

FORVIS

Transportation Tax Credits & Grants in the Inflation Reduction Act of 2022

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Presenters



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Agenda

- Introduction
- Advanced Manufacturing Production Credit
- Sustainable Aviation Fuel Credit
- Clean Fuel Production Credit
- Clean Vehicle Credit
- Previously-owned Clean Vehicle Credit
- Qualified Commercial Clean Vehicle Credit
- Alternative Fuel Vehicle Refueling Property Credit
- Grants and Loans
- Questions

Advanced Manufacturing Production Credit

- Production credit for eligible components produced by taxpayer and sold to an unrelated person pursuant to Section 45X
- Must be within a trade or business of the taxpayer
- Amount depends on type of component produced, including:
 - Solar energy component
 - Wind energy component
 - Inverter
 - Qualifying battery components
 - Applicable critical minerals

Background to Section 45X Credit

- Phase out: uses credit amount in Section x phaseout percentage

Year Sold During	% Phaseout
2030	75%
2031	50%
2032	25%
After 2032	0%

- Only qualified if production in the US or possession of the US
- Passthrough to estates and trusts and beneficiaries based on allocation of income
- Date: changes apply to components produced and sold after 12/31/22

Sustainable Aviation Fuel Credit

- New income tax credit under Section 40B that eliminates the previous biodiesel aviation fuel credit under Section 40A
 - General business credit under Section 38
 - Taxpayer may alternatively claim an excise tax credit under Section 4081 or excise tax refund under Section 6426
- Calculation of credit
 - Number of gallons of sustainable aviation fuel in such mixture multiplied by:
 - The sum of \$1.25, plus applicable supplementary amount (max \$.50/gallon) with respect to such sustainable aviation fuel
 - Credit applies to fuel sold or used after December 31, 2022, but before January 1, 2025

Sustainable Aviation Fuel Credit

- Sustainable aviation fuel and kerosene is a “*qualified mixture*” if:
 - Produced by the taxpayer in the United States
 - Such mixture is used by the taxpayer (or sold by the taxpayer for use) in an aircraft in the ordinary course of a trade or business, and
 - The transfer of such mixture to the fuel tank of such aircraft occurs in the United States
- *Sustainable Aviation Fuel*: Liquid fuel, the portion of which is not kerosene, that meets certain requirements set forth in Section 40B and has been certified as having a lifecycle greenhouse gas emissions reduction percentage of at least 50 percent

Sustainable Aviation Fuel Credit

- *Supplementary Amount*: equals \$.01 for each percentage point by which the lifecycle greenhouse gas emissions reduction percentage with respect to such fuel exceeds 50 percent (capped at \$0.50)
- Registration is required with the IRS to claim the credit, as well as certain certifications
- Credit amount is includable in gross income for income tax purposes

Clean Fuel Production Credit

- New income tax credit under Section 45Z
- Eligibility:
 - Fuel must be produced by the taxpayer at a qualified facility
 - Fuel must be sold by the taxpayer to an unrelated person for use by such person
 - In the production of a fuel mixture, or
 - In a trade or business, or
 - Who sells such fuel at retail to another person and places such fuel in the fuel tank of such other person

Clean Fuel Production Credit

- “*Qualified Facility*” means a facility in the US used for the production of transportation fuels and does not include any facility for which a credit is allowed for clean hydrogen production under Section 45V and Code Section 48, or carbon oxide sequestration under Section 45Q
- “*Transportation Fuel*” means a fuel which is suitable for use as a fuel in a highway vehicle or aircraft and meets certain emissions rates and processing requirements

Clean Fuel Production Credit

- Base credit amount is a product of \$0.20 per gallon of transportation fuel (\$0.35 per gallon of sustainable aviation fuel) multiplied by an emissions factor
 - Base credit amount may be increased to \$1.00 per gallon (\$1.75 for aviation fuel) if certain prevailing wage and apprenticeship requirements are met
- Credit amount applies to transportation fuel produced after December 31, 2024 and sold before January 1, 2028.
- Fuel must be produced in the US while taxpayer is registered with the IRS as a clean fuel producer

Clean Vehicle Credit

	Old law	New law
Name of credit	New qualified plug-in electric drive motor vehicles	Clean vehicle credit
IRC section	30D	30D
Effective date of amendments	Sold before enactment date	Various

