The residential tax credit under the act has been increased to 40 percent on qualifying expenditures up to $10,000 a year for a maximum credit of $4,000. The business tax credit has been increased from 10 percent to 15 percent. The termination date has been postponed from December 31, 1982, to December 31, 1985, and cogeneration equipment has been added to the list of property eligible for the credit.

To recapitulate, the full list of alternative energy property qualifying for the energy tax credit follows:

A. Alternative energy property which includes:

(1) boilers or other burners, the primary fuel of which is fuel other than oil, gas, or products from oil and gas (i.e., alternative substances);

(2) equipment used to convert alternate substances into synthetic liquid, gaseous or solid fuel (other than coke or coke gas);

(3) equipment used to convert or modify existing oil and gas burners to use alternate substances as fuel (or a fuel mixture with content of at least 25 percent alternate substances);

(4) equipment which uses coal (including lignite) as a feedstock for the manufacture of chemicals or other products (other than coke or coke gas);

(5) pollution control equipment required by federal, state, or local regulations to be installed in connection with such alternate energy property;

(6) equipment used generally in the storage, transfer or preparation of alternate substance for use in alternate energy property;

(7) equipment used to produce, distribute or use energy derived from a geothermal deposit (up to but not including the electrical transmission stage for electricity produced by geothermal power).

B. Solar or wind energy property.

C. Specially defined energy property, including recuperators, heat wheels, regenerators, heat exchangers, waste heat boilers, heat pipes, automatic energy control systems, preheaters, combustible gas recovery systems, or any other kinds of property which are specified in Treasury regulations, the primary purpose of which is to reduce the amount of energy consumption in existing industrial or commerical facilities.

D. Solid waste recycling equipment.

E. Property used to mine and extract oil from shale (through retorting).

F. Equipment for producing natural gas from geopressured brine.

It is intriguing to note that the Congressional deliberations on the windfall profits tax also served, in effect, to set aside consideration of proposed changes in the foreign tax credit which would have a serious effect on the petroleum industry's overseas activities. In April 1979, President Carter announced that he would propose legislation to limit the foreign tax credit allowed for income taxes paid on foreign oil and gas extraction income. In June 1979, the Treasury sent to Congress its legislative proposal to limit such credits to the lesser of:

(1) the tax credit computed with respect to overall foreign oil and gas extraction income (net of losses), or

(2) the tax credit computed with respect to such income on a country-by-country basis.

In effect, the administration's plan would have reduced the total credits from all foreign oil and gas extraction operations by offsetting net income in some countries with net losses in others. This would have eliminated some foreign tax credits for foreign income taxes actually paid by oil companies and, thus, it would have subjected the firms to double taxation. In early 1980, however, the Secretary of Treasury William Miller advised the Senate Finance Committee that he would propose a revised set of foreign tax credit changes. The Treasury Department subsequently indicated it would not put forth any new suggestions in this area until after the windfall profits tax was signed into law. The Reagan Administration has not pursued the matter.

In the future, if any legislative attention is given to the foreign tax credit, it should be noted that reducing or eliminating this provision would handicap U.S. oil companies relative to their foreign competitors and, thus, impede the search for new energy sources. The foreign tax credit has much history and precedent behind it. The credit was created in 1918 to protect all U.S. taxpayers earning foreign income from being taxed twice on it: once by the foreign government and again by the U.S. Internal Revenue Service. Nearly every industrial nation has a similar procedure for avoiding double taxation. Some, like France and the Netherlands, exempt their oil companies' foreign income altogether.

Some Relevant History of Energy Shifts

There clearly seems to be problems of consistency in relating the long-term goal of increasing domestic energy supplies and the impacts of taxation and related regulatory policies. On the basis of the ambitious investment schedule quoted earlier, one might have expected a more supportive or at least less inhibiting set of policies toward the petroleum companies which constitute the central sector of the energy industry. However, a survey of past tax policy toward the energy industry does not generate much enthusiasm for instituting yet another round of specialized tax treatment.

It is useful, however, to draw upon earlier and more successful experiences in American history, when this nation faced significant shifts in energy production and consumption. Those adjustments proceeded quite satisfactorily in the past. Successive shifts occurred from one energy source to another, as the underlying economics -- relative prices -- changed.

