It’s January 2023 – Do You Know Where Your EV Incentives Are?

Inflation Reduction Act Incentives Officially Begin – But Which Cars Qualify?

It is anticipated that consumer confusion will ensue with the advent of the new incentives. Not only have they become a lot more complicated, but many manufacturers have yet to finish the registration process that certifies vehicles. Also, the IRS, which was handed the Herculean task of crafting all of the implementation rule-making in the span of about 4 months, unsurprisingly, is not yet finished. The Department of the Treasury has announced a 3 month delay. This most particularly affects the rules concerning batteries. The incentive provisions are, therefore, being phased in.

No More Manufacturer Cap

The manufacturer unit sales cap is now gone. That means that Tesla and General Motors are no longer excluded on that basis. Toyota, Ford, Nissan, and Hyundai/Kia had also either surpassed or were close to reaching the 200,000 unit threshold, which will now not apply to them either. (Toyota and Hyundai/Kia are presently disqualified due to final assembly not occurring in North America.)

Delay in Battery Rules Means 3 Months Without Them

The biggest challenge for the automakers will be to source the required percentage of critical minerals, either domestically or from countries with whom we have a free trade agreement. A somewhat lesser challenge will be to have battery assembly located in North America. But for this 3-month window before the rules are complete, they simply don't apply. **This is, in effect, Treasury's "Buy Now" sale!** Incentives for most BEVs will almost certainly decline when the new provisions get implemented as this degree of supply-chain reorganization will take some time, but for now, enjoy the full $7500 incentive. **Note:** The buyer must be in possession of the vehicle prior to the implementation of the new battery rules to take advantage of the full incentive if the new rules would cause the vehicle to lose all or some of it.

Absent the new battery rules, PHEVs are subject to the battery pack size rules that existed before the IRA. When the new rules kick in, PHEVs will be eligible for the same incentives as BEVs.

Which Cars Are Eligible?

Good question, and not exactly straightforward. This is the page on the IRS website that lists the manufacturers and specific vehicles. A number of manufacturers, namely Kia, Mazda, Mercedes, and Subaru are listed as having entered into an agreement to become a "qualified manufacturer," but have not submitted specific vehicles. Other manufacturers are missing from the page altogether. Specific vehicle models are listed for Audi, Ford, GM, Nissan, Rivian, Stellantis, Tesla, Volkswagen, and Volvo. For the vehicle models that are listed, eligibility is not guaranteed (see MSRP cap below). The IRS advises this page will be updated on an ongoing basis.

MSRP Cap

Treasury is defining MSRP as the manufacturer's suggested retail price, including options, accessories, and trim (but not destination charges). This may be different than what you pay for the vehicle. For example, if a dealer either discounts or surcharges the price, it is still the price as suggested by the manufacturer that rules.

How a vehicle is classified with respect to body type determines which MSRP cap applies. Vans, SUVs, and pickups have an $80,000 cap. All other vehicles have a $55,000 cap. And it looks like the IRS is being persnickety about this classification insofar as crossovers, which in the marketplace are direct competitors to SUVs, are not classified as SUVs and are subject to the lower cap. Some examples are the Ford Mustang Mach-E, the 5-seat version of the Tesla Model Y (the 7-seat version *is* classified as an SUV), all of the non-AWD versions of the VW ID.4. It doesn't make a lot of sense to me either. Unfortunately, we foresaw this problem and included it as part of our comments to the IRS. It is a sneaky thing that ends up overweighting the incentives toward PHEVs.

Just because a vehicle is listed on the IRS web page does not mean that there is a trim level that falls under the cap. The cheapest Tesla Model Y, for example, is $65,990 (long range, non-performance, 5-seat configuration), obviously more than the $55,000 cap.

Other rules

Personal income rules are in effect – $300K for joint filers, $225K for head of house, $150K for a single filer. You can use current (purchase) year or prior year income to make this determination.

The incentive is in the form of a tax credit for when you file

your 2023 taxes. The transfer option doesn't take effect until 2024. Yes, you can use a tax credit if you use the standard deduction. The credit is good insofar as you have the tax liability to burn it off. To the extent the credit isn't used, it goes away – no carry forward. Leasing the vehicle is a way to utilize the credit if you don't have the tax liability.

The used EV incentive is now in effect.

North American final assembly rules have been in effect since the legislation was signed by President Biden on August 16th. The Department of Energy has a VIN decoder on this page, which you can use to make sure. Unfortunately, a VIN is not available until late in the sales cycle if you custom order, though it is available for a car on the lot.

The seller is required to send to the IRS the vehicle VIN and the purchaser's tax ID. The purchaser is required to include the VIN when filing for the credit.

For a more complete description of how the new incentives work, please see our incentives page.

Note: All incentive advice is to the best of our knowledge and cannot be guaranteed. Also, IRS rule-making may subsequently change things.

Westport Police Add New Tesla Model Y

New Model Y Enters Service

The Westport Police have entered a new Tesla Model Y into service. It has been fully customized for law enforcement duty.

The department now has a subscription to Tesla-fi and we will be monitoring electricity use and battery degradation. We are in touch with the police and may look at the metrics more broadly as we did in our extensive analysis of the Model 3 which was published about 18 months ago here.

The WPD has been lean-forward with respect to EVs from the start. They have been very happy with their Teslas, which exceed the performance and safety standards required for patrol cars, and which have gotten great feedback from the officers that have used them. But they have also acquired other non-Tesla EVs for things like parking patrol, the detective squad, and school patrol. In addition to EVs, they have installed level 2 EV chargers at the two Metro-North parking areas, which are under their management. Outside of commuter hours, these chargers are open to the public. Some of them are convenient to an area where there are a lot of restaurants and shops. And a number of them are powered by a solar array that sits atop the Saugatuck depot building. The police have also been supportive of EV Club events when we have needed to use the Saugatuck parking area.

The department was recognized by the CT Southwestern Area Clean Cities Coalition for its Municipal Readiness Award. The photos below are Chief of Police, Foti Koskinas, accepting the award and a front view of the Model Y. The award ceremony was December 13th.

