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Energy Tax Policy

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Energy Tax Policy

SUMMARY

Historically, U.S. federal energy tax policy promoted the supply of oil and gas. However, the 1970s witnessed (1) a significant cutback in the oil and gas industry's tax preferences, (2) the imposition of new excise taxes on oil, and (3) the introduction of numerous tax preferences for energy conservation, the development of alternative fuels, and the commercialization of the technologies for producing these fuels (renewables such as solar, wind, and biomass, and non-conventional fossil fuels such as shale oil and coalbed methane).

The Reagan Administration, using a free-market approach, advocated repeal of the windfall profit tax on oil and the repeal or phase-out of most energy tax preferences — for oil and gas, as well as alternative fuels. Due to the combined effects of the Economic Recovery Tax Act and the energy tax subsidies that had not been repealed, which together created negative effective tax rates in some cases, the actual energy tax policy differed from the stated policy.

The George H. Bush and Bill Clinton years witnessed a return to a much more activist energy tax policy, with an emphasis on energy conservation and alternative fuels. While the original aim was to reduce demand for imported oil, energy tax policy is also being increasingly viewed as a tool for achieving environmental and fiscal objectives. The current energy tax structure is dominated by revenues from a long-standing gasoline tax. However, recent debates over energy tax policy for fuels and electricity cover a wide range of tax measures for fossil fuels, alternative fuels, renewable energy, and energy efficiency.

The Clinton Administration's energy tax policy focused on reducing petroleum demand through incentives for energy efficiency, alternative fuels, and alternative-fueled vehicles. The Clinton policy also emphasized the environmental benefits of reducing greenhouse gases and global climate change. The George W. Bush Administration has proposed a limited number of energy tax measures.

The first session of the 108th Congress had been considering three similar bills to provide tax incentives to increase the supply of, and reduce the demand for, fossil fuels and electricity: the House version of H.R. 6, introduced as H.R. 1531 and approved by the House by a vote of 247-175 on April 11, 2003; the Senate version of H.R. 6, passed by the Senate on July 31, which is the same as the energy bill H.R. 4 approved by the Senate in 2002; and S.Amdt. 1424, a Senate Finance Committee (SFC) amendment to H.R. 6 that is a slightly modified version of S. 1149, the Energy Tax Incentives Act of 2003 approved by the SFC on May 23, 2003.

As a result of a failed conference on H.R. 6 in November 2003, Republicans have introduced S. 2095, which is very similar to S. 1149 with the exception of a dropped ETBE tax credit, an added tax credit for natural gas, and delays in the dates the provisions become effective. With some further modifications, and several floor amendments, as discussed later in this issues brief, these energy tax provisions are incorporated into S. 1637, the export tax repeal bill approved by the Senate on May 11, 2004.

MOST RECENT DEVELOPMENTS

On November 14, 2003, House and Senate conferees reconciled the few remaining differences over comprehensive energy legislation, Energy Policy Act of 2003 (H.R. 6). On November 18, 2003, the House approved the conference report, which contains about \$23.5 billion of energy tax incentives, by a fairly wide margin (246-180). On November 21, 2003, a cloture motion to limit debate of on the conference report failed by two votes. On November 24, Senate Republicans abandoned attempts to enact H.R. 6. On February 12, 2004, Senator Domenici introduced S. 2095, a scaled-down version of the stalled H.R. 6, which, essentially (with some relatively minor differences) includes the energy tax bill S. 1149 approved by the Senate Finance Committee in April 2003. On April 5, 2004, Republican leadership added the energy tax provisions of S. 2095 to the export tax repeal bill, S. 1637, which was approved by the Senate on May 11, 2004. On July 15, 2004 the Senate named conferees to the conference on the House and Senate FSC/ETI bills. The Senate FSC/ETI bill contains two packages: an extenders package, extending existing energy tax credits, and a fuller energy tax package. The House version contains only an extenders package. The language and timetables of these extenders differ from the Senate version.

BACKGROUND AND ANALYSIS

Introduction

Energy tax policy involves the use of the government's main fiscal instruments — taxes (financial disincentives) and tax subsidies (or incentives) — to alter the allocation or configuration of energy resources. Energy taxes and subsidies are intended to either correct a problem or distortion in the energy markets or to achieve some social, economic (efficiency, equity, or even macroeconomic), environmental, or fiscal objective.

The idea of applying tax policy instruments to the energy markets is not new, but until the 1970s energy tax policy had been little used. Recurrent energy-related problems since the 1970s — oil embargoes, oil price and supply shocks, wide petroleum price variations and price spikes, large geographical price disparities, tight energy supplies, rising oil import dependence, as well as increased concern for the environment — have caused policymakers to look toward energy taxes and subsidies with greater frequency.

This issue brief discusses the history, current posture, and the outlook for federal energy tax policy. It also discusses recent energy tax proposals, focusing on the major energy tax provisions included in omnibus energy legislation (H.R. 6) that is now in conference. (For a general economic analysis of energy tax policy, see CRS Report RL30406, *Energy Tax Policy: An Economic Analysis*.)

Background

The history of federal energy tax policy can basically be divided into four eras: the oil and gas period from 1916 to 1970, the energy crisis period of the 1970s, the free-market era of the Reagan Administration, and the post-Reagan era — including the period since 1998,

which has witnessed a plethora of energy tax proposals to address recurring energy market problems.

Energy Tax Policy From 1918-1970: Promoting Oil and Gas

Historically, federal energy tax policy was focused on increasing domestic oil and gas reserves and production; there were no tax incentives for energy conservation or for alternative fuels. Two oil/gas tax code preferences embodied this policy: 1) expensing of intangible drilling costs (IDCs) and dry hole costs, which was introduced in 1916, and 2) the percentage depletion allowance, first enacted in 1926 (coal was added in 1932).

