EV Club Supplies Vehicles for Wilton First Responder Training

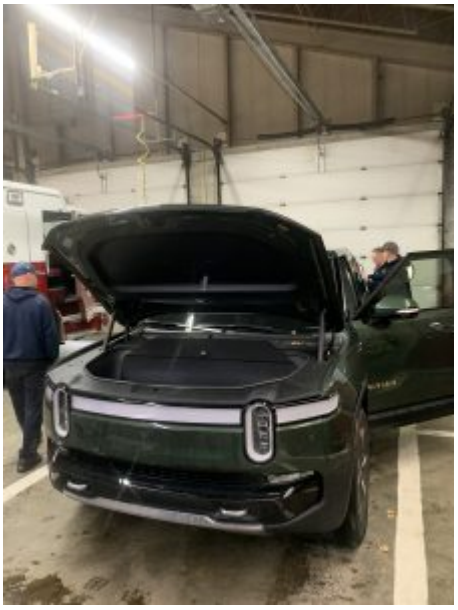
EV Training for Wilton Fire Department First Responders

There are 25,444 EVs in registered in the state out of roughly 2.2 million passenger vehicles but all signs point to an accelerating rate of adoption, especially once we get through the chip shortage, supply-chain issues, and there is more readily available supply. This is the time to start moving up the learning curve to be able to properly respond when they are involved in accidents. Fire departments around the state have recognized this.

The EV Club was happy to help out with first responder training by bringing vehicles for the fire department to learn about and inspect. The instructor, Jason Emery, is pictured in the photo at the top of the post (third from the left) with one of the vehicles, a Rivian R1T, members of the fire department, and Analiese Mione (third from right) and Barry Kresch (leftmost) of the EV Club. Jason explained how the charging works, where to find the high voltage cables (in case it becomes necessary to cut them in order to safely remove a vehicle occupant in an accident), the 12-volt batteries, and other EV features.

Instructor Jason Emery and Deputy Fire Chief John Plofkin, who has organized 4 days of training, are in the center of this photo.

Below is the Rivian charge port, with its J1772 and CCS connectors. To its right is the high-voltage cable which is accessed via the frunk.



The group is gathered for instructions. To the right is the information in the Rivian (with a handy QR code) for handling high voltage cables. A Chevy Volt was also inspected.

Demetri Spantidos brings his Model X around for inspection.

Dawn Henry brought her Model Y.

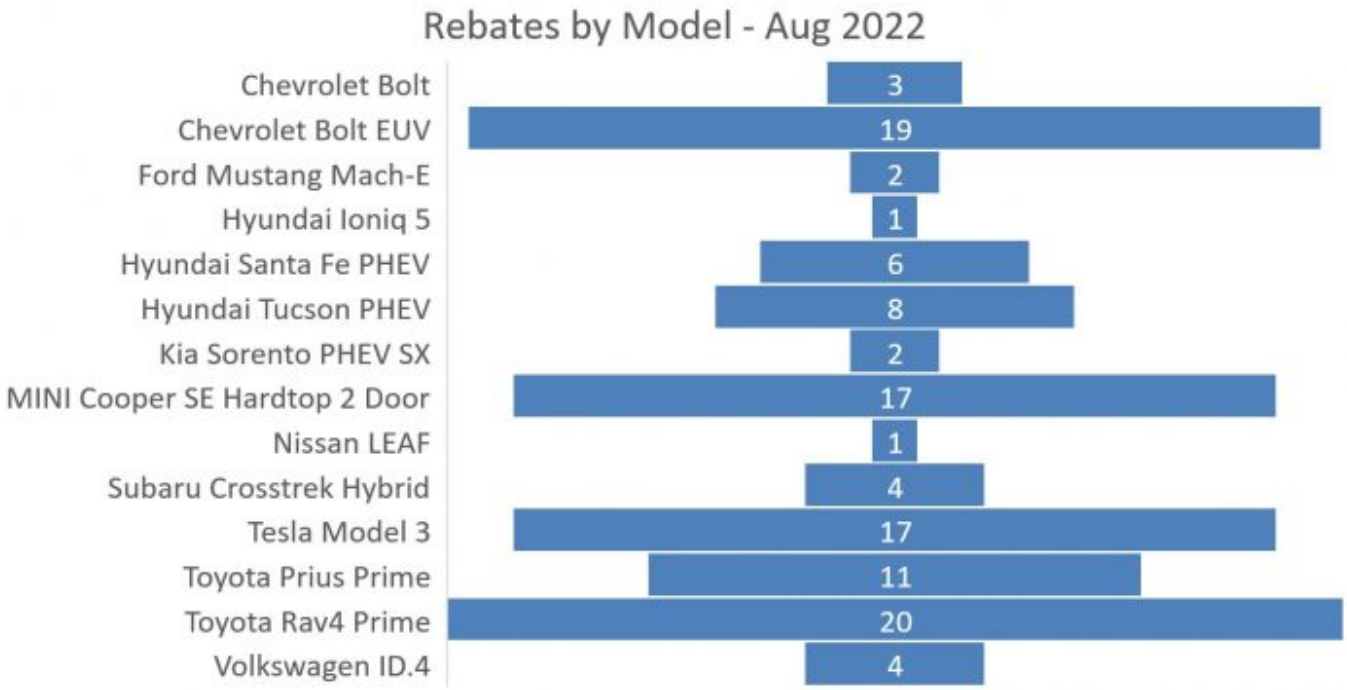
Signs of Life for CHEAPR

Rebates Increase Due to Higher MSRP Cap

CHEAPR rebates rose to 115 in August, and July was restated to 92, up from 57 in June and the low point for this year in February of 50. There are several models that received rebates that would not have been eligible before the increase in the MSRP. Unfortunately, there were no income-limited (LMI) rebates in August. The revised LMI rules, along with the other program changes that require back-end development, are still a ways away from implementation. It won't be until next year when all the changes are live. DEEP has published a timeline, but as we get closer and dates become more definitive, we will update.

The presence of the Mustang Mach-E, Tesla Model 3, Hyundai

Ioniq 5, and possibly some of the VW ID.4 are the result of the more generous MSRP allowance. The Chevy Bolt is finally making a rebound, and it is the new EUV variation that overwhelmingly dominates in this tranche of rebates. (We don't know if this is driven by consumer behavior or GM production priorities.) This is the first month in quite a while where the Toyota RAV4 Prime hasn't been the overwhelmingly dominant model. Another change is that BEVs accounted for a majority (56%) of the rebates. Overall, BEVs, which tend to be more expensive, account for 60% of registered EVs.