October CHEAPR Update

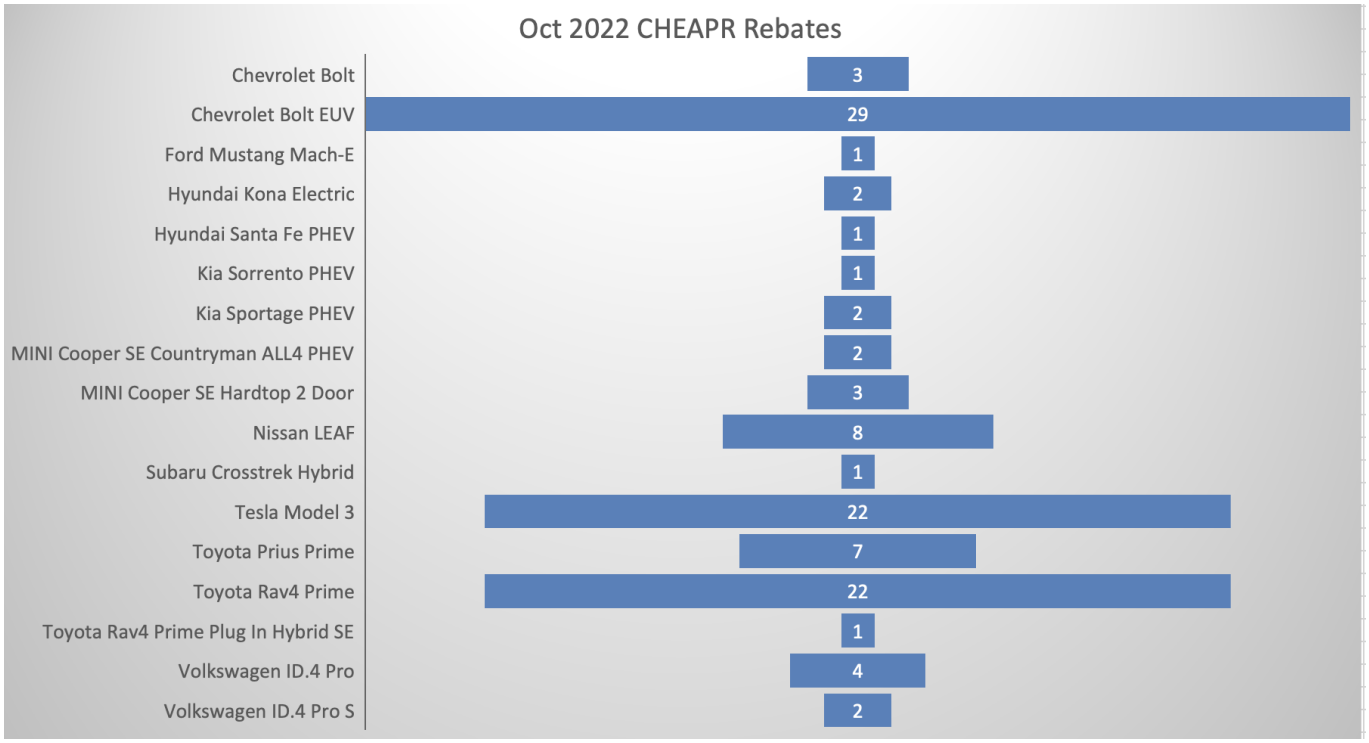
Steady as She Goes – Rebates Have Plateaued for the Time Being

CHEAPR rebates are up over 50% since the MSRP cap was raised in July. Rebates averaged 74 per month for the first half of the year. Since that time, that has increased to 115. It has been holding steady at that point. October had 111 rebates. September was restated (a common thing) to 118.

There is a CHEAPR board meeting on Dec. 15, so any updates regarding progress on implementation of the new aspects of the program will be communicated in our next update.

Below is the distribution of rebates by model. This is done using the data as it directly comes from CHEAPR. It can be a

little unpredictable how they characterize models. For example, there are 22 Toyota RAV4 Prime and 1 Toyota RAV4 Prime Plug in Hybrid SE. I suspect it is just a matter of not handling the data consistently. My preference would be to consolidate the model name.



The Toyota RAV4 Prime, which had been the dominant rebated vehicle is no longer alone. Since Chevy emerged from its Bolt battery recall and restarted production, the Bolt numbers have climbed significantly. The EUV version hugely outperforms the original hatchback.

Now that the base model Tesla Model 3 is again eligible, it is a regular high performer, though delivery timing causes the numbers to fluctuate.

The Toyota Prius, once the fuel-efficiency darling of the automotive world has been cannibilized by all manner of plug-in vehicles entering the market. The plug-in version of the Prius, the Prime, has taken a nosedive ever since the RAV4 Prime was unveiled. The RAV4 Prime is, of course, in the popular SUV segment, and it has a longer electric range than the Prius Prime, 42 vs 25 miles. Toyota has announced a

refresh of the Prius beginning with the 2024 model year. The PHEV reportedly is going to have an electric range of about 40 miles (this car has not yet been EPA rated).

There were no income-limited rebates awarded in October.

When we have December data, we will update our dealer rebate profile. Look for it in February.

Charging Cluster at Hotel Marcel

24 Chargers at Hotel Marcel in New Haven

Photos: Hotel Marcel, Maxwell Electric Shuttle Minibus parked at an EVConnect charger, Solar Canopy and Tesla chargers, charging under the canopy

At long last, the chargers at the Hotel Marcel in New Haven are live. The hotel is located in the Long Wharf area, next door to IKEA. There are 12 Tesla 250 kWh Supercharger stalls and 12 level 2 chargers from EVConnect with J-1772 connectors. The infrastructure is present to triple the number of L2 chargers to 36. You can use the EVConnect app to use them. Just download it from Apple App Store or Google Play, then scan the QR code, use the Guest Checkout option, then charging starts right away. Alternatively, if you already have a ChargePoint account, you should be able to start charging by just tapping your phone on the charger, or using the ChargePoint app. The rate for the level 2 charging is set by the hotel and it is being made available gratis. Tesla is responsible for setting the supercharger rate.

The IKEA next door has another 2 level 2 chargers (free) and there is a planned Electrify America level 3 installation coming.

The lobby area of the hotel is open 24/7 with rest rooms and food available. While you are there, check out this very cool facility, housed in a 1960's landmark Brutalist building retrofitted as the nation's first net-zero hotel. Power comes from solar panels on the roof and solar canopies, complemented

with batteries, energy efficient electric appliances and fixtures. Even the elevators have “regenerative braking” when they are descending. The 11th Commandment: No electron shall go to waste. The insulation is very tight, including the German-made windows, which allow for passive heating in the winter. All of this makes for effective sound insulation, as well. Even though it is near a busy highway, the rooms are totally quiet.

20 Chargers Coming to Fairfield

The Town of Fairfield will be installing 20 level 2 charging ports (10 dual port units) at Sullivan Independence Hall sometime in first quarter 2023. These are intended for use by the town fleet. The town doesn’t have the vehicles yet – like with everyone else, deliveries are slow. But it’s great they’re thinking ahead. These are networked and could be repurposed for consumer use, but it is not known if that will happen.

Both the Hotel Marcel and the Town of Fairfield made use of the utility incentives for these installations.

Ford Dealers Cry Foul Over New Program Rules, But Why?

Post by Barry Kresch

Dealerships Up In Arms Over Ford

Demands

Sparks are flying between Ford dealerships and Ford Motor Corporate over a looming deadline for dealers to declare whether they want to opt-in to Ford's new structure for selling EVs.

Ford Plan

Despite the success of its two most recent consumer battery electric vehicle (BEV) entries, the Mustang Mach-E and the F-150 Lightning, Ford CEO Jim Farley said the company needs to further streamline its operations and specialize if it is going to become a leader in electric vehicles and achieve the kind of margins seen at Tesla. Farley announced in March that Ford would be splitting the company into 3 divisions: Ford Blue Oval, Ford Pro, and Ford Model e. Blue will sell the company's ICE vehicles, including conventional hybrids and plug-in hybrids. (Ford currently sells only 1 plug-in hybrid, a version of the Escape, a low-volume vehicle with only 72 registered in CT as of July 1.) Pro is what it sounds like – commercial vehicles. Model e dealers will be the only dealers entitled to sell BEVs. Dealerships electing not to go with the certification remain Blue Oval.

