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IN FOCUS

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Clean Vehicle Tax Credits

The federal government currently offers three tax credits to incentivize the purchase of clean vehicles (electric vehicles, plug-in hybrid vehicles, and fuel cell vehicles). All three credits were created or substantially modified by P.L. 117-169, the Inflation Reduction Act of 2022 (IRA). This In Focus summarizes each clean vehicle credit and provides a brief discussion of relevant economic policy considerations.

Clean Vehicle Credit (IRC §30D)

Taxpayers purchasing a qualifying new clean vehicle may claim a nonrefundable tax credit of up to $7,500 for vehicles acquired before the end of 2032. The maximum potential credit ($7,500) is the sum of two amounts: the critical mineral amount ($3,750) and the battery component amount ($3,750), which went into effect for vehicles acquired on or after April 18, 2023. (Fuel cell vehicles without batteries that meet other requirements are eligible for the full $7,500 credit, though fuel cell vehicles with batteries are subject to the bulleted rules below.)

- To claim the critical mineral portion of the credit, a car's battery must have at least a certain percentage of its critical minerals that were extracted or processed in the United States or in a country with which the United States has a free trade agreement, or that were recycled in North America. The minimum percentage is 40% in 2023, 50% in 2024, 60% in 2025, 70% in 2026, and 80% thereafter. For vehicles acquired after 2024, no applicable critical minerals in the vehicle's battery may come from a *foreign entity of concern* (FEOC).

- To claim the battery component portion of the credit, at least a certain percentage of an electric vehicle battery's component parts must be manufactured or assembled in North America. The minimum percentage is 50% in 2023, 60% in 2024 and 2025, 70% in 2026, 80% in 2027, 90% in 2028, and 100% thereafter. Furthermore, vehicles acquired after 2023 cannot use battery components manufactured or assembled by an FEOC.

In addition to the critical minerals and battery component requirements, qualifying clean vehicles must meet other criteria. These additional criteria include a manufacturer's suggested retail price (MSRP) limit ($80,000 for vans, SUVs, and pickup trucks; $55,000 for other vehicles); a required gross vehicle weight rating (GVWR) of less than 14,000 pounds; and a battery capacity of at least 7 kilowatt hours. Additionally, all qualified vehicles must undergo final assembly in North America.

To claim the credit, taxpayers' modified adjusted gross incomes (MAGIs) for either the current or previous year must be at or below certain thresholds: $300,000 for married couples, $150,000 for single filers, and $225,000 for heads of household. The clean vehicle credit is *nonrefundable*, meaning taxpayers may not claim credit amounts in excess of their tax liabilities.

Since the beginning of 2024, taxpayers have been allowed to transfer their credits to vehicle dealers. Transferred credits may exceed taxpayers' income tax liabilities, effectively making transferred credits fully refundable. As a requirement for having received a transferred credit, dealers must compensate buyers with either a cash payment or a price reduction equal to the value of the credit. Taxpayers who transfer a credit but later exceed the MAGI limits must pay back the credit (to the IRS) when filing their taxes.

Credit for Previously Owned Clean Vehicles (IRC §25E)

Taxpayers purchasing a qualifying previously owned clean vehicle may claim a nonrefundable tax credit equal to 30% of the vehicle's sales price, up to a maximum credit of $4,000. This credit is commonly referred to as the "used clean vehicle credit." Qualifying used vehicles must be acquired before the end of 2032.

The credit can only be claimed once per vehicle, and the vehicle must satisfy other criteria. The vehicle must be purchased from a licensed dealer for $25,000 or less, have a GVWR of less than 14,000 pounds, and have a battery capacity of at least 7 kilowatt hours. In addition, the vehicle's model year must be at least two years before the year of purchase, and the dealer must produce a report of the transaction for both the buyer and the IRS.

Only taxpayers with MAGIs at or below $150,000 for married couples, $75,000 for single filers, and $112,500 for heads of household in either the current or previous year qualify for this tax credit. Taxpayers can claim the credit at most once every three years. Rules for credit transfers under the used clean vehicle credit are similar to those under the clean vehicle credit.

Credit for Qualified Commercial Clean Vehicles (IRC §45W)

By purchasing a qualified clean vehicle, businesses and tax-exempt organizations can qualify for a tax credit of up to $40,000. For plug-in hybrid vehicles, the credit equals the lesser of the incremental cost of the vehicle (the difference between its price and the price of a gas- or diesel-powered vehicle of similar size and use) or 15% of the vehicle's cost basis. For electric vehicles and fuel cell vehicles, the credit equals the lesser of the incremental cost of the vehicle or 30% of its cost basis. The credit may not exceed $7,500 for vehicles with a GVWR of less than 14,000 pounds.