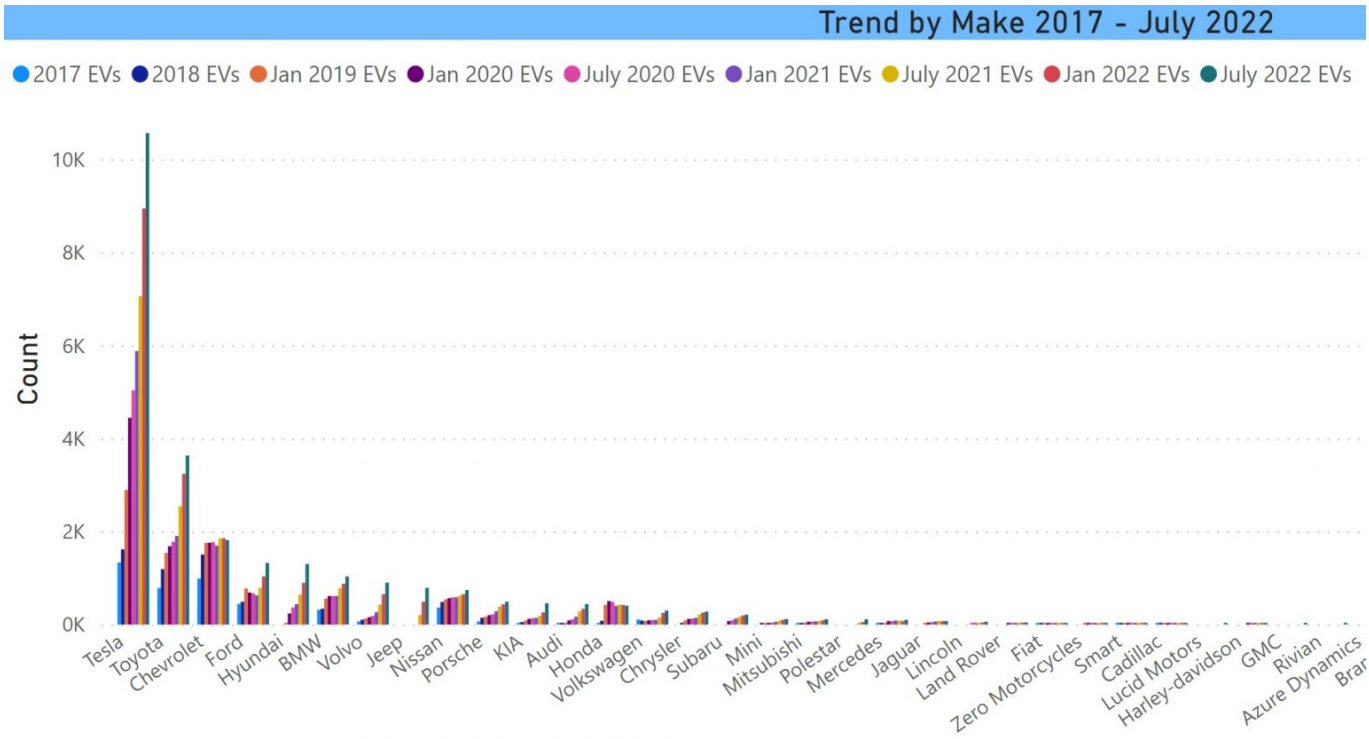


Tesla Still Driving EV Adoption

Registered EVs by Make

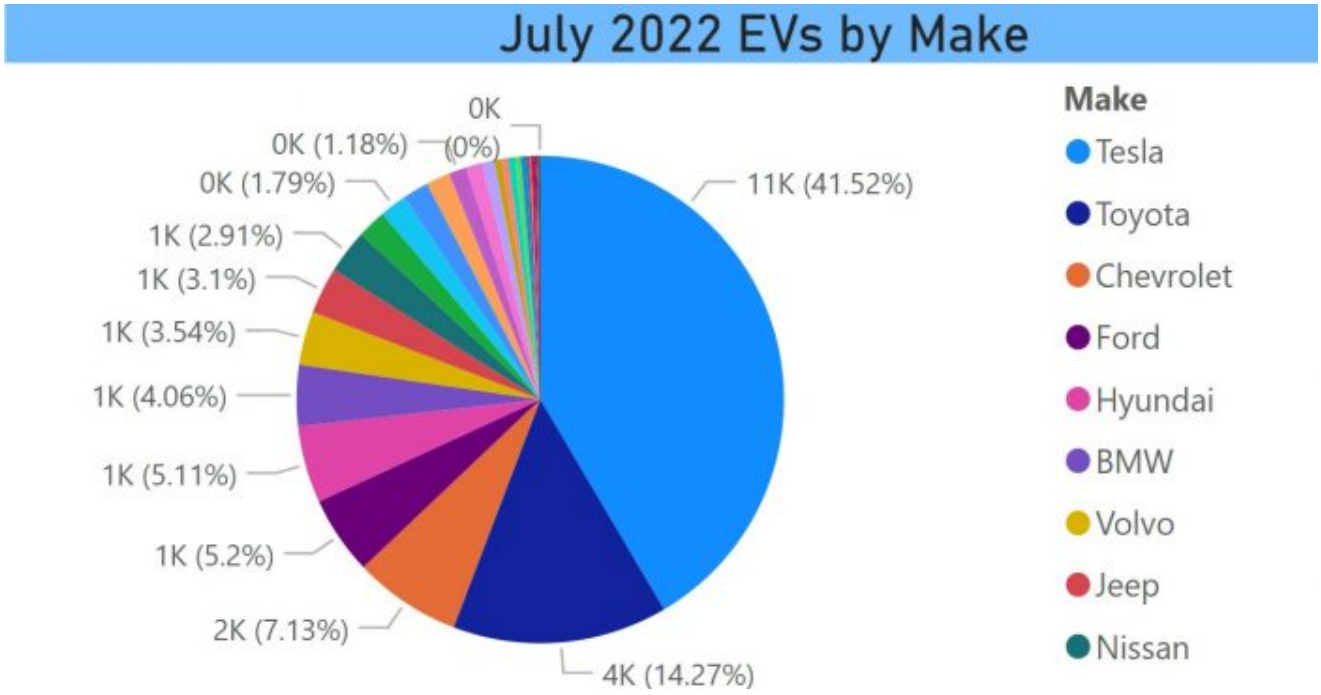
The pace of new EV model introductions has dramatically increased over the past year, but it is still Tesla that is driving the largest share of adoption. In other words, Tesla leads in overall registrations, as expected, but continues to add more EV registrations than anyone else. These are crazy times as consumers and the industry wrestle with the fallout of a war, chip shortage, and disrupted supply chains. We don't know how the trends will shake out, but for the first time we can really see a broader consumer EV demand across the board.

