

# Federal Tax Legislation Favors Alternative Energy Development and Energy Efficiency Initiatives

by Richard D. Martinson

Since the 1970s, United States tax policy at the federal level has been directed, at least in part, toward large-scale subsidization of the domestic energy industry, encouraging the development of a broad array of renewable and energy-efficient technologies through targeted legislation in the Internal Revenue Code of 1986, as amended. This trend has continued into the 21st century, and has been given new life by the Obama administration through two separate legislative packages that include energy-directed tax provisions: the American Recovery and Reinvestment Act of 2009 (ARRA)<sup>1</sup> and the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.<sup>2</sup>

**T**his article will identify certain discrete aspects of both acts that are directed to the encouragement of renewable energy production and energy conservation, and will discuss some of the practical implications of this legislation for the New Jersey business community.

## Business-Related Energy Tax Incentives

ARRA contained a number of changes to the code that are specifically directed at various segments of the U.S. energy industry. Some of the more notable and taxpayer-favorable provisions of the ARRA were manifested in the form of investment tax credits (ITCs), extensions of applicable "placed in service" qualification dates and other tax breaks specifically

targeting businesses promoting certain types of renewable energy sources. Set forth below is a summary of some of the tax changes contained in ARRA that are most likely to be of interest to taxpayers engaged in this segment of the energy production business.

### *Energy Property Credit*

Under Section 48 of the code, an ITC is available with respect to investments in certain types of "energy property." Energy property for this purpose, and the amount of the ITC "energy percentage" available with respect to such property,<sup>3</sup> includes the following:

- Solar energy property and "qualified fuel cell" power plants (30 percent ITC)
- Small commercial wind energy property (30 percent ITC)
- Geothermal energy property and "qualified stationary microturbine" power plants (10 percent ITC)
- Combined heat and power systems ("co-generation facilities") that generate thermal energy along with electrical or mechanical power (10 percent ITC)
- Geothermal heat pumps that use ground or groundwater as a thermal energy source to heat or cool buildings (10 percent ITC)

ARRA significantly enhanced the value of the ITC available for "qualified small wind energy property," which is property using a wind turbine with a nameplate capacity of not more than 100 kilowatts to generate electricity. Under pre-ARRA law, the tax credit otherwise available for such property was

limited to \$4,000, and expired as of Dec. 31, 2008. The ARRA repealed the dollar limitation, as applied to qualified small wind energy property, and the credit is now available for periods through Dec. 31, 2016.

In addition, under pre-ARRA law, where property was financed in whole or in part by subsidized financing or tax-exempt private activity bonds, the amount taken into account as tax basis for purposes of calculating the energy credit was reduced by a formula designed to 'back out' that portion of the basis attributable to such tax-favored financing. This limitation was repealed by the ARRA for periods after Dec. 31, 2008.

#### ***Advanced Energy Project Credit***

As part of the ARRA, Congress added a tax credit under Section 48C of the code, for investments in "qualifying advanced energy projects." The new credit, which was enacted as a component of the investment tax credit system, is equal to 30 percent of the qualified investment costs, and is specifically designed to encourage the development of a domestic manufacturing base to support the American renewable energy industry. A qualifying advanced energy project is one that "re-equips, expands or establishes a manufacturing facility" for any of the following:

- Property designed to produce energy from wind, solar, geothermal or other "renewable resources"
- Fuel cells, microturbines, or an energy storage system for use with electric or hybrid-electric motor vehicles
- Electric grids to support the transmission or intermittent sources of renewable energy, including storage of such energy
- Property designed to capture and sequester carbon dioxide
- Property designed to refine or blend renewable fuels

- New qualified plug-in electric drive vehicles or components specifically designed for use in such vehicles
- Any other "advanced energy property designed to reduce greenhouse gas emissions," as determined by the Treasury Department

Unlike the more conventional energy-based ITCs described above, credits for qualifying advanced energy projects under Section 48C are limited in amount, must be applied for by the taxpayer and are specifically allocated by the Treasury Department.

#### ***Renewable Resource Electricity Production Credit***

Under Section 45 of the code, a renewable electricity production credit (PTC) is available for certain qualified renewable energy facilities (including wind, biomass, geothermal and solar, among others) engaged in production and sale of electricity to unrelated third-party consumers.<sup>4</sup> The PTC is available over a 10-year period following the placed-in-service date of the qualified facility, and the 2010 rate at which the credit is calculated (annually adjusted for inflation) is 2.2 cents per kilowatt-hour produced and sold by the qualified facility.

The ARRA generally extended the required placed-in-service dates under Section 45 for wind facilities to Dec. 31, 2012, and for other eligible facilities to Dec. 31, 2013.

