

Federal EV Incentive – 2025 Outlook

Changes to Battery Rules and Used EV Supply

2025 will bring a large increase in the supply of eligible used EVs and new restrictions on battery critical minerals and component manufacturing..

Changes in Battery Sourcing Rules

Each year, the law requires a step-up in the minimum source-compliant rules for batteries.

- The percentage of critical minerals sourced either domestically or from a free-trade partner increases from 50% to 60%.
- The battery-module manufacturing requirement remains at 60% from North America.
- IRS loosened rules around the sourcing of graphite to take effect in 2025.
- Foreign entity of concern rules now apply to battery assembly as well as critical mineral sourcing. That means that for the 40% that does not have to come from eligible sources, none can come from any entity deemed a FEOC. Of course, this is mainly China, but applies to some other places as well.

Many vehicles lost eligibility in 2024 as the requirements became more stringent and the first part of the FEOC kicked-in. On the other hand, the industry is grateful for the recent flexibility on graphite, an area in which China is even more dominant.

The OEMs are working hard to wrangle their supply chains to become compliant. We expect a gradual increase in eligible vehicles as new plants open in North America.

The above rules apply only to consumer purchases. They do not apply for leases or commercial purchases. On the basis of a controversial IRS ruling, these vehicles are not required to comply with the consumer purchase rules. It has driven skyrocketing increases in the rate of EV leases. According to [Kelly Blue Book](#), leases now account for almost half of new EV sales and have surpassed financing as the preferred method for acquiring a new EV.

Used EV Incentive

This is one area where there will be a significant change for the better. Despite the gloom and doom reporting, EV sales are growing. In CT, EVs represented 10.4% of all new vehicle sales in Q2 of this year, according to CT DEEP. The July Connecticut DMV registration data show that EV registrations increased by 45% year on year, on top of a similar increase the year before.

What that means is that increasing numbers of EVs are eligible for the used incentive. The rule regarding vehicle age is that the model year of the vehicle must be at least 2 years older than the current calendar year. So, as of January, all of the 2023 EVs become eligible. Every year, the pool will increase.

There are lots of other rules around new and used EVs. See our [Incentives](#) page for a full description.

IRA EV Incentive – Alllll The Details

An Opportunity to Walk Through the Incentive Details

This blog has written a number of posts about the new EV incentive since the legislation was enacted in August of 2022. We are now in the implementation phase with IRS rule-making in progress. While we have a detailed description on our [Incentives](#) page, the law is complicated enough that we decided to devote a meeting to walking through the details and answer questions.

This is a Zoom meeting, scheduled for Thursday, March 2nd, at 7 PM. We are planning for one hour, but if there are a lot of questions, we can hang out a bit longer. Anyone is welcome to attend. Registration is free at this [link](#).

IRA Incentives, Leases, and Batteries

EV Manufacturers/Dealers Offering Consumer EV Leases, Incentives

Included

This is a follow up to a [post](#) from January 5, when we first published about a surprising turn of events with respect to eligibility for the electric vehicle (EV) incentives that are part of the Inflation Reduction Act.

As we have written [here](#) and other places, while the Inflation Reduction Act, IRA, has a lot to recommend it, the design of the consumer EV incentive is overly complicated and confusing with numerous restrictions on which cars and individuals qualify.

In a counter-intuitive twist, the complex became simple, at least for leasing customers. While there are all sorts of restrictions around whether a vehicle or a purchaser qualifies for the tax credit, the IRS issued guidance on 12/29/22 that a consumer *lease* should be considered a *commercial* transaction. The commercial EV incentive has none of the restrictions that apply to a consumer purchase. Whatever the vehicle cost, wherever it is made, no matter the body style, it qualifies for the \$7500 maximum incentive. (If you want to know the details of those consumer restrictions, see our [incentives page](#).)

The IRS logic here is that the dealer or manufacturer sells the vehicle to the finance company which holds the title. This is a commercial transaction. The fact that the finance company then executes a lease with a consumer is beside the point. As such, it falls under the rules for commercial incentives, which are governed by a separate provision in the law that does not impose the consumer restrictions.

We are now seeing examples of this in the marketplace. The photo at the top of the post is of an ad for a Lucid EV. A recent entrant as an EV-only startup, Lucid makes ultra high-end EVs that, judging by the reviews, are pretty great. [Car and Driver](#) described its “unbeatable range and great

performance.” However, the Lucid far exceeds the price caps imposed on the EV incentives in the IRA. But with a lease, voila, no MSRP cap. I received similar information from a CT dealership company that sells Hyundai and Genesis vehicles, that they have received new lease pricing that reflects the incentive. Both of those vehicles are manufactured in South Korea and thus run afoul of the North American final assembly rules if purchased.