Expensing of IDCs (such as labor costs, material costs, supplies, and repairs associated with drilling a well) gave oil and gas producers the benefit of fully deducting from the first year's income ("writing off") a significant portion of the total costs of bringing a well into production, costs that would otherwise (i.e., in theory and under standard, accepted tax accounting methods) be capitalized (i.e., written off during the life of the well as income is earned). For dry holes, which comprised on average about 80% of all the wells drilled, the costs were also allowed to be deducted in the year drilled (expensed) and deducted against other types of income, which led to many tax shelters that benefitted primarily high-income taxpayers. Expensing accelerates tax deductions, defers tax liability, and encourages oil and gas prospecting, drilling, and the development of reserves.

The percentage depletion allowance for oil and gas permitted oil and gas producers to claim 27.5% of revenue as a deduction for the cost of exhaustion or depletion of the deposit, allowing deductions in excess of capital investment (i.e., in excess of adjusted cost depletion) — the economically neutral method of capital recovery for the extractive industries. Percentage depletion encourages faster mineral development than cost depletion (the equivalent of depreciation of plants and equipment).

These and other tax subsidies discussed later (e.g., capital gains treatment of the sale of successful properties, the special exemption from the passive loss limitation rules, and special tax credits) reduced marginal effective tax rates in the oil and gas industries, reduced production costs, and increased investments in locating reserves (increased exploration). They also led to more profitable production and some acceleration of oil and gas production (increased rate of extraction), and more rapid depletion of energy resources than would otherwise occur. Such subsidies tend to channel resources into these activities that otherwise would be used for oil and gas activities abroad or for other economic activities in the United States. Relatively low oil prices encouraged petroleum consumption (as opposed to conservation) and inhibited the development of alternatives to fossil fuels, such as unconventional fuels and renewable forms of energy. Oil and gas production increased from 16% of total U.S. energy production in 1920 to 71.1% of total energy production in 1970 (the peak year).

Energy Tax Policy During the 1970s: Conservation and Alternative Fuels

Three developments during the 1970s caused a dramatic shift in the focus of federal energy tax policy. First, the large revenue losses associated with the oil and gas tax

preferences became increasingly hard to justify in the face of a progressively worsening fiscal picture — increasing federal budget deficits — and in view of the longstanding economic arguments against the special tax treatment for oil and gas. Second, heightened awareness of environmental pollution and concern for environmental degradation, and the increased importance of distributional issues in policy formulation (i.e., equity and fairness), lost the domestic oil and gas industry much political support. Thus, it became more difficult to justify percentage depletion and other subsidies, largely claimed by wealthy individuals and big vertically integrated oil companies. More importantly, during the 1970s there were two energy crises: the oil embargo of 1973 — also known as the first oil shock — and the Iranian Revolution in 1979, which focused policymakers' attention on the problems (alleged "failures") in the energy markets and how these problems reverberated throughout the economy causing stagflation, shortages, productivity problems, rising import dependence, and other economic and social problems.

These developments caused the increased use of fiscal subsidies or incentives — special tax credits, deductions, exclusions etc. — to shift from oil and gas supply toward energy conservation and alternative energy sources.

Three broad actions through the tax code were taken to implement the new energy tax policy during the 1970s: First, the oil industry's two major tax preferences — expensing of IDCs and percentage depletion — were significantly reduced, particularly the percentage depletion allowance, which was eliminated for the major integrated oil companies and reduced for the remaining producers. Other oil and gas tax benefits were also cut back during this period. For example, oil- and gas-fired boilers used in steam generation (for example, to generate electricity) could no longer qualify for accelerated depreciation as a result of the Energy Tax Act of 1978 (as discussed below).

The second broad policy action was the imposition of several new excise taxes on oil and gas (and later coal). Chief among these was the windfall profit tax (WPT) on oil first enacted in 1980 (P.L. 96-223). The WPT imposed an excise tax of 15% to 70% on the difference between the market price of oil and a predetermined (adjusted) base price. This tax, which was repealed in 1988, was part of a political compromise that decontrolled oil prices (between 1971 and 1980 oil prices were controlled under President Nixon's Economic Stabilization Act of 1970 — the so-called "wage-price freeze").

Another, but relatively small, excise tax on petroleum was instituted in 1980: the environmental excise tax on crude oil received at a U.S. refinery. This tax, which was part of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (P.L. 96-510), otherwise known as the "Superfund" program, was designed to charge oil refineries for the cost of releasing any hazardous materials that resulted from the refining of crude oil. The tax rate was set initially at 0.79¢ (\$0.0079) per barrel, and was subsequently raised to 9.7¢ per barrel. This tax expired at the end of 1995, but legislation has been proposed since then to reinstate it as part of Superfund reauthorization. (See CRS Issue Brief IB10011.)