Clean Vehicle Credit

	Old law	New law, initially
Qualified vehicle requirements, generally	<ul style="list-style-type: none"> • Original use in US • Acquired for use or lease • Made by a manufacturer • Motor vehicle under title II of the Clear Air Act • Primary use on roads with at least 4 wheels • Gross vehicle weight rating (GVWR) < 14,000 lbs. • Propelled by electric motor with a battery capacity >= 4 kwh that can be recharged by an external source • Written binding contracts 	<ul style="list-style-type: none"> • Original use in US • Acquired for use or lease • Made by a manufacturer • Motor vehicle under title II of the Clear Air Act • Primary use on roads with at least 4 wheels • Gross vehicle weight rating (GVWR) < 14,000 lbs. • Propelled by electric motor with a battery capacity >= 4 kwh that can be recharged by an external source • Final assembly in North America
Effective date of amendments	*Vehicles sold on or before date of enactment	Vehicles sold after date of enactment through end of 2022

Clean Vehicle Credit

- Guidance issued to date
 - FAQs from Treasury - <https://home.treasury.gov/system/files/136/EV-Tax-Credit-FAQs.pdf>
 - Updated IRC 30D information from the IRS – <https://www.irs.gov/businesses/plug-in-electric-vehicle-credit-irc-30-and-irc-30d>
 - List of vehicles that MAY meet the final assembly requirement from the Department of Energy – <https://afdc.energy.gov/laws/electric-vehicles-for-tax-credit>
 - VIN decoder to help determine where final assembly occurred from NHTSA – <https://www.nhtsa.gov/vin-decoder>

Clean Vehicle Credit

Plant Information: Canton Plant, CANTON, MISSISSIPPI, UNITED STATES (USA)

Using NHTSA's VIN Decoder to Identify a Vehicle's Plant of Manufacture

Among the information NHTSA's VIN decoder provides is information about the vehicle's plant of manufacture. After searching a VIN, you'll see the build plant and country for the vehicle in question. Refer to the "Plant Information" section at the bottom of the results.

More Information

The information displayed through NHTSA's VIN decoder is reported by the manufacturer. If you have further questions regarding this information, **please contact the vehicle manufacturer**. In addition, more information may be available on a label affixed to the vehicle. [NHTSA's Part 583 webpage](#) provides more information about this label.

If you are using NHTSA's VIN decoder to get information regarding the U.S. Electric Vehicle Tax Credit, **please refer to information released by the U.S. Department of Energy, U.S. Department of the Treasury and Internal Revenue Service**, and these [FAQs](#).

- Snippet from NHTSA VIN Decoder

Source: <https://www.nhtsa.gov/vin-decoder>

Clean Vehicle Credit

	Old law	New law
Credit calculation	Base \$2,500 Battery capacity ≥ 5 kwh \$417 plus \$417 per hour over 5 up to \$5,000 total	Critical minerals \$3,750 Battery components \$3,750
Credit limit	\$7,500	\$7,500
Effective date of amendments	Vehicles placed in service before guidance issued	*Vehicles placed in service after guidance issued

*Guidance is supposed to be issued by the Secretary by December 31, 2022

Clean Vehicle Credit

- Critical minerals
 - Battery must have a certain percentage of these minerals based upon their value that meet one of the following requirements:
 - Extracted **OR** processed in the US **OR** in a country the US has a free trade agreement with, or
 - Recycled in North America
 - Applicable percent
 - Placed in service after guidance and before January 1, 2024 = 40%
 - 2024 = 50%; 2025 = 60%; 2026 = 70%, after 2026 = 80%

Clean Vehicle Credit

- Battery components
 - The value of the battery components either manufactured or assembled in North America must be at least a certain percent of the overall value
 - Applicable percent
 - Placed in service after guidance and before January 1, 2024 = 50%
 - 2024 and 2025 = 60%; 2026 = 70%; 2027 = 80%; 2028 = 90%; after 2028 = 100%

Clean Vehicle Credit

- Critical mineral
 - Vehicles placed in service after December 31, 2024, won't be able to contain any critical mineral from a foreign entity of concern (extracted, processed, or recycled)
- Battery components
 - Vehicles placed in service after December 31, 2023, won't be able to contain any battery components that were manufactured or assembled by a foreign entity of concern

Clean Vehicle Credit

	Old law	New law
Credit phaseout	Yes	No
Credit limit adjusted for phaseout	Applies once manufacturer sells 200,000 th vehicles for use in the US	n/a
Effective date of amendments	Vehicles sold on or before December 31, 2022	Vehicles sold after December 31, 2022