Delay in Battery Rules

For buyers there is another loophole, for want of a better word, that gives the consumer a break, albeit temporarily. The IRS has not finished writing the regulations for the battery mineral sourcing/refining and manufacturing requirements. As a result, the incentive defaults to the old battery rules until the IRS issues these new regulations. They have said this will happen in March. In the meantime, we are now in a period where incentives are likely to be higher for most, if not all, EVs than they will be in a few months. Buy now, but be sure to take physical possession of the vehicle before the battery rules take effect or risk losing the incentive.

Manchin Agonistes

It has been widely reported that Senator Joe Manchin is not happy about either of these two developments. As reported in [The Verge](#), he has introduced legislation to delay the implementation of the incentives until the IRS finishes its rule making, and to claw back incentives that may have been granted under the IRS interim rules.

Manchin is also not pleased about the IRS interpretation of leasing as a commercial transaction and may try and correct that legislatively as well.

I doubt Manchin’s legislative proposal(s) will become law. The

House is too preoccupied getting its house in order. And what appetite will the Senate have to revisit this hard-fought reconciliation-passed bill? Nobody else in either chamber seems to be all that concerned about either of these developments, at least not on the record.

I think Manchin genuinely wants to bring manufacturing back America. I'm not so sure he cares about people buying EVs. The threat of a retroactive restriction and claw back only punctuates this. Part of the cleverness of the IRA is that it strikes a balance of both supply side and demand side incentives. But when it comes to EVs, the design of the consumer EV incentive is so perversely self-defeating, that with respect to Senator Manchin, this feels like karma.

Update: As reported in [Reuters](#), Manchin tried to get his bill passed on January 26th by unanimous consent, but it was blocked by Sen. Debbie Stabenow of Michigan. She is quoted saying, "It is not unreasonable what Treasury is doing ... they have been given an incredibly complicated task to try to figure out how this consumer credit will work." Separately, she also noted the inherent unfairness of this bill to consumers in that it "would literally take away credits from people who are buying cars today ... Fundamentally, (Manchin) is not a fan of EVs."

The usual disclosure: This information is accurate to the best of our knowledge. Always check with an accountant when it comes to tax matters.

How Not to Implement Policy

Post by Barry Kresch

Summary of Comments Submitted to the IRS for IRA EV Incentive

The EV Club has partnered with the Electric Vehicle Association to author comments for the in-process IRS rule-making regarding the implementation of the EV incentive in the Inflation Reduction Act.

There is a scrum of lobbyists from manufacturers and interests groups weighing in with their cadres of lawyers and tax accountants. The focus of the EV Club and the EVA is the consumer and that informs our perspective and where we choose to focus our efforts.

Comments inform the details of enactment that are within the purview of the IRS, not the legislation itself, which cannot be changed without further legislation. The outlook for the legislation to be amended in the near-term is cloudy at best.

The usual disclaimer – This is based on the latest information available and is not a legal opinion.

