Order Code IB10054

Energy Tax Policy

Updated May 25, 2006

Salvatore Lazzari
Resources, Science, and Industry Division

CONTENTS

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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 nonconventional 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 Due to the combined effects of the Economic Recovery Tax Act and the energy tax subsidies that had not been repealed, which together created negative effective tax rates in some cases, the actual energy tax policy differed from the stated policy.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. W. 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 was also increasingly viewed as a tool for achieving environmental and fiscal objectives.

The Clinton Administration's energy tax policy emphasized the environmental benefits of reducing greenhouse gases and global climate change, but it will be remembered for its failed proposal to enact a broadly based energy tax based on Btu's (British Thermal Units) and its 1993 across-the-board increase in motor fuels taxes by 4.3¢/gallon. The George W. Bush Administration has proposed a limited number of energy tax measures, but the 106th-108th Congresses have considered comprehensive energy legislation, which included numerous energy tax incentives to increase the supply of, and reduce the demand for, fossil fuels and electricity, and for energy efficiency in residential and commercial buildings as well as for more energy efficient vehicles. They also included tax incentives for several types of alternative and renewable resources such as solar and geothermal. Because of controversy over either corporate average fuel economy standards, the Alaskan national wildlife refuge, or methyl-tertiary butyl ether, each of these attempts failed.

The Working Families Tax Relief Act of 2004 (P.L. 108-311), which was signed into law by the President on October 4, 2004, retroactively extended four energy tax subsidies. The American Jobs Creation Act of 2004 (P.L. 108-357), signed on October 22, 2004, contains several energy-related tax breaks that were in the comprehensive energy bills. The current energy tax structure is dominated by revenues from a long-standing gasoline tax, and tax incentives for alternative and renewable fuels supply relative to energy from conventional fossil fuels.

The House and Senate have approved the conference report on H.R. 6, which provides for a net energy tax cut of $11.5 billion ($14.5 billion gross energy tax cuts, less $3 billion of energy taxes). This bill was signed by President Bush on August 8, 2005 (P.L. 109-58). The tax reconciliation bill recently signed by the President includes relatively minor tax increases on major integrated oil companies through a slowing down of the amortization of some oil and gas exploration costs.

MOST RECENT DEVELOPMENTS

On May 17, the President signed a $70 billion tax reconciliation bill (H.R. 4297) that increases taxes on major integrated oil companies by extending the depreciation recovery period for geological and geophysical costs from two to five years. On August 8, 2005, the President signed the comprehensive energy bill (H.R. 6) into law (P.L. 109-58). The bill contains about $15 billion in energy tax incentives over 11 years.

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. In theory, energy taxes and subsidies are, like tax policy instruments in general, 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. In practice, however, energy tax policy in the United States is made in a political setting, being determined by the views and interests of the key players in this setting: politicians, special interest groups, bureaucrats, and academic scholars. This implies that it does not generally, if ever, adhere to the principles of economic, or public finance, theory alone; that more often than not, energy tax policy may compound existing distortions, rather than correct them.

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, except for the oil and gas industry. 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 outlook for federal energy tax policy. It also discusses recent energy tax proposals, focusing on the major energy tax provisions that were debated as part of omnibus energy legislation in the 108th Congress (e.g., H.R. 6), which may be reintroduced in the 109th Congress. (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 to 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 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 federal energy tax policy to shift from oil and gas supply toward energy conservation (reduced energy demand) 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 penalizing the use of conventional fossil fuels, particularly oil and gas (and later coal). The Energy Tax Act of 1978 (ETA, P.L. 95-618) created a federal "gas guzzler" excise tax on the sale of automobiles with relatively low fuel economy ratings. This tax, which is still in effect, 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. Chief among the taxes on oil was the windfall profit tax (WPT) 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"). (For more detail on the windfall profit tax on crude oil that was imposed from 1980 until its repeal in 1988, see archived CRS Report 90-442, *The Windfall Profit Tax on Crude Oil: Overview of the Issues*, available from the author.)

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, 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.

The third broad action taken during the 1970s to implement the new and refocused energy tax policy was the introduction of numerous tax incentives or subsidies — special tax credits, deductions, exclusions, etc. — for energy conservation, the development of alternative fuels (renewable and nonconventional 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 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, recently at 5.2¢ per gallon out of a gasoline tax of 18.4¢/gal. Subsequent legislation extended the exemption and converted it into an immediate tax credit (currently at 51¢/gallon of *ethanol*).

