

TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION



Inflation Reduction Act: Implementation of the Clean Vehicle Tax Credits

March 3, 2025

Report Number: 2025-408-014

HIGHLIGHTS: Inflation Reduction Act: Implementation of the Clean Vehicle Tax Credits

Final Audit Report issued on March 3, 2025

Report Number 2025-408-014

Why TIGTA Did This Audit

This audit was initiated because the Inflation Reduction Act included provisions that created and revised clean vehicle tax credits. The provisions also provide registered dealers the ability to offer the buyer the option to transfer the eligible tax credit amount for a new clean vehicle or a previously owned clean vehicle to the registered dealers at the time of the sale of a qualified clean vehicle.

The overall objective of this audit was to assess the accuracy and completeness of the IRS's actions to implement the Clean Vehicle Credit, the Previously Owned Clean Vehicles Credit, and the Credit for Qualified Commercial Clean Vehicles.

Impact on Tax Administration

The maximum credit amount for qualifying clean vehicles is \$7,500 for new clean vehicles; \$4,000 for previously owned clean vehicles; and up to \$40,000 for qualified commercial clean vehicles. The Congressional Budget Office estimates that these clean vehicle tax credits will cost the government approximately \$12.5 billion over the 10-year period ending September 2031.

As of July 2024, qualified manufacturers submitted information to the IRS for more than 5.9 million qualifying clean vehicles manufactured during Calendar Year 2024 and previous years. Additionally, between January 2024 and July 2024, 7,233 sellers reported the sale of almost 242,000 clean vehicles, and \$1.4 billion in credits transferred from a buyer to a registered dealer.

What TIGTA Found

Upon enactment of the Inflation Reduction Act, the IRS developed a process for qualified manufacturers and sellers to submit information on qualifying vehicles and to report transfer elections through the newly developed Energy Credits Online portal. As of July 2024, 54 qualified manufacturers have entered into a written agreement to provide the IRS with qualifying vehicle information. As of the same time, 14,326 sellers created accounts to report the sale of clean vehicles. This process allows the IRS to validate qualifying clean vehicles from manufacturing through reporting on the taxpayer's annual tax return. The IRS also updated existing and developed new



tax forms, instructions, and publications; issued guidance to manufacturers, buyers, and sellers; and informed internal and external audiences about the clean vehicle tax credits and reporting requirements.

Although the IRS implemented tax return processing controls, our review identified some taxpayers who received potentially erroneous clean vehicle credits or had their returns rejected in error. For example, our analysis of tax return data through April 2024 identified 1,130 Tax Year 2023 individual tax returns claiming \$3.2 million in potentially erroneous clean vehicle tax credits. We notified IRS management, and they subsequently revised IRS computer programming to prevent future erroneous credits. However, as of October 2024, the IRS had not taken action to reverse the potentially erroneous credits claimed on the 1,130 tax returns.

We also identified concerns with 8 of the 58 business rules that we reviewed. For example, 1 business rule was not functioning as intended and incorrectly rejected tax returns for 225 taxpayers. Although the remaining seven business rules functioned as intended, the business rule documentation did not match the computer programming.

What TIGTA Recommended

We made 3 recommendations, including that the IRS take appropriate action to correct the 1,130 tax returns with potentially erroneous clean vehicle tax credits. The IRS agreed with all three recommendations and has taken or plans to take corrective actions.



TREASURY INSPECTOR GENERAL
FOR TAX ADMINISTRATION

U.S. DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20024

March 3, 2025

MEMORANDUM FOR: COMMISSIONER OF INTERNAL REVENUE

Danny Verneuille

FROM: Danny Verneuille
Acting Deputy Inspector General for Audit

SUBJECT: Final Audit Report – Inflation Reduction Act: Implementation of the
Clean Vehicle Tax Credits (Audit No.: 202340825)

This report presents the results of our review to assess the accuracy and completeness of the Internal Revenue Service's actions to implement the Clean Vehicle Credit, Previously Owned Clean Vehicles Credit, and Credit for Qualified Commercial Clean Vehicles tax credits created and updated by the Inflation Reduction Act of 2022.¹ This review is part of our Fiscal Year 2025 Annual Audit Plan and addresses the major management and performance challenge of *Tax Law Changes*.

Management's complete response to the draft report is included as Appendix IV. If you have any questions, please contact me or Diana M. Tengesdal, Assistant Inspector General for Audit (Returns Processing and Account Services).

¹ Pub. L. No. 117-169, 136 Stat. 1818.

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Background

In August 2022, the President signed the Inflation Reduction Act (IRA) into law.¹ We previously reported that the IRA contains 36 tax provisions that impact both individual and business taxpayers, including 3 provisions related to the purchasing of certain clean vehicles.²

The IRA amended the New Qualified Plug-In Electric Drive Motor Vehicles tax credit (Internal Revenue Code (I.R.C.) § 30D), renaming it to the Clean Vehicle Credit, and added other vehicle eligibility requirements for vehicles manufactured after Aug. 16, 2022.³ For example, the IRA requires that final assembly of a qualifying new clean vehicle be in North America. Additionally, the new clean vehicle needs to be produced by a qualified manufacturer and meet certain weight limitations, among other criteria. The IRA also established two new nonrefundable tax credits, Previously Owned Clean Vehicles Credit (I.R.C. § 25E) and Credit for Qualified Commercial Clean Vehicles (I.R.C. § 45W) effective for vehicles placed in service after Dec. 31, 2022.

The maximum credit for a qualifying new clean vehicle is \$7,500 if the vehicle meets the critical minerals and battery components requirements. The maximum credit for previously owned clean vehicles is \$4,000 and up to \$40,000 for qualified commercial clean vehicles. The three clean vehicle tax credits expire Dec. 31, 2032. The Congressional Budget Office estimates that these clean vehicle tax credits will cost the government approximately \$12.5 billion over the 10-year period ending September 2031. Figure 1 provides a summary of the maximum credits for qualifying vehicles.

Figure 1: Maximum Credits for Qualifying Vehicles



Source: TIGTA summary of IRA legislation and information from the Congressional Budget Office.