The credit for qualified commercial clean vehicles can only be claimed once per vehicle and must satisfy multiple other criteria. The vehicle must be used for business purposes, be used primarily in the United States, have a battery capacity

of at least 7 kilowatt hours if the GVWR is less than 14,000 pounds or 15 kilowatt hours otherwise, and be produced by a qualified manufacturer. In addition, the vehicle must be either mobile machinery as defined in IRC §4053(8) *or* a motor vehicle for use on public roads for purposes of Title II of the Clean Air Act. Mobile machinery is defined to include vehicles such as electric tractors while excluding vehicles such as electric golf carts.

The commercial clean vehicle credit is nonrefundable, meaning that businesses may not claim tax credits in excess of their income tax liabilities. Any unused credits may be carried back 1 year or carried forward up to 20 years to offset other years' tax liabilities. Tax-exempt organizations are eligible to receive the credit as a direct cash payment instead of as a nonrefundable tax credit.

Businesses may claim the commercial clean vehicle credit for vehicles leased to customers. In some cases, dealers have reportedly claimed credits for leased passenger vehicles, then used these credits to lower customers' down payments by $7,500. This *tax credit exception* allows customers to save up to $7,500 even if the vehicle does not match the MSRP restrictions or domestic content rules from the Clean Vehicle Credit; taxpayers who are above the Clean Vehicle Credit income limits can also benefit from the loophole. This issue is discussed in greater detail in CRS In Focus IF12603, *The Tax Credit Exception for Leased Electric Vehicles*, by Nicholas E. Buffie.

How Much Do the Tax Credits Cost and Who Claims Them?

According to the Joint Committee on Taxation (JCT), the three clean vehicle tax credits will reduce revenues by an estimated $21.7 billion over the FY2024-FY2028 budget window. This total is split with corporations claiming an estimated $14.4 billion for the credit for qualifying commercial clean vehicles and individuals claiming an estimated $5.6 billion for the clean vehicle credit and $1.7 billion for the used clean vehicle credit. **Table 1** shows the credits' projected costs by fiscal year.

Table 1. Cost Estimates for Clean Vehicle Tax Credits

Billions of Dollars, FY2024-FY2028

	2024	2025	2026	2027	2028
Clean Vehicle Credit (Individuals)	$1.8	$0.4	$0.5	$0.8	$2.1
Used Clean Vehicle Credit (Individuals)	$0.3	$0.3	$0.4	$0.3	$0.3
Credit for Qualified Commercial Clean Vehicles (Businesses)	$1.6	$2.4	$2.9	$3.5	$4.1
TOTAL	$3.7	$3.1	$3.8	$4.6	$6.5

Source: Joint Committee on Taxation, JCX-48-24.

The pre-IRA tax credit for plug-in electric vehicles (the precursor to the Clean Vehicle Credit) was claimed disproportionately by high-income taxpayers. In 2022, 50% of the credit's benefits went to taxpayers in the top 8% of the taxpayer income distribution (those with adjusted gross incomes, or AGIs, of $200,000 or more), and 93% of its benefits went to taxpayers in the top 33% (those with AGIs of $75,000 or more).

The previous tax credit's nonrefundable nature likely contributed to the relatively smaller benefits accruing to low-income taxpayers. For credits claimed in 2022, taxpayers with AGIs below $50,000 who claimed the credit received roughly $2,025, compared to $7,443 for taxpayers with AGIs between $100,000 and $500,000. This may change as more taxpayers transfer fully refundable credits to car dealers. Initial Treasury data for January 1-February 6, 2024, indicate that roughly 19,500 taxpayers transferred the clean vehicle credit or the used clean vehicle credit to car dealers. Over the same period, 5,500 vehicle sales were reported for purposes of traditional nonrefundable credits.

Complementary Tax Provisions

Federal tax policy also contains a provision that indirectly promotes the adoption of clean vehicles. The Alternative Fuel Vehicle Refueling Property Credit (IRC §30C) can be claimed by individuals and businesses that install property used to store or dispense clean-burning fuel or to recharge electric motor vehicles in qualifying census tracts. Qualifying census tracts are those designated as low-income for the New Markets Tax Credit (generally having a poverty rate greater than 20% or median family income less than 80% of the statewide or metropolitan area family income) or those located in nonurban areas.

The credit for individuals is equal to 30% of the cost of the property with a maximum credit of $1,000. For businesses, the credit is equal to 30% of the cost of the property if prevailing wage and qualified apprenticeship requirements are met (6% otherwise), with a maximum credit of $100,000 per unit of property.

Federal tax incentives support the clean vehicle market in other ways as well. For example, the clean hydrogen production credit (IRC §45V) subsidizes the production of hydrogen fuel which may be used in fuel cell vehicles, and the advanced manufacturing production credit (IRC §45X) subsidizes production of battery components which may be used in clean vehicles. In addition, an array of federal tax credits—most notably the Clean Electricity Investment Tax Credit (IRC §48E) and the Clean Electricity Production Tax Credit (IRC §45Y)—subsidize electricity generated by "clean energy" sources such as nuclear and renewables. For information on other energy tax incentives, see CRS Report R46865, *Energy Tax Provisions: Overview and Budgetary Cost*, by Nicholas E. Buffie and Donald J. Marples.

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