For example, in 1800, illumination in America was provided mainly by candles and oil lamps, with fuel for the lamps coming from whale oil. Whales

did not become extinct as the country grew. As the price of whale oil rose from 23 cents a gallon in 1832 to $1.45 in 1865, consumers switched to substitutes. In the 1850s, coal oil or kerosene derived from coal distillation dominated the residential market for illumination. In turn, its success was followed by an equally meteoric decline in favor of a new fuel that had appeared in the market, petroleum. By 1863, virtually all coal refiners had switched over to crude-oil refining, and many new refineries appeared.

Thus, the shifts from whale oil to kerosene to gasoline resulted not from an act of Congress or a subsidy from the Treasury, but from successive movements in the price of energy. The implication for our times is clear: the sooner that government frees existing energy sources, such as natural gas, from artificial price restraints, the sooner will new domestic energy sources become commerically competitive. Conversely, the continuation of price controls on natural gas delays the time when new domestic sources, including solar energy or synthetic fuels, will come into widespread use. The major spur to developing domestic energy sources will not be government subsidy, but price decontrol of existing energy sources.[8]

These interactions are currently most visible in the area of natural gas. The Natural Gas Policy Act of 1978 was designed to raise the wellhead prices of natural gas in order to achieve a balance between supply and demand in 1988. As pointed out above, the legislation specified gradual price increases for various categories of gas, based on a projected price of oil that today is considerably lower than current oil prices. This price disparity has prompted new inefficiencies in the allocation and consumption of natural gas. The

---

[8]Weidenbaum, op cit., pp. 114-120.

smooth transition to a deregulated market envisioned by the framers of the Act may not occur.

At the present time, high-priced natural gas is being imported from Canada at a time when cheaper U.S. supplies are in surplus. The problems in the gas market have been caused by the interaction of inflexible federal price control and rigid contracts between pipeline companies and producers. The contracts, in turn, were by-products of the long and convoluted history of government regulation of energy.

The basic problem is that federal regulation is too rigid to allow gas prices to reflect changing conditions. Natural gas prices are now at levels that have encouraged switching back to oil. With an estimated 15 percent of capacity idle, it is not clear that a sharp run up in prices would result if natural gas were deregulated.[9] The successful decontrol of oil prices two years ago provides the appropriate model.

The Future Role of Energy Tax Policy

When we examine the prospects for using tax policy to increase the likelihood of achieving the nation's investment targets, we find that there are many competing demands for tax reform. There is no shortage of alternatives for Congress to choose from: (1) moving to a flat or at least flatter income tax structure, (2) shifting the basis of federal taxation from income to sales or value added, (3) enhancing the equity of the tax system by closing all those "loopholes," and (4) increasing revenues in order to reduce the extremely large budget deficits that are in prospect for the next several

---

[9]Congressional Budget Office, Natural Gas Pricing Policies, Washington, Government Printing Office, 1983, p. 1; "Natural-Gas Deregulation: Time To Act," Morgan Guaranty Survey, January 1983, pp. 12-13.

years. Thus, any consideration of changes in energy taxation specifically must be placed in the larger context of changes in tax policy generally.

In a private enterprise economy, it is not appropriate that government, via tax policies or other mechanisms, guarantee that the energy industry will secure a larger total flow of funds in the 1980s. But the policies are needed to enable the energy industry to compete for those funds on an equal basis with other industries -- with no special subsidies and no special handicaps. The key alternative, in contrast, is an approach to industrial policy characterized by a series of quick fixes as the various sectors of society compete for specific government assistance. An important added benefit would accrue from the market-oriented approach proposed here -- a higher level of efficiency in the American economy, with a shift from dependence on government direction to reliance on competition in the market place.

The Future Role of Regulatory Policy

The expansion of environmental and other regulation has created major obstacles facing virtually every proposed energy project -- including those that are finally approved. Without downplaying the importance of tax considerations, perhaps the most serious energy problem in the United States today is the long delays that occur during the planning and construction phases of new energy projects. The delays do not arise primarily out of technology or problems in financing; they are, instead, the result of government.

From the investor's viewpoint, those problems increase uncertainty -- which can be devastating for major capital projects such as those involved in developing new forms of energy. An act of Congress finally was required to

override legal and ecological barriers so that the Alaskan pipeline could proceed. As an example of the governmental obstacles, the following are 14 major regulatory constraints to be faced in developing a new synthetic fuel project, any one of which could bring a project to a halt.

