



## CRS Analyzes the Production Tax Credit and Related Policies

Apr 23, 2014

Reading Time : **6 min**

The report also notes, based on the IRS tax return data, that few tax equity investors are subject to the alternative minimum tax (AMT); however, for those that are the AMT's limitation on PTCs can have a significant economic cost. This is because under the AMT regime, PTCs can only offset AMT tax liability if the PTCs accrued in the first four years of the project's operations. So if a taxpayer is in AMT and accrues PTCs from a five-year-old project, the taxpayer must wait to use the PTCs from that year for that project until it exits AMT. The taxpayer has to hope that will be within the next 20 years as unused PTCs expire after 20 years.

Below are key excerpts from the report:

- The PTC for wind and closed-loop biomass was first enacted in 1992. When first enacted, the PTC was scheduled to expire on July 1, 1999. Since 1999, the PTC has been extended eight times. On three occasions, the PTC was allowed to lapse before being retroactively extended. Including the present expiration, the PTC has been allowed to lapse four times.
- In addition to being extended, the PTC has also been expanded over time to include additional qualifying resources. In 2013, wind, closed-loop biomass, and geothermal technologies qualified for the full credit amount of 2.3 cents per kWh. Other technologies (open-loop biomass, small irrigation power, landfill gas, trash, qualified hydropower, marine and hydrokinetic) qualify for a half-credit amount, or 1.1 cents per kWh in 2013. Credit amounts are adjusted annually for inflation.
- The Joint Committee on Taxation (JCT) estimates that in 2013, foregone revenues (or "tax expenditures") for the PTC were \$1.7 billion. Between 2013 and 2017, the JCT estimates that foregone revenues associated with the PTC for renewable electricity

will total \$9.2 billion. Because these estimates are based on current law, any policy that extends or expands the PTC will increase the amount of foregone revenue.

- Tax incentives for renewables, however, may not be the most economically efficient way to correct for distortions in energy markets or to deliver federal financial support to the renewable energy sector. Tax subsidies reduce the average cost of electricity, increasing demand for electricity overall, countering energy efficiency and emissions reduction objectives. Subsidies delivered as non-refundable tax incentives often require those wishing to use the credit find “tax-equity” partners to provide equity investments in exchange for tax credits. The use of tax-equity reduces the amount of the incentive that flows directly to the renewable energy sector.
- Several policy options for the PTC have been proposed in the 113th Congress. These include (1) allowing the PTC to remain expired (current law); (2) temporarily extending the PTC (as proposed in the Tax Extenders Act of 2013 (S. 1859)); (3) temporarily extending the PTC but providing some form of phase-out (the PTC Certainty and Phaseout Act of 2013 (H.R. 2987)); (4) eliminating the inflation adjustment factor to phase out the PTC then repealing, (the Tax Reform Act of 2014); (5) permanently extending the PTC and making it refundable (the President’s FY2015 Budget); or (6) fundamentally reforming the PTC to provide a “technology neutral” incentive (the Baucus Energy Tax Reform discussion draft).
- Under current law, only facilities for which construction began before January 1, 2014, can qualify for the PTC. Before 2013, the PTC expiration date was a placed-in-service deadline, meaning that the electricity producing property had to be ready and available for use before the credit’s expiration date.
- The amount that may be claimed for the PTC is set to phase out once the market price of electricity exceeds threshold levels. Since the PTC was enacted, market prices of electricity have never exceeded the threshold level and the PTC has not been phased out, nor is the PTC likely to be phased out under current law.
- The ability to claim the PTC may also be limited by the corporate AMT. Currently, the PTC is available for taxpayers subject to the AMT for the first four years of the credit. While the PTC cannot be claimed against the corporate AMT, unused credits may be carried forward to offset future regular tax liability. While few firms are subject to the corporate AMT, this limitation may be significant for those affected.
- In 2010, 246 taxpayers claimed the PTC. Most of the credits claimed were for production of renewable electricity, with only a few claims being made for refined

coal, Indian coal or steel industry fuel. In total, in 2010, taxpayers claimed PTCs of \$1.7 billion. Because the PTC is paid out for 10 years, most PTCs awarded in any given year are the result of previous year investments. Some taxpayers may not be able to use all of their tax credits to offset taxable income in a given tax year. In this case, taxpayers may carry forward unused credits to offset tax liability in a future tax year. In 2010, nearly \$1.2 billion in PTC was carried forward from previous tax years.