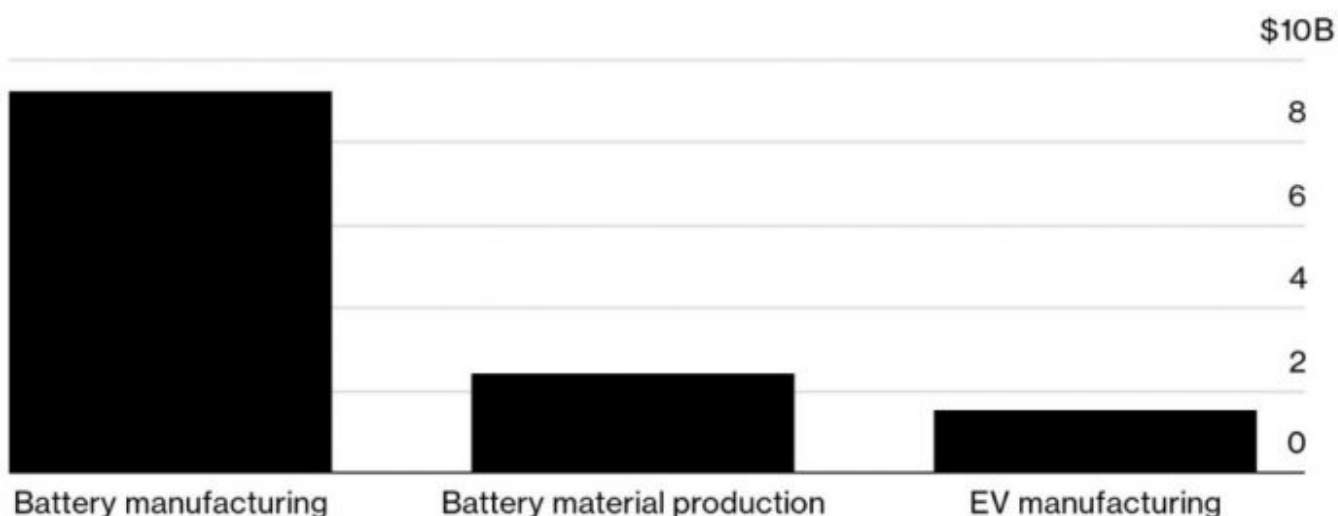
Sourcing/Manufacturing Requirements

The IRA is a landmark piece of legislation with a lot to recommend in it, but the EV incentive leaves much to be desired.

The focus of the IRA writ large is to “inshore,” or re-orient manufacturing to North America. It already seems to be having a material effect. This is a chart from Bloomberg showing significant announced investment levels that seemingly flow directly from the legislation.

Battery Investment Bonanza

Announced investment in North America since the IRA was signed into law



Source: Bloomberg

Bloomberg

The concern is timing. As of the date of this writing, we are not aware of any EV that would qualify for the full incentive when the requirements begin to phase in as of January, and we are aware of many that won't qualify for any incentive. We are advised that the IRS does have within its power to grant a temporary waiver, and facing a potentially significant disruption in the ability of the consumer to access EV purchase incentives, we support a modest delay in the requirements so that supply chains have a little more time to adjust.

Certification – A Real Buzzard's Nest

Our view is that the least well thought out part of the legislation is how the eligibility of a given vehicle is communicated to the consumer. There are requirements for final assembly, battery mineral sourcing, and battery manufacture. (Price, too, but we'll get to that later.) The latter two change every year, so a car that is compliant in 2024 might lose compliance in 2025. The fact that the requirements change

on a calendar year basis puts it out of sync with the model year focus of building cars, not to mention EPA certification and other regulatory things that happen with a new vehicle.

Websites that have a list of vehicles, such as Plugstar or the AFDC.energy.gov website, are no longer able to provide definitive information regarding incentive eligibility. The best they can do is list cars that *may* be eligible, leaving it for the consumer to do their own research. The AFDC website directs consumers to contact the manufacturer or check on the IRS website. When I look up “fun” in the dictionary, the definition doesn’t include reading the IRS website. I wouldn’t be surprised if the confusion filters down to dealerships. It would be possible for a Volkswagen dealership, for example, to have a German made ID.4 parked next to the identical vehicle manufactured in Tennessee. The former is immediately disqualified due to the final assembly rule, while the latter *might* be eligible *if* the battery requirements are met.

The AFDC site also links to a VIN decoder. The VIN has the information needed to know if a vehicle qualifies. The problem is that a VIN isn’t available in anywhere near a timely way relative to the consumer shopping journey. By the time the VIN is known, a binding contract is almost certainly in place and the vehicle is almost at the point of delivery.

Proposed Solution

- Have the certification be on a model year basis and have it be available at the time the model year is initially offered for sale (which may precede deliveries).
- The manufacturer takes responsibility for the certification. If due to a certification running change, the model (or some units of the model) is subsequently found to not meet the requirements, any incentive claw-back would become the responsibility of the manufacturer.

- This timing would enable the certification to potentially be included on the Monroney sticker (the label affixed to the window of a new vehicle that displays the EPA mileage rating and other officially required information).
- Online tools like those referenced above would be able to definitively report the incentive status for a particular vehicle.
- This model year basis is consistent with how many state programs are run.

The first year of this will be extra complicated as the rules themselves will not be clear until the rule making is complete. Manufacturers shooting for IRA compliance have a moving target.

Our guiding principle is that an incentive must be simple, dependable, and easy to access. The intent of this proposed solution is make the inherent complexity of the legislation invisible to the consumer.

MSRP Cap

The bill specifies that a vehicle must have a maximum MSRP of \$55,000 for a sedan or \$80,000 for an SUV or light truck. It does not define how the MSRP is determined. Early reports about the legislation indicated that the MSRP would be defined as the final price of the vehicle, including options (but not taxes, title, or destination charges). There are MSRP caps in state incentive programs but they typically don't work this way.