This is the trend of registrations by top EV makes. There are a relatively small number of companies that account for the bulk of the registrations, followed by a (very) long tail, longer than this static screenshot can accommodate. (An update will be posted to the EV Dashboard, which has the interactivity.) The chart is ranked by registrations as of July 1, 2022.



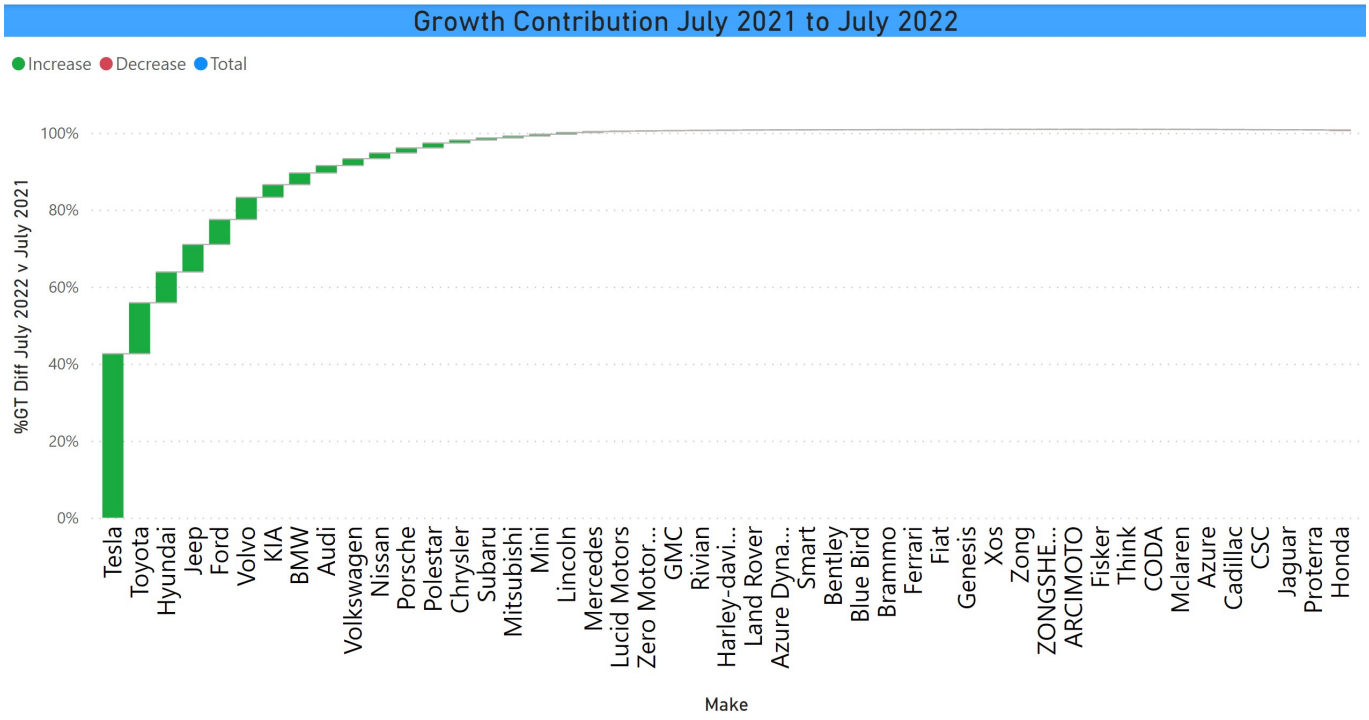
Tesla has pretty much maintained market share. It is responsible for 42% (the same as in January) of all plug-in

vehicles and 69% of BEVs, which is down from 71% in January. The movement in the numbers reflects the continuing shift in the market to BEVs. Both pie charts have the same title, but the second one is filtered for BEVs.