- *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. In current dollars this credit, which is still in effect, was $6.40 per barrel of liquid fuels and about $1.13 per thousand cubic feet (mcf) of gas in 2003.

- *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.

Some of these incentives — for example, the residential energy tax credits — have since expired, but others remain and still new ones have been introduced, such as the §45 renewable electricity tax credit, which was introduced in 1992 and expanded under the American Jobs Creation Act of 2004 (P.L. 108-357). The important point is that this approach toward energy tax policy — subsidizing a plethora of different forms of energy (both conventional and renewable) and providing incentives for diverse energy conservation (efficiency) technologies in as many sectors as possible has been the paradigm followed by policymakers since the 1970s. (A significant increase in nontax interventions in the energy markets — 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 — has also been a significant feature of energy policy since the 1970s. This included some of the most extensive energy legislation ever enacted. These nontax policy measures are not discussed here.)

Reagan's Free-Market Energy Tax Policy

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.

President Reagan's free-market views were well known prior to his election. During the 1980 presidential campaign, he proposed repeal of the WPT, deregulating oil and natural gas prices, and minimizing government intervention in the energy markets. 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 nonrenewable 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.

Although 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. 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.

Energy Tax Policy After Reagan

After the Reagan Revolution, several major energy and nonenergy 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 H. W. 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. For new facilities, this tax credit expired at the end of 2001 and again in 2003 but has been retroactively extended by recent tax legislation (as discussed below.) 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 nonconventional 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.* Enacted as Title V 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 Clinton years. 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).

Energy Tax Incentives in Comprehensive Energy Legislation

Several negative energy market developments since about 1998, which some had characterized as an "energy crisis," had led to congressional action on comprehensive energy proposals, which included numerous energy tax incentives. And with the exception of two recent tax bills enacted in October 2004, which included a limited number of sundry energy tax incentives, each of these bills has failed.

Brief History of Comprehensive Energy Policy Proposals

Although the primary rationale for comprehensive energy legislation has been spiking petroleum prices, and to a lesser extent spiking natural gas and electricity prices, the origin of these bills was the very low crude oil prices of the late 1990s. 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 carryback 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.

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 nonenergy 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," which 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.

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 nontax 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 bill, 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 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. The conference committee on H.R. 4 could not resolve differences, so the bills were dropped on November 13, 2002.

Energy Tax Action in the 108th Congress

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 provided about $17.1 billion of energy tax incentives and included just under $0.1 billion ($83 million) of nonenergy tax increases, or offsets. This bill was 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. After returning from the August 2003 recess, a House and Senate conference committee negotiated differences among provisions in three energy policy bills: the House and Senate versions of H.R. 6, and a substitute to the Senate Finance Committee (SFC) bill — a modified (or amended) version of S. 1149 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 10-year revenue loss was 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, 2004. The Senate approved S. 1637, with the energy tax measures, on May 11. H.R. 4520, the House version of the export tax repeal legislation, did not contain energy tax measures; they were still incorporated into H.R. 6.

Some energy tax incentives were enacted on October 4, 2004, as part of the Working Families Tax Relief Act of 2004 (P.L. 108-311), a $146 billion package of middle class and business tax breaks. This legislation, which was signed into law by the President on October 4, 2004, retroactively extended four energy tax subsidies: the §45 renewable tax credit, suspension of the 100% net income limitation for the oil and gas percentage depletion allowance, the $4,000 tax credit for electric vehicles, and the deduction for clean fuel vehicles (which ranges from $2,000 to $50,000). The §45 tax credit and the suspension of the 100% net income limitation had each expired on January 1, 2004; they were retroactively extended through December 31, 2005. The electric vehicle credit and the clean-vehicle income tax deduction were being phased out gradually beginning on January 1, 2004. P.L. 108-311 arrests the phase-down — provides 100% of the tax breaks — through 2005, but resumes it beginning on January 1, 2006, when only 25% of the tax break will be available.

(For more information, see CRS Report RL32265, *Expired and Expiring Energy Tax Incentives*.)

The American Jobs Creation Act of 2004 (P.L. 108-357) enacted on October 22, 2005, included about $5 billion in energy tax incentives. This bill, commonly referred to as the "FSC-ETI" or "jobs" bill, contained several energy-related tax breaks:

- Expansion of the renewable electricity credit to open-loop biomass, geothermal, solar, small irrigation power, and municipal solid waste facilities, and introduction of a $4.375/ton production tax credit for refined coal — not for the electricity produced from the coal. (The refined coal tax credit was originally part of the proposed expansion of the §29 tax credit, which already benefits "synfuels" from coal and was inserted into the renewable electricity section of the tax code).