The third broad action taken during the 1970s to implement the new and refocused energy tax policy was the introduction of numerous tax incentives for energy conservation, the development of alternative fuels (renewable and non-conventional fuels), and the commercialization of energy efficiency and alternative fuels technologies. Most of these new

tax subsidies were introduced as part of the Energy Tax Act of 1978 (ETA, P.L. 95-618), and expanded under the WPT, which also introduced additional new energy tax subsidies. The following list describes these:

- *Residential and Business Energy Tax Credits.* The ETA provided income tax credits for homeowners and businesses that invested in a variety of energy conservation products (e.g., insulation and other energy-conserving components) and for solar and wind energy equipment installed in a principal home or a business. The business energy tax credits were 10% to 15% of the investment in conservation or alternative fuels technologies, such as synthetic fuels, solar, wind, geothermal, and biomass. These tax credits were also expanded as part of the WPT but they generally expired (except for business use of solar and geothermal technologies) as scheduled either in 1982 or 1985. President Clinton's FY2001 budget included a solar credit that is very similar to the 1978 residential energy tax credits. A 15% investment tax credit for business use of solar and geothermal energy, which was made permanent, is all that remains of these tax credits.
- *Tax Subsidies for Alcohol Fuels.* The ETA also introduced the excise tax exemption for gasohol, currently at 5.3¢ per gallon (out of a gasoline tax of 18.4¢/gal.). Subsequent legislation extended the exemption and introduced the alcohol fuels "blenders" tax credits (which are in lieu of the exemption), and the 10¢/gal., small ethanol producers tax credit. The 1998 Transportation Equity Act (P.L. 105-178) extended the exemption, which was scheduled to expire, but at reduced rates. (For more information see CRS Report 98-435 E, *Alcohol Fuels Tax Incentives*.)
- *Gas Guzzler Tax.* The ETA created a federal "gas guzzler" excise tax on the sale of automobiles with relatively low fuel economy ratings. The tax currently ranges from \$1,000 for an automobile rated between 21.5 and 22.5 miles per gallon (mpg) to \$7,700 for an automobile rated at less than 12.5 mpg. This tax is still in effect.
- *Percentage Depletion for Geothermal.* The ETA made geothermal deposits eligible for the percentage depletion allowance, at the rate of 22%. Currently the rate is 15%.
- *§29 Tax Credit for Unconventional Fuels.* The 1980 WPT included a \$3.00 (in 1979 dollars) production tax credit to stimulate the supply of selected unconventional fuels: oil from shale or tar sands, gas produced from either geo-pressurized brine, Devonian shale, tight formations, and coalbed methane, gas from biomass, and synthetic fuels from coal. Adjusted for inflation, this credit, which is still in effect for wells, mines, or plants placed in service by June 30, 1998 (for coal and biomass facilities) and December 31, 1991 (for all other facilities and wells), was over \$6.00 per barrel of liquid fuels and about \$1.00 per thousand cubic feet (mcf) of gas in 1999. The credit for tight sands gas has been fixed at the 1979 rate of \$0.50 per mcf. (For more information, see CRS Report 97-679 E, *Economic Analysis of the Section 29 Tax Credit for Unconventional Fuels*.)

- *Tax-Exempt Interest on Industrial Development Bonds.* The WPT made facilities for producing fuels from solid waste exempt from federal taxation of interest on industrial development bonds (IDBs). This exemption was for the benefit of the development of alcohol fuels produced from biomass, for solid-waste-to-energy facilities, for hydroelectric facilities, and for facilities for producing renewable energy. IDBs, which provide significant benefits to state and local electric utilities (public power), had become a popular source of financing for renewable energy projects.

(During the 1970s there was also a significant increase in the number of energy laws and regulations, such as the Corporate Average Fuel Economy (CAFÉ) standards to reduce transportation fuel use, and other interventions through the budget and the credit markets. This included some of the most extensive energy legislation ever enacted. These non-tax policy measures are not discussed here.)

Reagan's Free-Market Energy Tax Policy

The Reagan era, the period from 1981-1989, witnessed the first attempt to create a more free-market energy tax policy by deregulating the energy markets, and by both reducing taxes and eliminating tax subsidies, both for conservation, alternative fuels, and oil and gas.

President Reagan's free-market views were well known prior to his election. During the 1980 presidential campaign, he proposed repeal of the WPT, the deregulation of oil and natural gas, and the minimization of government intervention, including reduced spending and taxes. The Reagan Administration opposed using the tax law to promote either oil and gas development, energy conservation, or the supply of alternative fuels. The idea was to have a more neutral and less distortionary energy tax policy, which would make energy markets work more efficiently and generate benefits to the general economy. The Reagan Administration believed that the responsibility for commercializing conservation and alternative energy technologies rested with the private sector and that high oil prices — real oil prices (corrected for inflation) were at historically high levels in 1981 and 1982 — would be ample encouragement for the development of alternative energy resources. High oil prices in themselves create conservation incentives and stimulate oil and gas production.

The Reagan Administration's energy tax policy was professed more formally in several energy and tax policy studies, including its 1981 National Energy Policy Plan and the 1983 update to this plan; it culminated in a 1984 Treasury study on general tax reform, which also proposed fundamental reforms of federal energy tax policy. In terms of actual legislation, many of the Reagan Administration's objectives were realized, although as discussed below there were unintended effects. In 1982, the business energy tax credits on most types of non-renewable technologies — those enacted under the ETA of 1978 — were allowed to expire as scheduled; other business credits and the residential energy tax credits were allowed to expire at the end of 1985, also as scheduled. Only the tax credits for business solar, geothermal, ocean thermal and biomass technologies were extended. And as mentioned above, today the tax credit for business investment in solar and geothermal technologies, which has since been reduced to 10%, is all that remains of these tax credits. A final accomplishment was the repeal of the WPT, but not until 1988, the end of the Reagan term.