Clean Vehicle Credit

	New law, initially	New law, subsequently
Qualified vehicle requirements, generally	<ul style="list-style-type: none"> • Original use in US • Acquired for use or lease • Made by a manufacturer • Motor vehicle under title II of the Clear Air Act • Primary use on roads with at least 4 wheels • GVWR < 14,000 lbs. • Propelled by electric motor with a battery capacity ≥ 4 kwh that can be recharged by an external source • Final assembly in North America 	<ul style="list-style-type: none"> • Same requirements as “New law, initially” except for the following changes, generally: • Made by a qualified manufacturer • Propelled by electric motor with a battery capacity ≥ 7 kwh that can be recharged by an external source • Seller of vehicle must report information to taxpayer and the Secretary • Now includes new qualified fuel cell motor vehicle (IRC 30B(b)(3), generally)
Effective date of amendments	Vehicles placed in service after date of enactment through end of 2022	Vehicles placed in service after December 31, 2022

Clean Vehicle Credit

	Old law	New law
Modified adjusted gross income (MAGI) limit	No	Yes
*Limit	n/a	<ul style="list-style-type: none">• Married filing joint or surviving spouse = \$300,000• Head of household = \$225,000• All other = \$150,000
Effective date of amendment	n/a	Vehicles placed in service after December 31, 2022

*Limit is based on the lesser of MAGI in prior year or year of purchase

Clean Vehicle Credit

	Old law	New law
Manufacturer's suggested retail price (MSRP) limit	No	Yes
*Limit	n/a	<ul style="list-style-type: none"> • Vans = \$80,000 • SUV = \$80,000 • Trucks = \$80,000 • All other vehicles = \$55,000
Effective date of amendment	n/a	Vehicles placed in service after December 31, 2022

*Secretary to issue guidance in connection with determining which classification a vehicle falls under

Clean Vehicle Credit

	Old law	New law
Transfer of credit election	No	Yes
Requirements to transfer	n/a	<ul style="list-style-type: none">• Dealer registered with Secretary• Certain information disclosed by dealer timely• Payment must be made via cash or partial/full down payment• Any incentives must not be impacted by making the election (value and availability of)• Election made on or before date of acquisition
Effective date of amendment	n/a	Vehicles placed in service after December 31, 2023

Clean Vehicle Credit

- Other items of note
 - Basis reduction for amount of credit allowed
 - No double benefits
 - Recapture of the credit if vehicle ceases to be a qualified new clean vehicle

Previously-owned Clean Vehicles

	Old law	New law
Name of credit	n/a	Previously-owned clean vehicles
IRC section	n/a	25E
Effective date of amendment	n/a	Vehicles acquired after December 31, 2022

Previously-owned Clean Vehicles

	New law
Qualified vehicles requirements, generally	<ul style="list-style-type: none">• Model year at least 2 years earlier than the calendar year of purchase• Previously used by someone else• Must be used in the US by buyer• Made by qualified manufacturer• Motor vehicle under title II of the Clean Air Act• Primary use on road with at least 4 wheels• GVWR < 14,000 lbs.• Propelled by electric motor with battery capacity >= 7kwh that can be recharged by an external source• Qualified fuel cell motor vehicle (IRC 30B(b)(3)) that has a GVWR < 14,000 lbs.• Acquired in a qualified sale by a qualified buyer

Previously-owned Clean Vehicles

	New law
Qualified sale	<ul style="list-style-type: none">• Sold by a qualified dealer under IRC 30D• Sales price \leq \$25,000• First transfer since date of enactment of IRC 25E to a qualified buyer who is not the original user
Qualified buyer	<ul style="list-style-type: none">• Purchaser is an individual and not a dependent of another• Purchases vehicle for use and not resale• Not claimed a credit within 3 years of the date the vehicle is purchased

Previously-owned Clean Vehicles

	New law
Credit calculation	30% of sales price
Credit limit	\$4,000

Previously-owned Clean Vehicles

	Old law	New law
Modified adjusted gross income (MAGI) limit	No	Yes
*Limit	n/a	<ul style="list-style-type: none"> • Married filing joint or surviving spouse = \$150,000 • Head of household = \$112,500 • All other = \$75,000
Effective date of amendment	n/a	Vehicles placed in service after December 31, 2022

*Limit is based on the lesser of MAGI in prior year or year of purchase

Previously-owned Clean Vehicles

	New law
Transfer of credit election	Yes
Requirements to transfer	<ul style="list-style-type: none">• Dealer registered with Secretary• Certain information disclosed by dealer timely• Payment must be made via cash or partial/full down payment• Any incentives must not be impacted by making the election (value and availability of)• Election made on or before date of purchase
Effective date of amendment	Vehicles placed in service after December 31, 2023

