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.

**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.

**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.

**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.

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*1. Implemented by IRS Code Section 45.
2. Also sometimes referred to as the “Energy Tax Credit”; Implemented by IRS Code Section 48.*
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](http://www.dsire.org)
- Department of Energy (DOE) [http://www.energy.gov/additionaltaxbreaks.htm](http://www.energy.gov/additionaltaxbreaks.htm)
- Troutman Sanders Law Firm For clarification on the deadlines for application to the Treasury for cash grant: [http://www.troutmansanders.com/treasurycashgrant062010/](http://www.troutmansanders.com/treasurycashgrant062010/)

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

<table>
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<th>Tax Credit</th>
<th>Incentive</th>
<th>Eligibility</th>
<th>Expiration</th>
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| Production Tax Credit   | $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. |
| *PTC-eligible projects  | $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.        |
| (and therefore cash     |                                                |                                                                            |                                                 |
| grant)                  |                                                |                                                                            |                                                 |
| Investment Tax          | 30% of qualified capital expenditures         | Solar, small wind, and fuel cells (subject to maximum incentive)           | Placed in service on or before 12/31/2016.        |
| Credit                  | 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.        |
| 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 | 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.