The Reagan Administration's other energy tax policy proposals, however, were not adopted. The tax incentives for oil and gas were not eliminated, although they were pared back as part of the Tax Reform Act (TRA) of 1986:

- 'Expensing' was retained, but there were cutbacks for integrated oil producers (who would be allowed to expense only 70% of such costs and amortize — deduct evenly over time — the remaining 30%) and other reductions;
- Percentage depletion would not apply to lease bonuses, advance royalties, or any other payments made without regard to actual production from the property. This amendment applied to geothermal wells as well as oil and gas properties. Another section of TRA denied capital gains treatment on certain dispositions of interest in oil and gas property (and to geothermal property);
- The TRA replaced the old minimum taxes with a new alternative minimum tax that placed limits on the tax benefits to oil/gas producers from the expensing of IDCs and the percentage depletion allowance. (Taxpayers must compute both the standard income tax and the alternative minimum tax imposed on a variety of tax preferences or subsidies, and pay the larger of the two.) However, in an effort to mitigate any burdensome effects of this new tax, only the excess of the deduction above 65% of net income was to be treated as a preference item;
- Investments in oil and gas properties were exempted from the passive loss limitation rules that were intended to curb tax shelter investments — a working interest in an oil and gas property was not treated as a passive activity. Thus any losses and credits derived from oil and gas investment activity could be used as a tax shelter to offset the taxpayer's other income without limitations under the passive loss rules.

While the Reagan Administration's objective was to create a free-market energy policy, significant liberalization of the depreciation system and reduction in marginal tax rates — both the result of the Economic Recovery Tax Act of 1981 (ERTA, P.L. 97-34) — combined with the regular investment tax credit and the business energy investment tax credits, resulted in negative effective tax rates for many investments, including alternative energy investments such as solar and synthetic fuels. (See, for instance: CRS Report 84-85 E. *Effective Tax Rates on Solar/Wind and Synthetic Fuels as Compared to Conventional Energy Resources.*) Also, the retention of percentage depletion and expensing of IDCs (even at the reduced rates) rendered oil and gas investments still favored relative to investments in general. Other energy tax policy developments during the Reagan era were as follows:

- The Deficit Reduction Act of 1984 (P.L. 98-369) tinkered with several energy tax provisions including the WPT and percentage depletion. Also, the 1984 tax law extended several of the tax incentives for alcohol fuels: (1) the tax exemption for alcohol fuels mixtures was raised from 5¢ to 6¢; (2)

the law retained the prior 9¢-per-gallon exemption for neat alcohol fuels, i.e., those that are at least 85% alcohol, derived from alternative substances, but it provided for a new exemption of 4.5¢ per gallon for alcohol fuels derived from natural gas; (3) the alcohol “blenders” credit was raised from 50 cents to 60 cents per gallon; and (4) the duty on alcohol imported for use as a fuel was increased from 50 cents to 60 cents per gallon.

- In 1986 two environmental excise taxes were enacted on oil: (1) under the Superfund Amendments and Reauthorization Act of 1986 (P.L. 99-499), an increase in the Superfund oil tax from 0.79¢ to 8.2¢-per-barrel on domestic oil received and to 11.7¢ per barrel on imported petroleum. This tax differential violated the General Agreement on Tariffs and Trade (GATT), and the Steel Trade Liberalization Program Implementation Act of 1989 (P.L. 101-221) made the rates uniform at 9.7¢ per barrel; and (2) under the Omnibus Budget Reconciliation Act of 1986 (P.L. 99-510), imposition of the Oil Spill Liability Trust Fund excise tax at 1.3¢ per barrel, which was subsequently raised to 5.0¢/barrel. Both these taxes expired at the end of 1995.
- In addition, the TRA of 1986 reduced the excise tax exemption for “neat” alcohol fuels, from 9¢ per gallon to 6¢ per gallon. It also permitted alcohol imported from certain Caribbean countries to enter free of the 60¢-per-gallon duty. The TRA also repealed the tax-exempt financing provision for alcohol-producing facilities and for certain steam-generating facilities.

Energy Tax Policy After Reagan

After the Reagan Revolution, several major energy and non-energy laws were enacted that amended the energy tax laws in several ways, some major:

- *Revenue Provisions of the Omnibus Reconciliation Act of 1990.* President George Herbert Bush’s first major tax law included numerous energy tax incentives: 1) For conservation (and deficit reduction), the law increased the gasoline tax by 5¢/gallon and doubled the gas-guzzler tax; 2) for oil and gas, the law introduced a 10% tax credit for enhanced oil recovery expenditures, liberalized some of the restrictions on the percentage depletion allowance, and reduced the impact of the alternative minimum tax on oil and gas investments; and 3) for alternative fuels, the law expanded the §29 tax credit for unconventional fuels and introduced the tax credit for small producers of ethanol used as a motor fuel.
- *Energy Policy Act of 1992 (P.L. 102-486).* This broad energy measure introduced the §45 tax credit, at 1.5¢ per kilowatt hour, for electricity generated from wind and “closed-loop” biomass systems. (Poultry litter was added later. This tax credit expired at the end of 2001 for new facilities.) In addition, the 1992 law 1) added an income tax deduction for the costs, up to \$2,000, of clean-fuel powered vehicles; 2) liberalized the alcohol fuels tax exemption; 3) expanded the §29 production tax credit for non-conventional energy resources; 4) liberalized the tax breaks for oil and gas.

- *Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66)*. President Clinton proposed a differential Btu tax on fossil fuels (a broadly-based general tax primarily on oil, gas and coal based on the British thermal units of heat output), which was dropped in favor of a broadly applied 4.3¢/gallon increase in the excise taxes on motor fuels, with revenues allocated for deficit reduction rather than the various trust funds.
- *Taxpayer Relief Act of 1997 (P.L. 105-34)*. This law includes a variety of excise tax provisions for motor fuels, of which some involved tax reductions on alternative transportation fuels, and some involved increases, such as on kerosene, which on balance further tilted energy tax policy toward alternative fuels.
- *Tax Relief and Extension Act (Title V of P.L. 106-170)*. Enacted as part of the Ticket to Work and Work Incentives Improvement Act of 1999 (P.L. 106-170), it extended and liberalized the 1.5¢/kWh renewable electricity production tax credit, and renewed the suspension of the net income limit on the percentage depletion allowance for marginal oil and gas wells.