Farley was quoted by CNBC as saying, "We are going all in, creating separate but complementary businesses that give us start-up speed and unbridled innovation in Ford Model e together with Ford Blue's industrial know-how, volume and iconic brands like Bronco, that start-ups can only dream about."

When Ford announced the particulars at its dealership meetings in September, dealers were advised that in order to be a Model e certified dealership, they must be prepared to invest up to $1.2 million for infrastructure, do business under certain prescribed rules, and make a decision by 12/2 (pushed back

from the original deadline of 10/31). Those dealerships moving forward with this arrangement are to be Model e Certified Elite. Ford is also offering a lower-investment tier, just Certified (no Elite) of $500,000 that comes with a cap on the number of EVs they will get. According to Autoblog, the cap is 25 vehicles annually and they are not permitted to be displayed on the showroom floor. This may be a useful option for lower-volume dealers.

Other requirements:

- Dealers have to ensure the chargers remain in good working order.
- Chargers must be public-facing.
- Other investments are required for equipment to service EVs, and again, they have to do this anyway.
- Pricing transparency. Dealers set the price of the vehicles, but every customer of that dealer gets the same no-haggle price. The price can be different at different dealers.
- Transactions can be done online or at the dealer.
- Dealers have to deliver EVs to buyers.
- Dealers must have pick up and drop off service for when vehicles need to go to the shop.
- Ongoing staff training is required. (I've lost track of how many club-members report they know more than the salesperson.)

The Model e arrangement begins in January 2024. Dealers who do not opt for Model e will be given another window to do so in 2025 to begin selling EVs in 2027.

CT Dealers Invoke the Power of the State

The Farley plan is bold, but it seems to be too bold for CT Ford dealers. They complain that it is too high a mandatory

investment in too short a time frame. In addition to the investment, dealers are reportedly not happy about the restrictive pricing policy, and generally being told what they can and cannot sell on any level.

As reported in CT News Junkie, local dealers have gotten state and federal politicians to speak out on their behalf. U.S. Senator Richard Blumenthal is quoted as saying, "I'm convinced there is a case that needs to be investigated here." Presumably, he is suggesting that the Federal Trade Commission get involved. From State Representative Roland Lemar (D – New Haven), "I think we all are going to call on Ford strongly post this meeting to rescind these terms and to restart this conversation." And State Senator Heather Somers (R – Groton) opined, "The amount of investment required for our local dealers is staggering, absolutely staggering."

How often does it happen that private businesses are able to get government to intervene in a commercial dispute?

Our Perspective

Ford's plan is an aggressive gambit of the kind we haven't often enough seen from the legacy automakers. Even though Ford is among the best positioned of these companies from the perspective of its having developed two of the most successful EVs, Farley deserves credit for pushing forward and betting on innovation.

But let's unpack the dealership complaints.

Regarding notice, the dealerships have known this was coming since March. Though the specifics were not announced at that point, it looks to us like there were ongoing discussions with dealers, which is how the non-elite version of Model e came about as it was not a part of the earlier announcements. Yes, they have to make a big decision, but it did not come out of the blue.

According to Inside EVs, 90% of the upfront cost is for the installation of DC fast charging equipment. It is unlikely that any dealer will pay anywhere near $1.2 million. There are state and federal incentives available and they are generous. The state incentive is through Eversource and United Illuminating. DCFC installations can receive up to $150,000 (baseline) or $250,000 if the location is an under-served community, and the funds can cover 100% of make-ready (the expensive task of bringing the power, a lot of power, to the location) and up to 50% of the cost of the hardware. Furthermore, the make-ready can include oversized panels or additional conduit for future-proofing purposes. There is also a provision for EV chargers in the Inflation Reduction Act (rule-making for the IRA is still in progress). I would not be surprised if these incentives cover ~70% or more of the cost. Of course, Ford is not in a position to make specific promises about what in the way of incentives a given dealer would get, so they have no choice but to state the max cost.

If a dealership is going to be in the EV business, they need chargers anyway! Ford notes the ubiquity of its dealerships. This part of the plan will put EV chargers front and center and turn that necessity into a marketing asset. Ford has financing programs in place. And the dealers can charge for the electricity.

Most Dealers May Not Be Like CT Dealers

Not all dealerships oppose what Ford is asking. In fact, CT appears to be in the minority. CNBC quotes Tim Hovik, a Nevada dealer and head of the Ford National Dealership Council which represents Ford's franchised dealers, who characterized the plan as "well-received."

"The dealer body wholeheartedly agrees with Jim's assessment, we very much want to be the most valuable franchise out there.

We’re big fans of that,” said Hovik. “It’s really all about growth.”

No local Ford dealers spoke on the record in the CT News Junkie article. The only dealer quoted was Jeff Aiosa in his capacity as an officer of the CT dealer association. He owns a Mercedes dealership.

Lemonade

Dealerships have often been a weak link in EV sales. Not all of them, but many. Their innate conservatism is part of what is causing the traditional car companies to badly lag Tesla. The share of registered EVs in Connecticut that are Tesla is higher in 2022 than it was when I first began tracking adoption in 2017.

Ford’s Farley has commented that he would like to incorporate some of what he feels are the advantages of direct sales into the way Ford sells EVs. Ford, itself, cannot turn to direct sales. There are franchise laws and they’re not going away. I assume he feels it is pointless to challenge them even if he wanted to.

When I read about the Model e plan, I thought, “He’s figured out how to make lemonade.” The dealership in this model actually becomes an asset.

If every Ford dealer has publicly accessible DCFC prominently displayed, it sends a message to the consumer that this is a brand that is serious about selling EVs. The pricing transparency may work to reduce the dealer markups over MSRP or attempts to force customers to buy options they don’t want. Ford has been opposed to these practices. If owners of other brands are allowed, even encouraged, to charge at a Ford dealership, it is a way for them to see what Ford is offering and how they approach selling EVs that may influence the purchase of their next vehicle.

Aside from the chargers and pricing, the other requirements listed in the bullet points go beyond what many dealers offer today, but they will all contribute to a better consumer experience.

Ford is not so gently encouraging specialization. While a Certified-Elite dealer can continue to sell ICE vehicles, the program pushes them to emphasize, and I suspect at some point only sell, EVs.

Ford's plan is a serious attempt to solve the dealership conundrum. It is different than the "put up or shut up" approach of GM, where the company ended up buying out 17% of its Cadillac dealerships that were not prepared to invest in EVs.

I beg to differ with Senator Blumenthal. We don't need an investigation. We need forward-looking, consumer-friendly ways of doing business.

Update:

Multiple sources are reporting that two-thirds of Ford dealerships have elected to participate in Model e with the majority opting for the Elite certification level. There are some other areas where like CT there is a more organized level of opposition.

Lawsuits have been filed by dealers and their associations against Ford. We don't have the Venn diagram to know the overlap between those who signed up for the program and those who filed suit. It is possible a dealership might opt-in to Model e to avoid being shut out of EV inventory and still participate in the lawsuits pushing back on Ford. A description of the cases can be found at FordAuthority.com. The article mentions some dealers and associations, but has no mentions regarding Ford dealerships in CT.

