Emerging Issues Commentary
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Jenner & Block: Federal and State Tax Incentives for Renewable Energy

By Gail H. Morse and Alexandra E. Dowling

Fossil fuels are the source of more than 86% of the United States' energy.[1] Historically, businesses have invested in fossil fuels over renewable energy sources because renewable energy has not been seen as a cost-effective alternative.[2] However, renewable energy is becoming a more attractive alternative energy source for a variety of reasons, including the increased cost of fossil fuels, the decreased cost of producing renewable energy, and because renewable energy sources are often more environmentally-friendly.[3] Nevertheless, investment in such alternative energy sources thus far has not been effective in reducing U.S. petroleum consumption, dependency on foreign imports, or greenhouse gas emissions.[4]

Federal and state tax provisions, which have historically provided important tax incentives for fossil fuel producers, could affect whether alternative energy sources become a viable and cost effective alternative to fossil fuels.[5] As history has demonstrated, tax policies aimed at increasing energy production from renewable sources are more likely to be enacted when federal and state legislatures are under pressure to do so. The current instability in the Middle East and the focus on the environmental impact of fossil fuels and their impact on climate change might be sufficient incentives for legislative action to encourage the development and use of alternative energy sources.

History of Federal and State Energy Tax Incentives. Tax incentives historically have provided subsidies to certain activities to achieve social, economic, or political goals.[6] Fossil fuel production has received its share of federal income tax incentives to: (1) compensate producers for the significant up-front expenses incurred in the perceived risky industry; (2) encourage conservation of the oil and gas reserves; and (3) maintain U.S. productive capacity for national defense purposes.[7] In general, these federal in-

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1. M. Hymel, *The United States' Experience with Energy-Based Tax Incentives: The Evidence Supporting Tax Incentives for Renewable Energy*, Arizona Legal Studies Discussion Paper No. 06-21 (Apr. 2006), at 2.

2. J. Kaufman, *Federal Income Tax Incentives for Energy From Renewable Sources*, 20 J. Nat. Resources & Env't 163, 163 (2005-2006).

3. J. Kaufman, *Federal Income Tax Incentives for Energy From Renewable Sources*, 20 J. Nat. Resources & Env't 163, 163 (2005-2006).

4. M. Hymel, *The United States' Experience with Energy-Based Tax Incentives: The Evidence Supporting Tax Incentives for Renewable Energy*, Arizona Legal Studies Discussion Paper No. 06-21 (Apr. 2006), at 3.

5. A discussion of tax policy related to renewable fuels that are used by passenger cars will be the subject of a separate expert commentary.

6. R. Mann, Ch. 16, "Subsidies, Tax Policy, and Technological Innovation," in Global Climate Change and U.S. Law, at 565 (M. Gerrard ed., Am. Bar Ass'n 2007).

come tax incentives take two forms: percentage depletion and expensing intangible drilling costs.

Percentage depletion allows taxpayers to deduct a fixed percentage of the gross value of annual production from a mineral property[8] as an alternative to the standard cost-basis method of determining depletion. Percentage depletion thus encourages speculative investments because if the value of the mineral deposits is greater than a taxpayer's initial cost basis in a mineral investment, the taxpayer will be able to deduct more than its basis in the investment, thereby reducing tax on the income generated. The intangible drilling and development costs provision allows fossil fuel producers to immediately deduct their expenses for the development of a mine or other natural deposit instead of capitalizing them,[9] as is required in most other industries.

The federal income tax incentives also can flow through to the calculation of taxable income at the state level. In states which "piggyback" onto or begin their taxable income calculation with federal taxable income, these incentives will be reflected in federal taxable income and, if not "adjusted" at the state level by state specific additions or subtractions, will flow through to the state income tax return.

Incentives for fossil fuel production have been around almost since the inception of the federal income tax code—the first incentives were enacted in 1916. However, it was not until 1978, as a reaction to the OPEC oil embargo and oil crisis in the earlier part of the decade, that Congress and many state legislatures enacted the first income tax incentive for renewable energy production. Among those first incentives added in 1978 was an income tax credit for investments in solar, wind, geothermal and ocean thermal power technology for use in homes or businesses.[10]

The business and homeowner tax credit remained in place at percentages that varied between 10% and 15% through 1985, when the residential energy credit and parts of the business energy credit were allowed to expire. The business energy credit for solar energy continued and was made permanent at 10% of the investment in solar or geothermal energy equipment in 1992.[11] Also in 1992, Congress enacted a renewable electricity income tax credit of 1.5 cents per kilowatt hour of electricity (adjusted for inflation) produced from renewable energy sources, which include wind energy, closed loop bio-

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7. M. Hymel, *The United States' Experience with Energy-Based Tax Incentives: The Evidence Supporting Tax Incentives for Renewable Energy*, Arizona Legal Studies Discussion Paper No. 06-21 (Apr. 2006), at 19.