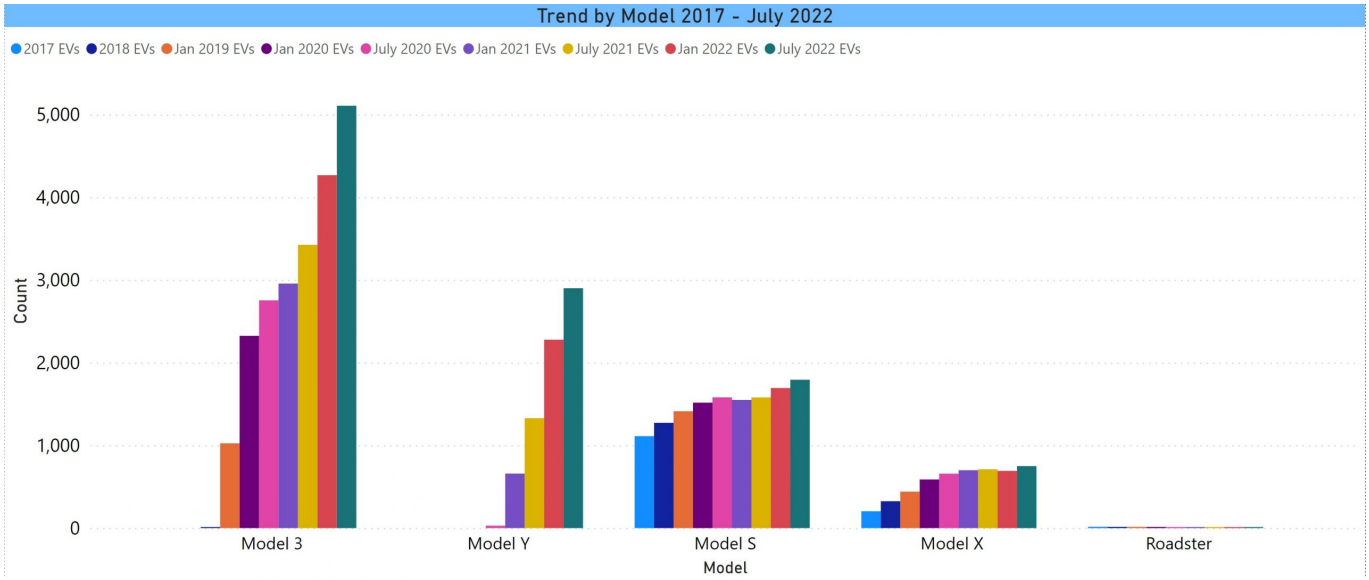


The growth with Tesla was still powered by the Model 3. Even though industry reports indicates the Model Y is the largest selling Tesla model (actually, largest seller among all EVs), there were more Model 3s added to this latest file. It may have to do with this file being net registrations and more trading of the Model 3 as a used vehicle, but even restricting the data to the 2022 model year, the Model 3 still has more registrations than the Model Y. There are now Tesla added a net additional 3505 registrations and not has a total of 10,564, roughly 3x its nearest competitor.

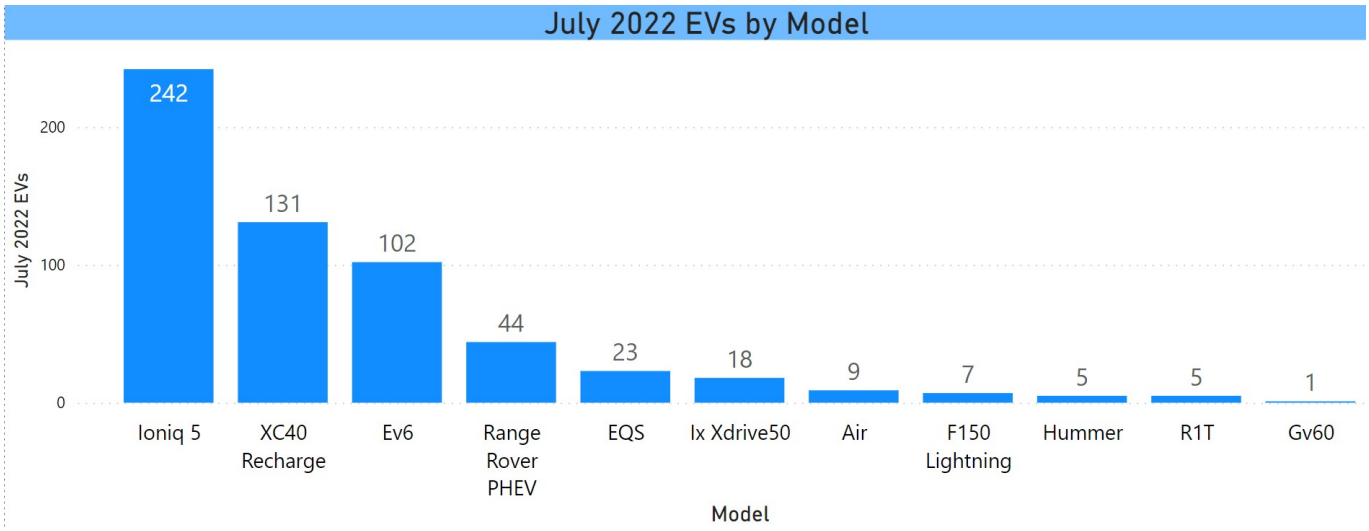
This chart shows the relative growth contribution of each manufacturer over the past year.



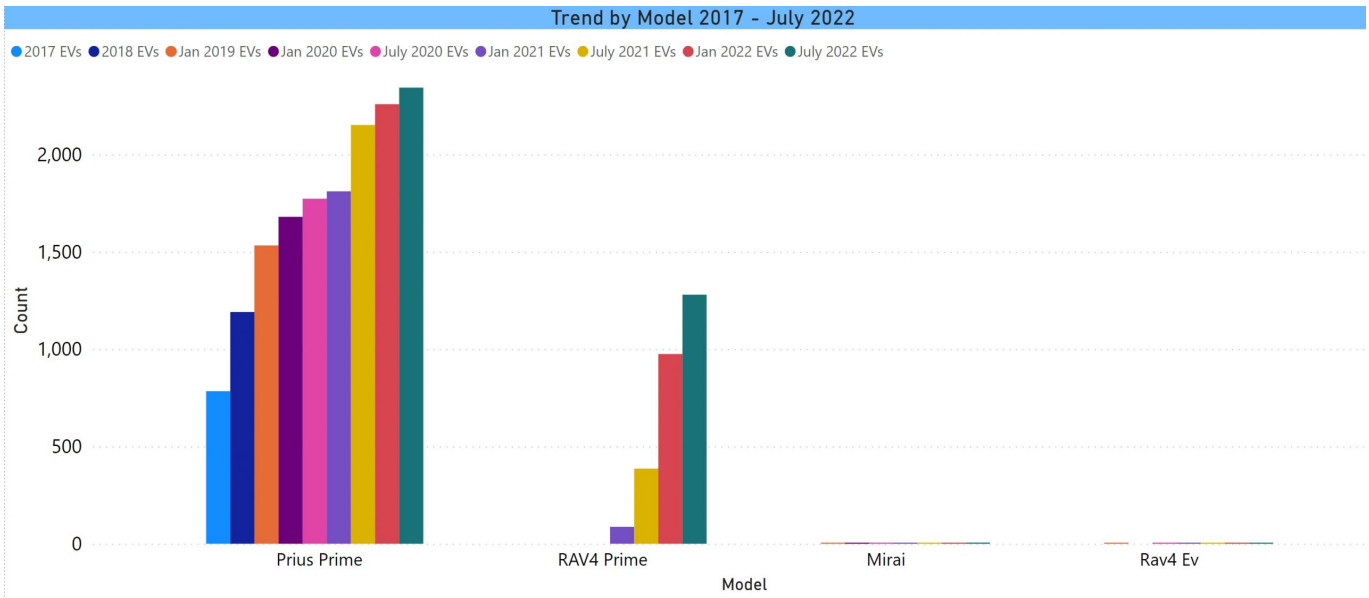
Below are the individual Tesla models.



One of the questions we get is which new models are appearing in our data. This is an arbitrary selection of some newer models. Some were introduced more recently than others and many are back-ordered. Can you spell “s-u-p-p-l-y c-h-a-i-n?”