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.

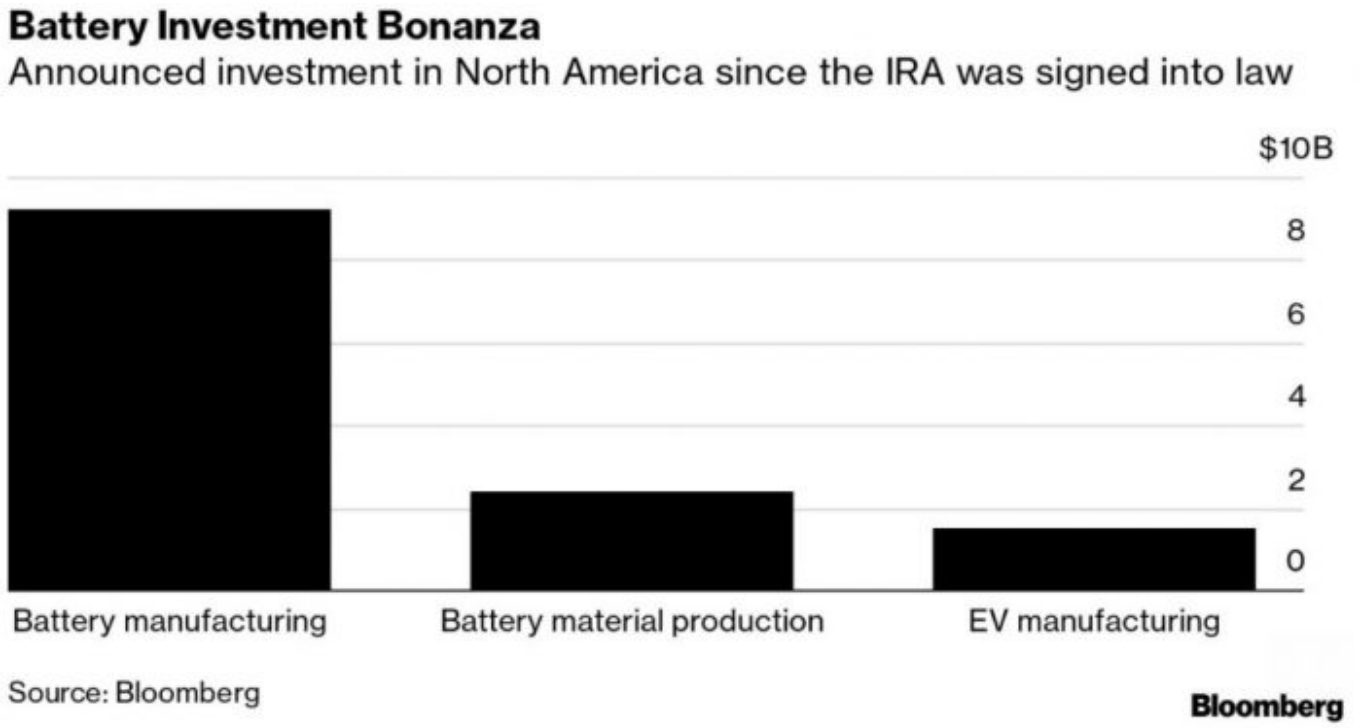
The usual disclaimer – This is based on the latest information available and is not a legal opinion.

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.



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.

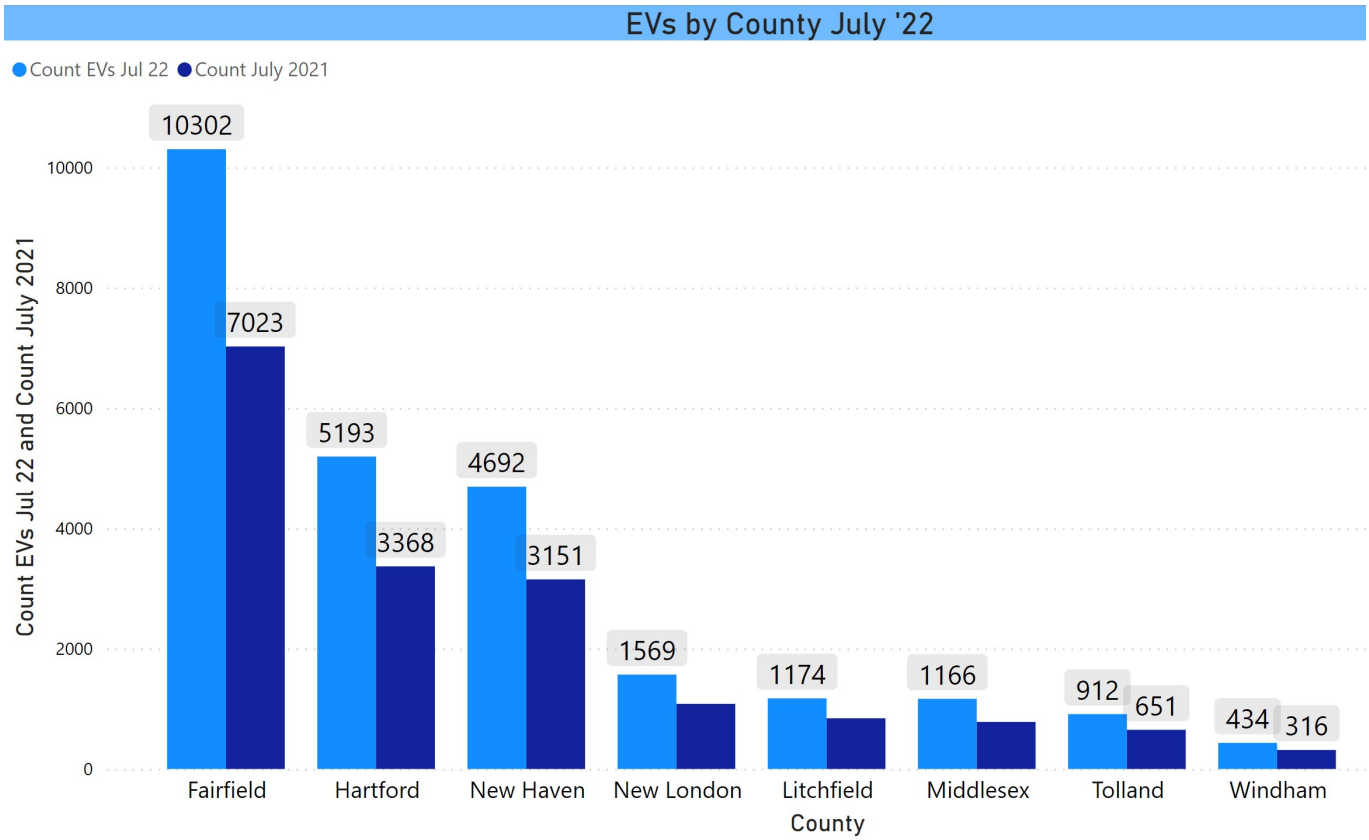
The IRA EV consumer purchase incentives suffer from being too complicated for consumers to easily negotiate. Our comments seek to address this. The IRS is working to have its rule-making done by the end of the year.