As this list suggests, the post-Reagan energy tax policy returned more to the interventionist course established during the 1970s and primarily was directed at energy conservation and alternative fuels, mostly for the purpose of reducing oil import dependence and enhancing energy security. However, there is an environmental twist to energy tax policy during this period, particularly in the more recent years, as the discussion of President Clinton's proposals will demonstrate. Fiscal concerns, which for most of that period created a perennial search for more revenues to reduce budget deficits, have also driven energy tax policy proposals during the post-Reagan era. This is underscored by proposals, which have not been enacted, to impose broad-based energy taxes such as the Btu tax or the carbon tax to mitigate greenhouse gas emissions.

Another interesting feature of the post-Reagan energy tax policy is that while the primary focus continues to be energy conservation and alternative fuels, no energy tax legislation has been enacted during this period that does not also include some, relatively minor, tax relief for the oil and gas industry, either in the form of new tax incentives or liberalization of existing tax breaks (or both).

Table 1 summarizes current energy tax provisions and related revenue effects. A minus ("-") sign indicates revenue losses, which means that the provision is a tax subsidy or incentive, intended to increase the subsidized activity (energy conservation measures or the supply of some alternative and renewable fuel or technology); no minus sign means that the provision is a tax, which means that it should reduce supply of, or the demand for, the taxed activity (either conventional fuel supply, energy demand, or the demand for energy-using technologies, such as cars).

Energy Tax Proposals in the 106th Congress

Energy price volatility over the past few years has led to congressional action on energy tax policy. This action was prompted by energy market problems which some had characterized as an "energy crisis."

First, there have been wide fluctuations in crude oil prices. Domestic crude oil prices reached a low of just over \$10 per barrel in the winter of 1998-1999, among the lowest crude oil prices in history after correcting for inflation. From 1986-1999 oil prices averaged about \$17 per barrel, fluctuating from between \$12 and \$20 per barrel. These low oil prices hurt oil producers, benefitted oil refiners, and encouraged consumption. They also served as a disincentive to conservation and investment in energy efficiency technologies and discouraged production of alternative fuels and renewable technologies. To address the low oil prices, there were many tax bills in the first session of the 106th Congress (1999) focused on production tax credits for marginal or stripper wells, but they also included carry back provisions for net operating losses, and other fossil fuels supply provisions.

By summer 1999, crude oil prices rose to about \$20 per barrel, and peaked at more than \$30 per barrel by summer 2000, causing high gasoline, diesel, and heating oil prices. To address these effects of high crude oil prices, legislative proposals again focused on production tax credits and other supply incentives. The rationale was not tax relief for a depressed industry but tax incentives to increase output, reduce prices, and provide price relief to consumers.

In addition to high petroleum prices there were forces — some of which were understood (factors such as environmental regulations and pipeline breaks) and others that are still are not so clearly understood — that caused the prices of these petroleum products to spike. In response, there were proposals in 2000 to either temporarily reduce or eliminate the federal excise tax on gasoline, diesel, and other special motor fuels. The proposals aimed to help consumers (including truckers) cushion the financial effect of the price spikes. (For an analysis of this legislation, see CRS Report RL30497, *Suspending the Gas Tax: Analysis of S. 2285*.) The Midwest gasoline price spike in summer 2000 kept interest in these excise tax moratoria alive and generated interest in proposals for a windfall profit tax on oil companies which, by then, were earning substantial profits from high prices. (For more detail on the windfall profit tax on crude oil that was imposed from 1980 until its repeal in 1988, see CRS Report 90-442, *The Windfall Profit Tax on Crude Oil: Overview of the Issues*.)

Despite numerous bills to address these issues, no major energy tax bill was enacted in the 106th Congress. However, some minor amendments to energy tax provisions were enacted as part of non-energy tax bills. This includes Title V of the Ticket to Work and Work Incentives Improvement Act of 1999 (P.L. 106-170), enacted on December 1999. Also, the 106th Congress did enact a package of \$500 million in loan guarantees for small independent oil and gas producers, which became law (P.L. 106-51) in August 1999.

Energy Tax Action in the 107th Congress

In early 2001, the 107th Congress faced a combination of fluctuating oil prices, an electricity crisis in California, and spiking natural gas prices. The gas prices had increased steadily in 2000 and reached \$9 per thousand cubic feet (mcf) at the outset of the 107th Congress. At one point, spot market prices reached about \$30 per mcf, the energy equivalent of \$175 per barrel of oil. The combination of energy problems had developed into an “energy crisis,” that prompted congressional action on a comprehensive energy policy bill — the first since 1992 — which included a significant expansion of energy tax incentives and subsidies and other energy policy measures.

Omnibus Energy Bills (H.R. 4)

In 2002, the House and Senate approved two distinct versions of an omnibus energy bill, H.R. 4. While there were substantial differences in the non-tax provisions of the bill, the energy tax measures also differed significantly. The House bill proposed larger energy tax cuts, with some energy tax increases. It would have reduced energy taxes by about \$36.5 billion over 10 years, in contrast to the Senate version, which cut about \$18.3 billion over 10 years, including about \$5.1 billion in tax credits over 10 years for two mandates: a renewable energy portfolio standard (\$0.3 billion) and a renewable fuel standard (\$4.8 billion).

The House version emphasized conventional fuels supply, including capital investment incentives to stimulate production and distribution of oil, natural gas, and electricity. This focus assumed that recent energy problems were due mainly to supply and capacity shortages driven by economic growth and low energy prices. In the House bill, as a relative share in dollar terms, about 75% of the tax cuts were for fossil fuels, 14% were for energy efficiency, 10% were for renewable and alternative fuels, and 1% were for miscellaneous provisions.