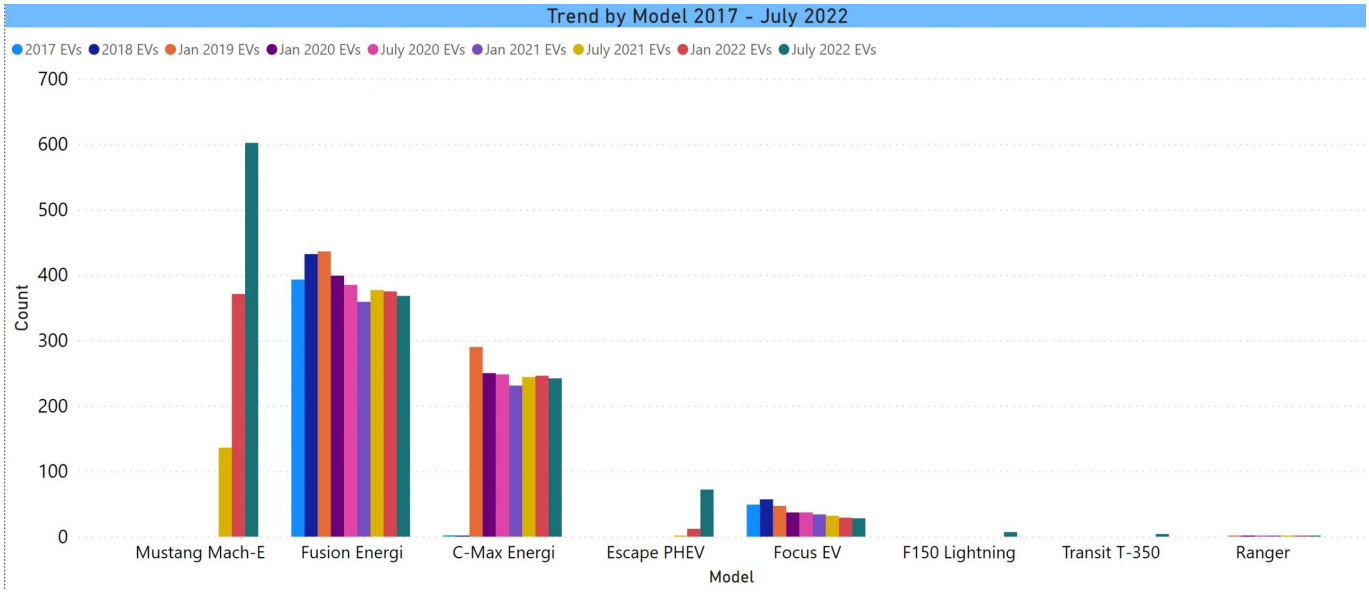
The second most widely registered make is Toyota, which has surpassed GM a few years ago and has grown its lead with the successful RAV4 Prime PHEV. That model appears to have taken share from its Prius stablemate. The new BEV, the bz4X, does not appear in the file. Included are 6 Mirai fuel cell vehicles and the discontinued compliance car, the BEV RAV 4. There are 3632 Toyotas.



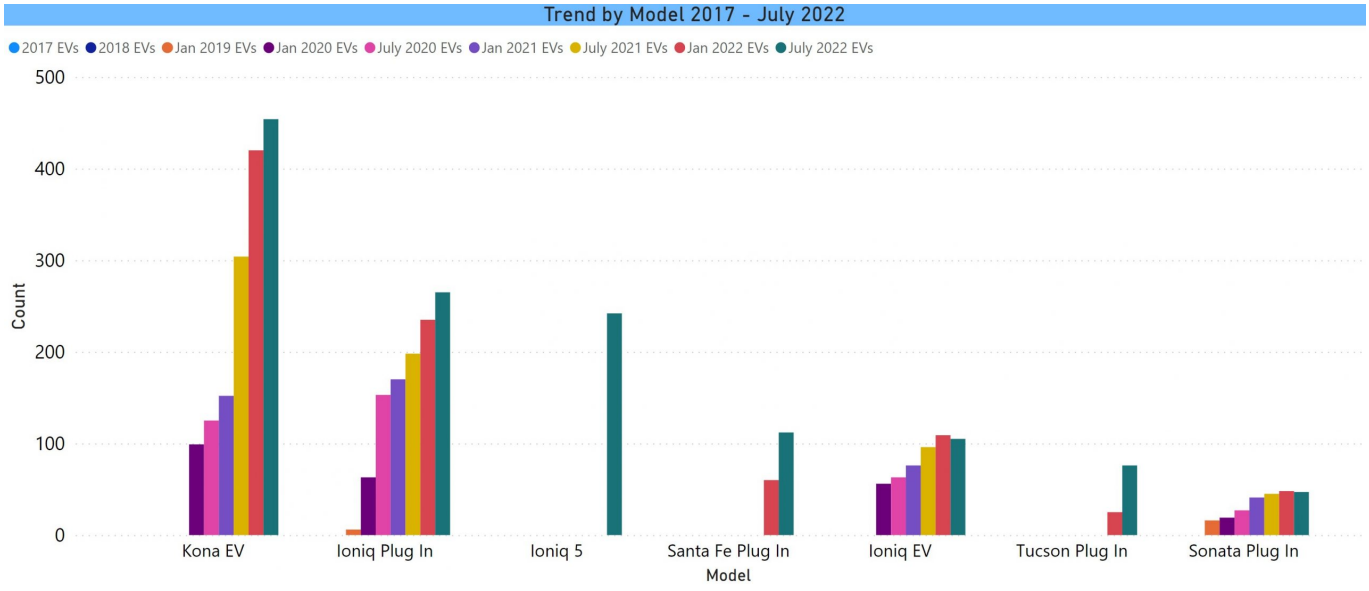
Chevy follows next, having slipped from second to third. With Volt sales having been discontinued in 2019 and the prolonged, extensive Bolt recall, Chevy has been flat for a while, and actually slightly down from January. Its total is 1815.

In fourth position is Ford, which is on a growth curve with 2

successful, though supply-constrained, BEVs in the Mustang Mach-E and the F-150 Lightning. Very few of the latter have been delivered. The Ford total is now 1324. Ford looks to be positioned for the strongest non-Tesla growth if they can ramp deliveries.

