



# Inflation Reduction Act of 2022: Incentives for Clean Transportation

September 6, 2022

# The Inflation Reduction Act of 2022

On August 16, 2022, budget reconciliation legislation, commonly known as the "Inflation Reduction Act of 2022" (IRA), was signed into law (P.L. 117-169). The IRA contains multiple provisions related to the adoption and deployment of "clean transportation" technologies, building upon existing programs and incentives for "clean transportation."

# **Clean Transportation Tax Incentives**

U.S. sales of fuel cell vehicles (FCVs) and plug-in electric vehicles (PEVs; see also Transportation Energy Data Book) have increased overall, with 2021 sales of both groups of vehicles exceeding 2019 sales. This trend in sales has occurred while car prices generally have increased, including used car prices. The prices of FCVs and PEVs are typically higher than their gasoline counterparts.

Some of the various tax provisions in the IRA pertain to "clean transportation." As described below, the IRA modifies the existing tax credit for new PEVs (26 U.S.C. §30D) resulting in a modified tax credit for certain "clean vehicles." The IRA also creates a new tax credit for previously owned "clean vehicles" and commercial "clean vehicles." The 200,000 per manufacturer unit phase-out threshold is eliminated, allowing qualifying new Tesla and General Motors vehicles to once again be eligible for the full tax credit. The IRA also modifies the existing tax credit for alternative fuel refueling property (26 U.S.C. §30C). All four tax credits expire on December 31, 2032.

### **Clean Vehicle Credit**

Section 13401 modifies the tax credit for PEVs, expanding eligibility for "clean vehicles," including FCVs (a previous tax credit for FCVs under 26 U.S.C. §30B expired December 31, 2021), and introducing income and price limits. Qualifying vehicles have final assembly in North America, and no vehicle qualifies that includes battery components (after 2023) or critical minerals (after 2024) from foreign entities of concern.

**Congressional Research Service** 

https://crsreports.congress.gov IN12003 The total amount of the credit (maximum \$7,500) applies to any qualifying FCV (fuel economy previously determined the total credit amount). For PEVs, the credit amount applies in two equal amounts determined by certain battery production criteria rather than battery capacity: half requires a minimum percentage (based on value) of the battery's critical minerals to be recycled in North America or extracted or processed by a country that is party to a U.S. free trade agreement; half requires a minimum percentage of battery components to be made in North America.

These requirements appear to support other efforts to reduce reliance on production and manufacturing activities in China (see P.L. 117-167 and White House supply chain policies for critical minerals). Since many minerals and components come from China and other countries that are not party to a U.S. free trade agreement, this could stress the domestic battery supply chain. With the requirement for final assembly in North America going into effect upon enactment, fewer vehicle models will be eligible through the end of 2022 than were eligible for the unmodified tax credit. Future eligibility will depend on whether supply chains are able to accommodate these new requirements and whether manufacturers choose to pursue such credits.

### **Credit for Previously Owned Clean Vehicles**

Section 13402 introduces a new tax credit to apply to the first transfer (after the date of enactment) of qualifying "clean vehicles" (e.g., PEVs and FCVs) with a maximum credit amount of \$4,000, a maximum sale price of \$25,000, and limits on the income of taxpayers (\$150,000 for joint returns, \$112,500 for heads of household, and \$75,000 for all others).

### **Qualified Commercial Clean Vehicles**

Section 13403 introduces a new tax credit offering a separate option from the Section 13401 credit (double benefit is disallowed) for commercial "clean vehicles" (e.g., PEVs and FCVs). Commercial vehicles may be eligible for the unmodified tax credit for PEVs or the previous tax credit for FCVs. The basis for the credit amount differs from that for the Section 13401 credit: either 15% of the vehicle cost (30% for non-gasoline or non-diesel vehicles) or the incremental cost relative to a comparable vehicle. The maximum amount is \$7,500 for gross vehicle weight rating (GVWR) less than 14,000 pounds, or \$40,000 otherwise (e.g., school buses, heavy-duty municipal vehicles).

### **Alternative Fuel Refueling Credit**

Section 13404 extends and modifies the tax credit for alternative fuel refueling property. Qualifying property is expanded to include charging stations for 2- and 3-wheeled vehicles (for use on public roads) and bidirectional charging equipment (i.e., vehicle-to-grid or V2G). Starting in 2023, qualifying property will be limited to that placed in service within low-income or non-urban census tracts.

For residential property, the credit amount is continued at 30% of the cost with a maximum amount of \$1,000. For business property, the credit amount decreases to 6% (from 30%) with a maximum amount of \$100,000 (previously \$30,000). Business property meeting prevailing wage and registered apprenticeship requirements may be eligible for a credit amount of 30% (\$100,000 maximum).

# **Funding for Vehicle Fleets**

In addition to tax credits, the IRA supports fleet acquisition of clean and zero-emission vehicles (e.g., PEVs, FCVs). Section 70002 appropriates \$3 billion to the United States Postal Service (USPS) to acquire zero-emission delivery vehicles and requisite infrastructure at USPS facilities. Section 60101 appropriates \$1 billion to the Environmental Protection Agency to implement a grant and rebate program

for clean heavy-duty vehicles, with \$400 million set aside for projects to replace vehicles serving communities located in an air quality nonattainment area for any air pollutant.

## **Domestic Manufacturing**

The IRA also provides funding to support domestic manufacturing activities that could support development of "clean vehicles" and their battery supply chain. Section 13501 extends the Advanced Energy Project Credit (26 U.S.C. §48C), allocating an additional \$10 billion for manufacturing facilities, including those for PEVs, FCVs, and associated infrastructure. Section 50142 appropriates \$3 billion to the Advanced Technology Vehicles Manufacturing (ATVM) Loan Program to provide direct loans for manufacturing of low- or zero-emission vehicles. Section 50143 appropriates \$2 billion to provide grants for production of PEVs, FCVs, and other efficient vehicles.

#### **Author Information**

Melissa N. Diaz Analyst in Energy Policy

#### Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.