Most vehicles have multiple trim levels and then offer options within each trim level. The Connecticut program, CHEAPR, uses the base trim level MSRP. If a trim level is below the maximum allowed MSRP, ordering additional options does not affect eligibility, even if the final price exceeds the cap. The California law is more generous. If the base price of the

lowest priced trim level is below the cap, then all trim levels qualify. The EV Club and EVA are advocating for the CA definition. This would obviously allow more EVs to qualify. We can deal with that!

Transfers

Eager to get a purchase incentive but not happy about waiting many months until you file your taxes to realize it? The transfer option is designed as the answer. Becoming effective in 2024, the consumer has the option to transfer the incentive to the dealer (new or used) and receive the tax credit as a “cash on the hood” rebate. As we have been diving into the bill details, an important point about the tax treatment of the rebate is not clear. If someone elects the transfer, they receive the full amount. However, if they do not have the tax liability to absorb it, they are on the hook for paying the difference between their liability and the \$7500 (for a new vehicle) come tax time. At least that is how several folks who know more about tax accounting than I have interpreted it.

Doing this kind of claw-back makes no sense on any level. The consumer is exposed to an unquantified risk. The dealer is receiving the credit, and either using it or getting reimbursed by Treasury, so it would be a weird form of double taxation. Finally, it is self-defeating. The intended design of the incentive is to increase EV adoption among non-affluent consumers. This would act as a red flag for exactly the target consumer. The EV Club and EVA are advocating that anyone taking the transfer get the full incentive, full stop.

Transfers vs Leasing

A transfer works differently than a lease. If a customer leases, the incentive goes to the finance company or whomever holds the title. That entity can package the incentive into lower lease payments. It has always been a way for someone who

does not have \$7500 of offsetting tax liability to be able to take full advantage of the incentive. However, the title holder is not legally obligated to do this. They can just keep all or part the incentive for themselves. It is why we have always advised consumers to discuss this specifically with the seller.

One of the good things about the transfer is that the rules require full disclosure on the part of the seller and that the seller pass the entire incentive through to the customer. The EV Club/EVA recommend that these requirements be expanded to include leasing customers.

Transfers and Income Eligibility

There are income caps in this program as we explain on our [incentives page](#). If someone takes the tax credit the old-fashioned way, meaning when they file their taxes, income eligibility can be determined by either the current year or prior year modified adjusted gross income. In the case of a transfer, where the dealer is tasked with verifying eligibility, as an operational matter, the only option is to look at the prior year. It is the recommendation of the EV Club/EVA that the consumer, if determined to be ineligible for the prior year, be given the option of using the current year. In that scenario, the incentive would be given at the time of purchase. The consumer would take responsibility for current year eligibility (to be verified upon tax filing). If the consumer remains ineligible, it is their responsibility to repay the incentive. There are situations where someone has a pretty good idea whether they will have a change in taxable income and this expands their opportunity to receive an incentive.

The IRA EV consumer purchase incentives suffer from being too complicated for consumers to easily negotiate. Our comments seek to address this. The IRS is working to have its rule-making done by the end of the year.

New Federal EV Incentive

Post by Barry Kresch

EV Transferable Tax Credit Included in Inflation Reduction Act (IRA)

President Biden signed the Inflation Reduction Act into law on August 16th. With it comes a new EV purchase incentive.

It was past time to revise the existing federal EV incentive. The IRA brings with it some improvements, along with more complexity and some uncertainty. I have read a lot of the reporting around this legislation and find much of it not completely clear and sometimes inconsistent. There is also still additional rule-making that has to happen. This is what it looks like to me with the caveat that your mileage may vary and the content may be updated based on new information.

Summary of the new incentive:

- Tax credit of up to \$7500 for new EVs.
- Option to take the credit as a normal tax credit or assign it to the dealer to receive it as an immediate rebate (not to mention utilize it if you do not have enough tax liability). Begins 2024.
- Although the bill has a lot of language about dealers, Tesla and other direct sellers are eligible to the extent their vehicles meet the other requirements.
- Used EV incentive of up to the lesser of \$4000 or 30% of the vehicle cost.
- In order to receive the used EV incentive, the vehicle must be purchased from a dealer. Used-car only dealers qualify. Private sales do not.