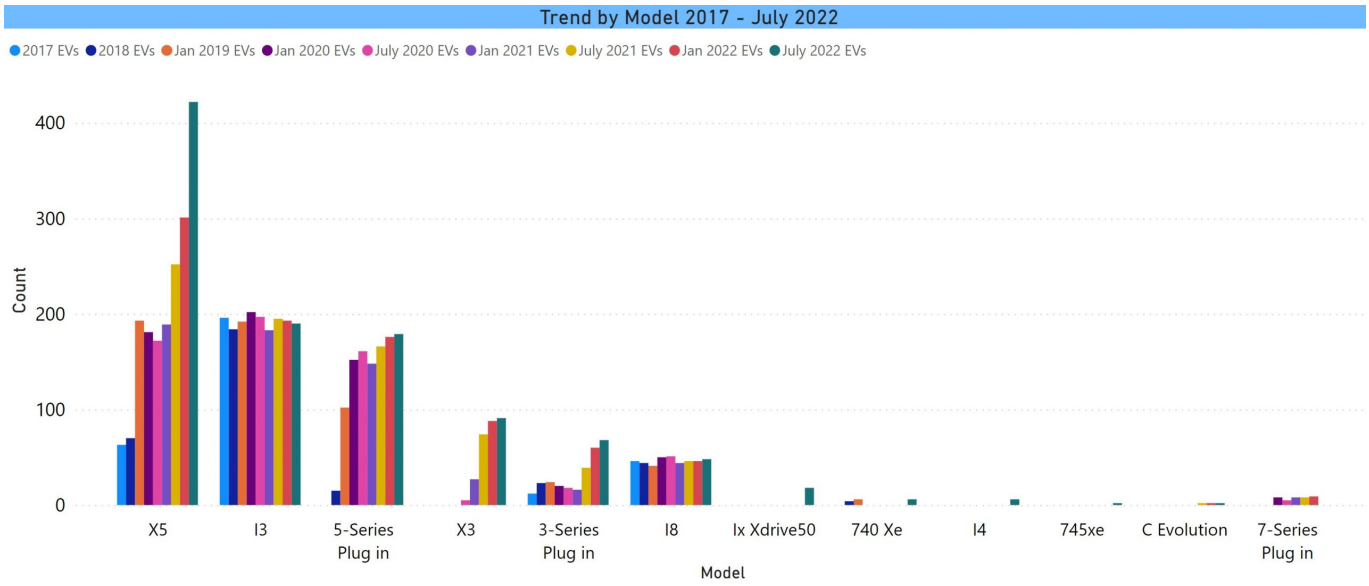


Hyundai, boosted by its successful Ioniq 5, the company's first purpose-built EV platform, comes next with 1301 total registrations.



The only other manufacturer with over 1,000 registrations is BMW at 1032. BMW has always had a large number of plug in models produced, but the X5 PHEV is the first one to get

noticeable traction. Their new BEV models, the i4 and iX, have not made an impact as yet.



Volvo, Jeep, and Nissan have between 500 and 1000 registered EVs. Then the tail gets long with 31 makes represented among the population of registered EVs. In future posts, we will examine how we are pacing relative to goals, along with the geographic patterns across the state.

Rivian Deliveries Coming to CT

Shiny new R1T on a Rainy Day.

The photo above is of Analiese Mione, a member of the EV Club CT Leadership Team and one of the earliest Rivian R1T preorder holders. She was all smiles when taking delivery of her Adventure Package R1T. The pickup is in forest green with 21″ tires to maximize range, an electric tonneau cover and heated and cooled vegan seats. The photo isn't helped by the gray, rainy day, but we sure were toasty in the truck.

There were only 7 Rivians registered in CT as of our most recent DMV update on July 1st, but deliveries are increasing. Indeed, the Rivian employee who delivered the R1T and delivered a fact and fun-filled onboarding experience, mentioned that not 5 miles away a Rivian R1S was being delivered to another customer. During the Rivian earnings call this week, the company reported a 67% increase in production from second to third quarter, and affirmed guidance of 25,000 of vehicles to be produced by the end of the year. They are currently producing all 3 announced models: the R1T pickup truck, R1S SUV, and the commercial delivery van that is being manufactured for Amazon.

This adventure vehicle sports a 135 kWh battery pack and an EPA-rated range of 314 miles. Assembly is done at the Rivian plant in Normal, Illinois, which means it qualifies for the $7,500 federal tax credit for the remainder of 2022 under the recently passed IRA. For 2023 and beyond, we have to wait to find out if they comply with the new battery rules, and the price cap of $80K for pickups and SUVs goes into effect. It comes with J1772 (level 2) and CCS (level 3) charging connectors, along with a portable charger that can plug in to a 120 volt outlet or a 240 volt NEMA plug.

Behind the second row of seats is a gear tunnel that runs from one side of the truck to the other with doors on each end that fold down and double as seats or stepping stools for reaching

above the truck. Analiese, a native plant specialist and private gardener in her retirement, plans to use it to conveniently stow her gardening tools for use at local private client homes.

Club president Barry Kresch joined Analiese for an inaugural test drive. Despite weighing a formidable 7,148 pounds, the vehicle rides on gossamer wings – smooth and silky, but responsive, quiet and very fast in all 5 driving modes. Analiese thinks she'll drive it in Conserve and All Purpose most of the time, but can switch to Sport mode with the tap of one finger should a Ferrari or Lamborghini pull up to her at a red light. To help spread the excitement about driving EVs and let others learn about this impressive feat of engineering, Analiese plans to participate in a number of upcoming EV showcase events.

Telematics Update

Telematics Phantom Drain Issues Fixed by Eversource

Some EV owners who are interested in participated in the Eversource and UI (collectively, the EDCs) demand/response charging incentives, but do not have/don’t plan to get an approved charger are still able to participate via telematics, where the EDCs communicate directly with the vehicle.

Eversource customers who signed up were seeing frequent battery wake-ups as the car was being pinged every half-hour along with measurable battery drain. This has now been fixed, courtesy of a software update. Also, the demand-response period ends at the end of this month. There will be a new vendor and new process rolling out in 2023.

Eversource has thanked the club, particularly Paul Braren, for the detailed feedback and beta testing of the new software.

This was not an issue with United Illuminating, which uses a different vendor.

