Insight

Primer: Tax Reform Changes to Energy Tax Credits

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Summary

- The proposed tax reform would help equalize the tax credit treatment for clean energy sources under existing tax credits, as well as eliminate some fossil fuel tax credits.
- The net effect of the tax reform from energy tax changes would be to raise $13.4 billion, which comes mostly from eliminating the inflation adjustment for the Production Tax Credit (a credit that mainly benefits large-scale wind power).
- The tax reform would take an important step toward ensuring clean energy sources beyond wind and solar have access to tax credits, give more tax breaks to residential homes that use clean energy, and reform credits to be more focused on clean energy rather than industry-specific tax breaks.

Introduction

The proposed tax reform, the Tax Cuts and Jobs Act, will make some significant changes to energy tax credits. As the American Action Forum has noted, energy tax credits have been a source of strife in the energy sector. Tax credits in their current form are almost always targeted to specific industries for policy purposes, and over the decades this practice has resulted in distortions that have altered choice among consumers. This is not merely a clean vs. fossil fuel issue: specific energy tax breaks to wind or solar power, targeted to achieve policy goals, effectively disadvantage alternative energy sources. For example, the current tax code gives a bigger tax break to solar power over geothermal, even under the same tax provision. The tax reform will help eliminate some of these preferences, while raising over $13 billion in revenue over 10 years.

Changes in the Tax Reform

The proposed reform will change seven energy tax provisions: the Production Tax Credt, the Investment Tax Credit, the Residential Energy Efficiency Tax Credit, the Enhanced Oil Recovery Tax Credit, the Marginal Well Production Tax Credit, and the Advanced Nuclear Tax Credit. The changes, and the effect, are as follows:

Tax Provision	Net Revenue change 2018-2027 (billions)
Eliminate Inflation Adjustment from PTC	$ 12.30
Normalize ITC Schedules	$ (1.20)
Normalize Residential Energy Efficient Tax Credit	$ (1.10)
Repeal EOR Tax Credit	$ (0.20)
Repeal Marginal Well Production Credit	$ –
Re-Schedule and Distribute Advanced Nuclear Tax Credits	$ (0.40)
Repeal EV Tax Credit	$ 4.00
Net Change	$ 13.40

Source: Joint Committee on Taxation estimates.

Eliminate Inflation from Production Tax Credit

The reform will eliminate the inflation aspect of the Production Tax Credit (PTC). Under current law, the tax credit is 1.5 cents per kilowatt hour from qualified clean energy sources (mostly wind power), indexed for inflation (around 2.3 cents in 2016). Under the reform, all PTC credits for new qualifying sources will be set at 1.5 cents per kilowatt hour, and this is estimated to raise tax revenues by $12.3 billion from 2018-2027. A positive impact from this change will be to minimize the perversions of negative rates, an event that occurs when wind power providers can pay consumers to purchase their electricity and still be profitable thanks to the tax credit.

Harmonize Investment Tax Credit Schedules

Under current law, solar power investments receive a tax credit of 30 percent of their

investment. The Investment Tax Credit (ITC) for other clean energy sources has expired, except for geothermal which gets a small 10 percent credit. The reform will equalize the ITC eligibility across a number of clean energy sources, and most solar, wind, combined heat and power, thermal energy, and geothermal energy sources will be able to claim the same level of tax credit, except for solar which will phase out a little slower. All these tax credits would end after 2022, as opposed to current law which allows solar to claim a 10 percent ITC through 2028. The effect of this will be to end the ITC's blatant preference for solar, and improve the competitiveness of all clean energy sources, benefiting both the environment and consumer choice. This will not be costless, and relative to the current law will reduce federal revenues by $1.2 billion from 2018-2027.

Residential Energy Efficiency Tax Credits

Currently, homeowners that invest in solar power or other residential clean energy or energy efficiency provisions can claim a tax credit. The tax credit for investments in geothermal heat pumps, small wind, or fuel cells has expired, but investors in solar power can still claim a tax credit equal to 30 percent of qualifying expenditures for solar power. The reform would end the preference for solar and restore the tax credit for *all* qualifying clean residential energy sources until 2022, at a reduced rate (26 percent in 2020, 22 percent in 2021). This change will reduce federal revenues by $1.1 billion from 2017-2028.

