Volta Chargers at Amazon Fresh

Photo by David Dreyfuss/Post by Barry Kresch

Update:

These chargers have been ordered removed. The site has been approved for chargers but not the signage.

How Did That Happen?

Volta is a company that installs charging stations at their own expense at highly trafficked locations which are free to users. These chargers are at the site of the former Barnes and Noble on Post Road East in Westport, now being renovated as an Amazon supermarket due to open later this year.

Volta chargers have large screens that display digital advertising. Its business model is that the advertising covers the cost of installation and power, plus earns a profit. The business benefits from having this amenity (and Amazon has made sustainability a corporate focus). Volta chargers typically have J1772 connectors.

While we always welcome EV charging stations, the odd thing about this is that a proposed Volta installation just down the road at Stop and Shop was nixed by Westport Planning and Zoning, the reason being that the video display was non-conforming signage. Do they think these will remain invisible?

Volta chargers can be found at the new upscale mall, The Sono Collection, in Norwalk. Malls and supermarkets are ideal locations from Volta's perspective with people constantly coming and going, the better to bulk up the number of advertising exposures. The chargers are placed in a prominent location, not ancillary parking. Volta has a master agreement

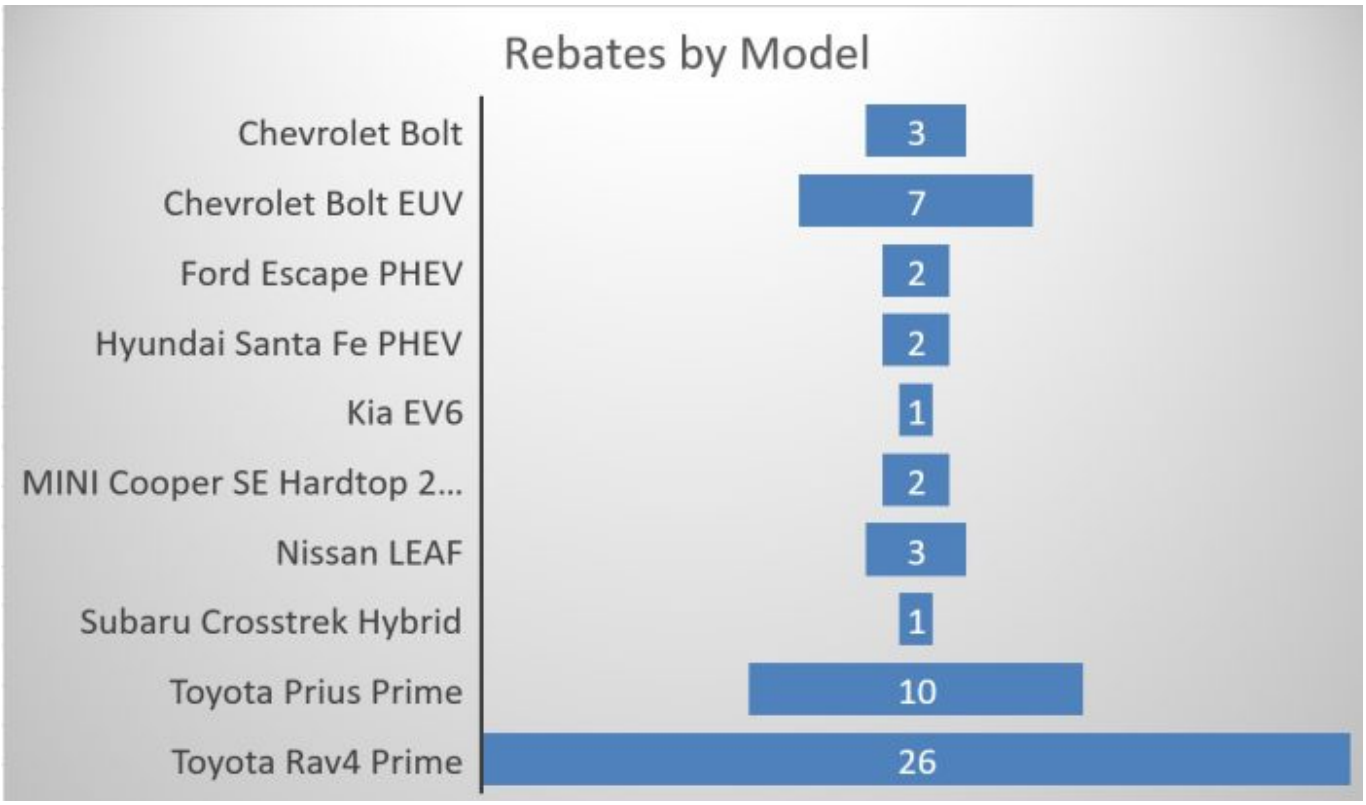
with Stop and Shop to install chargers at a number of their locations, including 2 locations in Norwalk.