Geography of CT EVs July 2022

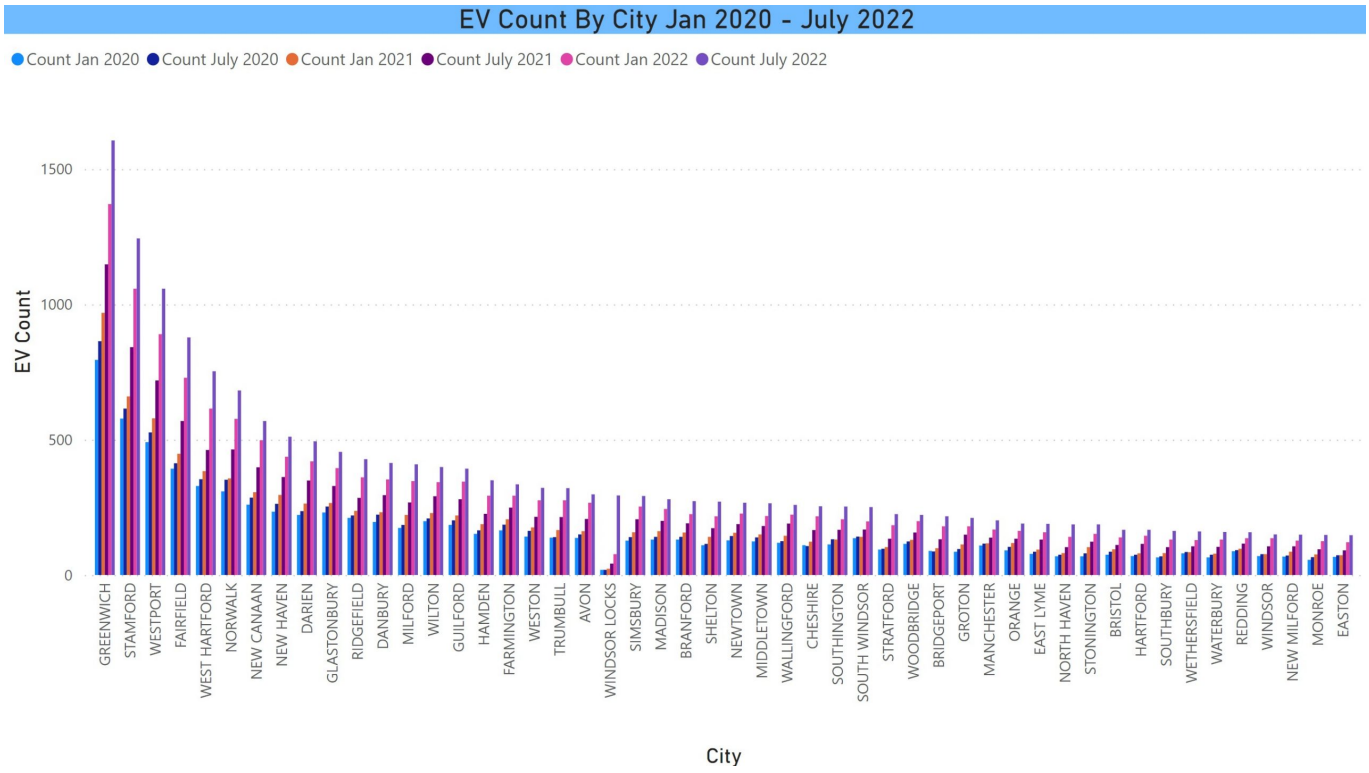
Geographic Profile – Counties and Cities July 2022

All data are from a Freedom of Information Act Request filed with the Department of Motor Vehicles for EV registration data as of July 1. Due to space constraints, many of the screen captures below do not show the full chart. All of the data is published to the website on the Interactive EV Dashboard. Complete charts are there, including slicers and sliders.

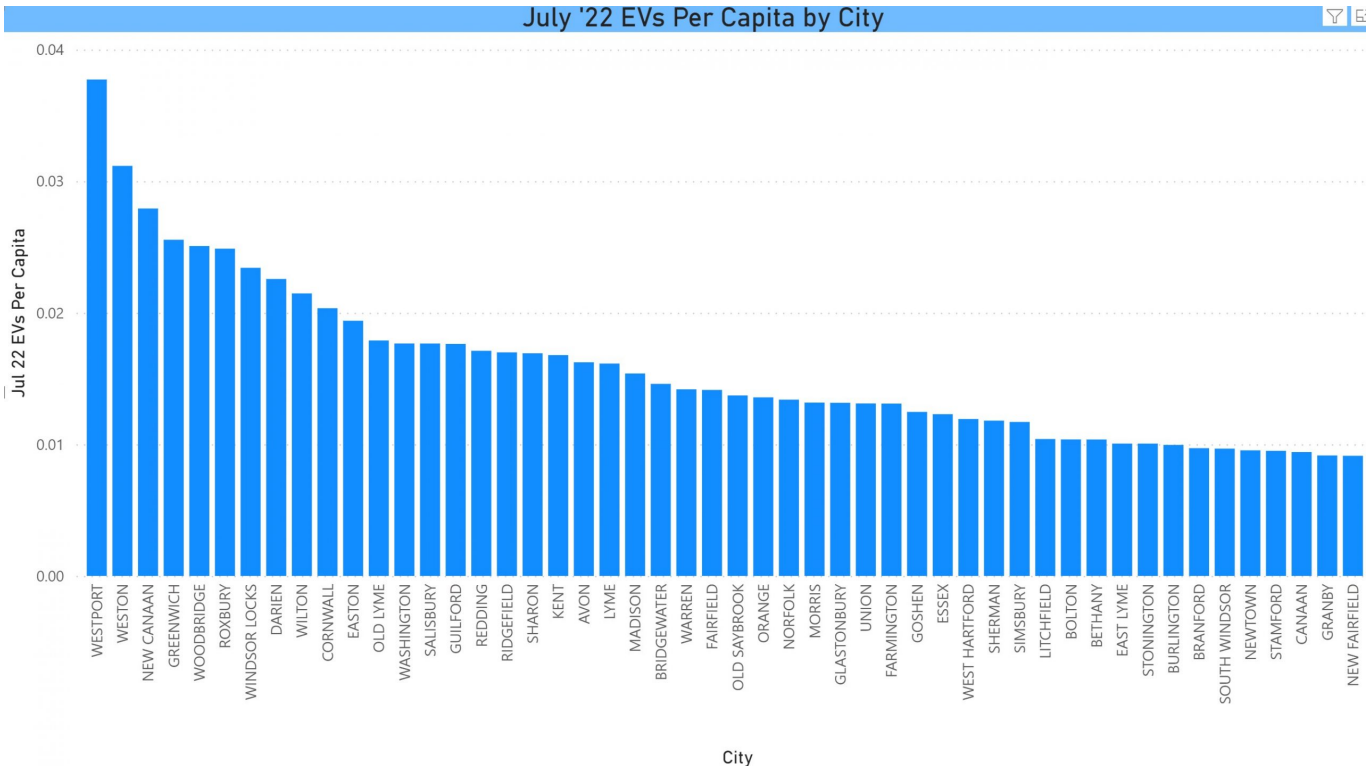
This chart shows year over year growth in EVs by County (July 2022/July 2021). Fairfield County continues to account for about 40% of the EVs registered in the state.