¹ Pub. L. No. 117-169, 136 Stat. 1818.

² TIGTA, Report No. 2024-408-004, [Inflation Reduction Act: Assessment of Implementation of Processing Year 2023 Tax Provisions](#) (October 2023). The three provisions relating to clean vehicles are IRA provisions 13401, Clean Vehicle Credit; 13402, Credit for Previously Owned Clean Vehicles; and 13403, Credit for Qualified Commercial Clean Vehicles.

³ See Appendix V for a glossary of terms.

Qualifications for the clean vehicle tax credits

To qualify for the Clean Vehicle Credit and the Previously Owned Clean Vehicles Credit, certain buyers must meet certain income limits. Additionally, qualifying vehicles must meet certain battery components requirements and purchase price limits. For example, buyers purchasing a vehicle qualifying for the Clean Vehicle Credit must have a modified adjusted gross income less than or equal to \$300,000 for married filing jointly and qualifying surviving spouse, \$225,000 for head of household, or \$150,000 for other filers.⁴ Meanwhile, buyers purchasing a vehicle qualifying for the Previously Owned Clean Vehicles Credit must have a modified adjusted gross income less than or equal to \$150,000 for married filing jointly and qualifying surviving spouse, \$112,500 for head of household, or \$75,000 for other filers.⁵ Conversely, there is no income limitation for the Credit for Qualified Commercial Clean Vehicles. Appendix III has a detailed list of the eligibility requirements for the buyer and criteria for the vehicles for each clean vehicle tax credit.

Beginning in Calendar Year 2024, the IRA enables registered dealers to offer the individual buyer the option to elect to transfer the eligible tax credit amount of a qualified clean vehicle to the registered dealers at the time of sale. The buyer can then use the tax credit as a down payment on the qualified vehicle or receive cash back from the registered dealer. In turn, the registered dealer receives an advance payment of the buyer's clean vehicle tax credit amount from the Internal Revenue Service (IRS). The option to elect to transfer a tax credit is not available for the Credit for Qualified Commercial Clean Vehicles.

Moreover, the IRA provides the IRS with math error authority to correct and/or disallow the clean vehicle tax credits during tax return processing if criteria are not met. For example, the IRS can disallow a claim for a clean vehicle tax credit if the vehicle identification number (VIN) is missing or does not match the IRS's records of reported qualifying vehicles. The IRS can also disallow the credit during tax return processing if a taxpayer, *i.e.*, buyer, exceeds the income limits resulting in assessing additional tax or reducing the refund claimed. The IRS will notify the buyer of the changes made during tax return processing.

Reporting requirements for qualifying vehicles and sales

The IRA requires manufacturers and sellers of eligible clean vehicles to report VINs and other information to the IRS. The IRS uses this information to ensure that vehicles claimed on tax returns qualify for the respective clean vehicle tax credit. The IRS developed a section within the Energy Credits Online (ECO) portal to facilitate the reporting requirements for manufacturers and sellers.⁶ This includes:

- **Qualified Manufacturers** report monthly on manufactured vehicles that qualify for any of the clean vehicle tax credits. These reports include information necessary to validate qualifications of the vehicle, *e.g.*, VIN, make, model, battery capacity, critical minerals, and battery components requirements. Qualified manufacturers are also required to

⁴ Other filers include single, married filing separately, estates, and trusts for the Clean Vehicle Credit.

⁵ Other filers include single and married filing separately for the Previously Owned Clean Vehicles Credit.

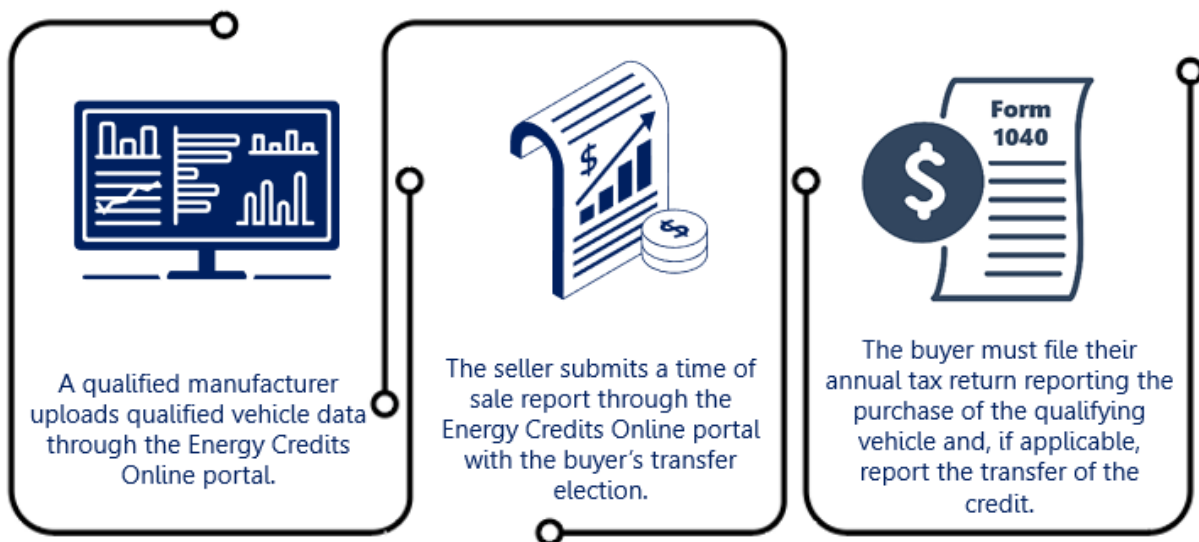
⁶ The IRS also developed the Pre-Filing Registration tool within the ECO portal for preregistering for an elective payment, *i.e.*, I.R.C. § 6417, or transfer of credit, *i.e.*, I.R.C. § 6418, for certain clean energy tax credits. We conducted a separate review on the Pre-Filing Registration tool; TIGTA, Report No. 2024-408-066, [Inflation Reduction Act: Implementation of Elective Payment and Transfer of Credit Provision](#) (September 2024).

report vehicles manufactured in prior years that would qualify for the Previously Owned Clean Vehicles Credit.