Changes Coming for Next Year

The demand response program involved discrete events, meaning periods of a few hours on a hot day, where charging gets throttled. For year 2 and going forward, the Public Utilities Regulatory Agency has asked for an additional option. It is referred to as “managed charging” and proposals are being submitted for approval. Most likely, consumers will have an

opportunity to choose A or B, with different incentive levels are associated with each. When details are available, we will update.

Eligible Equipment and Vehicles Update

Since the majority of registered BEVs in the state are Tesla, the question has come up on more than one occasion of whether Tesla chargers will be part of the program. To this point, Tesla has not submitted a charger for the EDC approval process, and so telematics remains the only option for Tesla owners. There are also a lot of EV owners, and not just Tesla owners, that already have chargers, which may not be part of the program. The telematics option is available for some of these vehicles.

At this point, only ChargePoint and EnelX (JuiceBox) have approved chargers, several models for each.

Below is the list of approved telematics vehicles.

Eversource Customers	
Electric Vehicle Make	**Electric Vehicle Model**
Ford Mustang	**Mach-e:** 2021 models and newer
Jaguar	**I-Pace:** 2019 models and newer
Range Rover	**PHEV P400e:** 2019 models and newer
	Sport PHEV P400e: 2019 models and newer
Tesla	**Model 3:** 2017 models and newer
	Model S: 2012 models and newer
	Model X: 2016 models and newer
	Model Y: 2020 models and newer
Toyota	**Prius Prime:** 2021 models and newer
	Rav4 Prime: 2021 models and newer
Volkswagen	**e-Golf:** 2020 models and newer

The list of approved chargers and telematics vehicles is

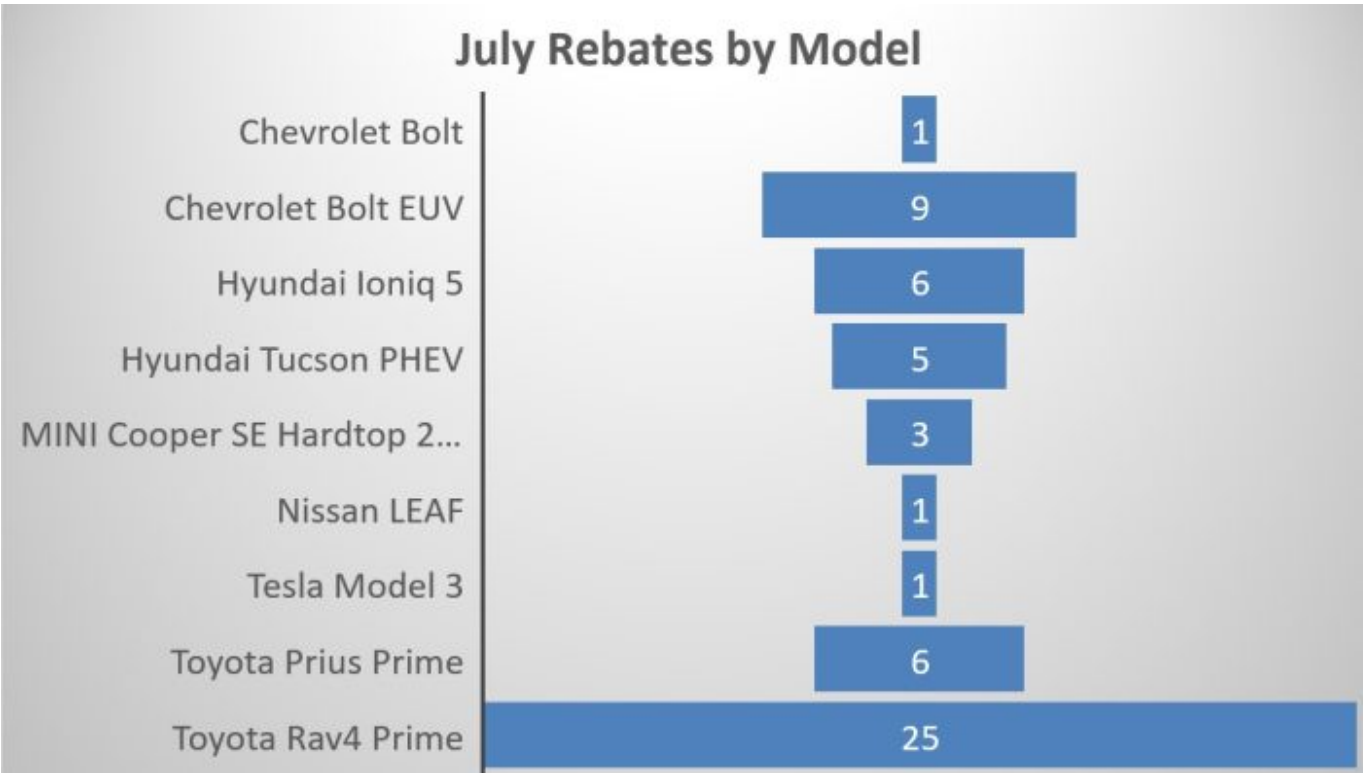
currently the same for both Eversource and UI. Eversource has advised us of pending telematics approval for several vehicles from **Hyundai, namely the 2021 Ioniq BEV and PHEV, Ioniq 5, Santa Fe PHEV, and Tucson PHEV**.

CHEAPR July 2022 Update

New CHEAPR, Though Still A Slow Pace of Rebates

There were 57 CHEAPR rebates awarded in July, the first month where the higher MSRP cap, now $50,000, was in effect. This was the same number as in June. We don't expect to get a clear reading on the new program for a while given current supply constraints and the fact that the program is undergoing a phased rollout. One aspect that is still a ways from being rolled out is the revised income-limited incentives. The earlier version dating to 2021 is still in place, but there were no Rebate Plus incentives given in July.

We did see the appearance of 2 models that would not have previously been eligible – the Hyundai Ioniq 5 with 6 rebates and the Tesla Model 3 with 1 rebate. The rebate activity continues to be dominated by the Toyota RAV4 Prime (24 rebates). The second most rebated vehicle was the Chevy Bolt with 10. It looks like the Bolt is finally getting past the purgatory of its extensive recall/battery replacement. The newer EUV version accounting for 9 of the 10 rebates.



Electric Car Guest Drive Returns in September

Share Your EV Knowledge and Get Paid

The Electric Car Guest Drive program that is run by the publisher of Electric Car Insider is returning to this general area with 2 September dates, the 23rd and 24th, Friday and Saturday, in Pearl River, NY (Rockland County).