Greenwich, Stamford, and Westport retain their positions as the top cities in terms of EV registrations. This is the trend by city since January of 2020. While the top cities have remained consistent, there are shifting ranks among a number of cities. The top 3 have now exceeded 1000 registered EVs. In this static screenshot, there isn’t enough room to display all cities. They will be able to be seen when the dashboard is published (soon).

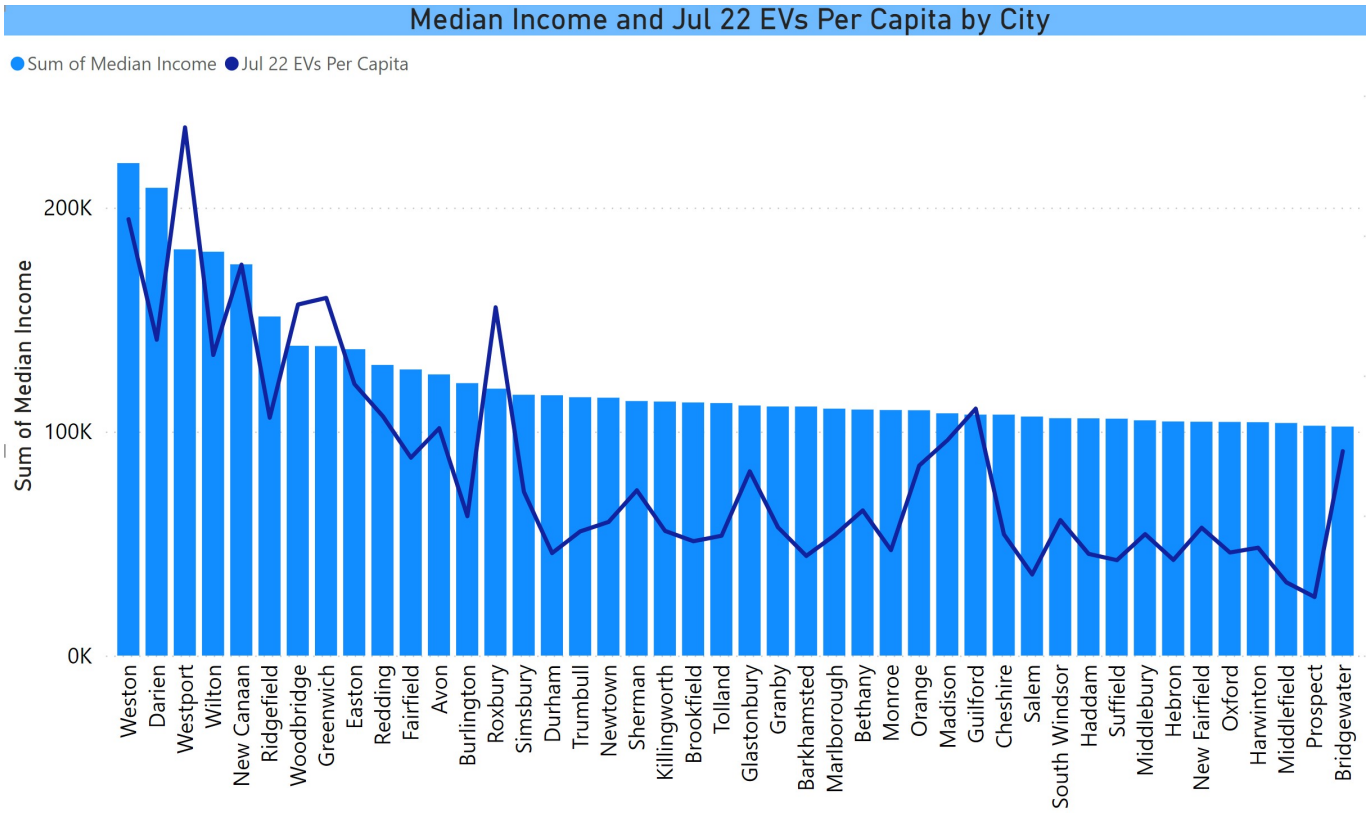


Westport remains the top city in EVs per capita, but some of the smaller cities, such as Weston and New Canaan are near the top when adjusted for population.



Below is a chart of cities ranked by median income (bars) with a linear overlay of EVs per capita. Yes, EV adoption still

skews upmarket, though there are exceptions, not all of them visible within the space of the screenshot.



Electric Plane Flyover

UPDATE: This event is postponed to Sunday, 11/13, same time, due to forecast for inclement weather.

A team of students from Lafayette College are planning an electric airplane flyover during a football game on Saturday, 11/19. Lehigh University is the opponent and the game is being held at Lafayette in Easton, PA.

The Pipistrel Alpha Electro airplane that will be used is

based in Hartford and, according to a Facebook post by Remi Oktay, one of the Lafayette students, will need to make 3 charging stops to get there. The first two stops are in CT – Waterbury-Oxford Airport at 6:15 AM, followed by the Danbury Municipal Airport at 8:30 AM. We understand that spectators will be accommodated.

None of these airports has charging facilities, so in what might be the coolest part of this, Ford F-150 Lightning owners are being recruited to use the vehicle's bi-directional charging capability to "refuel" the aircraft.

We wish them the best!

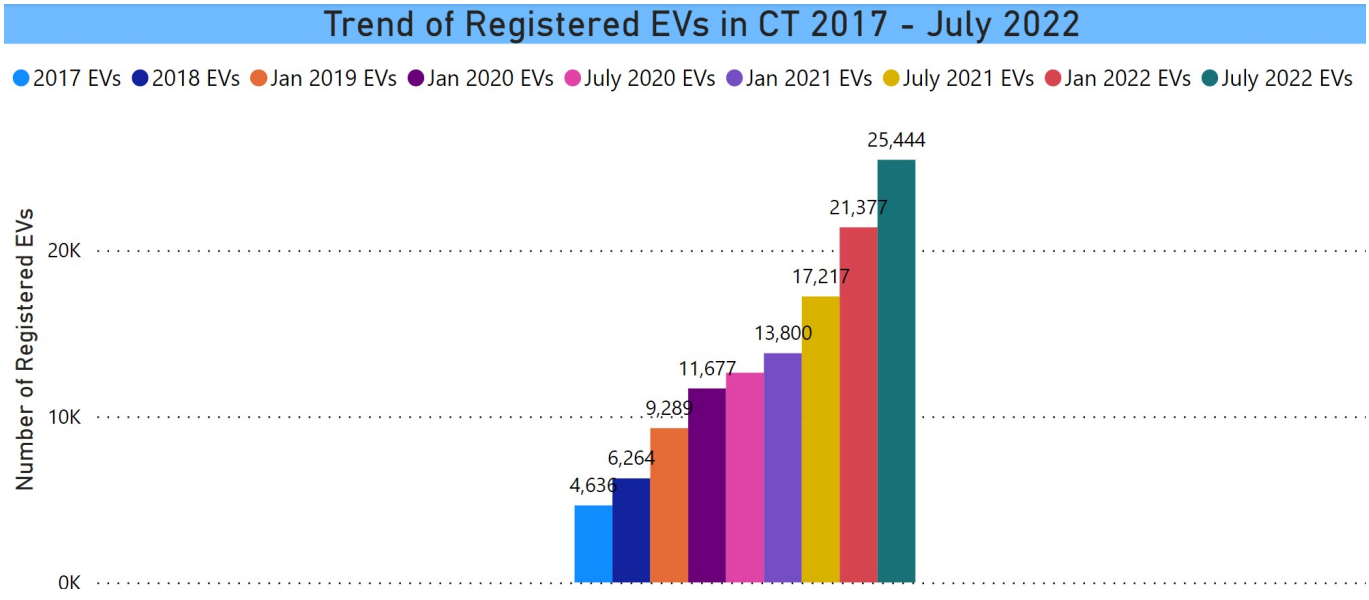
Are We There Yet?