- Means testing (income limits for recipients of new and used incentives).
- Price cap for new and used EVs.
- 10-year time horizon – Incentives in place through 2032.
- Minimum battery pack size requirement of 7 kWh (increased from the current 5 kWh, but still really small).
- New incentives are effective as of 2023.
- Requirements for minerals sourcing and battery manufacturing phase in beginning in 2023.
- Final assembly takes place in North America.

Limitations of the Current Incentive

The existing federal EV tax credit was limited from the beginning and has become increasingly less useful as time goes on. Perhaps because EVs were relatively exotic when it first began, each manufacturer was allotted a quota of 200,000 unit sales before they would begin to phase out of the incentive. It never made a lot of sense. Not only did it end up penalizing those companies that were first out of the gate, the number is puny considering the country has a light-duty fleet of approximately 200 million vehicles (Bureau of Transportation Statistics).

When a manufacturer crosses the 200,000 unit threshold, a phase-out period begins that lasts 15-18 months, depending on the timing of when they crossed. Tesla and General Motors exceeded the threshold in 2018. Tesla was fully phased out by the end of 2019 and GM followed in March, 2020. Toyota, Ford, Nissan, and Hyundai have either just recently hit that mark or are close.

The second limitation to the current program is inherent in its structure as a tax credit. You have to wait until you file your taxes to get it and it only helps if you have enough tax

liability to offset. There is no carry-forward provision. All that said, it does have the virtue of relative simplicity. The only rule is that the size of the credit is based on the size of the battery pack. All BEVs and the longer-range PHEVs qualify for the full credit, which begins at 18 kWh.

The New IRA Upends Much of This Thinking

The new program makes a good start by removing the 200,000 cap. In its place are new rules intended to introduce progressivity, and new requirements to jump-start a domestic supply chain and spur domestic manufacturing. The result is a much more complex program and a risk that the materials and manufacturing requirements may be so aggressive as to cause EVs to lose partial or complete eligibility, at least for a period of time.

The IRA is a big deal with a lot of parts that are out of scope of this EV-focused post. Nonetheless, what is arguably the most controversial aspect of the EV proposal goes to what is at the core of the bill as a whole. That is its big bet on industrial policy to revive domestic industry with an eye towards not only emissions reduction, but jobs and national security – a combination of tax incentives; direct pay; and support for research, materials sourcing, and manufacturing, coupled with consumer incentives, not only for EVs, but for solar, storage, and heat pumps. In my view, the design is a good one that will lead to private investment, job creation, leadership in industries of the future, and a lower risk profile. You don't need a long memory to recall the serious shortage of PPE early in the pandemic or the continuing shortage of microchips.

Automobile manufacturers are objecting to how aggressively the materials and manufacturing requirements are put in place and how quickly they escalate. We will see where this lands. I

don't take what the manufacturers say at face value. Many of these companies are the same ones that fought airbags and lobbied (with some degree of success) to loosen CAFE standards.

The other controversial part of the IRA is its provision to tie granting of oil and gas leases to renewable energy development. I don't see the point in tying the development of fossil-fuel assets to renewables. However, in the scheme of things, I think there will be a fossil-fuel long-tail no matter what we do, and there is enough here to generate a robust adoption of cleaner technology that will create a positive feedback loop and erode fossil-fuel demand. The simple fact is that as renewables scale and become cheaper, fossil fuels become less cost competitive.

The fact that the IRA has a 10-year lifespan is a great thing. Our government has never had a consistent energy policy to speak of. This makes for much greater certainty in the investment environment.

EV Material and Assembly Requirements

- Upon enactment (August 16th), the current incentive remains in place for the balance of 2022, but the domestic final assembly (of the vehicle, not the battery) provision will apply immediately. I'm not sure why they felt they had to lower the boom so quickly. Any EV that is imported will no longer be eligible and there are some major ones. Hyundai, Kia, Polestar, and Toyota are some of the manufacturers importing EVs to this country.
- The new tax credit is split into 2 parts: sourcing of critical minerals and assembly of batteries, each valued at \$3750.
 - These begin in 2023.

- 40% of critical minerals must be sourced from a country with which the USA has a free-trade agreement. This escalates each year until it reaches 80% in 2027, where it stays through the duration of the bill.
- 50% of battery components must be manufactured and assembled in North America. This escalates until it reaches 100% in 2029.
- It is possible that many EV manufacturers will not meet one or both of these requirements because they have to reorganize their supply chains and augment domestic manufacturing.
- Beginning in 2025, none of the critical minerals can be extracted or processed from a foreign entity of concern. This is obviously aimed at China, but it affects other countries as well.
- Beginning in 2024, none of the battery manufacturing can occur in a foreign entity of concern.
- Recycling of retired batteries that occurs in North America can be counted toward the required percentages.
- As noted above, final vehicle assembly must be in North America as of 8/16 (unless a binding contract had been signed and the customer is awaiting delivery). That is table stakes.
- The final assembly and sourcing provisions do not apply to used EVs.