- **Sellers** report qualified vehicles sold. The seller's report is referred to as the time of sale report, which is provided to the buyer at the time of sale and is submitted to the IRS within three calendar days of the sale. These reports include information necessary to validate qualifications of the vehicle, *e.g.*, VIN, make, model, and maximum credit amount, and includes the buyer's identifying information, *e.g.*, Social Security Number. Sellers do not need to submit a time of sale report for commercial vehicles.

The ECO portal is accessible through IRS.gov and leverages the IRS's Credential Service Provider to authenticate the individual user's identity. Once the individual user authenticates themselves, they can then register to create a Clean Energy Account. Upon approval, the user can register as a seller or manufacturer to submit the appropriate documentation through the ECO portal to the IRS. Figure 2 summarizes the reporting process for qualified manufacturers, sellers, and buyers of qualified clean vehicles related to the tax credit.

Figure 2: Summary of Reporting Information on a Qualified Clean Vehicle



Source: TIGTA review of IRS processing procedures and guidance.

Results of Review

Actions Taken to Implement the Clean Vehicle Tax Credits

The implementation of new legislation involves creating or updating tax products, identifying potential changes to computer programming, and developing and executing communication and outreach plans. The implementation activities also required collaboration with other government agencies, *e.g.*, the Department of Energy and the Department of Transportation, and external stakeholders, *e.g.*, National Automobile Dealers Association. Additionally, the IRS

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and the Department of the Treasury issued guidance documents to assist manufacturers, sellers, and buyers with interpreting the I.R.C. sections associated with the clean vehicle tax credits.

Upon enactment of the IRA, the IRS began:



Developing a process for qualified manufacturers and sellers to submit information on eligible vehicles and sellers to report the sale of such vehicles to the IRS through the newly developed ECO portal.



Updating existing and developing new tax forms, *e.g.*, Form 8936, *Clean Vehicle Credits*, and Form 8936 Schedule A, *Clean Vehicle Credit Amount*, instructions; and associated publications. The form now includes all three clean vehicle tax credits.



Issuing guidance on the clean vehicle tax credits for manufacturers, buyers, and sellers.



Developing a communication and outreach plan to ensure that stakeholders, *i.e.*, buyers, qualified manufacturers, and sellers, are provided accurate information on the changes made by the legislation and guidance.

Figure 3 provides the key events to implement the clean vehicle tax credits.

Figure 3: Key Events in the Implementation of the Clean Vehicle Tax Credits

<u>2022</u>	
Dec 12	Guidance issued on manufacturers entering into a written agreement with the IRS and periodically reporting qualifying vehicles.
<u>2023</u>	
Oct 5	The IRS began populating the ECO portal with information previously provided by qualified manufacturers until the portal capability was available on Feb. 29, 2024.
Oct 6	Guidance issued on clean vehicle tax credit transfers and requirements for registered dealers.
Oct 16	ECO portal available to a limited number of sellers to register to be eligible to receive an advance payment of transferred credit.
Nov 1	ECO portal available to all sellers to register to be eligible to receive an advance payment of transferred credit.
Nov 15	ECO portal available to manufacturers to register as a qualified manufacturer to submit vehicles that qualify for the clean vehicle tax credits.
Dec 4	Guidance issued on critical minerals and battery components to address those vehicles manufactured or assembled by a foreign entity of concern. This requires qualified manufacturers to resubmit information about qualifying vehicles to ensure compliance with the new requirements.
Dec 18	Qualified manufacturers begin to resubmit qualified vehicles reporting the new foreign entity of concern requirements.

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2024	
Jan 1	Sellers are required to begin reporting sales of clean vehicles through the ECO portal. The ECO portal available for sellers to submit time of sale reports and request an advance payment of the buyer's clean vehicle tax credit for registered dealers. The IRS begins matching the sale of vehicles against the vehicles reported by qualified manufacturers to validate the vehicles purchased and validate the advance payment election.
Jan 29	Buyers can begin filing tax returns reporting clean vehicle tax credits for vehicles placed in service in Calendar Year 2023.
Feb 29	Qualified manufacturers can submit qualified vehicle reports through the ECO portal. ⁷

Source: TIGTA summary of key events in the implementation of the clean vehicle tax credits between December 2022 through February 2024.

Procedures were developed for qualified manufacturers to register and report eligible vehicles

Our review of ECO portal data identified 54 qualified manufacturers that have entered into a written agreement with the IRS as of July 2024. These qualified manufacturers submitted information for more than 5.9 million vehicles qualifying for the clean vehicle tax credits manufactured during Calendar Year 2024 and previous years.⁸ Our review of a statistically valid sample of 96 qualified vehicles confirmed that the vehicles' information submitted by the qualified manufacturers met the criteria for the clean vehicle tax credits, *e.g.*, battery capacity and sale prices, and matched to information on the U.S. Department of Transportation's VIN Decoder.⁹

According to Revenue Procedure 2022-42, the reporting criteria includes VIN, make, model, battery capacity, critical minerals, and battery components requirements. Further, only qualifying vehicles reported in the ECO portal are eligible for the clean vehicle tax credits. We also identified 15 qualified manufacturers that have entered into a written agreement with the IRS but have not yet reported qualifying vehicles. IRS management stated these qualified manufacturers may have not yet produced qualifying vehicles.

⁷ Previously, qualified manufacturers were reporting qualified vehicles to the IRS outside of the ECO portal.

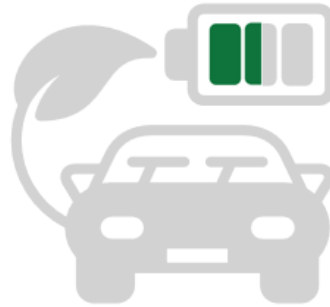
⁸ This includes vehicles manufactured in prior years that meet the qualifications for the Previously Owned Clean Vehicles Credit.

⁹ Our sample was selected from 4.3 million vehicles submitted as of Feb. 7, 2024, using a 95 percent confidence interval, 5 percent error rate, and ± 10 percent precision factor. We did not project on this sample because we did not identify any differences between the vehicle information provided by qualified manufacturers and the information on the U.S. Department of Transportation VIN Decoder.