8. 26 U.S.C. § 613.

9. 26 U.S.C. § 616.

10. 26 U.S.C. § 46(a)(2) (1978).

11. 26 U.S.C. § 48.

mass (plants grown to be burned for energy), and poultry waste facilities (poultry manure and litter).[12]

By the early 1990s, however, the 1973 oil crisis was long past, resulting in little political will for alternative energy tax credits. No new incentives were enacted until the mid-2000s, when the political landscape had changed and there was greater pressure for independent, environmentally-friendly fuel sources. In 2004, Congress expanded the renewable electricity tax credit to include other sources of energy, including geothermal, solar, irrigation, municipal solid waste, and refined coal.[13]

The greatest recent activity with respect to renewable energy incentives has been the Energy Tax Incentives Act of 2005 ("Act").[14] Under the Act, Congress increased the tax credit for solar energy sources, permitting taxpayers to take a 30% income tax credit for the purchase price of equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat, unless the property is used to generate energy for the purpose of heating a swimming pool, for property purchased before January 1, 2009 (as extended).[15] This credit was further expanded to cover hydroelectric power and qualified Indian coal facilities (coal produced by coal reserves that were once owned by an Indian tribe or were held in trust by the U.S. for the benefit of an Indian tribe).[16] Depending on the energy source, the tax credit varies from 1.9 cents to 9.5 cents per kilowatt hour, and the period over which it can be claimed varies from ten to five years.[17] The statute contains a sunset provision before which the facility has to be placed in service, which is currently set to expire on January 1, 2009.[18]

In addition, as part of the Act, Congress enacted legislation providing bondholders of clean renewable energy bonds with a tax credit against income tax at the rate established by the Internal Revenue Service on the issue date of the bond.[19] The credit is only available if 95% or more of the proceeds of the bond is used to finance a project that is eligible for the renewable electricity tax credit and if the issuer complies with cer-

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12. 26 U.S.C. § 38; 26 U.S.C. § 45.
13. 26 U.S.C. § 45(c)(1).
14. Pub. L. No. 109-58, Tit. XIII, 119 Stat. 594, 986 (2005).
15. 26 U.S.C. § 48(a)(2)(A).
16. 26 U.S.C. § 45(c)(9).
17. 26 U.S.C. § 45 (b)(4).
18. 26 U.S.C. § 45 (d)(1), (2)(A)(i), (3)(A)(i)(I) *et seq.*
19. 26 U.S.C. § 54.

tain regulatory provisions.[20] This credit is available until $1.2 billion in clean renewable energy bonds are outstanding.[21]

Finally, the Act provides for a business fuel cell credit and a residential energy-efficient property credit. The business fuel cell credit provides taxpayers with a 15% credit against income tax otherwise imposed for the purchase of qualified fuel cell and micro-turbine power plants.[22] The residential energy-efficient property credit provides taxpayers with a credit of up to $2,000 for certain types of energy-efficient property, such as solar water-heating property, that taxpayers install in their home.[23]

The incentive scheme is focused on income tax credits rather than deductions or other mechanisms to calculate taxable income. Consequently, the available federal credits do not flow through to the calculation of state taxable income. To provide state level incentives, states have enacted their own specific energy credits. Currently, over 40 states provide some kind of tax incentive via an income tax credit for renewable energy production. Many states, such as Iowa, provide tax credits to commercial businesses for wind, solar or geothermal energy systems that are similar to those provided by the federal tax system.[24] Other states, such as North Carolina, provide a tax credit to businesses for the cost of renewable energy equipment.[25] A slightly more unusual approach is taken by Montana, which entitles taxpayers that invest over $5,000 in alternative energy sources a credit of up to 35% of corporate or individual income tax on any income generated by the investment.[26] Many states also offer tax credits for some percentage of the cost of renewable energy equipment. For example, Hawaii provides taxpayers with a tax credit of a certain dollar amount or a percentage of the cost of the equipment, whichever is less.[27] In addition to income tax benefits, some states offer sales tax and property tax incentives. For example, New Jersey exempts solar and wind energy equipment from state sales tax.[28] Approximately 30 states exempt or reduce property tax on renewable energy equipment.

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20. 26 U.S.C. § 54(d)(1).
21. 26 U.S.C. § 54 (f).
22. 26 U.S.C. § 48(a)(3)(A)(iv).
23. 26 U.S.C. § 25D.
24. Iowa Admin. Code § 701-42.26.
25. N.C. Gen. Stat. § 105-130.28.
26. Mont. Code Ann. § 15-32-402(1).
27. Haw. Rev. Stat. § 235-12.5(a).
28. N.J. Stat. § 54:32B-8.33.

