



## **PTCs, ITCs and Section 1603 Grants: Compare and Contrast**

### **Overview**

Until passage of the American Recovery and Reinvestment Act of 2009 (“ARRA”), there were few decisions to be made regarding the type of tax credit to claim under the Internal Revenue Code (“Code”) for a renewable energy project. Facilities like wind, biomass, geothermal and landfill gas qualified for a production tax credit (“PTC”), and solar facilities qualified for an investment tax credit (“ITC”). Now, for many types of facilities taxpayers can choose among a PTC, an ITC and a cash grant from the Department of the Treasury under ARRA section 1603 (“Section 1603 Grant”).

### **Production Tax Credit**

The PTC is found in Code section 45. The PTC provides a tax credit per kWh of electricity sold by a taxpayer from a qualifying facility to an unrelated person. For facilities selling electricity generated from wind, closed-loop biomass and geothermal sources, the PTC rate is 1.5 cents per kWh, which amount is adjusted for inflation and is 2.2 cents per kWh in 2010. For persons selling electricity generated from open-loop biomass, landfill gas, trash, qualified hydropower or marine and hydrokinetic sources, the credit rate is half the credit rate for wind (1.1 cents per kWh in 2010). The PTC can be claimed for sales in the first 10 years from the time the facility is originally placed in service.

In general, to claim the PTC, a person must sell electricity that it produces to an unrelated person. Only production in the United States is taken into account.

PTCs cannot reduce a taxpayer’s tax liability below a minimum threshold in any given year. The minimum threshold is the greater of (1) 25% of the excess of a taxpayer’s regular income tax liability over \$25,000 (calculated before taking the general business credit) or (2) the taxpayer’s tentative minimum tax. However, under a special rule, during the four-year period beginning on the date the facility was originally placed in service, the tentative minimum tax is treated as being zero, so that the PTC can be claimed against minimum tax for four years.

The amount of PTCs that can be claimed is reduced to the extent that the facility is the beneficiary of certain other subsidies. The amount of the reduction is based on a fraction the numerator of which is the sum, for the tax year and all prior tax years, of:

- grants provided by the United States, a state, or a political subdivision of a state;
- proceeds of tax-exempt bonds;
- subsidized energy financing under a federal, state, or local program provided in connection with the project; and
- any other Federal tax credit allowable for any property that is part of the project;

and the denominator of which is the aggregate amount of additions to the capital account for the project for the tax year and all prior tax years. Note that the reduction cannot exceed 50% of the amount of the credit.

### **Investment Tax Credit**

The ITC for renewable generating facilities is found in Code section 48. The ITC is based on a percentage of a taxpayer's investment in qualifying energy property. For example, if the taxpayer's investment in qualifying energy property is \$100 and the credit rate is 30%, the amount of the ITC is \$30. In general, the investment in energy property is determined in accordance with the general rules for determining the basis of property for federal income tax purposes, which generally is the cost of the facility. The investment includes all items properly included by the taxpayer in the depreciable basis of the property, such as installation costs and the cost for freight incurred in construction of the specified energy property. However, the investment for this purpose does not include all costs of a project. For example, it would not include the costs of land, buildings, certain land improvements, the acquisition of certain intangible assets like certain licenses, etc. In the case of facilities generating electricity from solar and fuel cells, the ITC percentage is 30% as long as the facility is placed in service by the end of 2016. The ITC rate is 10% for combined heat and power facilities and for microturbines.

In general, the ITC is only available to the person who owns the energy property when it is originally placed in service. Under special rules, a person can sell energy property to another person under a sale and leaseback, and the purchaser/lessor will be considered the original owner of the energy property as long as the sale-leaseback occurs within three months of the time the energy property is originally placed in service. There are also special rules allowing a lessor to make an election to pass the ITC through to the lessee.

In addition, the ARRA changed the tax laws to allow taxpayers to make an irrevocable election to have certain types of facilities that qualify for the PTC under Code section 45 treated as energy property eligible for a 30% ITC under Code section 48. A taxpayer electing to claim an ITC must not claim the PTC. Taxpayers generally are allowed to make this election with respect to property placed in service after December 31, 2008, and before the end of the current placed-in-service deadlines in Code section 45 (generally, through 2013; through 2012 for wind facilities).

In March 2009, the National Renewable Energy Laboratory published a study by the Ernest Orlando Lawrence Berkeley National Laboratory ("LBNL Study")<sup>1</sup> that provided estimates of the percentages of the total costs of typical projects that qualified for the ITC. The estimated percentage in the case of wind property was 90-95%, in the case of biomass was 95%, in the case of geothermal was 75% and in the case of landfill gas was 95%.<sup>2</sup>

### **Section 1603 Grant**

Under the ARRA, alternatively, a taxpayer may elect to apply to the Department of the Treasury to obtain a Section 1603 Grant for most types of property qualifying for the PTC or ITC. In general, with

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<sup>1</sup> See <http://www.nrel.gov/docs/fy09osti/45359.pdf>

<sup>2</sup> Note that this study was completed prior to the release in July 2009 by the Department of the Treasury of guidance on the Section 1603 Grant program. That guidance went into considerable detail into the types of costs that qualify for the ITC and the Section 1603 Grant and could potentially alter the study's analysis.