In comparison, the Senate bill would have provided a much smaller amount of tax incentives for fossil fuels and nuclear power and somewhat fewer incentives for energy efficiency, but provided more incentives for alternative and renewable fuels. Specifically, as a relative share in dollar terms, about 51% of the tax cuts were for fossil fuels, 14% were for energy efficiency, 23% were for renewable and alternative fuels, and 25% were for incentives driven by the renewable energy mandates. (The Senate version of H.R. 4 is discussed in greater detail in the next section of this issue brief. For a more detailed comparison the House and Senate versions of H.R. 4, see CRS Report RL31427, *Omnibus Energy Legislation: H.R. 4 Side-by-Side Comparison*.)

The conference committee on H.R. 4 could not resolve differences, so the bills were dropped on November 13, 2002. Thus, the only energy tax measure actually enacted during the 107th Congress was a retroactive extension of some deadlines for four energy tax provisions: the \$45 tax credit for electricity produced from wind, biomass, and poultry waste; the tax credit for electric vehicles; the deduction for clean-fuel vehicles and certain refueling property; and the percentage depletion allowance. (Each of these provisions, which face expiration deadlines, is addressed in the three energy bills currently facing the Congress). This was done under the Job Creation and Worker Assistance Act of 2002 (H.R. 3090), signed into law by President Bush on March 9, 2002. This act also repealed the dyed diesel fuel mandate.

Energy Tax Action in the 108th Congress

After returning from the August 2003 recess, a House and Senate conference committee negotiated the differences among provisions in three energy policy bills: the House and Senate versions of H.R. 6, and a substitute to the SFC bill — a modified (or amended) version of S. 1149 that was substituted for Senate H.R. 6 in conference as S.Amdt. 1424 and S.Amdt. 1431.

On November 14, 2003, House and Senate conferees reconciled the few remaining differences over the two conference versions of H.R. 6, which primarily centered on several energy tax issues — ethanol tax subsidies, the §29 unconventional fuels tax credit, tax incentives for nuclear power, and clean coal. On November 18, 2003, the House approved, by a fairly wide margin (246-180), the conference report containing about \$23.5 billion of energy tax incentives. However, with the proposed ethanol mandate, which would further reduce energy tax receipts — the ten-year revenue loss is projected to be around \$26 billion. On November 24, Senate Republicans put aside attempts to enact H.R. 6. A number of uneasy alliances pieced together to bridge contentious divides over regional issues as varied as electricity, fuel additives (MTBE), and natural gas subsidies, failed to secure the necessary 60 votes to overcome a Democratic filibuster before Congress's adjournment for the holiday season. This represented the third attempt to pass comprehensive energy legislation, a top priority for Republicans and for President Bush.

Republicans introduced a smaller energy bill as S. 2095 on February 12, 2004. S. 2095 included a slightly modified version of the amended energy tax bill S. 1149; the tax provisions of S. 2095 were added to the export tax repeal bill S. 1637, on April 5. The Senate approved S. 1637, with the energy tax measures, on May 11.

Summary of the Energy Tax Provisions in S. 1637

The energy tax provisions of S. 1637 are basically the same as in S. 1149 (as amended) with several, relatively minor, exceptions:

- S. 1637 would allow the marginal oil and gas tax credits to be carried back to prior years (the other two bills would not have allowed carrybacks);
- With respect to the unconventional fuels tax credit (§29), S. 1637 would (a) change the phase-out threshold prices from \$23.50 in 1979 dollars to \$35.00 in 2002 dollars, which has the effect of facilitating the credit's phase-out, (b) maintain the original level of credit, which is currently at \$6.40/barrel of oil equivalent (S. 1149 would have rebased, i.e., reduced, the credit to \$3.00 beginning on the date of enactment) and (c) not allow landfill gas depreciable equipment to qualify for the tax credit;
- S. 1637 specifies new guidelines for energy-efficient lighting equipment for purposes of the \$2.25/sq.ft. deduction for energy efficiency expenditures in commercial buildings;
- S. 1637 restricts the §45 tax credit for certain types of open-loop renewable electricity;
- S. 1637 eliminates a provision that would have allowed ethanol blended with aviation fuel to qualify for the special tax breaks added by the bill; and
- S. 1637 allows the expensing of 100% of capital costs for small business refiners of low sulfur diesel fuel (the other bills limited this to 75% of capital costs).

To further control revenue losses, S. 1637 advances the effective date for most of the energy tax provisions forward to January 1, 2005, compared to October 1, 2004. S. 1637 also includes all of the tax shelter provisions in S. 1149 and adds additional revenue raisers mostly in improving compliance with the fuels tax provisions.

Finally, several additional provisions were added as amendments to S. 1637 during floor debate. An amendment by Senator Nickles would, after the date of enactment and through July 1, 2006, treat electrical transmission property as 15-year depreciation property rather than the current 20-year standard. Another amendment includes language clarifying that the Tennessee Valley Authority would be eligible for a class of tradeable \$45 tax credits and clean-coal tax credits. The bill also included language that would allow qualifying ethanol facilities to claim an investment credit equal to 15% of certain types of pollution control equipment. The credit would cover technology installed to reduce air emissions to meet EPA regulations, such as thermal oxidizers, regenerative thermal oxidizers, scrubber systems, evaporative control systems, and vapor recovery systems

S. 1149 (Amended). As discussed above, the energy tax provisions of S. 1637 are generally the same as those in the amended version of S. 1149. S. 1149 (before Senator Grassley's amendments) was originally approved by the SFC on May 23, 2003. Under an agreement between the SFC leadership of both parties, the SFC energy tax bill (S. 1149) was reintroduced as S.Amdt. 1424 (to be further amended by S.Amdt. 1431) and substituted for the Senate's version of H.R. 6 in conference. S. 1149 as approved by the SFC — before the 2003 amendments and the recent amendments to S. 1637 — would provide \$19.6 billion of gross energy tax cuts. These energy tax reductions were to be partially offset through about \$4.8 billion in tax increases — additional curbs on corporate tax shelters, limits on corporate and individual expatriates, and an extension of Internal Revenue Service user fees. Thus the net 10-year tax cut under S. 1149 would have been just over \$14.8 billion. Additional revenue losses would result from the renewable fuels standard, should it be enacted.

