THE BOTTOM LINE ON…

Answers to frequently asked questions about climate and energy policy Issue 18

WORLD RESOURCES INSTITUTE

RENEWABLE ENERGY TAX CREDITS

The Federal Production Tax Credit (PTC) and Investment Tax Credit (ITC) are incentives for development and deployment of renewable energy technologies. This document provides an update on their benefits, applicability to specific technologies, and expiration dates.

This is an update to the first Bottom Line on Renewable Energy Tax Credits, published April 2008, which answers basic questions about different types of tax credits, their purpose, and qualification requirements. This document has been updated to reflect legislative changes that have occurred since then and is up-to-date as of September 12, 2010. Please consult the WRI website for further updates.

What are the Production Tax Credit (PTC) and the Investment Tax Credit (ITC)?

The Production Tax Credit (PTC)[1] reduces the federal income taxes of qualified tax-paying owners of renewable energy projects based on the *electrical output* (measured in kilowatt-hours, or kWh) of grid-connected renewable energy facilities. The Investment Tax Credit (ITC)[2] reduces federal income taxes for qualified tax-paying owners based on *capital investment* in renewable energy projects (measured in dollars). The ITC is earned when the equipment is placed into service.

*Changes made by the 2008 Economic Recovery and Stabilization Act **	*Changes made by the 2009 American Recovery and Reinvestment Act (ARRA)*	
Changes included: • extending the ITC for qualified projects placed in service prior to end of 2016; • allowing the ITC to be used against regular tax and alternative minimum tax (AMT); and, • making public utilities eligible to benefit from ITC.	Changes included: • PTC extension for wind through 2012; • PTC extension for biomass, geothermal, landfill gas, municipal solid waste, qualified hydroelectric, and wave/tidal power through 2013; • PTC-eligible projects can elect to receive ITC instead of PTC;	• ITC-eligible projects can receive the Treasury cash grant instead of tax credits; • Projects that benefit from the ITC can also take advantage of subsidized energy financing;** • Removal of the $4,000 dollar cap on the ITC for small wind projects; and, • Authorization of $2.3 billion in funding for the Advanced Energy Manufacturing Tax Credit.

* Also includes updates made by the 2008 Energy Improvement and Extension Act
** E.g. industrial development bonds or assistance via other Federal, state, or locally-subsidized financing programs

What is the Treasury cash grant?

The cash grant is an option for ITC-eligible projects to receive the value of the ITC as a direct grant instead of as a tax credit. Eligible technologies can receive a cash grant covering up to 30% of the capital investment. Since the ARRA allowed PTC-eligible projects to elect the ITC instead, those projects can also elect to receive the cash grant.

1. Implemented by IRS Code Section 45.
2. Also sometimes referred to as the “Energy Tax Credit”; Implemented by IRS Code Section 48.

What is the Advanced Energy Manufacturing Tax Credit (MTC)?

The Advanced Energy Manufacturing Tax Credit (MTC) awards tax credits to new, expanded, or re-equipped domestic manufacturing facilities that support clean energy development. The Department of Energy (DOE) and the Internal Revenue Service (IRS) allocated MTC credits in April 2010 to projects based on their commercial viability, job creation, GHG reductions and other factors. Since more applications were received than anticipated, the Obama administration requested that the MTC be extended.

Who qualifies for the PTC?

Depending on the complexity of the ownership structure, it may be appropriate to get a letter of opinion from the IRS for specific projects. Below is some high-level guidance on claiming the PTC:

- A tax-paying entity must own the generating asset and sell the electricity to an unrelated third party.
- Entities that do not pay taxes, such as publicly owned electric utilities, rural electric cooperatives and government bodies, may not take advantage of the PTC. Investor-owned utilities do qualify for the PTC.
- Generating assets must be located in the United States and placed in service between December 31, 1992 and January 1, 2013 (for wind) or January 1, 2014 (all others).

Who qualifies for the ITC?

The following are basic guidelines for claiming the ITC:

- System owner must be a tax-paying entity.
- Equipment must be new, though used equipment can potentially be treated as new depending on the amount of upgrades after the purchase.
- System must be placed in service between December 31, 2005 and December 31, 2016.