respect to property that otherwise would be eligible for the PTC, the Section 1603 Grant amount is 30% of the basis of the property that would comprise a qualified facility under Code section 45. This election can be made by a taxpayer that owns a wind facility, a closed-loop biomass facility, an open-loop biomass facility, a geothermal facility, a landfill gas facility, a trash facility, a qualified hydropower facility or a marine and hydrokinetic facility. With respect to property that could have claimed the ITC but not the PTC, such as solar, fuel cells, microturbines and combined heat and power property, the rate for the Section 1603 Grant is the same as the ITC rate. At the end of this document is a table showing the PTC rate and the ITC or Section 1603 Grant rate and the required in-service date to obtain these benefits under current law.

Taxpayers can claim the Section 1603 Grant with respect to property originally placed in service in 2009, 2010 or 2011 or for property where construction began in 2009, 2010 or 2011, that is originally placed in service by the end of by 2012 (in the case of wind facility property), 2013 (in the case of other renewable power facility property eligible for the PTC) or 2016 (in the case of solar, fuel cells, microturbines and combined heat and power property).

Generally, the amount of the Section 1603 Grant is the same as the ITC available for the property. The basis of property is determined in accordance with the general rules for determining the basis of property for Federal income tax purposes. See discussion above. Treasury and the Internal Revenue Service intend that the same basis rules would apply for both – applicants generally can look to ITC precedent to determine qualifying basis for purposes of the Section 1603 grant.

Applicants must submit with their application for a Section 1603 payment documentation to support the cost basis claimed for the property. Supporting documentation includes a detailed breakdown of all costs included in the basis. For properties that have a cost basis in excess of \$500,000 applicants must submit an independent accountant's certification attesting to the accuracy of all costs claimed as part of the basis of the property. In doing so, the accountants will not only verify that amounts were incurred but must also certify that the costs are qualifying costs for purposes of the Section 1603 Grant.

For property placed in service<sup>3</sup> in 2009, 2010 or 2011, applications must be submitted after the property has been placed in service and before October 1, 2012. Treasury will review the applications and make payment to qualified applicants within 60 days from the date the completed application is received by Treasury. For property not placed in service in 2009, 2010 or 2011 but for which construction began in 2009 or 2010, applications must be submitted after construction commences but before October 1, 2012.

If the property has been placed in service at the time of the application, Treasury will make payments to qualified applicants within 60 days from the date the completed application is received. For property not yet placed in service at the time of the application, Treasury will review such applications and notify the applicant if all eligibility requirements that can be determined prior to the property being placed in service have been met. If so notified, applicants must then submit, within 90 days after the date the property is placed in service, supplemental information sufficient for Treasury to make a final determination. Treasury will conduct a final review of the application at that time and make payment to qualified applicants within 60 days after the supplemental information is received by Treasury.

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<sup>3</sup> The placed-in-service date for purposes of the Section 1603 Grants is determined using the same rules as for ITC and depreciation purposes.

If a Section 1603 Grant is paid, no PTC or ITC may be claimed with respect to the property.

No grant may be awarded to any Federal, State, or local government (or any political subdivision, agency, or instrumentality thereof) or any section 501(c) tax-exempt entity (a “disqualified person”).

As with the ITC, in order to claim the Section 1603 Grant, the applicant must be the original user of the facility – that is, the owner of the facility at the time a facility is originally placed in service. In other words, a developer must transfer ownership to an investor prior to the original in-service date if that investor is to obtain the ITC or the Section 1603 Grant.<sup>4</sup>

### **C. Considerations for Choosing Between the Options**

There are a number of considerations that must be taken into account in determining whether to claim the PTC, ITC or Section 1603 Grant. The March 2009 LBNL Study looked at two project-specific factors – installed project costs and expected capacity factor (production) – and used a simple cash flow model to quantitatively analyze the tradeoff between the PTC or ITC (or equivalent Section 1603 Grant) for a number of different technologies. The study used these two factors because the relative value of the PTC goes up as the expected capacity factor goes up, while the relative value of the ITC or the Section 1603 Grant increases as installed project costs increase. This study concluded that only two of the five technologies modeled clearly favored one credit over the other: open-loop biomass received more value from the ITC than from the PTC in every combination of installed cost and capacity factor modeled, while geothermal overwhelmingly received more value from the PTC.

The expected capacity factor can be especially important in determining whether the PTC or ITC (or equivalent Section 1603 Grant) is preferable in the case of a wind facility and the installed costs are often determinative in landfill gas transactions.

Beyond these quantitative factors there are a number of other factors that are also important. First, the ITC or the Section 1603 Grant provide money upfront rather than over 10 years. In fact, with respect to certain property with a normal construction period of two years or more, the ITC can be claimed during the construction period as expenditures (qualified progress expenditures) are made by the taxpayer. This clearly provides cash-flow benefits.