Procedures were developed for sellers to register and report eligible vehicle sales

Our analysis identified 14,326 sellers that created accounts in the ECO portal to report the sales of clean vehicles. Of these, 7,233 sellers reported the sale of 241,812 clean vehicles between January 2024 and July 2024. The time of sale reports also showed that approximately \$1.4 billion in clean vehicle tax credits were

transferred from a buyer to a registered dealer for almost 209,000 qualifying vehicles.¹⁰ As discussed previously, the IRA allows an individual buyer to transfer their clean vehicle tax credit to a registered dealer, thus allowing the buyer to receive the total credit either as a cash payment from the registered dealer or as a down payment towards the purchase of a qualified vehicle.



Registered dealers reported **\$1.4 billion** in transferred credits for **209,000** qualified vehicles.

As part of the implementation efforts, the IRS created the process for sellers of clean vehicles to obtain access to the ECO portal, including providing identifying information to allow the IRS to validate the business identity of the seller. To become a registered dealer and receive advance payments, the seller is required to provide identifying information along with a direct deposit account number and dealer's license number.

The IRS conducts validity checks on sellers to ensure that the information provided matches to the IRS's records and the direct deposit account belongs to the seller to prevent misrouting of the advance payment. The IRS also reviews the seller's tax account for tax compliance, *i.e.*, timely filed tax returns, timely paid taxes, and no outstanding tax liability. Once the IRS reviews and accepts the information, the seller becomes a registered dealer that can submit vehicle sales and receive advance payments of transferred credits. Sellers that do not pass the automated compliance check or do not provide a valid bank account can access the ECO portal to submit sale reports but cannot receive advance payments. Additionally, registered dealers must remain in full tax compliance to be able to continue to receive advance payments.

Processes were developed for reporting sales and transfer of credit elections

As stated previously, sellers of vehicles qualifying for the Clean Vehicle Credit and the Previously Owned Clean Vehicles Credit are required to report the sales of qualified vehicles to the IRS through the ECO portal within three calendar days of the sale. Sellers are also required to provide the buyer with a copy of the approved time of sale report for use when filing their annual tax return. During Processing Year 2024, the IRS used VINs provided by the qualified manufacturers to verify that vehicles reported on Tax Year 2023 tax returns were eligible for the clean vehicle tax credits because the IRS did not have sales records for this period. Beginning in Processing Year 2025, the IRS plans to use the time of sale reports submitted through the ECO portal to verify that the vehicle is qualified for the tax credit when the buyer files their annual tax return.

¹⁰ Transfer elections for new clean vehicles total \$1.3 billion and previously owned clean vehicles total \$140 million.

The time of sale reports include information on the buyer's election to transfer the credit to the registered dealer. The IRS matches the registered dealer's information to the IRS's Master File account information, and if validated, the IRS will issue an advance payment to the registered dealer. Typically, the advance payment is issued within seven calendar days of reporting the sale. The IRS sends the payment to the registered dealer's direct deposit account provided during the registration process.

Additionally, the IRS posts an indicator on the buyer's tax account noting their transfer election of the clean vehicle tax credit. The indicator allows the IRS to identify buyers who are required to file a tax return to report the purchase of a qualifying vehicle and to track the election to transfer the credit to a registered dealer. The buyer is responsible for ensuring that they meet the eligibility requirements of the clean vehicle tax credit when making the transfer election. If the buyer does not meet the eligibility requirements, *e.g.*, income limits, then the IRS will recover the transferred credit from the buyer when the buyer files their annual tax return.

IRS management stated that they began posting the transfer election indicators to the buyers' tax accounts on June 27, 2024. Management explained that the posting of these indicators was delayed due to the extent of programming needed for IRA changes. Management also noted that these indicators will not be needed until the buyer files a tax return during the 2025 Filing Season. We plan to conduct a follow-up review and will evaluate the controls to identify and prevent erroneous claims on clean vehicle tax credits and ensure the accuracy of processing of credit transfers.¹¹

Buyer reporting requirements

To claim the clean vehicle tax credits, the buyer must report the purchase of a qualified vehicle on Form 8936 Schedule A and attach it to their annual tax return. The Form 8936 Schedule A records the identifying information of the vehicle, *e.g.*, make, model, year, VIN, date placed in service. This allows the IRS to review the tax return information to ensure that both the taxpayer and the vehicle qualify for the clean vehicle tax credit.

A buyer who elects to transfer the credit to a registered dealer is also required to file an annual tax return reporting the vehicle purchased and reporting the election to transfer to the registered dealer. When choosing the transfer election, the taxpayer receives the full amount of the applicable clean vehicle tax credit regardless of the taxpayer's tax liability. Buyers who do not meet the income qualifications will be liable for repaying the entire credit amount received as a transfer.

Buyers who do not meet the income qualifications will be liable for the repayment of the entire credit amount received as a transfer.

In comparison, taxpayers who do not choose the transfer election are limited to the amount of their tax liability because the clean vehicle tax credits are nonrefundable. As a hypothetical example, when the transfer election is made for a vehicle that qualifies for the Clean Vehicle Credit, *i.e.*, \$7,500, the eligible taxpayer receives \$7,500 as a down payment from the seller to purchase the vehicle. However, if the same eligible taxpayer elected to claim the Clean Vehicle

¹¹ TIGTA, Audit No. 2025408018, *Continued Assessment of Clean Vehicle Tax Credits*.

Credit on their tax return that had a total tax liability of \$5,000, the credit would be limited to the \$5,000 rather than \$7,500.

The IRS is currently working on the processing controls for the 2025 Filing Season to ensure that buyers report transfer elections of clean vehicle tax credits. As previously stated, we plan to conduct a follow-up review to ensure that the IRS's controls are working as intended and preventing erroneous claims.¹²

Communication and outreach plans were developed and are being followed

In October 2022, the IRS drafted a communication and outreach plan to ensure that manufacturers, buyers, and sellers understand how the clean vehicle tax credits are required to be administered. The plan details communication methods, audiences, messages, owners, target dates, and statuses. Our review determined that the IRS is following its plan to inform internal and external audiences on the clean vehicle tax credits and the process for reporting vehicle information to the IRS. As part of the communication and outreach plan, the IRS conducted webinars for manufacturers and sellers that provided one-on-one communication to help resolve issues.