TABLE 1. U.S. RENEWABLE ENERGY TAX INCENTIVES AS OF 2010

Tax Credit	Incentive	Eligibility	Expiration
Production Tax Credit ***PTC-eligible projects qualify for ITC (and therefore cash grant)**	$22/MWh for first 10 years of operation*	Wind, closed-loop biomass, geothermal	Wind projects placed in service on or before 12/31/2012. All other eligible technologies placed in service on or before 12/31/2013.
	$11/MWh for first 10 years of operation	Open-loop biomass, qualified hydroelectric, landfill gas, municipal solid waste (MSW), marine and hydrokinetic power	Placed in service on or before 12/31/2013.
Investment Tax Credit	30% of qualified capital expenditures	Solar, small wind, and fuel cells (subject to maximum incentive)	Placed in service on or before 12/31/2016. Incentive for solar reverts to 10% in 2016.
	10% of qualified capital expenditures	Geothermal, Combined Heat and Power (CHP), microturbines (microturbines subject to maximum incentives)	Placed in service on or before 12/31/2016. Geothermal has no expiration.
Treasury Cash Grant	30% of qualified capital expenditures for qualifying solar, fuel cell (subject to cap), small wind, biomass, geothermal, landfill gas, waste, hydropower, and marine and hydrokinetic facilities 10% of expenditures for geothermal heat pumps, microturbines (subject to cap), combined heat and power (CHP)	ITC-eligible projects can qualify for cash grant 30% credit: Solar, fuel cells, small wind 10% credit: Geothermal, microturbines, CHP	Project must apply by 10/1/2011. Construction must begin by 12/31/2010. Project must be in service or construction commenced in 2009-2010 and thereafter in service by 2013 for wind, 2017 for solar, and 2014 for other technologies.

* Values stated for PTC ($22/MWh and $11/MWh) are for 2010, and are adjusted for inflation each year.

- PTC-eligible projects can elect to receive the ITC instead of the PTC.
- While the original ITC excluded publicly owned electric utilities, those can now benefit from the ITC as of 2008. Investor owned utilities remain eligible.

What are the other tax incentives granted to renewable energy projects? What are MACRS and Bonus Depreciation?

Modified Accelerated Capital-Recovery System (MACRs) is a system of rules and schedules for accelerated depreciation. A five year depreciation schedule is allowed for all ITC-eligible technologies as well as large wind projects. For some biomass property, the schedule is over 7 years. Bonus Depreciation allowed taxpayers to deduct 50% of the value of eligible systems in the first year but has not been renewed for 2010.

What are the upper limits or maximum value that can be awarded in tax credits?

The ITC does not limit the total credit value granted to a project, but does limit the credit value granted per kW of capacity of certain technologies. For small wind projects placed in service starting in 2009, the ITC dollar cap was removed by the ARRA. The maximum incentive for fuel cells is $3,000 per kW and for microturbines is $200 per kW.

Resources

- Database of State Incentives for Renewables and Efficiency: http://www.dsire.org
- Internal Revenue Service (IRS) http://www.irs.gov/pub/irs-pdf/f8835.pdf
- Novogradac and Co. LLP http://www.novoco.com/energy/retc/irsguide.php
- Solar Energy Industries Association http://www.seia.org/galleries/pdf/ITC_Frequently_Asked_Questions_10_9_08.pdf
- National Renewable Energy Lab (NREL) http://eetd.lbl.gov/ea/emp/reports/lbnl-1642e.pdf
- Department of Energy (DOE) http://www.energy.gov/additionaltaxbreaks.htm
- Clean Energy Resource Teams http://www.cleanenergyresourceteams.org/get-answers/13/10/2008/us-congress-passes-ptcitc-extensions
- Troutman Sanders Law Firm
  For clarification on the deadlines for application to the Treasury for cash grant: http://www.troutmansanders.com/treasurycashgrant062010/

Authors: Jenna Goodward and Mariana Gonzalez

This series is a product of WRI's climate and business engagement projects including the Green Power Market Development Group and the U.S. Climate Business Group. Through these projects, WRI works with leading companies to pioneer low-carbon business strategies and advance markets for renewable energy.