For a renewable energy facility that is eligible for the PTC, the ARRA provides taxpayers with an irrevocable election to claim a 30 percent ITC under Section 48 of the code, in lieu of taking the otherwise available PTCs. This election is available during the entire period for which the PTCs were extended by the ARRA (*i.e.*, through the end of 2012 for wind facilities and through the end of 2013 for other eligible renewable resource facilities). It is not available for

any facility that has received PTCs in prior tax years.

#### ***Cash Grants in Lieu of ITC or Electricity Production Credit***

Section 1603 of the ARRA introduced an entirely new energy-based tax incentive that allows owners of renewable energy projects that qualify for the Section 48 ITC (including projects otherwise eligible for the PTC under Section 45) to forego a tax credit in favor of a direct nontaxable cash payment from the Treasury Department in an amount equal to the corresponding ITC. As originally enacted by the ARRA, the cash grant is available for eligible projects and facilities that were either placed in service during 2009 or 2010, or placed in service after 2010 if construction began on the facility during 2009 or 2010. As amended by the 2010 tax relief act, the permissible placed-in-service date has been extended through the end of 2011.

The cash grant initiative (sometimes referred to among practitioners as the Section 1603 grant program) is somewhat unusual in that it is directly administered by the Treasury Department, and is, therefore, procedurally distinct from the longstanding ITC (and PTC) regime, which falls under the purview of the Internal Revenue Service. The Treasury Department has released guidance on how the program is intended to operate, however,<sup>5</sup> and anecdotal evidence suggests that it has been fairly popular. Approximately \$5.8 billion has been granted under the program thus far. The program has no cap, and grants are not awarded on a competitive basis.

As is true for conventional ITCs, in order to be eligible for the grant program, the specified energy property must be used in a trade or business, or held for the production of income. Residential or non-business properties are not eligible. Eligible applicants under the program receive grants of either 10

or 30 percent of the basis of the specified energy property, depending on the type of property.

The legislative history to the Section 1603 cash grant program indicates that the program is intended to mimic the operation of the Section 48 ITC, including with respect to procedural items such as tax basis adjustment for facilities qualifying for the grant, and applicable recapture rules.<sup>6</sup> Moreover, both the statute and the Treasury Department guidance make clear that certain persons (*e.g.*, tax-exempt organizations, governmental entities) are ineligible to participate in the program, and that any indirect investment by any such person in an otherwise eligible project or facility will disqualify the facility completely.

As a matter of tax policy, the Section 1603 grant program is clearly intended to stimulate economic investment in 'green' businesses, much like the more traditional ITC program. Additionally, however, the cash grant program also offers the potential benefit of being available to businesses that are not currently in a tax-positive position, and thus may be unable to derive economic benefit from a traditional tax credit.

### **Financing Structures**

As suggested above, tax benefits attributable to capital expenditures for energy-related projects have, as a practical matter, typically been limited to institutional investors, primarily because the ability to exploit the economic value of such benefits depended in large part on a sufficiently large tax base against which to apply the available ITCs. Various financing structures have traditionally been utilized to permit project developers—who often are not in a position to directly enjoy such benefits—to effectively monetize those tax attributes by transferring them to passive investors with the economic wherewithal to more effectively use them. Two such financing structures are

the sale-leaseback and the flip partnership.

In a typical sale-leaseback transaction, a developer would construct a qualified energy property (*e.g.*, a solar facility capable of producing electricity) and, under formally approved tax leasing guidelines, sell the facility to an institutional investor (*e.g.*, a bank), while entering into a long-term leaseback of the facility. The developer would then either operate to produce and sell electric power to third-party end users, or on-lease to an independent operator. Such a financing structure would permit access to the accompanying tax benefits in a variety of ways, including:

- Accelerated tax depreciation deductions (including bonus depreciation, which was substantially enhanced by both the ARRA and the 2010 tax relief act), as well as the energy property ITC (but not the PTC) remaining with the institutional investor/lessor of the project.
- Depreciation benefits remaining with the investor/lessor, but an elective pass-through of the ITC benefits to the lessee/operator.
- Depreciation benefits remaining with the investor/lessor, but with the lessee/operator retaining the option to forego ITC tax benefits in favor of annual PTCs, based on the electricity produced over a 10-year period.

As an alternative to the sale-leaseback structure, energy projects have also frequently been financed through partnership/limited liability company arrangements, sometimes known as flip partnerships. Under this structure, an institutional investor contributes capital to a single-purpose LLC (through which the developer usually has developed a qualified facility), and is allocated substantially all of the near-term tax benefits and cash flows produced by the project. After the institutional investor's

capital (and a pre-negotiated return) has been repaid through operating cash flow distributions, the developer is compensated for its time, effort and capital invested in the project through adjusted (or flipped) income and cash flow allocations, later in the project's operating life.

While the above-described financing structures remain available under current law, the changes to tax-energy policy effected by the ARRA were implemented in large part with the recognition that many institutional players have either suffered a significant reduction in taxable income (and therefore have a reduced appetite for tax-sensitive investment benefits), or have simply become more cautious in their capital investment decisions.