- Creation of a new tax credit for oil and gas from marginal (small) wells, triggered when oil prices are below $18/barrel ($2/mcf for natural gas).

- Liberalization of the tax treatment of electric cooperatives under a restructured electricity market.

- Reduction of the depreciation recovery period for certain Alaska pipelines to 7 years (15 years under prior law).

- Extension of the 15% enhanced oil recovery credit to Alaska gas processing facilities.

- Reform of the tax subsidies for fuel ethanol — basically replacing the excise tax exemption with an equivalent immediate tax credit — and expansion of the credit to include biodiesel (at a higher rate for biodiesel made from virgin oils).

- Repeal of the general fund component (4.3¢/gal.) excise tax on diesel fuel used in trains and barges.

- A new $2.10/barrel tax credit for production of low-sulfur diesel fuel and "expensing" of (basically, faster depreciation deductions for) the capital costs to produce such fuels.

H.R. 6 (The Energy Policy Act of 2005)

On June 28, 2005, the Senate approved by an 85-12 vote a broadly based energy bill (H.R. 6) with an 11-year, $18.6 billion package of energy tax breaks tilted toward renewable energy resources and conservation. Joint Committee on Taxation figures released on June 28 show that the bill included about $0.213 million in nonenergy tax cuts and more than $4.7 billion in revenue offsets, meaning the bill had a total tax cut of $18.8 billion over 11 years, offset by the $4.7 billion in tax increases. The House energy bill, which included energy tax incentives totaling about $8.1 billion over 11 years, and no tax increases, was approved in April. This bill was weighted almost entirely toward fossil fuels and electricity supply. On

July 27, 2005, the conference committee on the comprehensive energy bill (H.R. 6) reached agreement on $11.1 billion of energy tax incentives, including $3 billion in tax increases (both energy and nonenergy). The distribution of the cuts by type of fuel for each of the three versions of H.R. 6 is shown in **Table 1.**

One way to briefly compare the two measures is to compare revenue losses from the energy tax incentives alone and the percentage distribution by type of incentive as a percent of the net energy tax cuts, in row 11. The net revenue losses over an 11-year time frame from FY2005 to FY2015 were estimated by the Joint Committee on Taxation. The total revenue losses are reported in two ways. First, the absolute dollar value of tax cuts over 11 years are in the odd-numbered columns. Second, the even-numbered columns show the percentage distribution of total revenue losses by type of incentive for each measure.

Table 1 illustrates the major differences between the three energy tax measures, measured in terms of projected aggregate revenue losses. First, the Senate bill was more than twice the size, in terms of net energy tax cuts, as the House bill. Second, most of this difference is accounted for by tax cuts for the electricity industry, energy efficiency and renewable and alternative fuels. The Senate bill provided absolutely and relatively more tax cuts for energy efficiency and alternative fuels. The differences in tax cuts for alternative fuels are particularly striking: $12 billion in the Senate bill vs. $0.6 billion in the House bill. The Senate bill also provided more tax incentives for energy efficiency investments than the House bill. The House bill provided much larger tax cuts for the electricity industry, particularly for electricity infrastructure. Thus, in a relative sense, the House bill was tilted more toward fossil fuel production, while the Senate bill's tax cuts were tilted more to the production of alternative and renewable fuels and energy conservation. However, the absolute dollar tax cuts for oil, gas, and coal were also somewhat larger in the Senate bill than in the House bill ($5.8 billion vs. $4.7 billion).

Table 1 also shows that the conference report provided about $1.3 billion for energy efficiency and conservation, including a deduction for energy-efficient commercial property, fuel cells, and micro-turbines, and $4.5 billion in renewables incentives including a two-year extension of the tax code §45 credit, renewable energy bonds, and business credits for solar. A $2.6 billion package of oil and gas incentives included seven-year depreciation for natural gas gathering lines, a refinery expensing provision, and a small refiner definition for refiner depletion, according to sources. A nearly $3 billion coal package provided for an 84-month amortization for pollution control facilities and treatment of §29 as a general business credit. More than $3 billion in electricity incentives leaned more toward the House version, including provisions providing 15-year depreciation for transmission property, nuclear decommissioning provisions, and a nuclear electricity production tax credit. It also provided for the five-year carry-back of net operating losses of certain electric utility companies. A Senate-passed tax credit to encourage the recycling of a variety of items, including paper, glass, plastics, and electronic products, was dropped from the final version of the energy bill (H.R. 6) that cleared Congress July 29. Instead, conferees included a provision requiring the Treasury and Energy departments to conduct a study on recycling. On July 29, 2005, the Senate approved the conference report to the energy bill (H.R. 6), clearing it for the President's signature on August 8 (P.L. 109-58).