House Version of H.R. 6

On the House side, on April 3, 2003, the Ways and Means Committee (WMC) voted 24-12 for an energy tax incentives bill (H.R. 1531) that was incorporated into H.R. 6 and approved by the House on April 11, 2003, by a vote of 247-175. The House version of H.R. 6 provides about \$17.1 billion of energy tax incentives and includes just under \$0.1 billion (\$83 million) of non-energy tax increases, or offsets. This bill is a substantially scaled-down version of the House energy tax bill H.R. 2511 (107th Congress), which was incorporated into H.R. 4, the House energy bill of the 107th Congress that never became law.

Conference Report to H.R. 6

The energy tax provisions in the conference measure that was approved by the House on November 18, 2003, and considered by the Senate, are an expanded version of the House version of H.R. 6 and S. 1149 (as amended). The conference report contains about \$23.5 billion of energy tax incentives — \$6.2 billion more than the House bill, and \$3.6 billion more than the Senate bill. It also contains no revenue offsets or non-energy tax increases (although there are energy tax changes that raise some revenues over the estimated 10-year period). Also, with the proposed ethanol mandate, which would further reduce energy tax receipts, the 10-year revenue loss is projected to be around \$26 billion.

Brief Comparison of the Three Measures

Table 2 shows the revenue effects of three measures just discussed: the House-approved version of H.R. 6, the H.R. 6 conference report, and S. 1149 as approved by the Senate Finance Committee in May 2003. It compares revenue losses from the energy tax incentives and the percentage distribution by type of incentive as discussed above. The net revenue losses are each estimated over a 10-year time frame FY2004-FY2013 as estimated by the Joint Committee on Taxation. The percentage distribution of total revenue losses by type of incentive is shown for each measure in the even-numbered columns. Revenue effects of the energy tax provisions of S. 1637 have not been estimated but are expected to be similar to those of S. 1149.

The total revenue losses are reported in two ways. First, the net energy tax cuts are in row (12) of **Table 2**. This shows how the energy tax cuts differ among the three bills, exclusive of non-energy tax decreases and increases (or offsets), if any. The grand total revenue loss, inclusive of any non-energy tax increases, appears in row (14), which is row (12) + row (13). Row (14) figures are the same as those reported by the Joint Committee on Taxation for the two congressional tax-writing committees. (For more detail see CRS Report RL32042, *Energy Tax Incentives in the 108th Congress: A Comparison of the House and Senate Versions of H.R. 6 and the Senate Finance Committee Amendment.*)

LEGISLATION

H.R. 6 (Tauzin)

Promotes energy conservation, and research and development; provides for energy security and diversity in energy supply for the American people; and for other purposes. Incorporates H.R. 39, H.R. 238, H.R. 1531 (the tax provisions), and H.R. 1644. The tax title amends the Internal Revenue Code of 1986 to provide incentives for fossil fuel supply (including coal output incentives), facilitate electricity industry restructuring (which is also an energy supply incentive), and reduce fossil fuel demand through enhanced energy efficiency and alternative and renewable fuels supply. Also provides for revenue offsets. Introduced April 7, 2003; referred to several committees. House version passed April 11, 2003; Senate version passed July 31, 2003.

S. 1149 (Grassley)

Energy Tax Incentives Act of 2003. Supersedes S. 597. Contains provisions for renewable energy production tax credit, alternative fuels, energy conservation, fossil fuels, and other tax measures. Committee on Finance reported (S.Rept. 108-54) May 23, 2003; placed on Calendar as No. 113 and incorporated into S. 14, but was dropped when the Senate substituted last year's omnibus energy bill H.R. 4 as H.R. 6.

S.Amdt. 1424 (Grassley)

This is the same as S. 1149 and was the position of the Senate during the conference with the House on the Energy Policy Act of 2003 (H.R. 6).

S.Amdt. 1431 (Grassley)

This amendment of S.Amdt. 1424 (or S. 1149) was offered during the conference with the House on the Energy Policy Act of 2003 (H.R. 6). The amendments to the SFC-approved S. 1149 involve (1) an expansion of the biodiesel tax credit, including an expansion of the rate of credit for agri-biodiesel from \$0.50/gallon to \$1.00/gallon, (2) clarification and elaboration with respect to the tax credit for construction of more energy-efficient new homes, (3) changes — some increases, some decreases — to the amount of tax credits for different types of energy- efficient heating and cooling equipment, and insulation property for existing homes, (4) some minor modifications to the clean coal tax incentives, and (5) extension of the enhanced oil recovery tax credit to certain oil production facilities in Alaska.

S. 2095 (Domenici)

Enhances energy conservation and research and development and provides for security and diversity in the energy supply for the American people. Amends federal statutes including the Internal Revenue Code of 1986 to provide tax and nontax incentives for oil, gas, and coal, and for energy efficiency and alternative and renewable fuels. Introduced February 12, 2004. Supersedes the Senate version of H.R. 6 approved in conference in 2003.

