



Insight

Climate Implications of the BBBA's EV Provisions

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Executive Summary

- The Biden Administration has called for the increased adoption of electric vehicles (EVs) as part of its climate change agenda.
- The Build Back Better Act includes provisions that incentivize the adoption of EVs through tax credits which are subject to union-labor requirements and other restrictions
- The conjunction of these requirements, however, would undermine the administration's goal of incentivizing EV purchases.

Introduction

In the United States, the transportation sector is the greatest contributor of the greenhouse gas emissions responsible for climate change. In 2019, transportation contributed 29 percent of total emissions. Transportation is largely reliant on petroleum, which is the most consumed energy source domestically and the largest contributor of carbon dioxide emissions, as a result.^[1]

Recently, the U.S. House of Representatives passed reconciliation legislation, the [Build Back Better Act](#) (BBBA). The BBBA includes tax credits for the purchase of electric vehicles (EVs) as well as other programs that provide tax rebates and credits for clean energy technology. The new credits, however, are subject to requirements that vehicles are assembled in unionized plants for taxpayers to be able to take advantage of their full value. The growing number of electric and hybrid vehicles being produced at unionized plants, however, do not meet the criteria to receive the tax credit, which undermines its ability to incentivize the purchase of EVs.

Credits for Personal and Commercial Vehicles

The Bipartisan Infrastructure Framework (BIF) addresses some of the administration's longstanding goals.^[2] President Biden's American Jobs Plan calls for the expansion of EV infrastructure, particularly the construction of 500,000 charging stations by 2030 at a cost of \$7.5 billion. In addition, the Biden Administration established a target for EV sales: 50 percent of all auto sales by 2030.[?] Similarly, the BBBA includes tax credits to incentivize EV purchases, including battery and plug-in hybrid electric vehicles. In order to qualify, the vehicle must have a gasoline tank no larger than 2.5 gallons and a battery capacity of no less than 40 kilowatt hours.

The language proposed by the Democratic members of the Ways and Means Committee on tax credits includes union-labor requirements, like many of the administration’s proposals. Tax credits would be available to individuals who purchase new or previously owned electric vehicles, as well as to companies that purchase new vehicles. EV consumers would qualify for a \$7,500 tax credit. The purchase of EVs that rely on battery cells manufactured in the United States or vehicles assembled domestically at collective bargaining plants are eligible for increased benefits, \$500 and \$4,500, respectively.

If all conditions are met, consumers could receive a tax credit of up to \$12,500; the claimable credit cannot exceed 50 percent of the EV’s purchase price, however. In addition, the tax credit cannot be applied to vans, trucks, and sport utility vehicles that cost more than \$80,000 and other vehicles that cost more than \$55,000.

Impact

In 2020, 70 percent of EVs sold in the United States included domestically manufactured batteries, qualifying a majority of vehicles for the \$500 tax credit. Only four car models were produced in unionized plants in 2019, according to the United Automotive Workers. In 2019, they represented 3 percent of EVs sold in the United States.[3] Popular brands of EVs include Tesla and Nissan, neither of which manufactures its vehicles in unionized plants, yet make up a majority of sales.

The number of 2022 EV models in union production, including hybrids, will increase to 12 and include new models, among them the electric GMC Hummer and Ford F-150.[4] As demonstrated in the table below, the growing number of vehicles classified as hybrids by the manufacturer have gas tanks over 2.5 gallons and thus do not qualify for the tax credit. As a result, the tax credit’s ability to incentivize EV purchases may be undermined.

2022 Union of Auto Workers Built Electric & Hybrid Vehicles[5]

| Make & Model | Technology | Gas Tank Capacity (gal) |
|---------------------|------------|-------------------------|
| Chevrolet Bolt | Electric | N/a |
| Chevrolet Bolt EUV | Electric | N/a |
| Ford F-150 | Hybrid | 36 |
| Ford F-150 | Electric | N/a |
| GMC Hummer Pick-up | Electric | N/a |
| Ram 1500 | Hybrid | 26 |
| Cadillac Escalade | Hybrid | 24 |
| Ford Escape | Hybrid | 11-14 |
| Ford Explorer | Hybrid | 18 |
| GMC Yukon | Hybrid | 24 |
| Jeep Grand Cherokee | Hybrid | 23 |
| Jeep Wrangler | Hybrid | 17 |
| Lincoln Aviator | Hybrid | 18 |

| | | |
|-------------------|----------|-----|
| Ford Transit | Electric | N/a |
| Chrysler Pacifica | Hybrid | 16 |

Conclusion

The BBBA's tax credits for individual and business EV purchases could incentivize the widespread adoption of these vehicles, pursuant to President Biden's 2030 goal. Nevertheless, these credits are so narrowly tailored with union-labor requirements and other restrictions as to exclude the majority of EVs on the market. While the availability of union-assembled vehicles has grown, the number of models that qualify for the full \$12,500 tax credit is still limited. Due to the BBBA's definition of an EV, most 2022 models would not qualify, limiting the bill's ability to incentivize the purchase of EVs.

[1] <https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf?VersionId=yu89kg1O2qP754CdR8Qmyn4RRWc5iodZ>

[2] https://waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/SUBFGHJ_xml.pdf

[3] <https://uaw.org/2019-uaw-union-built-vehicle-guide-buy-union-support-good-jobs/>

[4] <https://uaw.org/wp-content/uploads/2021/09/Final-Vehicle-Guide-2022.pdf>

[5] <https://www.ford.com/suvs/explorer/models/explorer/> <https://www.ford.com/suvs-crossovers/escape/models/escape-se-hybrid/> <https://www.lincoln.com/luxury-suvs/aviator/models/standard/?gnav=vhpnav-specs>
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