Details of the tax title show that four revenue offsets were retained in the conference report: reinstatement of the Oil Spill Liability Trust Fund; extension of the Leaking

Underground Storage Tank (LUST) trust fund rate, which would be expanded to all fuels; modification of the §197 amortization, and a small increase in the excise taxes on tires. The offsets total roughly $3 billion compared to nearly $5 billion in the Senate-approved H.R. 6. Because the oil spill liability tax and the Leaking Underground Storage Tank financing taxes are imposed on oil refineries, the oil and gas refinery and distribution sector (row 2 of **Table 1**) suffered a net tax increase of $1,769 ($2,857-$1,088).

Current Posture of Energy Tax Policy

The above background discussion of energy tax policy may be conveniently summarized in **Table 2,** which shows current energy tax provisions — both special (or targeted) energy tax subsidies and targeted energy taxes — 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 demand for, the taxed activity (either conventional fuel supply, energy demand, or the demand for energy-using technologies, such as cars).

Energy Tax Policy Outlook

After expanding energy tax incentives in the Energy Policy Act of 2005 (P.L. 109-58), the 109th Congress moved to rescind the incentives, and even to raise energy taxes on oil and gas, in response to the high energy prices and resulting record oil and gas industry profits. The Senate-passed reconciliation bill (S. 2020) would have raised taxes on major U.S. integrated oil companies by (1) denying amortization treatment of geological and geophysical expenditures (such expenditures would have to be depleted), (2) disallowing a portion of the tax benefits from LIFO (Last-in-first-out) inventory accounting, (3) denying such companies the tax credit for taxes paid to foreign countries, and (4) restricting the use of the §29 tax credit for unconventional fuels. Ultimately, only a negligible tax increase on major integrated oil companies was enacted when, on May 17, the President signed a $70 billion tax reconciliation bill (H.R. 4297). Under that bill, geological and geophysical (G&G)costs undertaken in exploring for oil and gas by major integrated oil companies is amortized over five years rather than two years. The two-year period was enacted under the Energy Policy Act of 2005. Prior to that, G&G costs were capitalized, which is consistent with economic and accounting theory. The 2006 change would increases taxes on major integrated oil companies by an estimated $189 million over 10 years, effectively rescinding about 20% of the nearly $1 billion 10-year tax cut under the EPA05.

LEGISLATION

H.R. 4297 (Thomas)

A bill to provide for reconciliation pursuant to section 201(b) of the concurrent resolution on the budget for FY2006. Allows nonrefundable personal credits to be claimed against the AMT; extends and enhances the R&D tax credit; extends and enhances the Work

Opportunity Tax Credit; extends the 2003 reduction in capital gains taxes; extends the increased limitation for small business expensing under §179; curbs the manufacturing deduction; and includes miscellaneous other tax provisions. Introduced on November 10, 2005. Approved by the House on December 8 by a 234-197 vote (Roll no. 621). Signed by the President on May 17, 2006

H.R. 4040 (McCrery)

To amend the Internal Revenue Code of 1986 to provide tax benefits for the Gulf Opportunity Zone and certain areas affected by Hurricanes Rita and Wilma, and for other purposes. Includes tax relief for public utilities adversely affected by the recent hurricanes. Introduced December 6, 2005. Referred to House Committee on Ways and Means. Passed by the House on December 7, 2005, by a vote of 41-4 (roll no. 618; two-thirds required).

S. 2020 (Grassley)

A bill to provide for reconciliation pursuant to section 201(b) of the concurrent resolution on the budget for FY2006. Amends the Internal Revenue Code to (1) provide tax incentives (including incentives to public utilities) in areas affected by Hurricanes Katrina, Rita, and Wilma; (2) extend various expiring tax provisions; (3) revise provisions relating to charitable contributions and charitable organizations; (4) restrict tax shelter activity and increase penalties for underpayment of tax; and (5) revise provisions relating to taxation of foreign income, tax reporting, and accounting methods. Raises taxes on major U.S. integrated oil companies by denying amortization treatment of geological and geophysical expenditures (such expenditures would have to be depleted), disallowing a portion of the tax benefits from LIFO (Last-in-first-out) inventory accounting, and denying such companies the tax credit for taxes paid to foreign countries. Eliminates the 75% phase-out of the tax credit for electric vehicles and constrains the use of the §29 tax credit for unconventional fuels. Introduced November 16, 2005. Passed/agreed to in Senate on November 18, 2005, by a vote of 64-33 (record vote number 347).