S. 1637 (Frist)

Amends the Internal Revenue Code of 1986 to comply with the World Trade Organization rulings on the FSC/ETI benefit in a manner that preserves jobs and production activities in the United States, reforms and simplifies the international taxation rules of the United States, and for other purposes including expansion of energy tax incentives to increase conservation and production and reduce imports. Introduced September 18, 2003; energy tax provisions of S. 2095 added on April 5, 2004; passed Senate May 11, 2004.

FOR ADDITIONAL READING**CRS Reports**

CRS Report RL31427. *Omnibus Energy Legislation: H.R. 4 Side-by-Side Comparison*, by Mark Holt and Carol Glover.

CRS Report RL30406. *Energy Tax Policy: An Economic Analysis*, by Salvatore Lazzari.

CRS Report RL30953. *Energy Tax Incentives: A Comparison of the National Energy Security Act of 2001 (S. 389) and the Democratic Alternative (S. 596)*, by Salvatore Lazzari.

**Table 1. Energy Tax Provisions and Estimated Revenue Effects
(FY2003, \$ millions)**

Category	Provision	Major Limitations	Revenue Effect
CONVENTIONAL FOSSIL FUELS SUPPLY (bpd = barrels per day; < indicates less than)			
% depletion — oil/gas	15% of sales (higher for marginal wells)	for indep., up to 1,000 or equiv. bpd	- \$400
Expensing of IDC's — oil/gas & other fuels	100% deductible in first year	corporations expense only 70% of IDC's	- 600
Enhanced Oil Recovery Credit	15% of the costs	only for specific tertiary methods	- 200
% depletion — coal and other fuels	10% for coal	must be < 50% of taxable income	- < 50
coal excise tax (FY2001)	\$1.10/ton (0.55 for surface mines)	not to exceed 4.4% of sales price	550
ALTERNATIVE AND RENEWABLE FUELS			
§29, production tax credit	\$6.25/bar. (or \$1.00/mcf)	biogas, coal synfuels, coalbed methane, etc.	- 1,000
5.3¢ exemption for gasohol	exemption from motor fuels taxes	for biomass ethanol only	- 1,100
§45 credit for renewable electricity	1.7¢/kWh.	wind, closed loop biomass, and poultry waste	- < 50
exclusion of interest on S&L bonds	interest income exempt from tax	for hydroelectric or biomass facilities used to produce electricity	-100
tax credits for alcohol fuels	53¢/gal+ 10¢/gal for small producer credit	only for biomass ethanol (e.g., corn)	- < 50
deduction for clean-fuel vehicles	\$2,000 for cars; \$50,000 for trucks; \$100,000 deduction for refueling facilities	CNG, LNG, LPG, hydrogen, neat alcohols, and electricity; phases out over 2002-2004	- < 50
tax credit for electric vehicles	10%, up to \$4,000	phase-out from 2002-2004	- < 50
credit for solar & geothermal tech.	10% investment tax credit for businesses	utilities excluded	- < 50
ENERGY CONSERVATION			
fuels taxes (FY2000)	18.4¢/gal of gas	4.4¢-24.4¢ for other fuels	29,600
mass trans. subsidies	exclusion of \$100/month	up to \$190/month for parking benefits	- 3,700
gas-guzzler tax (FY2001)	\$1,000-\$7,700/car	to limos and vehicles weighing 6,000 lbs. or less	78
exclusion for utility conservation subsidies	subsidies not taxable as income	any energy conservation measure	- < 50

Source: Joint Tax Committee and Internal Revenue Service estimates.

Table 2. Energy Tax Provisions: Comparison of 10-Year Estimated Revenue Loss by Type of Incentive
(\$ millions; % of total revenue losses)

	House Version of H.R. 6		S. 1149 ^a		H.R. 6 Conference Report	
	(1)	(2)	(3)	(4)	(5)	(6)
INCENTIVES FOR FOSSIL FUELS SUPPLY						
(1) Oil & Gas Production	-\$5,788	33.8%	-\$5,649	28.8%	-\$6,352	27.1%
(2) Oil & Gas Refining and Distribution	-3,725	21.7%	-3,656	18.6%	-4,166	17.8%
(3) Coal	0	0%	-2,168	11.1%	-2,516	10.8%
(4) Subtotal	-9,513	55.5%	-11,473	58.5%	-13,034	55.6%
ELECTRICITY RESTRUCTURING PROVISIONS						
(5) Nuclear	-1,462	8.5%	-1,019	5.2%	-1,637	7.0%
(6) Other	-1,232	7.2%	+486	-2.5% ^b	-1,360	5.8%
(7) Subtotal	-2,694	15.7%	-533	2.7%	-2,997	12.8%
INCENTIVES FOR EFFICIENCY, RENEWABLES, AND ALTERNATIVE FUELS						
(8) Energy Efficiency	-1,560	9.1%	-2,153	11.0%	-1,772	7.6%
(9) Renewable Energy & Alternative Fuels	-3,348	19.5%	-5,435	27.7%	-5,595	23.9%
(10) Subtotal	-4,908	28.6%	-7,588	38.7%	-7,367	31.5%
(11) MISCELLANEOUS	-33	0.2%	-18	0.1%	-116	0.5%
(12) NET ENERGY TAX CUTS: TOTAL	-17,148	100.0%	-19,612	100%	-23,398	100.0%
(13) REVENUE OFFSETS	+83		+4,816		0	
(14) GRAND TOTAL	-17,065		-14,796		-23,514	

Source: CRS estimates based on Joint Tax Committee reports.

Notes:

- a. Note that the revenue losses were those scored by the JTC for the SFC bill approved in April 2003. No scoring for S. 1637, including the energy tax provisions, was available at this writing.
- b. Note that “grand total” measures the net proposed *energy* tax cuts defined as gross energy tax cuts less any energy tax increases, and excluding any non-energy tax increases. See text for important caveats that must be observed when using this table.