The IRS took several actions to assist buyers, sellers, and manufacturers including:

- Publishing several guidance documents for manufacturers and sellers explaining how to use the ECO portal and providing a user's guide to accessing the ECO portal.
- Updating its *Frequently Asked Questions* section on IRS.gov about clean vehicle tax credits as guidance was issued. Additionally, the IRS posted instructional videos on its website showing how to use the ECO portal and the requirements of the tax credits for buyers, sellers, and manufacturers. The IRS stated that it continues to evaluate the need to update or add information to ensure that manufacturers, buyers, and sellers have the necessary information.
- Creating the landing page Credits and deductions under the Inflation Reduction Act of 2022 on IRS.gov. The landing page provides links to clean vehicle tax credit content pages and information for manufacturers, buyers, and sellers.
- Hosting virtual office hours from November 2023 through January 2024 to assist sellers with registration and reporting the sale of qualified vehicles. The IRS hosted 25 sessions with more than 3,000 attendees.
- Establishing dedicated email addresses to assist manufacturers and sellers with the registration and reporting processes. As of August 2024, the IRS received more than 53,000 emails to the dedicated addresses. The IRS provided 107 emails for the period October 2023 through February 2024. Our review determined that the IRS resolved most of the inquiries within a week.

¹² TIGTA, Audit No. 2025408018, *Continued Assessment of Clean Vehicle Tax Credits*.

Although Tax Return Processing Controls Were Implemented, Some Taxpayers Received Potentially Erroneous Clean Vehicle Tax Credits or Had Their Returns Rejected in Error

As of April 2024, our analysis identified 1,130 Tax Year 2023 individual tax returns with Form 8936 Schedule A, claiming \$3.2 million in potentially erroneous clean vehicle tax credits. The IRS developed tax return processing controls, *e.g.*, a business rule and error resolution code, to identify mismatches between VINs reported on the tax return and ECO portal data. Claims for the clean vehicle tax credits in which the VIN does not match ECO portal data are not allowed; however, these tax returns bypassed the business rule because of other conditions that were present on the tax returns.

In May 2024, we notified IRS management about the potentially erroneous clean vehicle tax credits. IRS management stated that programming updates were made to remove the bypass condition and require the matching of all VINs to the ECO portal. This change became effective for tax returns processed after March 17, 2024. However, as of October 2024, the IRS had yet to take action to reverse the potentially erroneous credits on the 1,130 tax returns we identified. We believe that the IRS should review these tax returns and take the appropriate action to reverse the potentially erroneous tax credits and assess the additional tax owed by these taxpayers. IRS management stated that they are evaluating options to address these tax returns.

Recommendation 1: The Chief, Tax Compliance Officer, should review the 1,130 tax returns with potentially erroneous clean vehicle tax credits and assess the additional tax owed, if any.

Management's Response: The IRS agreed with the recommendation and is addressing the potentially erroneous clean vehicle tax credits that we identified. The IRS reviewed these potentially erroneous credits and tentatively found 1,098 of the 1,130 returns to be noncompliant. This is the result of a business rule not functioning as expected. Management noted that they identified a problem with this business rule and corrected it on March 17, 2024, prior to our identifying this issue in May 2024. The IRS plans to exercise post-processing math error authority to address the erroneously paid credits as warranted.

Business rules were not always properly implemented

Our review identified 58 business rules for individual taxpayers that were created or updated because of the changes to the clean vehicle tax credits for Tax Year 2023.¹³ For example, the IRS implemented business rules to evaluate income thresholds and the validity of the VIN during tax return processing. Our review of the business rules identified potential concerns with 8 of the 58 business rules. We alerted IRS management of our concerns as they were identified to allow management to revise computer programming as needed. We determined that the remaining 50 business rules were operating as intended.

¹³ The IRS uses business rules to validate information included on electronically filed tax returns for acceptance into tax return processing. The IRS will reject electronically filed tax returns from processing when the tax return does not meet a business rule.

Recommendation 2 (Email Alert): As of May 2024, our analysis identified 225 individual taxpayers who had their tax returns incorrectly rejected for Tax Year 2023. The IRS incorrectly rejected tax returns when the taxpayer claimed the Previously Owned Clean Vehicles Credit on the Form 1040, *U.S. Individual Income Tax Return*, Schedule 3, *Additional Credits and Payments*, and attached the Form 8936. This occurred because the business rule was looking for the Form 8936 to be attached to the specific line claiming the credit instead of attached to the tax return.

Management's Response to Email Alert: IRS officials agreed that the business rule was not working as intended and corrected the computer programming in June 2024.

Recommendation 3 (Email Request): In February 2024, we notified the IRS of concerns with seven business rules on the Form 8936 not functioning as stated in the business rule documentation. These business rules ensure the accuracy of the calculations on the Form 8936. Although the rules worked appropriately based on the context of the tax form, the business rule documentation did not match the computer programming.

Management's Response to Email Request: IRS management agreed and updated programming. Management also noted that a Unified Work Request for Form 8936 includes the updates to the rules for Filing Season 2025. The Unified Work Request was completed, and the changes were made to Modernized e-File in July 2024.

Office of Audit Comment: We agree and note that the updates for the business rule documentation was included in the Unified Work Request and that the updated rule language was available in November 2024.

Appendix I

Detailed Objective, Scope, and Methodology

The overall objective was to assess the accuracy and completeness of the IRS's actions to implement the Clean Vehicle Credit, Previously Owned Clean Vehicles Credit, and Credit for Qualified Commercial Clean Vehicles tax credits created and updated by the IRA. To accomplish our objective, we:

- Evaluated the IRS's actions to implement the clean vehicle tax credits for Calendar Year 2024.
- Assessed the controls over the ECO portal to ensure that users are properly validated. Additionally, we used a contracted statistician to provide a statistically valid sample of 96 qualified vehicles from a population of 4.3 million qualified vehicles submitted through the ECO portal as of Feb. 7, 2024. We reviewed a statistically valid sample to determine if the ECO portal VIN information matched to the U.S. Department of Transportation's VIN Decoder.¹
- Evaluated the IRS's process that allows buyers of a clean vehicle to transfer clean vehicle tax credits to registered dealers.
- Evaluated the IRS's communication and outreach plans to ensure that taxpayers, manufacturers, and sellers are being provided helpful information to understand the IRA clean vehicle credits and how to use the ECO portal. We reviewed 107 emails that were provided by the IRS for the period October 2023 through February 2024 to determine if the IRS timely provided responses.