What Is the Progress Toward the Goal in the ZEV Plan

This has been quite a year for EVs – a major revamp of the federal incentive, an improved CT CHEAPR program, utility incentives for charging, a federal infrastructure bill providing over $50MM to CT to support a public EV charging station build out along major highway corridors, and most importantly, increased consumer interest. Unfortunately, there have also been supply chain disruptions and chip shortages leading to higher costs and a lack of inventory. Tesla and Rivian raised prices. Tesla blamed missing its Q3 delivery target on snaggled logistics. Many dealers have been charging a "market adjustment fee", i.e. raising the price above sticker, sometimes way over sticker, or trying to force consumers to buy options they didn't order. Dealers aren't

keeping demo vehicles on the lot because they are selling whatever they get their hands on. Consumers report waiting for long periods to get their vehicle. And finally, while we welcome the removal of the manufacturer cap in the revised federal incentive, it looks like it will create confusion for the first year or 2 with its complexity and uncertainty with respect to manufacturers aligning their manufacturing to meet the requirements.

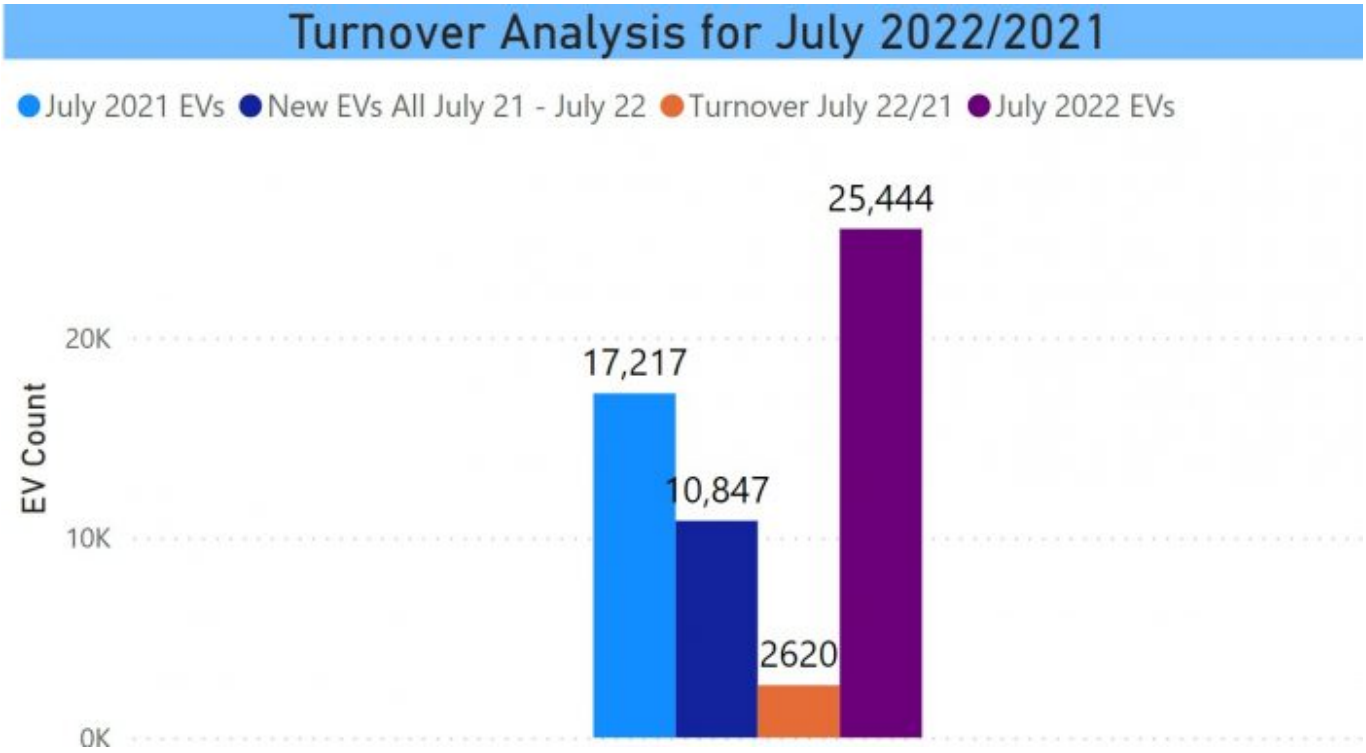
So where does that leave us? We are up to 25,444 EVs (defined as BEV, PHEV, along with electric motorcycles and fuel cell). That is how it is defined at DMV and what is published on its website. This is a July 1 number.



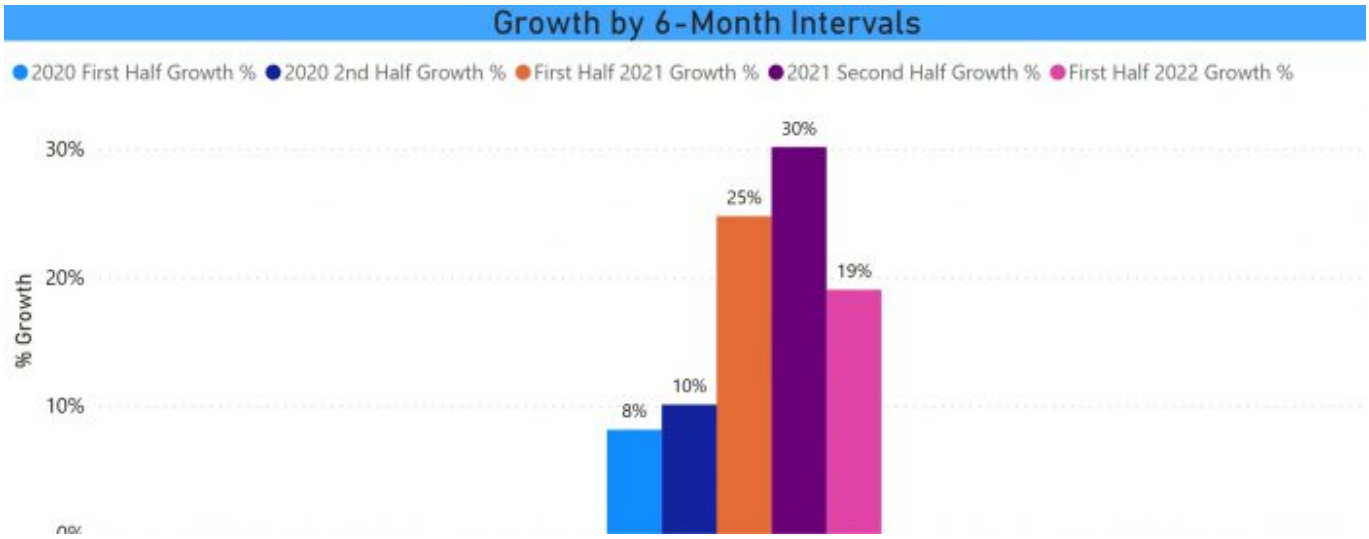
The state has established a goal of 500,000 EVs registered by 2030 with an interim goal of 125-150,000 by 2025. This comes to us via the Multistate Zero Emission Vehicle Action Plan Memorandum of Understanding. A lot of words for a non-binding document, but a useful yardstick for expectations, nonetheless. The chart at the top of the post represents where we've been (blue), where we are as of July 1 (dark blue dot), and where we need to be with the goals graphed on a straight line basis (magenta line). We need substantial increases every year, order of magnitude of 50% in net registrations. This is