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Renewable Energy Taxes and Environmental Effect. Despite the recent flurry of legislative activity, federal and state income tax incentives are not yet sufficient to significantly affect the decision to move to renewable energy sources.[29] For example, many of the tax credits have sunset provisions that discourage significant up-front investment.[30] Moreover, while some of the current renewable energy tax incentives relate to energy sources that have beneficial environmental effects, many do not. In particular, biomass fuels emit greenhouse gases when burned.[31] Similarly, some of the credits provide incentives for producing traditional fossil fuels in conjunction with renewable fuels.[32] Finally, the credits might not even relate to a renewable energy source, as in the case of the tax credit for Indian coal.

Some energy tax policy experts argue that a better alternative to creating tax subsidies for renewable fuel sources would be to tax traditional fuel sources and eliminate all energy tax credits.[33] The clearest example of an environmental tax disincentive is the carbon tax, which would be a tax on carbon emissions. Taxing "bad" behaviors would be consistent with making fossil fuel producers and users pay for the externalities (or societal costs) of their behavior, such as the adverse environmental effects of burning fossil fuels, that would otherwise not factor in to a free market-style energy market. In general, however, subsidies may be more politically tenable because they provide a clear benefit to an identifiable group at a cost that is borne by a diffuse group (as opposed to tax increases, which have the opposite effect).[34] Moreover, fossil fuel subsidies have survived every effort to eliminate them over 90 years.[35]

The Future. In 2007 and 2008, Congress considered legislation that would have provided a $21 billion subsidy for alternative fuels and imposed new taxes on fossil fuels. However, as a result of President Bush's threatened veto, the tax provisions were dropped from the energy bill, which passed in December 2007.[36] Nevertheless, as of early 2008, legislators are continuing to work for a variety of tax incentives for renew-

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29. M. Hymel, *The United States' Experience with Energy-Based Tax Incentives: The Evidence Supporting Tax Incentives for Renewable Energy*, Arizona Legal Studies Discussion Paper No. 06-21 (Apr. 2006), at 23.

30. *Senators Reintroduce Tax Credit Extension for "Clean" Energy Technology Investments*, Daily Tax Rep. (BNA) 32 DTR G-3 (Feb. 19, 2008).

31. R. Mann, Ch. 16, "Subsidies, Tax Policy, and Technological Innovation," in Global Climate Change and U.S. Law, at 567 (M. Gerrard ed., Am. Bar Ass'n 2007).

32. 26 U.S.C. § 45(d)(2).

33. G. Metcalf, *Federal Tax Policy Towards Energy*, Nat'l Bureau of Econ. Research (Sept. 14, 2006).

34. E. Toder, Energy Taxation: Principles and Interests, Energy — A Special Supplement to Tax Notes, State Tax Notes, and Tax Notes International, at 93 (Nov. 27, 2006).

35. E. Toder, Energy Taxation: Principles and Interests, Energy — A Special Supplement to Tax Notes, State Tax Notes, and Tax Notes International, at 93 (Nov. 27, 2006).

36. Energy Independence and Security Act of 2007, Pub. L. No. 110-140, 121 Stat. 1492 (2007).

able energy, including extending the sunset provisions of certain tax incentives and setting national standards for the amount of electricity that utilities must derive from renewable sources.[37] Like in the 1970s, when limited supply of oil was part of the impetus for the first round of income tax incentives for renewable energy, the high price of oil, volatility in the Middle East, and the current focus on environmentalism may put enough pressure on Congress in the coming years to pass permanent and significant tax incentives for fossil fuel and renewable energy producers.[38]

In the absence of a broad, permanent federal tax policy toward renewable energy, state governments have adopted a range of income and other tax incentives. This trend will likely continue, and multi-state corporations will continue to be subject to a variety of tax regimes and pressures in different states.

Practice Pointers

- Practitioners, energy producers and energy consumers must pay close attention to federal tax law trends to take advantage of and to be part of the dialogue for change, as Congress is currently under considerable pressure to make changes in the taxation of and provide incentives for renewable energy production.

- Practitioners and multi-state energy producers and consumers must also closely monitor state developments. States are able to adapt and respond to pressures for change more quickly than the federal government. The lack of a cohesive federal tax policy in this area will encourage states to continue to enact state-specific measures causing a lack of uniformity for multi-state taxpayers and consumers.

- Energy producers and consumers can help shape the debate on effective federal and state incentives for renewable energy by closely monitoring and participating in the legislative process.

- The income tax incentives proposed and foreseen are based on the continuation of the current tax system. If that basic system changes from an income-based system, as some of the presidential candidates and commentators propose in the interest of simplification and fairness, the potential for tax incentives for renewable energy might never be enacted or take significantly different forms.

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37. L. Garner, *Forecasts Call for Continued High Prices; Early Action on Renewable Energy Planned*, Daily Report for Executives (BNA) 12 DER S-5 (Jan. 18, 2008).

38. *See, e.g.*, H.R. 3221 ("Renewable Energy and Energy Conservation Tax Act of 2008").

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For Discussion of Energy Policy Tax Incentives, *see* Energy Law and Transactions Ch. 59, § 59.13.

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