Performance of This Review

This review was performed with information obtained from IRS personnel within the Small Business/Self-Employed Division in Washington, D.C., Taxpayer Services Division in Atlanta, Georgia, and Information Technology function in Washington, D.C., during the period August 2023 through October 2024. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Data Validation Methodology

During this review, we obtained and assessed the reliability of data from the Individual Master File, Individual Return Transaction File, and National Account Profile database that were available on TIGTA's Data Center Warehouse and data extracts from our Data Extracts Group from the Modernized Tax Return Database for Processing Year 2024. Additionally, we obtained

¹ Our sample was selected using a 95 percent confidence interval, 5 percent error rate, and ± 10 percent precision factor.

periodic data extracts from the IRS of the ECO portal. We evaluated the data by (1) performing electronic testing of required data elements, (2) reviewing existing information about the data and the system that produced them, and (3) comparing fields against the IRS's Employee User Portal and the Integrated Data Retrieval System. We determined that the data were sufficiently reliable for purposes of this report.

Internal Controls Methodology

Internal controls relate to management's plans, methods, and procedures used to meet their mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance. We determined that the following internal controls were relevant to our audit objective: the IRS's communication and customer support strategies for the ECO portal; processes and procedures for validating ECO portal users; processing controls for ECO portal data entered by users; and processes and procedures for processing tax returns with clean vehicle tax credits. We evaluated these controls by reviewing the IRS's communication and customer support plans for clean vehicle credits; the processes and procedures for users to enter data into the ECO portal, the processes and procedures for the IRS to process tax returns with a clean vehicle tax credit; the Internal Revenue Manual; and other relevant documentation obtained from the IRS. We also held discussions with IRS management to discuss the ECO portal.

Appendix II

Outcome Measures

This appendix presents detailed information on the measurable impact that our recommended corrective actions will have on tax administration. These benefits will be incorporated into our Semiannual Report to Congress.

Type and Value of Outcome Measure:

- Revenue Protection – Potential; \$3,241,281 in potentially erroneous clean vehicle tax credits were claimed on 1,130 Tax Year 2023 individual tax returns (see Recommendation 1).

Methodology Used to Measure the Reported Benefit:

We obtained a data extract of all electronically filed individual tax returns for Tax Year 2023 from the Modernized Tax Return Database as of April 8, 2024, and compared VINs from the Form 8936 with VINs from the ECO portal. We identified 1,136 tax returns in which VINs from the tax return were not included in the ECO portal, but the IRS did not match the VINs against the portal. IRS management stated that there were conditions on the tax return that caused the tax return to bypass the process to match VINs to the ECO portal, allowing taxpayers to claim potentially erroneous credits. IRS management stated that the programming was fixed as of March 17, 2024, to ensure that all VINs on tax returns were matched to the ECO portal. However, the IRS does not have a process in place to recover the potentially erroneous credits from the taxpayer's tax account for the tax returns processed before March 17, 2024. We analyzed the 1,136 tax returns to identify the potential tax effect if the IRS reverses the potentially erroneous tax credit. Our analysis identified that the IRS could potentially recover \$3,241,281 in potentially erroneous clean vehicle tax credits for 1,130 tax returns. There was no tax effect for the remaining six tax returns.

Type and Value of Outcome Measure:

- Taxpayer Burden – Actual; 225 individual taxpayers filed tax returns claiming the Previously Owned Clean Vehicles Credit that were incorrectly rejected (see Recommendation 2).

Methodology Used to Measure the Reported Benefit:

We obtained a data extract of all electronically filed individual tax returns for Tax Year 2023 from the Modernized Tax Return Database as of May 25, 2024. Our analysis identified 225 taxpayers who had their Tax Year 2023 tax returns incorrectly rejected by business rule S3-F1040-025 stating that if the taxpayer claims the Previously Owned Clean Vehicles Credit on Form 1040 Schedule 3, then the taxpayer must attach Form 8936. Our review found that tax returns were rejecting when the taxpayer reported a Previously Owned Clean Vehicles Credit and had the attached Form 8936. This occurred because the business rule was looking for the Form 8936 to be attached to the specific line claiming the credit instead of attached to the tax return. On

May 3, 2024, IRS management agreed with our analysis, and programming was updated effective June 16, 2024.

Appendix III

Summary of the Qualifications for the Clean Vehicle Tax Credits

	Clean Vehicle Credit (I.R.C. § 30D)	Previously Owned Clean Vehicles Credit (I.R.C. § 25E)	Credit for Qualified Commercial Clean Vehicles (I.R.C. § 45W)
Maximum Credit	\$7,500	\$4,000	\$7,500 (vehicles weighing under 14,000 pounds) \$40,000 (all other vehicles).
Credit Calculation	\$3,750 for vehicles meeting the critical minerals requirement and \$3,750 for vehicles meeting the battery components requirement. ¹	Lesser of \$4,000 or 30 percent of sale price of a qualifying vehicle.	Lesser of 15 percent of the vehicle's cost (30 percent for vehicles not gasoline or diesel powered) or the incremental cost of the vehicle.
Eligible Taxpayers	Individuals and business entities.	Individuals who cannot be claimed as a dependent on someone else's tax return.	Businesses and tax-exempt entities.
Qualifying Vehicles	Must be manufactured by a qualified manufacturer. Vehicle must be for use and not for resale. Gross weight of vehicle must be less than 14,000 pounds. Battery capacity of 7 kWh with external charging, or propelled by fuel cells, <i>e.g.</i> , hydrogen gas.	Same as Clean Vehicle Credit.	Must be manufactured by a qualified manufacturer. Must be a vehicle acquired for use or lease by the taxpayer. Vehicles weighing under 14,000 pounds need a battery capacity of 7 kWh. Vehicles weighing 14,000 pounds or more must have battery capacity of at least 15 kWh.
Price Limits	Manufacturer's Suggested Retail Prices less than or equal to: <ul style="list-style-type: none"> • \$80,000 for vans, sports utility vehicles, pickup trucks. • \$55,000 for other vehicles. 	Sale price is less than or equal to \$25,000.	Not Applicable.
Income Limits	Modified adjusted gross income is less than or equal to: <ul style="list-style-type: none"> • \$300,000 (married filing jointly and qualifying surviving spouse. • \$225,000 (head of household). • \$150,000 (other filers). 	Modified adjusted gross income is less than or equal to: <ul style="list-style-type: none"> • \$150,000 (married joint filers and qualifying surviving spouse. • \$112,500 (head of household). • \$75,000 (other filers). 	Not Applicable.