The energy-related tax legislation in the ARRA addressed these concerns in three significant ways:

1. by permitting developers to convert PTCs otherwise available with respect to qualified facilities into an ITC, thereby front-loading economically valuable tax attributes;
2. by allowing the elective conversion of otherwise available ITCs or PTCs into a cash grant under the Section 1603 program, thereby obviating the need for a taxable income base sufficient to utilize the tax credits; and
3. by reducing the required tax-basis adjustment for qualified projects to only one-half of the amount of the cash grant (or ITC) received with respect to the facility, thereby expanding the overall economic tax value of the investment.

Accordingly, in addition to the increased absolute value of the tax benefits made available under the ARRA for energy-related projects, the legislation also significantly expanded the pool of taxpayers potentially able to enjoy those benefits on a near-term timetable.

## Non-Business Tax Incentives

### Non-Business Energy Property Tax Credit

Under Section 25C of the code, taxpayers may claim a personal income tax credit (the non-business energy property tax credit) for certain energy-efficient property installed in a dwelling located in the U.S. and owned and used by the taxpayer as a personal residence. Under the ARRA, for property placed in service in 2009 and 2010 the credit is equal to 30 percent (increased from 10 percent under pre-ARRA law) of the sum of: 1) the amount paid during the year for qualified energy efficiency improvements installed during the year, and 2) the amount of residential energy property expenditures paid by the taxpayer during the tax year for the purchase of: a) advanced main air circulating fans, b) qualified natural gas, propane or oil furnace or hot water boilers, and c) energy efficient building property. The aggregate amount of the credit for both years cannot exceed \$1,500.

The 2010 tax relief act reconfigured the non-business energy property tax credit and extended it for one year, through Dec. 31, 2011, at pre-ARRA limitations, so that a taxpayer may claim a credit for qualified energy property placed in service during 2011, but only to the extent any prior credits claimed for 2009 or 2010 do not exceed \$500. Thus, the Section 25C credit available for 2011 is equal to 10 percent of the amount paid for qualified energy efficiency improvements installed during 2011, plus the amount of residential energy property expenditures paid during that year.

Certain limitations apply to expenditures incurred for certain specified types of residential energy property.

### Residential Energy-Efficient Property Credit

Under Section 25D of the code, taxpayers are allowed a nonrefundable personal tax credit known as the residential

energy efficient property (REEP) credit, equal to 30 percent of expenditures incurred for qualified solar electric, solar water heating, fuel cell, small wind energy and geothermal heat pump property placed in service before 2017. The REEP credit for fuel cell property is limited to \$500 for each 0.5 kilowatt of capacity. Prior to 2009, the credit was limited to \$2,000 for solar water heating and geothermal pump property, but the ARRA removed these limitations for taxable years beginning after 2008.

## Conclusion

As the foregoing discussion suggests, much of the tax legislation coming out of Congress in recent years has taken the form of tax expenditures (*i.e.*, programs directed to, and explicitly designed to assist, particular domestic industries and economic activities). While the ARRA (which is sometimes referred to as the stimulus act) was clearly enacted as part of a much broader attempt to stimulate overall economic and business activity in the U.S., the energy-related tax expenditures contained in the act are likely to be of relatively short duration. Accordingly, it behooves taxpayers involved in the energy industry, and their advisers, to carefully consider whether those enhanced tax benefits could tip the scales in turning an otherwise dubious project proposal into a clearly profitable investment return on their much-needed capital. ☛

## Endnotes

1. P.L. 111-5, 2/17/2009.
2. P.L. 111-312, 12/17/2010.
3. An ITC allows a dollar-for-dollar credit against the taxpayer's net income tax liability and, in the case of energy property, is an amount equal to the applicable energy percentage multiplied by the taxpayer's tax basis (generally acquisition cost) in the qualified energy property.

4. Perhaps of particular interest to New Jersey-based businesses, the list of PTC-eligible qualified facilities includes "marine and hydrokinetic renewable energy facilities," which derive energy from waves, tides and currents in oceans, as well as free-flowing water found in estuaries, tidal areas, rivers, lakes and streams and certain man-made systems, such as irrigation systems and canals. The expanded list also includes facilities creating energy through the process of ocean thermal energy conversion.
5. Treasury guidance can be found on the Treasury Department website at <http://www.treasury.gov/initiatives/recovery/Pages/1603.aspx>.
6. Section 50 of the code requires that the tax basis of energy property with respect to which a taxpayer has received an ITC must be reduced by an amount equal to 50 percent of the credit, and an equivalent basis adjustment rule applies to property qualifying for participation in the Section 1603 program. Similarly, to the extent such property subsequently becomes ineligible as qualifying energy property within five years of the cash grant, a portion of the grant monies are subject to recapture.

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