the turnover over the past year, the equivalent of roughly a quarter of acquisitions. That means sales (new + used) need to increase about 75% annually to get to that net figure.

For whatever reason, one of the questions we always get is how many fuel cell vehicles are registered. 6.



We have recently been close to that but it becomes a taller order as the baseline gets higher. Growth over the past year is about 48% (25,444/17,217), but the pace fell in the past 6 months to a level below the same period one year ago. We should ideally be overachieving at this stage.



There is momentum, but it has yet to be manifest in the numbers. It is important to keep in mind that the steep percentage increases required to meet the goals will be a greater challenge as the baseline increases. And it may take another year to assess true demand levels.

Not So Fast

CHEAPR Rebates Dip in September

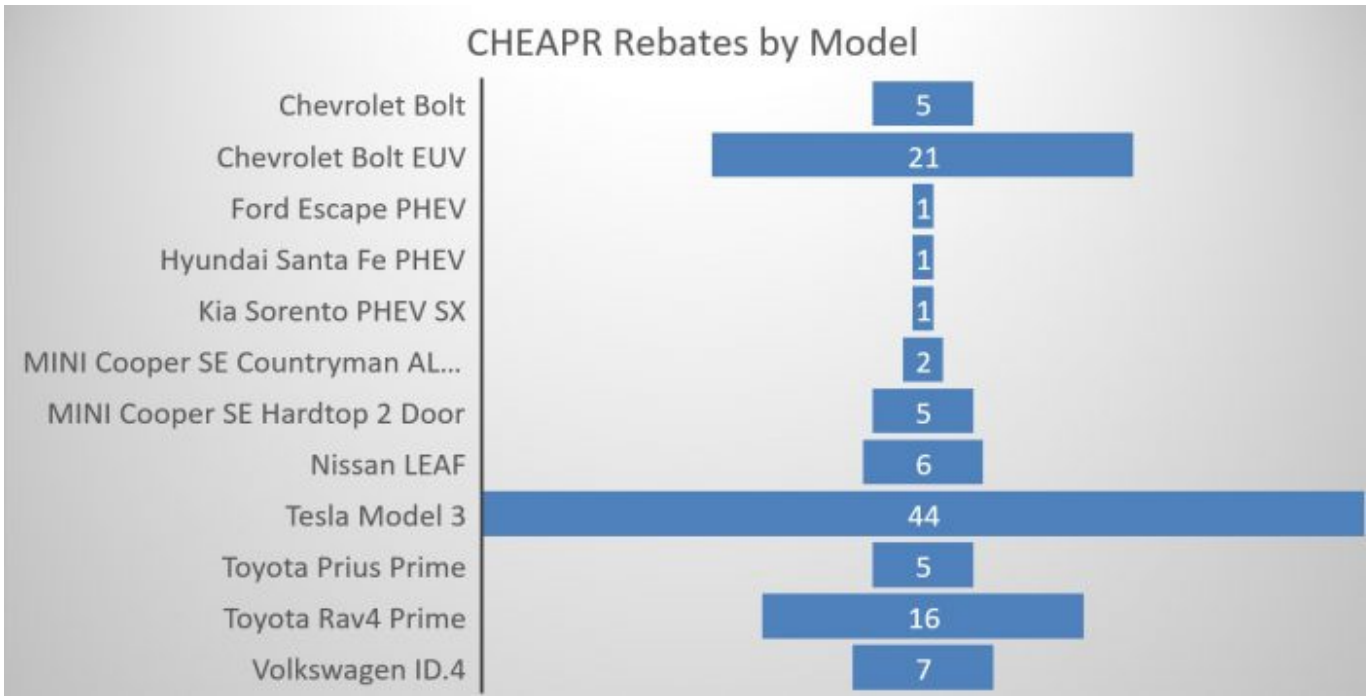
It looked like we were on a roll with rebates having risen from 59 in June to 93 (implementation of higher MSRP cap) in July to 136 in August (restated from an earlier 119), but September has retreated to 114. Maybe it, too, will be restated next month. Hanging over all of this are the continuing difficult market conditions.

I have made a technical change beginning with September. The spreadsheet published by DEEP double counts vehicles/people

receiving the Rebate+ New (supplemental incentive for income-limited consumers) rebates. It appears as a separate row in the file (i.e. one row for the standard rebate and a second row for the supplement) and the count reflects the number of rows, not the number of vehicles. (This is not the case for Rebate+ Used, where there is one row per vehicle.) So in the chart at the top of the page, there are 114 rebates listed, as opposed to 116 in the chart on the DEEP website. At this time, it is not causing major differences, but the potential for that to happen will increase when the new program goes live at some point next year.

There were 3 Rebate+ incentives in September – 2 new and 1 used.

Below is the rebate by model chart.



The spike for Tesla is similar to what we have seen in the past when Tesla used to be eligible. They batch their deliveries and clearly a bunch of Model 3 SR RWD arrived (the only eligible model). Also, as we've learned, a higher percentage of Teslas that are eligible for a rebate get the rebate. The reason is that it is baked into their order flow process, which is not the case with anyone else. DEEP has

reported that there are many eligible vehicles that do not get the rebate.

Chevy may have a success on its hands with the Bolt EUV. Most of the action in the BEV world has been with higher-end vehicles. It is a hopeful sign that a vehicle with an entry price of $27,200 that received 8/10 ratings from Car and Driver and Edmunds is getting traction.

For a period of time, CHEAPR seemed like the RAV4 rebate program as that vehicle had become so dominant. This month is way down. Is it because of inventory issues or is it the continued movement of the market towards BEVs? It is down roughly 40% from where it had been tracking. And the Prius Prime continues to be in a long term decline, which I speculate is likely about the noncompetitiveness of the vehicle and not the supply. Toyota now has one BEV, the bZ4X EUV. It is a 2023 model year, shipped in very limited quantities. Also, it was subject to a recall shortly after it began shipping. Sharp turns or hard braking could loosen a hub bolt, risking the wheel possibly coming off. Deliveries resumed earlier this month. This vehicle will be CHEAPR eligible. None are registered in CT as of July 1.