Source: TIGTA summary of the IRA. kWh=kilowatt hour.

¹ Vehicles placed into service between Jan. 1, 2024, and April 17, 2024, did not have to meet both the critical minerals and battery components requirements to be eligible for the full \$7,500 tax credit. The credit was calculated using a base minimum credit amount of \$2,500 and can increase by \$417 for each additional kilowatt hour of battery capacity over the minimum 7 kilowatt hours until the credit reaches \$7,500. In general, the minimum credit will be \$3,751 (\$2,500 + 3 times \$417), the credit amount for a vehicle with the minimum 7 kilowatt hours of battery capacity.

Appendix IV

Management's Response to the Draft Report



COMMISSIONER
SMALL BUSINESS/SELF-EMPLOYED DIVISION

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

January 29, 2025

MEMORANDUM FOR DANNY VERNEUILLE
ACTING DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: Lia Colbert Amalia C. Colbert
Commissioner, Small Business/Self-Employed Division

Digitally signed by Amalia
C. Colbert
Date: 2025.01.29
16:33:20 -05'00'

SUBJECT: Draft Audit Report – Inflation Reduction Act: Implementation of
the Clean Vehicle Tax Credits (Audit # 202340825)

Thank you for the opportunity to review and comment on TIGTA's draft report entitled, *Inflation Reduction Act: Implementation of the Clean Vehicle Tax Credits*. The Inflation Reduction Act of 2022 (IRA) made significant changes to Internal Revenue Code (IRC) section 30D, Clean Vehicle Credit (formerly the New Qualified Plug-In Electric Drive Motor Vehicles tax credit). The IRA also added two additional clean vehicle credits – IRC section 25E, Previously-Owned Clean Vehicle Credit and IRC section 45W, Commercial Clean Vehicle Credit. These provisions required IRS to develop and implement new processes, procedures, and computer programming, some unique to tax administration. To ensure implementation of these new provisions met the needs of all taxpayers, we collaborated with the Department of Treasury, the Department of Energy, and the Bureau of the Fiscal Service. This cooperation led to the development of innovative approaches necessary for successful implementation.

We are pleased that the report recognizes our substantial actions taken to implement this challenging legislation. Key highlights include the planning, development, and implementation of the following:

- Registration process for qualified manufacturers and a periodic reporting process for qualified manufacturers to report eligible vehicles to IRS,
- Registration process for sellers to submit time of sale reports to IRS to report eligible vehicles sales,
- Process for registered sellers to report a clean vehicle buyer's election to transfer their credit to the dealer to receive advance payment of the credit at time of sale, and

- Process for sellers to return a clean vehicle previously reported as sold to the IRS.

To meet the reporting requirements of these provisions, we developed the Energy Credits Online (ECO) portal. The portal launched on October 16, 2023, at which time clean vehicle sellers could begin the registration process. The initial launch of the portal also facilitated the intake of information from clean vehicle manufacturers and sellers. We quickly expanded the use of the ECO portal for other clean energy credits, including those with registration requirements. We also continue to expand the functionality within the portal. For example, we recently added functionality that includes secure messaging capabilities.

As of December 13, 2024, we processed more than 600,000 clean vehicle credit claims on returns filed during calendar year 2024. To date, we have registered over 12,200 clean vehicle sellers to participate in the advance payment program and an additional 3,400 vehicle sellers for time of sale reporting only.

In calendar year 2024, consumers saved more than \$3 billion in upfront costs at the time of sale on more than 450,000 clean vehicles. More than 90% of clean vehicle transactions submitted by dealers through ECO involved the advance payment of the buyer's clean vehicle credit to reduce their cost of purchasing the vehicle.

We worked quickly to address the issues identified by TIGTA during the audit and appreciate the opportunity to address these issues as the audit progressed. As we continue to implement these provisions, we prioritize the need for buyers, sellers, and manufacturers of clean vehicles to have the guidance, information, and resources necessary to benefit from these credits. We look forward to working with TIGTA on the follow-up review to continue the assessment of clean vehicle tax credits.

Attached are our comments and proposed actions to your recommendations. If you have any questions, please contact me, or Garrett Gluth, Director, Exam Quality and Technical Support, Small Business/Self-Employed Division.

Attachment

Attachment

RECOMMENDATION 1:

The Chief, Tax Compliance Officer, should review the 1,130 tax returns with potentially erroneous clean vehicle tax credits and assess the additional tax owed, if any.

CORRECTIVE ACTION:

We agree. We are addressing the potentially erroneous clean vehicle tax credits identified by TIGTA. We reviewed these potentially erroneous credits and tentatively found 1,098 of the 1,130 returns identified by TIGTA to be noncompliant. This is the result of a business rule not functioning as expected. We note we identified a problem with this business rule and corrected it on March 17, 2024, prior to TIGTA identifying this issue on May 13, 2024. We plan to exercise post-processing math error authority to address the erroneously paid credits as warranted.