FOR ADDITIONAL READING

U.S. Congress. Senate Budget Committee. *Tax Expenditures: Compendium of Background Material on Individual Provisions.* Committee Print. December 2004. 108th Congress, 2nd Sess.

Joint Tax Committee Description of Energy Tax Policy Tax Incentives Act of 2005, Scheduled for Senate Finance Committee Markup June 16, 2005 (JCX-44-05). June 14, 2005.

CRS Report RS21935. *The Black Lung Excise Tax on Coal*, by Salvatore Lazzari.

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

CRS Report RS22322. *Taxes and Fiscal Year 2006 Reconciliation: A Brief Summary,* David L. Brumbaugh, November 14, 2005.

CRS Report RS22344. *The Gulf Opportunity Zone Act of 2005,* by Erika Lunder, February 14, 2006.

Table 1. Comparison of Energy Tax Provisions the House, Senate, and Conference Versions of H.R. 6 (109th Congress): 11-Year Estimated Revenue Loss by Type of Incentive

(in millions of dollars; percentage of total revenue losses)

	House H.R. 6		Senate H.R. 6		Conference Report	
INCENTIVES FOR FOSSIL FUELS SUPPLY						
	(1)	(2)	(3)	(4)		
(1) Oil & Gas Production	-1,525	18.9%	-1,416	7.6%	-1,545	10.6%
(2) Oil & Gas Refining and Distribution	-1,663	20.6%	-1,399	7.5%	-1,088	7.5%
(3) Coal	-1,490	18.4%	-3,003	16.2%	-2,948	20.3%
(4) Subtotal	-4,678	57.8%	-5,818	31.3%	-5,581	38.6%
ELECTRICITY RESTRUCTURING PROVISIONS						
(5) Nuclear	-1,313	16.2%	-278	1.5%	-1,571	10.9%
(6) Other	-1,529	18.9%	-475	2.6%	-1,549	10.7%
(7) Subtotal	-2,842	35.1%	-753	4.1%	-3,120	21.6%
INCENTIVES FOR EFFICIENCY, RENEWABLES, AND ALTERNATIVE FUELS						
(8) Energy Efficiency	-570	7.0%	-3,987	21.4%	-1,260	8.7%
(9) Renewable Energy & Alternative Fuels	0	0%	-8,031	43.2%	-4,500	31.1%
(10) Subtotal	-570	7.0%	-12,018	64.6%	-5,760	39.8%
(11) Net Energy Tax Cuts	-8,010	100%	-18,589	100%	-14,461	100.0%
(12) Non Energy Tax Cuts[a]	0		-213		-92	
(13) Total Energy and Non-Energy Tax Cuts	0		-18,802		-14,553	
(14) Energy Tax Increases[b]	0		0		+2,857	
(15) Other Tax Increases			+ 4,705		171	
(15) NET TAX CUTS	-8,010		-14,055		-11,525	

Source: CRS estimates based on Joint Tax Committee reports.

a. The conference report includes a provision to expand R&D for all energy activities. This provision is listed as a nonenergy tax cut to simplify the table.

b. Energy tax increases comprise the oil spill liability tax and the Leaking Underground Storage Tank financing rate, both of which are imposed on oil refineries. If these taxes are subtracted from the tax subsidies (row 2), the oil and gas refinery and distribution sector suffered a net tax increase of $1,769 ($2,857-$1,088).

Table 2. Current Energy Tax Incentives and Taxes: Estimated Revenue Effects FY2005 and FY2005-FY2009

(in millions of dollars)