- While the number of taxpayers claiming the PTC increased between 2008 and 2009, this number decreased between 2009 and 2010. With the Section 1603 grant option available, fewer taxpayers claimed the PTC. From 2009 through 2013, \$14.3 billion was awarded in Section 1603 grants to recipients that might have otherwise claimed the PTC had the grant option not been available. This figure is not directly comparable to the costs of the PTC over four years, because Section 1603 grants are a one-time payment, while projects can claim the PTC for 10 years of production.
- The amount of PTCs being carried forward more than doubled between 2008 and 2009, then doubled again between 2009 and 2010. During the economic downturn, taxpayers had less net income to offset with tax credits. Further, weakness in tax equity markets made it harder for renewable energy project developers to establish partnerships to monetize tax credits.
- Between 2013 and 2017, estimated revenue losses associated with the PTC are \$9.4 billion. Most of these revenue losses, \$7.7 billion, are due to the PTC for wind energy. An estimated \$1.5 billion is for PTCs for electricity produced using open-loop biomass. An estimated \$0.5 billion is attributable to other renewable resources, including closed-loop biomass, geothermal, qualified hydropower, small irrigation power, and municipal solid waste. Over the same five-year period, the estimated revenue losses associated with the production credits for refined coal and Indian coal are \$0.1 billion each. JCT's tax expenditure estimates are based on current law. Thus, any policy that extends the PTC would increase these tax expenditure estimates.
- Extending the PTC through 2015, as proposed in the EXPIRE Act would cost an estimated \$13.3 billion over the 2014 to 2024 budget window. In September 2013, the JCT estimated a one-year extension of the PTC for wind only, not extending the PTC for other technologies, had an estimated revenue cost of \$6.2 billion over the 2014 to 2023 budget window, while a five-year extension had an estimated revenue cost of \$18.5 billion over the same time frame.

- The President's FY2015 budget proposes to permanently extend the PTC, add solar to the list of qualifying technologies, and make the credit refundable. The Treasury estimates that the permanent PTC extension proposed by the president would reduce revenues by \$19.3 billion between 2015 and 2024. In analysis of the President's FY2014 budget, the JCT estimated enacting this policy would cost \$24.7 billion between 2014 and 2023.<sup>21</sup> The Congressional Budget Office estimates that a permanent PTC (or a PTC extended through the budget horizon) would cost \$28.4 billion between 2014 and 2024.
- Recent extensions of the PTC reflect a belief that the tax incentives contribute to the development of renewable energy infrastructure, which advances environmental and energy policy goals.
- Research suggests that the PTC has driven investment and contributed to growth in the wind industry. While further extension of the PTC may lead to further investment and growth in wind infrastructure, this potential is limited in the case of short-term extensions. Further, retroactive extensions provide what are often characterized as windfall benefits, rewarding taxpayers that made investments absent tax incentives.
- A common rationale for government intervention in energy markets is the presence of "externalities," which result in "market failures." Pollution resulting from the production and consumption of energy creates a negative externality, as the costs of pollution are borne by society as a whole, not just energy producers and consumers. Because producers and consumers of polluting energy resources do not bear the full cost of their production (or consumption) choices, too much energy is produced (or consumed), resulting in a market outcome that is economically inefficient.
- A more direct and economically efficient approach to addressing pollution and environmental concerns in the energy sector would be a direct tax on pollution or emissions, such as a carbon tax. This option would generate revenues that could be used to offset other distortionary taxes, achieve distributional goals or reduce the deficit. A carbon tax approach would also be "technology neutral," not requiring Congress to select which technologies to subsidize.
- Tax incentives are also not the most efficient mechanism for delivering federal financial support directly to renewable energy developers and investors. Stand-alone projects often have limited tax liability. Thus, project developers often seek outside investors to "monetize" tax benefits using "tax-equity" financing arrangements. The use of tax equity investors, often major financial institutions, reduces the amount of

federal financial support for renewable energy that is delivered directly to the renewable energy sector.

## Categories

Renewable Energy

© 2025 Akin Gump Strauss Hauer & Feld LLP. All rights reserved. Attorney advertising. This document is distributed for informational use only; it does not constitute legal advice and should not be used as such. Prior results do not guarantee a similar outcome. Akin is the practicing name of Akin Gump LLP, a New York limited liability partnership authorized and regulated by the Solicitors Regulation Authority under number 267321. A list of the partners is available for inspection at Eighth Floor, Ten Bishops Square, London E1 6EG. For more information about Akin Gump LLP, Akin Gump Strauss Hauer & Feld LLP and other associated entities under which the Akin Gump network operates worldwide, please see our Legal Notices page.