EV owners bring their vehicles for test drives (guest drives) with the owner in the passenger seat. The drive is over a pre-planned route that is between 1.5 and 2 miles. The event is taking place at 1 Blue Hill Plaza, which is an office complex

and the home of the sponsoring utility, Orange and Rockland Electric. They have held events there in the past. The route is mostly the perimeter road of the parking lot with a short stretch on a local road as the parking does not completely surround the building.

Participation can be for 1 or 2 days and an honorarium of $300 is paid for each day. Lunch is provided. So is an optional dinner at a good restaurant with the staff and other EV owners.

Please arrive on site by 9:30 am. The event concludes at 4 pm.

The drives themselves are casual with no dealerships or salespeople involved in the event. EV owners just explain the basics of driving the vehicle, describe the drive-electric lifestyle, and answer questions. No sales pressure of any kind is involved. These events have a demonstrated track record of driving EV conversions. (It is not necessary to be an authority on the complicated new federal EV incentive.)

Vaccinated owners preferred. The event follows local public health guidelines as of the date of the event. Masks are not currently mandated. However, if an owner wishes to have masked guests, that will be honored.

Registration Info

A web page from Electric Car Insider describing details can be found here.

Register here.

You can also feel free to contact the Electric Car Insider publisher, Chris Alan, directly at Chris@electric-car-insider.com

Feel free to tell them that you were referred by the EV Club.

Federal EVSE Credit Returns

Post by Barry Kresch

Tax Credit for Purchase and Installation of an EV Charger

The recently passed Inflation Reduction Act has amended US Code 26, Section 30C to reinstate a tax credit for the purchase and installation of an EV charger.

This credit had been in the tax code a while. Every year it expired and every year it got extended for one year, sometimes, as is the case now, after the fact. It had expired on December 31, 2021. It is now folded into the 10-year time horizon of the IRA. Here are the key things to know:

- The credit is for 30% of the combined cost of the hardware and installation, capped at $1000. This is the same as what it used to be.
- This has nothing to do with the utility incentives. Any charger qualifies.
- It is retroactive to January 1, 2022. If you bought a unit earlier this year, include it in your tax return.
- This incentive becomes more restrictive beginning in 2023, going through 2032. It then applies only to low income communities and rural census tracts.
- Use IRS form 8911 to claim the credit.

There is a commercial version of this with higher amounts.

Standard caveat: Always check with your CPA.

In the In-Between

Photo: Hyundai Ioniq 5 is an example of a vehicle that immediately loses eligibility due to its not being manufactured in North America

Post by Barry Kresch

Which EVs Are Eligible for the Federal Tax Credit for the Remainder of 2022

The Inflation Reduction Act, for the most part, goes into effect in January 2023. That leaves this interregnum from August 16th through the end of this year, when the existing program stays in place except for the fact that as of the moment the ink dries, EVs not assembled in North America lose eligibility. According to EVAdoption, only 21 models qualify for the remainder of this year:

Audi Q5 TFSI e PHEV	PHEV
BMW X5 xDrive 45e	PHEV
BMW 330e	PHEV
Chrysler Pacifica Hybrid	PHEV
Ford E-Transit	BEV
Ford Escape PHEV	PHEV
Ford F-150 Lightning	BEV
Ford Mustang Mach-E	BEV
Jeep Grand Cherokee 4xe	PHEV
Jeep Wrangler 4xe	PHEV
Karma Revero GT	PHEV
Lincoln Aviator Grand Touring	PHEV
Lincoln Corsair Grand Touring	PHEV
Lordstown Endurance*	BEV
Lucid Motors Air	BEV
Mercedes-Benz EQS SUV*	BEV
Nissan LEAF	BEV
Rivian R1S	BEV
Rivian R1T	BEV
Volkswagen ID.4**	BEV
Volvo S60 T8 Recharge PHEV	PHEV

All of these are manufactured in either the United States, Canada, or Mexico.

The manufacturer cap remains in place until the end of the year, which eliminates Tesla and General Motors. All of the above manufacturers have not phased out. Toyota reportedly exceeded the 200,000 unit cap during the second quarter. That would translate to the tax credit being halved in Q4. After that, they wouldn’t have to worry about it. For any company that exceeds the cap in the third (or fourth) quarter, Ford being the most likely example, it becomes a non-issue as the cap would be gone before they phase out.

The Volkswagen ID.4 has been imported from Germany, but the company will soon manufacture them in its Tennessee plant. Be sure and check.

Customers of Rivian and Lucid, new manufacturers of high-end EVs, will be able to utilize the credit until the end of the year. As of next year, these cars, except for lesser equipped versions of the R1T and R1S, will exceed the new price thresholds. The Karma and the Mercedes also exceed the new price thresholds.

What if You Bought a Car Earlier This Year That Is No Longer Eligible

If you bought a car earlier this year that was eligible when you bought it but has lost eligibility either as of August 16th or will lose eligibility as of next year, you can still take the tax credit when you file your 2022 taxes.

If you have a binding contract from before August 16th on a vehicle such as the above-noted Ioniq 5 that has lost eligibility, but you have not taken delivery, you should still get the credit based on the federal language. Usually, it means a binding contract that neither party can change, a non-refundable deposit, and a VIN.

“Binding” is the key word. This is the IRS language:

“If you entered into a written binding contract to purchase a new qualifying electric vehicle before August 16, 2022, but do not take possession of the vehicle until on or after August 16, 2022 (for example, because the vehicle has not been delivered), you may claim the EV credit based on the rules that were in effect before August 16, 2022. The final assembly requirement does not apply before August 16, 2022.”

A binding contract is generally interpreted as enforceable under state law, including a non-refundable deposit of at least 5% of the total value. This is an excerpt of the language on the IRS website (which is federal):

“For example, if a customer has made a non-refundable deposit or down payment of 5 percent of the total contract price, it is an indication of a binding contract. A contract is binding even if subject to a condition, as long as the condition is not within the control of either party. A contract will continue to be binding if the parties make insubstantial changes in its terms and conditions.”

As we are always careful to say, we try to provide accurate information, but with respect to tax credit eligibility, please check with a CPA.

Although I applaud the goals of the IRA, I think this abrupt loss of eligibility is confusing for consumers and not helpful in general.

We do not yet know which models will meet the minerals sourcing and battery manufacturing requirements that take effect next year. I expect to see reports in the EV press as models become declared eligible.

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.