There have been reports of intense lobbying happening around these requirements. We'll see if there is a grant of a waiver. There is also some rule-making to be done. For example, the NY Times wondered if a Chinese battery company like CATL were to build a facility here, whether that would escape the "entities of concern" provision.

This is a list of currently eligible vehicles on the

Department of Energy website: <https://afdc.energy.gov/laws/inflation-reduction-act>. The list applies to 2022. 2023 is TBD.

Price Caps and Means Testing

- There is a price cap for new vehicles of \$55,000 for a sedan and \$80,000 for an SUV, van, or pickup. For prospective Tesla buyers, it means the Model Y gets more support than the 3. These definitions are drawn from the EPA classifications.
- Used EVs have a price cap of \$25,000.
- A used EV has to be at least 2 years older than its model year.
- A used vehicle is eligible if it is the first transfer of a vehicle subsequent to the enactment of the legislation. It is intended to prevent multiple incentives per vehicle. Further, the transfer has to be to a different person (i.e. a person cannot get the incentive for buying a vehicle off-lease).
- The used incentive cannot be utilized by a person more frequently than once every 3 years.
- Eligible new car buyers are limited to a max adjusted gross income of \$300,000 for joint filers, \$225,000 for a head of household filer, and \$150,000 for a single filer.
- Used EVs are income limited to \$150,000 for joint filers, \$112,500 for head of household filer, and \$75,000 for a single filer.
- Neither the income limits nor MSRP cap are indexed for inflation over the 10-year course of the bill.

The federal MSRP cap seems to work differently than it does for the state incentive. Based on reporting in the [NY Times](#) that said, "Rivian's electric pickups start at \$72,500 but can easily top \$80,000 with options," I am assuming that means the federal definition is inclusive of options. This differs from

what the state uses, which is the base MSRP of the trim level (i.e. excluding options). This will make it more difficult to have a chart of available vehicles such as there is with the CHEAPR website. The Department of Energy's Alternative Fuels Data Center will likely publish such a list, but it will have to be hedged as "may" be eligible. You can always use a VIN decoder, which will tell you the particulars of a vehicle such that you can determine if it is eligible. The downside of that approach is that it is not usable unless you are far enough into the purchase process to have a VIN. Anyway, here it is on the NHTSA website: <https://www.nhtsa.gov/vin-decoder>

It will be interesting to see if as we, hopefully, emerge from the supply chain mess, manufacturers will make an effort to get their vehicles under the price caps. Of late, it has been going in the other direction.

Keep in mind that the income caps are binary. If you are within the cap, you get the full credit. If not, you get nothing.

It strikes me that having both an MSRP cap and means-testing is overkill. Until the income-limited incentives were introduced in 2021 for CHEAPR, the program used the MSRP cap as an indirect form of means qualification. It would probably get you to a similar place and be less intrusive.

In general, the more rules, the more difficult it is for the consumer, resulting in lower utilization than otherwise might have occurred. There are a bunch of rules here.

Tax Credit and Transference

- The new tax credit allows the purchaser to take the tax credit as is done now at filing time with the flexibility to use either the current or prior tax year to determine income eligibility.
- Alternatively, the purchaser can assign the credit to

the dealer and receive the funds as a rebate at the time of purchase. This also solves the problem of someone who doesn't have enough tax liability to use a standard tax credit.

- Transferring of the credit to a dealer goes into effect in 2024.
- When the credit is transferred, it is up to the dealer to verify eligibility. Only the prior tax year can be used in this instance and hopefully, there are adequate privacy protections in place.
- In order for a dealer to accept the transfer, they have to be registered with the Secretary of the Treasury. There appear to be some considerable burdens placed on dealers to comply with the program.

E-bikes and auto cycles

- Sorry, nothing here. An e-bike incentive was included in Build Back Better, but did not make it to the IRA.
- Auto cycles, such as the 3-wheeled Aptera vehicle do not qualify, nor do electric motorcycles.

Those individuals who had a binding contract, but had not taken delivery, of a vehicle that lost eligibility on August 16th or will lose eligibility next year, will still receive the tax credit. To be clear, the contract had to be in effect before August 16th, 2022.