Category	Provision	Major Limitations	Revenue Effects FY2006
CONVENTIONAL FOSSIL FUELS SUPPLY (bpd = barrels per day; < indicates less than)			
Targeted Tax Subsidies			
disposition of elec. trans. property to implement FERC policy	capital gain recognized evenly over 8 years	proceeds must be reinvested in other elec. assets	- 600
% depletion — oil, -gas, and coal	15% of sales (higher for marginal wells); 10% for coal	only for independents, up to 1,000 or equiv. bpd	- 1,100
expensing and amortization of exploration and development costs — oil/gas & other fuels	100% deductible IDCs in first year/ 2 year amortization of geological and geophysical costs	corporations expense only 70% of IDCs	- 1,100
nuclear decommissioning	liberalizes tax deductible contributions to a fund in advance of actual decommissioning	in general, the IRS sets limits on the annual amounts made to a nuclear decommissioning fund	- 120
electric utilities	allows net-operating losses (NOLs) to be carried back 5 years, as compared with 2 years	only 20% of the NOLs in 2003-2005 qualify	-72
incentives for small refiners to comply with EPA sulfur regulations	$2.10 credit per barrel of low-sulfur diesel, + expensing of 75% of capital costs	credit limited to 25% of capital costs; expensing phases out for refining capacity of 155,000-205,000 barrels per day.	- < 50
credit for clean-coal technologies	20% for IGCC systems; 15% for other advanced coal tech.	each system has maximum aggregate dollar limits	- 26
Targeted Taxes			
black-lung coal excise taxes and AML fees (2003)	$1.25/ton for underground coal ($0.90 for surface coal)	coal tax not to exceed 4.4% of sales price (2.2% for the AML fee)	789
oil spill liability trust fund excise tax	$0.05/barrel tax on every barrel of crude oil refined	moneys are allocated into a fund for cleaning up oil spills	150
ALTERNATIVE, UNCONVENTIONAL, AND RENEWABLE FUELS			
Targeted Tax Subsidies			
§29, production tax credit	$6.40/bar. of oil or ($1.13/mcf of gas)	biogas, coal synfuels, coalbed methane, etc.	- 2,700
credits for fuel ethanol	$0.51 blender's credit, + $0.10/gal small producer credit	for biomass ethanol only (e.g., from corn)	- 1,890
tax credit for clean-fuel refueling property	$30,000 tax credit for alternative fuel equipment	per location, per taxpayer (replaces the deduction)	- < 50
§45 credit for renewable electricity	1.8¢/kWh. (0.9¢ in some cases; $4.375/ton of refined coal	wind, closed-loop biomass, poultry waste, solar, geothermal, etc.	- 2,000
alternative motor vehicle tax credits	$400-$40,000 credit for each fuel cell, hybrid, lean burn and other AFVs	tax credit is function of vehicle weight, fuel economy, and lifetime fuel savings	- 283

Category	Provision	Major Limitations	Revenue Effects FY2006
exclusion of interest on S&L bonds	interest income exempt from tax	for hydroelectric or biomass facilities used to produce electricity	- 100
credits for biodiesel	$0.50/gal. of recycled biodiesel; $1.00/gal. for virgin biodiesel	sold at retail or used in a trade or business; applies to oils from vegetables or animal fats	- 122
credit for solar & geothermal tech.	10% investment tax credit for businesses	utilities excluded	- < 50
ENERGY CONSERVATION			
Targeted Subsidies			
mass trans. subsidies	exclusion of $105/month		- 192
manufacturer's credit for energy efficient appliances	max credit is $50 for dishwashers, $175 for refrigerators, and $200 for clothes washers	amount of credit depends on energy efficiency, energy savings, and varies by year; total annual credit is also limited	- 117
deduction for the cost of energy efficient property in commercial buildings	tax deduction of cost of envelope components, heating cooling systems, and lighting	total deductions cannot exceed $1.80/sq.ft.	- 81
credit for energy efficiency improvements to existing homes	10% tax credit ($500/home) on up to $5,000 of costs; $50-$300 credit for other items	max credit on windows is $200	- 55
Targeted Taxes			
fuels taxes (FY2003)[a]	18.4¢/gal. on gasoline	4.4¢-24.4¢ for other fuels	39,078
gas-guzzler tax (FY2003)	$1,000-$7,700/ vehicle weighing 6,000 lbs. or less	trucks and SUVs are exempt	127
exclusion for utility conservation subsidies	subsidies not taxable as income	any energy conservation measure	< - 50

Source: Joint Tax Committee estimates and Internal Revenue Service data.

Note: A negative sign indicates a tax subsidy or incentive; no negative sign indicates an energy tax. NA denotes not available.

a. This category includes revenue from excise taxes on tires, a heavy vehicle use tax, and retail sales tax on trucks and tractors, which also go into the Highway Trust Fund (HTF). No separate breakdown of revenue losses for fuels is available for FY2005-FY2009, but revenues from motor fuel taxes generally represent about 90% of the total HTF taxes.