Previously-owned Clean Vehicles

- Other items of note
 - Basis reduction for amount of credit allowed
 - No double benefits
 - Recapture of the credit if vehicle ceases to be a qualified new clean vehicle

Commercial Clean Vehicles

	Old law	New law
Name of credit	n/a	Qualified commercial clean vehicles
IRC section	n/a	45W
Effective date of amendment	n/a	Vehicles acquired after December 31, 2022

Commercial Clean Vehicles

	New law
Qualified vehicles requirements, generally	<ul style="list-style-type: none">• Original use in the US by acquirer• Depreciable property only• Made by qualified manufacturer• And is either:<ol style="list-style-type: none">1) Motor vehicle under title II of the Clean Air Act and is primarily used on roads2) Mobile machinery per IRC 4053(8)• And is either:<ol style="list-style-type: none">1. Propelled by electric motor with battery capacity $\geq 15\text{kwh}$ (7kwh if vehicle has GVWR $< 14,000$ lbs.) that can be recharged by an external source, or2. Qualified fuel cell motor vehicle (IRC 30B(b)(3))

Commercial Clean Vehicles

	New law
Credit calculation	<ul style="list-style-type: none">• Lesser of 15% of basis (30% if vehicle is not powered by a gas or diesel engine) -or-• Incremental cost* of vehicle
Credit limit	<ul style="list-style-type: none">• GVWR < 14,000 lbs. = \$7,500• All other = \$40,000

*Incremental cost is additional cost to purchase a clean vehicle rather than an internal combustion engine vehicle that is comparable in size and use

Commercial Clean Vehicles

- Other items of note
 - Basis reduction for amount of credit allowed
 - No double benefits
 - No credit allowed for vehicle that had credit allowed under IRC 30D (clean vehicle credit)
 - Recapture of the credit if vehicle ceases to be a qualified new clean vehicle
 - Part of the general business credit
 - Direct pay option available

Alternative Fuel Vehicle Refueling Property Credit

	Old law	New law
Name of credit	Alternative fuel vehicle refueling property credit	Alternative fuel vehicle refueling property credit
IRC section	30C	30C
Effective date of amendments	Property placed in service during 2022 (retroactively extended)	Generally, property placed in service after December 31, 2022

Alternative Fuel Vehicle Refueling Property Credit

The “Charging Station” credit

Alternative Fuel Vehicle Refueling Property Credit

	Old law	New law
Qualifying property requirement, generally	<ul style="list-style-type: none"> • Depreciable property OR installed at a place of principal residence • Original use • Stores or dispenses a “clean-burning fuel” or electricity directly into a motor vehicle that will be propelled by it 	<ul style="list-style-type: none"> • Depreciable property OR installed at a place of principal residence • Original use • Stores or dispenses a “clean-burning fuel” or electricity directly into a motor vehicle that will be propelled by it • Bidirectional charging equipment
Additional requirements	<ul style="list-style-type: none"> • Not a building or a structural component of the building 	<ul style="list-style-type: none"> • Not a building or a structural component of the building
Effective date of amendments	Property placed in service during 2022	Generally, property placed in service after December 31, 2022

Alternative Fuel Vehicle Refueling Property Credit

	Old law	New law
Clean burning fuel or electricity, generally	<ul style="list-style-type: none">• Any fuel if 85% or more of the fuel is made up of any combination of: ethanol, natural gas, compressed or liquified natural gas, liquified petroleum, or hydrogen• Any mixture if it is made up of 2 or more of: biodiesel, diesel fuel, or kerosene AND at least 20% based on volume is biodiesel calculated without considering any kerosene• Electricity	<ul style="list-style-type: none">• Same• Transportation fuel under 45Z(d)(5) (after December 31, 2024)

Alternative Fuel Vehicle Refueling Property Credit

	Old law	New law
Motor vehicle, generally	<ul style="list-style-type: none">• Primary use on roads and has at least 4 wheels	<ul style="list-style-type: none">• Primary use on roads and has at least 4 wheels• Primary use on roads and has 2 or 3 wheels, AND:<ul style="list-style-type: none">• Depreciable property• Propelled by electricity
Location of property	<ul style="list-style-type: none">• Any business location or personal residence	<ul style="list-style-type: none">• Located in eligible census tract:<ul style="list-style-type: none">• Not in an urban area• Low-income community