Also, in many cases the amount of ITC or Section 1603 Grant can be known with greater certainty going into a project. While there can be variations in cost from budgeted amounts, the unknowns can be greater with respect to the PTC. If the facility is down for a time due to operational issues, the PTC can be significantly less than expected. Moreover, in certain types of facilities, especially wind facilities, the amount of PTC that will be available over time can vary by operational factors such as the significant risks relating to the uncertainty in the long-term average and year-to-year wind variations. Even if the total amount of the PTCs over 10 years do not vary from projections, the net present value of the PTCs can vary due to the year-to-year variations.

The ITC can be claimed against the alternative minimum tax. PTCs can only be used against the alternative minimum tax for the first four years after the facility is placed in service. And, of course, the

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<sup>4</sup> Note that special rules very similar to the ITC rules allow an extra three months to transfer the property to the lessor in the case of a sale and leaseback.

Section 1603 Grant does not require any income tax liability. As a result, a project seeking a Section 1603 Grant requires less tax equity than does a project seeking a PTC or an ITC.

With respect to investor-owned utilities, ITCs and the Section 1603 Grants are subject to the tax normalization rules, while PTCs are not.

The PTC can be reduced for grants, tax-exempt bonds, subsidized energy financing and other credits. These reductions do not apply to the ITC and Section 1603 Grants. However, while there is no specific prohibition against claiming an ITC or Section 1603 Grant simply because another type of grant is available, if such other type of grant is excludible from income as a nonshareholder contribution to the capital of a corporation, then the basis of any property acquired with such grant during the 12-month period beginning on the day the contribution is received is reduced by the amount of such contribution. This would reduce the ITC or Section 1603 Grant amount.

If the taxpayer claims ITCs or the Section 1603 Grant, the depreciable basis of property is reduced by 50% of the amount of the ITC or grant, but there is no basis reduction if the taxpayer claims the PTC.

If the taxpayer chooses to claim the ITC, the owner must keep property for five years or the credits will be recaptured in whole or in part. There are no such recapture provisions in the PTC rules. In fact, PTCs can be claimed by subsequent purchasers of the facility over the 10-year credit period. With respect to the Section 1603 Grants, there is a recapture rule, but it is much more lenient than the rule for the ITC. Selling or otherwise disposing of the property to an entity other than a disqualified person does not result in recapture provided the property continues to qualify as specified energy property and provided the purchaser of the property agrees to be jointly liable with the applicant for any recapture. Recapture can also occur if property ceases to qualify as a specified energy property. Temporary cessation of energy production will not result in recapture provided the owner of the property intends to resume production at the time production ceases. Permanent cessation of production will result in recapture. Permanent cessation of production due to natural disaster will not result in recapture unless the property is replaced with property for which a Section 1603 Grant payment is allowed. Replacement would be treated as occurring if the applicant uses Code section 1033 to avoid gain recognition.

The PTC rules generally do not allow anyone but the owner to make sales and claim the credits. Lease financing is available with respect to the ITC and the Section 1603 Grants.

**TABLE 1 – Summary Credit Rule Schedule**

Specified Energy Property	Required In-Service Date	PTC Rate for 2010 (claim for 10 years from original in-service date)	Applicable Percentage of Eligible Cost Basis
Large Wind	Jan 1, 2013	2.2 cents per kWh	30%
Closed-Loop Biomass Facility	Jan 1, 2014	2.2 cents per kWh	30%
Open-loop Biomass Facility	Jan 1, 2014	1.1 cents per kWh	30%
Geothermal under IRC sec. 45	Jan 1, 2014	2.2 cents per kWh	30%
Landfill Gas Facility	Jan 1, 2014	1.1 cents per kWh	30%
Trash	Jan 1, 2014	1.1 cents per kWh	30%
Qualified Hydropower Facility	Jan 1, 2014	1.1 cents per kWh	30%
Marine & Hydrokinetic	Jan 1, 2014	1.1 cents per kWh	30%
Solar	Jan 1, 2017	None	30%
Fuel Cells <sup>5</sup>	Jan 1, 2017	None	30%
Microturbines <sup>6</sup>	Jan 1, 2017	None	10%
Combined Heat & Power	Jan 1, 2017	None	10%

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#### ABOUT US PREF

The objective of the US Partnership for Renewable Energy Finance (US PREF) is to unlock capital flows to new, large-scale and distributed renewable energy projects in the United States. To achieve this objective, a balanced and credible group of highly experienced renewable energy financiers from financial institutions, investors, professional services firms, and others, working with leading non-government organizations, have convened as US PREF. US PREF, founded in 2009 with support from the consulting firm Green Order, is a program of the American Council On Renewable Energy (ACORE), a Washington, DC - based 501 (c)(3) non-profit organization whose mission is to bring renewable energy into the mainstream of the US economy and lifestyle through research, education, convening, and communications. For questions, contact Todd Foley, Senior VP of Policy at [foley@acore.org](mailto:foley@acore.org) or Cindi Eck, Director of Leadership Programs at [eck@acore.org](mailto:eck@acore.org).

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<sup>5</sup> For fuel cell property the maximum amount of the payment may not exceed an amount equal to \$1,500 for each 0.5 kilowatt of capacity.

<sup>6</sup> For microturbine property the maximum amount of the payment may not exceed an amount equal to \$200 for each kilowatt of capacity.