IMPLEMENTATION DATE:

October 15, 2025

RESPONSIBLE OFFICIAL:

Director, Exam Case Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

We will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 2:

Recommendation 2 (Email Alert): As of May 25, 2024, our analysis identified 225 taxpayers had their tax returns incorrectly rejected for Tax Year 2023. The IRS incorrectly rejected tax returns when the taxpayer claimed the Previously-Owned Clean Vehicles credit on the Form 1040 Schedule 3, Additional Credits and Payments, and attached the Form 8936. This occurred because the business rule was looking for the Form 8936 to be attached to the specific line claiming the credit instead of attached to the tax return.

Management's Response to Email Alert: IRS officials agreed that the business rule was not working as intended and corrected the computer programming on June 16, 2024.

CORRECTIVE ACTION:

We agree. The requisite corrections were deployed on June 16, 2024.

IMPLEMENTATION DATE:

Implemented

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RESPONSIBLE OFFICIAL:

Director, Submission Processing, e-File Services, Customer Account Services,
Taxpayer Services Division

CORRECTIVE ACTION MONITORING PLAN:

N/A

RECOMMENDATION 3:

Recommendation 3 (Email Alert): On Feb. 21, 2024, we notified the IRS of concerns with 7 business rules on the Form 8936 not functioning as stated in the business rule documentation. These business rules ensure the accuracy of the calculations on the Form 8936. Although the rules worked appropriately based on the context of the tax form, the business rule documentation did not match the computer programming.

Management's Response to Email Alert: IRS officials agreed with our concerns and will update the business rule documentation by January 2025.

CORRECTIVE ACTION:

We agree. We updated programming and Release 10.8 Unified Work Request (UWR) 979569 for Form 8936, Clean Vehicle Credits, includes the updates to the rules for Filing Season 2025. The UWR was completed, and the changes were made to Modernized e-File on July 29, 2024.

IMPLEMENTATION DATE:

Implemented

RESPONSIBLE OFFICIAL:

Director, Submission Processing, e-File Services, Customer Account Services,
Taxpayer Services Division

CORRECTIVE ACTION MONITORING PLAN:

N/A

Appendix V

Glossary of Terms

Term	Definition
Business Rule	Used to validate information included on electronically filed tax returns for acceptance into tax return processing. The IRS will reject electronically filed tax returns from processing when the tax return does not meet the business rule criteria.
Calendar Year	Twelve consecutive months ending Dec. 31.
Employee User Portal	An internal IRS portal that allows IRS employee users to access IRS data systems, such as tax administration processing systems, financial information systems, and other data and applications, including mission-critical applications. TIGTA auditors can also request access to this information.
Filing Season	The period from Jan. 1 through mid-April when most individual income tax returns are filed.
Final Assembly	I.R.C. § 30D(d)(5) defines “final assembly” as the process by which a manufacturer produces a new clean vehicle at, or using, a plant, factory, or other place from which the vehicle is delivered to a dealer or importer with all component parts necessary for the mechanical operation of the vehicle included with the vehicle, whether the component parts are permanently installed in or on the vehicle.
Foreign Entity of Concern	An entity that is owned by, controlled by, or subjected to the jurisdiction or direction of a government of a foreign country that is a covered nation, <i>i.e.</i> , China, Russia, Iran, and North Korea.
Individual Master File	The IRS database that maintains transactions or records of individual tax accounts.
Individual Return Transaction File	A database maintained by the IRS that contains information on the individual tax returns it receives.
Integrated Data Retrieval System	An IRS computer system capable of retrieving or updating stored information. It works in conjunction with a taxpayer’s account records.
Internal Revenue Code	The body of law that codifies all federal tax laws. These laws constitute Title 26 of the United States Code, which is a consolidation and codification by subject matter of the general and permanent laws of the United States.
Internal Revenue Manual	Primary source of instructions to employees relating to the administration and operation of the IRS. The Manual contains the direction employees need to carry out their operational responsibilities.
Master File	IRS database that stores various types of taxpayer account information. This database includes individual, business, and employee plans and exempt organizations data.

Inflation Reduction Act: Implementation of the Clean Vehicle Tax Credits

Term	Definition
Modernized Tax Return Database	The official repository of all electronic tax returns processed through the Modernized e-File system.
Modified Adjusted Gross Income	Is adjusted gross income as figured on a federal income tax return before subtracting any deductions for student loan interest. For most individuals, modified gross income is the same as adjusted gross income.
National Account Profile	A compilation of selected entity data from various IRS Master Files and the Social Security Administration.
Processing Year	The calendar year in which the IRS processes the tax return or document.
Qualified Manufacturer	A manufacturer who has entered into a written agreement with the IRS under which the manufacturer agrees to make periodic written reports to the IRS providing VIN and other information about their new clean vehicles.
Registered Dealer	A dealer who registers with the IRS to submit sales information on vehicles eligible for Clean Vehicle Credit and the Previously Owned Clean Vehicles Credit and are eligible to receive a transfer of the clean vehicle tax credits.
Social Security Number	A nine-digit number issued to an individual by the Social Security Administration. The IRS uses this number to process tax documents and returns.
Tax Year	A 12-month accounting period for keeping records on income and expenses used as the basis for calculating the annual taxes due. For most individual taxpayers, the tax year is synonymous with the calendar year.
U.S. Department of Transportation's Vehicle Identification Number Decoder	The VIN decoder provides information reported by the manufacturer on a specific VIN.
Unified Work Request	Provides the detailed business requirements for data requests so the IRS can properly review, assign, analyze, and respond (approve/deny) to the request, and can also cost and schedule the request for the implementation and delivery of any agreed-upon information technology products or services.
Vehicle Identification Number	A 17-character alphanumeric code for a specific automobile.

Appendix VI

Abbreviations

ECO	Energy Credits Online
IRA	Inflation Reduction Act of 2022
I.R.C.	Internal Revenue Code
IRS	Internal Revenue Service
TIGTA	Treasury Inspector General for Tax Administration
VIN	Vehicle Identification Number



**To report fraud, waste, or abuse,
contact our hotline on the web
at <https://www.tigta.gov/reportcrime-misconduct>.**

**To make suggestions to improve IRS policies, processes, or systems
affecting taxpayers, contact us at www.tigta.gov/form/suggestions.**

Information you provide is confidential, and you may remain anonymous.