Alternative Fuel Vehicle Refueling Property Credit

	Old law	New law
Credit calculation	<ul style="list-style-type: none">• 30% of the cost of any qualified property placed in service during the year	<ul style="list-style-type: none">• 30% of the cost of any qualified property placed in service during the year, if non-depreciable• 6% of the cost, if depreciable
Credit limit	<ul style="list-style-type: none">• \$30,000 for depreciable property• \$1,000 for all other property	<ul style="list-style-type: none">• \$100,000 for depreciable property• \$1,000 for all other property
Application of limit	Per location	Per item

Alternative Fuel Vehicle Refueling Property Credit

	Old law	New law
Increased credit amount	n/a	<ul style="list-style-type: none">• 5x base credit applicable to depreciable property if BOTH of the following are met:<ul style="list-style-type: none">• Prevailing wage requirement• Apprenticeship requirement
Project requirements for increased credit amount	n/a	<ul style="list-style-type: none">• Project begins before 60 days after Secretary issues guidance on the above requirements• Project satisfies BOTH requirements if not before the 60-day mark

Alternative Fuel Vehicle Refueling Property Credit

- Prevailing wage requirement
 - Must be paid to any laborer or mechanic who is employed by:
 - Taxpayer claiming credit
 - Contractor
 - Subcontractor
 - Related to the construction of the property
 - At least as much as the rate for a similar project for construction, alteration or repair for the location of the project
 - As determined by the Secretary of Labor

Alternative Fuel Vehicle Refueling Property Credit

- Apprenticeship requirement
 - Rules similar to the ones contained within the Electricity produced from certain renewable sources credit (specifically IRC 45(b)(8) to apply
 - Generally, would require a certain % of hours of the project to be performed by a qualified apprentice
 - 12.5% for 2023
 - 15.0% after 2023
 - Exceptions may apply

Alternative Fuel Vehicle Refueling Property Credit

- Other items of note
 - Direct pay option available for credit
 - Transfer option available for credit

Clean Heavy-Duty Vehicles Grant

- The Clean Air Act is amended by inserting Section 132
- Appropriated \$1 billion for fiscal year 2022, not otherwise appropriated, to remain available until September 30, 2031
 - \$400 billion is designated to areas not meeting certain air quality standards
- Grant or rebate of costs for:
 - Incremental costs of replacing an eligible non-zero emission vehicle with a zero-emission vehicle
 - Purchasing, installing, operating and maintaining infrastructure needed to charge, fuel or maintain zero-emission vehicles
 - Workforce development and training
 - Planning and technical activities

Clean Heavy-Duty Vehicles Grant

- Must be an eligible recipient
 - Eligible recipient: a State, municipality, Indian tribe, or nonprofit school transportation association
- Eligible contractors (listed below) may be awarded contracts for providing rebates
 - Has capacity to sell, lease, license, or contract for service zero-emission vehicles, or charging or other equipment needed to charge, fuel or maintain zero-emission vehicles, to individuals or entities that own, lease, license, or contract for service an eligible vehicle, or
 - Arrange financing for a sale, lease, license or contract for service

Clean Heavy-Duty Vehicles Grant

- *Heavy-Duty Vehicle*: Means a Class 6 or Class 7 heavy-duty vehicle as defined in section 1037.801 of title 40 of the Code of Federal Regulations
- Must submit an application in a manner to be provided

Other Transportation Infrastructure Grants

- Alternative Fuel and Low-Emission Aviation Technology Program (\$295 million)
 - Grants for projects in the US that produce, transport, blend, or store sustainable aviation fuel, or develop, demonstrate, or apply low-emission aviation technologies
- Domestic Manufacturing Conversion Grants (\$2 billion)
 - Provides grants for domestic production of efficient hybrid, plug-in electric hybrid, plug-in electric drive, and hydrogen fuel cell electric vehicles

Other Transportation Infrastructure Grants

- Low-Carbon Transportation Materials Grants (\$2 billion)
 - Reimburse or provide incentives to eligible recipients for the use, in projects, of construction materials and products that have substantially lower levels of embodied greenhouse gas emissions
- Neighborhood Access and Equity Grants (\$1.9 billion)
 - Improve walkability, safety, and affordable transportation access
 - Mitigate or remediate negative impacts on the human or natural environment
 - Planning and capacity building activities in disadvantaged communities

Advanced Technology Vehicle Manufacturing Loan

- \$3 billion available
- Provides direct loans for reequipping, expanding, or establishing a manufacturing facility in the US
- Facility must produce, or for engineering integration performed in the US, advanced technology vehicles
- Vehicles must emit, under any possible operational mode or condition, low or zero exhaust emissions of greenhouse gases

Questions?

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