- Preparing an environmental impact statement, as required by the National Environmental Policy Act of 1969.
- Meeting new source performance standards for air quality, under the Clean Air Act Amendments of 1977.
- Meeting the hazardous pollutant emission standards, under the Clean Air Act Amendments of 1977.
- Meeting the state air-quality implementation plans required by the Clean Air Act Amendments of 1977.
- Obtaining necessary point source discharge permits, under the Water Pollution Control Act Amendments of 1972.
- Meeting state water quality standards and water quality management plans, as promulgated under the Clean Water Act of 1977
- Complying with limitations applicable to "underground injections," under the Safe Drinking Water Act of 1974.
- Complying with the regulaton of interstate pipeline transmissions, under the Interstate Commerce Act.
- Complying with the prohibition against a carrier transporting its own products, under the Interstate Commerce Act.
- Complying with the regulation of interstate transmission of synthetic gas once it is mixed with natural gas, under the Natural Gas Act of 1978.
- Obtaining necessary plant and mine leases from the U.S. Bureau of Land Management.
- Obtaining necessary water allocations from the U.S. Bureau of Reclamation.
- Complying with the Coal Mine Health and Safety Act of 1969, as amended.[10]

---

[10]President's Energy Resources Council, Synfuels Interagency Task Force, Recommendations for a Synthetic Fuels Commercialization Program, vol. 1, (Washington, D.C.: U.S. Government Printing Office, 1975), and more recent data.

The uncertainty for private industry resulting from the way in which various environmental programs are carried out can be overwhelming in the case of a new energy facility. In many cases, various energy projects and power-generating plans -- nuclear and non-nuclear alike -- have never become operational because of the delays. Yet, public concern about pollution of air and water and destruction of natural resources continues to be very real. The need, thus, is for a careful review of the vast and cumbersome regulatory labyrinth and the elimination of regulations that do not pass the economic test of generating more benefits than costs.[11]

Conclusions and Recommendations

A realistic and effective government policy for energy development requires changes in the federal tax and regulatory systems. These changes fall into two categories: (1) eliminating the special benefits that have been granted to the various segments of the energy industry, and (2) simultaneously removing the many obstacles that have been placed in the industry's path. The basic approach suggested here is a new twist to an old saying: "Don't just stand there, undo something. The following is a brief outline of the needed changes:

(1) Eliminate the windfall profits tax. That tax does nothing to help curtail energy consumption, but it simultaneously reduces the financial ability of the private sector to increase domestic energy production.

(2) Eliminate the regulatory functions of the Department of Energy. The sooner that domestic energy prices equal world market

---

[11]Murray L. Weidenbaum, The Future of Business Regulation, New York, Amacom, 1980.

prices, the sooner will new domestic energy sources -- conventional and unconventional, including synthetic fuel, solar energy, etc. -- become competitive. Moreover, realistic prices will become the most effective stimulus to energy conservation. Deregulation of natural gas prices is long overdue.

(3) Eliminate the host of tax breaks for specialized energy projects. Tax subsidies would no longer be needed in an environment where realistic energy prices prevail. The experience of the home insulation industry is instructive. The producers in that industry found that their order books became full just as soon as the public realized that insulation was a good way of reducing high and rising energy costs. The federal subsidies came later.

(4) Cut back the regulatory obstacles which impede the construction and operation of new energy projects. What is truly needed is not a special board to cut red tape for a few arbitrarily selected energy projects, but comprehensive reform of the entire regulatory process. Without these reforms, many of the tax incentives for new investment will turn out to be ineffective. The inability to obtain the many government permits and approvals needed for a new project cannot be overcome by increasing the normal after-tax rate of return. At present, the thicket of government rules makes every proposed energy project an attractive target for any self-appointed advocate of the status quo and for opponents of economic growth.

(5) Cut back the expenditure subsidies for the highly specific energy activities that the Congress arbitrarily has chosen to support.

These special aids would no longer be necessary if the first four proposals are adopted. The elimination of the windfall profits tax revenues would make it more urgent to reduce these low-priority outlays in order to minimize budget deficits.

Boiled down to its essence, the most effective national policy to promote domestic energy development is to achieve a well-functioning market economy that does not require special policies for any specific industry -- energy or any other. The optimum energy tax policy is to tax the activities of the energy industry exactly the same way as any other business is taxed -- without prejudice or favoritism.