

The Year-End Clean Energy Tax Credit Deal: Swing and a Miss for Climate

Congress settled on a series of government spending bills just in time to avoid a government shutdown. A handful of clean energy tax credits extenders made it into the final package. While Congress had the chance to make some meaningful progress on technology deployment and greenhouse gas (GHG) emission reductions, the final package came up short of its potential. In this note, we review what made the cut, what didn't, and where we go from here.¹ We find that:

The tax extender deal likely has no tangible emissions benefits. The short duration and modest scope of the extenders package will produce small, near-term emission reductions. These tiny gains may get canceled out by the extension of the production tax credit for coal on Native American lands.

US emissions will be up to 100 million tons higher from 2025 onward than if a comprehensive package made it into law. Many of the tax credits not included in the package could have driven deployment of gigawatts of new clean energy and millions of additional electric vehicles. Instead, uncertainty for key clean technologies like carbon capture and offshore wind will persist.

The Deal

Congressional leadership from both parties agreed on a clean energy extenders package as part of a much larger tax deal, which covers topics as varied as disaster relief, alcohol taxation and railroad track maintenance. The complete package is part of broader must-pass, bipartisan spending legislation and should be on the President's desk before the end of the week. While there was no guarantee that any clean energy tax credits would be part of the package, the provisions in the deal are short in duration and much smaller in scope than the array of options we considered in previous research.

The major provisions in the package include:

- Biofuels: Retroactive application and extension of tax credits for the production of biodiesel and certain other alternative fuels under Sections 40A, 6426, and 6427 through 2022, and retroactive application and extension of the Section 40 second-generation biofuel tax credit through 2020.
- **Renewable energy production tax credit:** Extension of the Section 45 renewable energy production tax credit (PTC) for wind through 2020 at the 2019 value, then phase down to zero.
- Energy efficiency credits: Retroactive application and extension through 2020 of the Section 45L new home tax credit, the Section 25C residential tax credit, and the Section 179D commercial buildings tax credit.
- Additional provisions: Retroactive application and extension through 2020 of tax credits for producing coal on Native American lands, selling fuel cell and two-wheel electric vehicles and other items.

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Likely no tangible emissions benefit

Our initial take on the emissions implications of the package is that it is probably a wash for the climate. While we have not conducted a full energy system analysis of the deal, there are several reasons why we arrive at this conclusion. First, all extenders but the wind PTC and biofuel extensions primarily apply to actions and investments that occurred in 2018 and 2019. Extending these provisions don't change the past, though they do provide retroactive support to the struggling advanced biofuel industry. Second, the one-year extension of efficiency provisions, the wind PTC, and multi-year extension of biofuel credits certainly won't hurt the climate, but the amount of change in the energy system they will achieve will be far smaller than anything we assessed in previous research.

Finally, the extension of the production tax credit for coal produced on native American lands through 2020 will put upward pressure on US emissions. This is the fifth time Congress has extended the credit since its inception in 2005. While it's unclear how much coal production will remain online because of the credit, we estimate using Joint Committee on Taxation projections that recipients of the credit in 2020 will produce enough coal to emit 8 million metric tons of CO2. The potential increase in emissions due to the extension of the coal credit may cancel out nearly all the emission reductions associated with clean energy tax extenders in the package in 2020.

A lifeline for biofuels

The technology that benefits the most from the deal is biofuels. Advanced biofuel producers have struggled in recent years with low retail fuel prices and regulatory turbulence from the Trump Administration. The deal provides retroactive support for production in 2018 and 2019 and multi-year certainty for most biofuels through 2022. These extenders have the potential to serve as a bridge to a more reliable future policy landscape.

Megatons and More Left on the Table

The most important part of the story on the tax extenders deal is what is not in the bill. Advocates and clean energy companies made a strong case and lobbied hard to extend and expand a vast array of tax credits. Many of the provisions left out of the deal had bipartisan backing and would have helped the US to make tangible progress on clean energy deployment and GHG reductions—cutting GHGs by up to 100 million tons compared to current policy. Without these provisions and additional future policy action, the US is currently on track to achieve net-GHG reductions of 12-19% below 2005 levels in 2025, nowhere near the Paris Agreement goal of 26-28%, and far off the path to deep decarbonization.

Headwinds for clean energy

Beyond GHG reductions, many clean energy technologies will now face tough sledding and ongoing market distortions going into the next decade. The offshore wind industry will begin the 2020s with no federal tax credit support. Meanwhile gigawatts of projects languish in the doldrums while the Department of Interior completes additional permitting reviews. Storage technologies will continue to get tax credit support when coupled with utility-scale solar but not for other applications, even if deployment elsewhere on the grid adds more value. The fate of America's existing nuclear fleet continues to look bleak, and the window to start construction of carbon capture projects continues to close while the Internal Revenue Service works on draft rules for the Section 45Q carbon capture credit.

Consumers who want to buy clean technologies will also feel the pinch. Federal support for residential solar installations and geothermal heat pumps will phase out by 2022. The most popular electric vehicles on the market today are no longer eligible for a \$7,500 tax credit. With dozens of new models due to hit the market in the next few years, the existing credit is likely to phase out for most manufacturers in the not-toodistant future. Without an extension of EV tax credits, the deal missed an opportunity to put millions more EVs on the road by 2030.

Looking Ahead

As Congress enters an election year, the chances of passing any major legislation—including additional tax extenders—is low. Leadership in both parties will avoid as many opportunities to force tough votes as possible. This means that uncertainty for tax extenders left out of the deal will persist well into 2020 at a minimum. With election pressure behind it, a lame duck Congress may be willing to revisit clean energy tax credit extenders late next year, just as Congresses in 2006 and 2014 did.

2020 will bring an array of new climate and clean energy proposals from candidates, members of Congress, advocates and others. While clean energy tax credit extensions could have made a down payment on future action, comprehensive and ambitious policy is needed to get the US economy on track for long-term decarbonization. We look forward to assessing additional ideas in the year ahead.

Disclosure Appendix

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