

# Federal EV Tax Credit

## Federal Tax Credit

There is a Federal tax credit of up to \$7500 for the purchase of a plug-in vehicle. The [amount](#) of the credit depends on the size of the battery. This tax credit originated in the Energy Improvement and Extension Act of 2008 (George W. Bush administration), though it was amended in the Recovery and Reinvestment Act (a.k.a. "Obama Stimulus Package) in 2009. 2018 could be "the year of the ceiling."

There was some suspense regarding whether the credit would survive the 2017 GOP tax bill given an administration that is doubling down on fossil fuels. The House version of the bill eliminated it. The Senate version retained it, and in the end, it survived. (A proposal arising late in the Obama Administration to change the incentive from a credit to a point of sale rebate and raise it to \$10,000 was not able to get serious consideration in this Congress.)

Though the survival of the tax credit may sound counter-intuitive given the current political climate, there is evidence that even though EVs are relatively new, they have established a presence economically. [Fortune](#) reports that 50 companies, including major auto manufacturers and Uber, sent a letter urging Congress to retain the credit. The [Detroit Free Press](#) reports data compiled by the US Energy Department saying that EV production in this country is responsible for over 215,000 jobs.

It also happens not to be without controversy among vehicle manufacturers, particularly Tesla and General Motors, which will feel its distorting effects first.

## Unit Threshold

The credit has a ceiling of 200,000 units applied to a given manufacturer. Once a manufacturer sells unit number 200,000, the credit remains in place for the current and subsequent quarters (to service the pipeline). It is then halved (up to \$3750) for the next 6 months, halved again (up to \$1875) for another 6 months, and then it goes away entirely for that manufacturer. In other words, the players who jumped first into the deep water will become price-disadvantaged relative to the laggards.

Tesla and General Motors have sold 161,771 and 168,183 respectively through 2017. Both are certain to crack the 200,000 level during 2018 and lose the credit at some point in 2019. Tesla will probably get there first if it succeeds in ramping Model 3 deliveries. The YouTube Channel, Teslanomics (a relatively conservative forecaster) expects Tesla to get to this level in the second quarter. GM, at its current run rate of over 5,000 plug-in units per month, will not be that far behind. And if Nissan, another early entrant, has success with its new generation of the Leaf, it too, could reach this point in the relatively near term. Nissan has sold 114,808 Leafs to this point. These companies will face some big pricing decisions and pressure to maximize cost-control in order to stay competitive.

## Importance of EVs to Forestall Climate Change

According to a report issued by the [Union of Concerned Scientists](#), "Electric vehicles are central to reducing oil consumption and transportation-related emissions in the United States." And incentives matter at this stage of the game. In the one instance where there was a real "light switch" test, the State of Georgia, which initially had generous EV

incentives in the form of a \$5,000 rebate, discontinued it in 2015 and EV sales dropped by 89% in the span of two months. In California, a state that has been among the most aggressive in deploying various incentives, EVs represent 5% of new vehicle sales (as opposed to 1% nationally).

With all of the wrangling over the EV incentives, let's not forget that the fossil fuel industry continues to benefit from preferential tax treatment in the form of expensing of intangible drilling costs, domestic manufacturing deduction, depletion allowance, accelerated amortization, and inexpensive Federal leases. This was estimated by the [Wall Street Journal](#) to be worth \$4.76 billion per year. Also keep in mind that externalities, the effects of burning the stuff, drilling/fracking for it, transporting it, or accidentally spilling it are not taxed. There are Federal and State gas taxes, though the Federal tax hasn't been raised since 1993. This has kept gasoline prices in the USA lower than most of the world. The average price for a gallon of gasoline domestically is 55% lower than the worldwide average (January 2018).

With respect to the Federal tax credit, what we have may be better than nothing, but we like the Obama-era proposal to turn the tax credit into a rebate. Not everyone is able to benefit from a tax credit. And we would like to see the sales-unit cap removed.

In terms of how long incentives might be needed, according to data from the Union of Concerned Scientists, it is estimated that with continuing improvements and cost reduction in the technology, the cost curve for EVs may cross that of internal combustion vehicles by about 2025.