Repeal the Enhanced Oil Recovery Credit

Under current law, producers of oil using enhanced oil recovery (sequestering CO2 into oil wells to release oil and raise it to the pump) can claim a tax credit of up to 15 percent of the costs. This tax credit will be repealed, but the Joint Committee on Taxation estimates that this will *reduce* federal revenues by $0.2 billion over 2018-2027. This may be due to an estimation of reduced oil sales, which are subject to taxes (or rents and royalties if extracted from federal land).

Repeal the Marginal Well Production Credit

Under the current law, oil and gas producers using marginal wells (wells nearing the end of their useful productive life) can claim a tax credit per barrel or thousand cubic feet of production if oil or gas prices are exceptionally low. The intent of such credit is to bolster domestic energy production. The tax reform will eliminate this fossil fuel tax break, and is expected to have no effect on revenue.

Modify the Advanced Nuclear Tax Credit

Currently, the Treasury can allocate tax credits for investors in advanced nuclear power plants, up to a maximum power capacity eligibility of 6 gigawatts (a typical nuclear plant is around 1-2 gigawatts) over an 8-year period. The reform would modify the tax credit to make two important changes: one, the law would clarify that that the allocation of these tax credits can be re-allocated every 8 years; and two, the tax credits will be eligible to be transferred to participants in the nuclear supply chain—not just electricity producers. Effectively, fuel producers, or persons involved in the design and construction of nuclear power plants, would also be able to benefit from the credits. This is likely good news, as actual construction times and expenses for advanced nuclear power plants represent only a portion of the total costs. The estimated revenue impact of this modification will be to reduce federal revenues by $0.4 billion from 2018-2027.

Repeal the Electric-Vehicle Tax Credit

Currently, purchasers of electric vehicles (EV) can claim a tax credit up to $7,500 for purchasing a qualifying electric vehicle. The tax reform would repeal this, raising approximately $4 billion from 2018-2027. The EV credit has been both criticized and praised, but from a purely economic perspective the credit is a most effective policy tool in the earliest stages of adoption—something which it has arguably already achieved. Repealing the credit will be truer to the intent of tax reform, which is to eliminate as many special-interest tax loopholes as possible.

Non-Energy Tax Changes That Will Impact Energy

- A tax break for domestic manufacturing known as Section 199 will be repealed, which will end a 6 percent deduction of qualified activities for domestic oil and gas production.
- Electric utilities will be exempted from changes to interest deductibility and capital expensing, ending a concern they had with initial proposals.

Overall Assessment of Changes

Many industry participants were fearful of the uncertainty in the tax reform, and the promise to pay for corporate reductions with base broadening—which ostensibly includes eliminating energy tax credits. In its current proposed form, the reform will refocus the modified tax credits to a more energy-neutral tax treatment that better achieves

environmental policy goals. The real winners will be emerging technologies that have struggled to compete with big incumbent energy sources that were able to rely on a competitive advantage from the tax code. Wind power will have its tax credits significantly pared back, and solar will lose its advantage over emerging competitors. Some controversial fossil fuel tax breaks will be eliminated, but may have little impact. The advanced nuclear tax credit will be better designed, and will likely better reach struggling areas in the nuclear industry.

However, most energy tax provisions remain unchanged. As a past AAF analysis explained, there are numerous tax credits in the energy space, and the "tax form behavior" impact is estimated to be around $130 billion (note, that does not mean eliminating the provisions would raise $130 billion). There is more that can be done, but the proposed reform is certainly a step in the right direction and would result in a more technology-neutral energy tax policy than we have today. Compared to the status quo, the tax reform will foster more competition among emerging clean energy sources while simultaneously paring back controversial energy tax breaks to help pay for tax cuts elsewhere.