Just don’t try and sneak in for a charge after hours. They typically turn off the units when the business is not open. Operating hours can generally be found on the PlugShare app. These chargers are not yet listed because they are not yet live.

CHEAPR June Wrap – The New Program Awaits

“Old CHEAPR” Quietly Ends – How Fast Will The New Program Ramp?

June was a slow rebate month by any measure with just 57 rebates, of which 41 were PHEV. These numbers continue recent trends of a low-volume PHEV-heavy program. The Toyota RAV4 Prime, the popular PHEV SUV, continues to dominate the rebates. There were no income-limited rebates.



Looking at the trend in the chart in the featured image, one can see the rebate trend increase as more EVs came on the market with the big spike being due to the Tesla Model 3. Then there is a big drop in Q4 of 2019 when the MSRP cap was reduced. There was another trough during the pandemic, followed by a spike due to pent up demand, which has now leveled off at an anemic rate this year. We look forward to seeing more incentives used beginning with July.

Higher MSRP Cap Now in Effect

The components of the new program as legislated in Public Act 22-25 (previously referred to as SB-4 when it was wending its way through the legislature) are being implemented as they are operationally ready. The simplest change was the increase in the MSRP cap to $50,000. That went into effect July 1. There will be over 10 new vehicles that now become eligible, including some important BEVs such as the Hyundai Ioniq 5 and its sibling Kia EV6, Polestar 2, the Mustang Mach-E, and the Tesla Model 3 Standard Range Rear Wheel Drive. Most of the EVs on the market come in multiple trim levels. The base price of

the trim level determines a vehicle’s eligibility.

Coming Enhancements

Looser eligibility requirements for the income-limited incentives. The requirement is now an income level that is a maximum of three times the poverty level. These incentives come in the form of an additional incentive for a new EV or an incentive for a used EVs. Used EVs have to be purchased through a dealership (either a new or used dealership, including virtual, i.e. not private sales) to be eligible. DEEP may revise the size of these incentives. We’ll update when we are closer to implementation, which will most likely be near the end of the year.

CHEAPR since 2019 has been residential only, but now it is extended to business, non-profits, municipal, fleets, and tribal entities. This is expected to be implemented as of the fall. After the next board meeting in September, we should have a firmer idea.

$500 rebate for eligible e-bikes (income limited). ETA unknown, but probably around the end of the year.

All licensed drivers are entitled to use the rebate twice (beginning as of June 2021). The newly eligible categories, such as businesses or municipalities get up to 10 rebates per year with a total cap of 20.

Budget Blues?

Most, if not all, state rebate programs have to steward the budget carefully. If the funds are expended before the next replenishment, the program either has to be suspended or the rebate can be granted and paid after the fact. Neither is an appealing scenario. NJ is a case of the former, where the state burns through the money and rebates become unavailable

for a period of time.

CHEAPR has had 3 different funding mechanisms at different points since its inception in 2015. Prior to this new relaunch, the legislature had funded the program at $3 million annually since 2019. It isn't a robust amount and DEEP has been concerned, based on modeling from its consultant, about program over-spending. However, DEEP made cuts to both the size of the incentive and the MSRP cap, which caused the program to be vastly under-spent. The unpredictable variable has been utilization rate. A persistently lower number of eligible purchasers have availed themselves of the rebate than projected.

The higher MSRP cap and the new enhancements will increase the spend substantially. The consultant again modeled that if the utilization rate ticks up, the program could run too hot. Should we be concerned about budget?

I don't think we have much to worry about in the short term, at least until 2024 and probably later than that. The unspent funds get rolled over and the program has a reserve of over $5MM. The budget for the new program increases from $3MM to roughly $8MM by virtue of the entirety of the clean air fees collected going to support the program. With registration moving from biennial to triennial, there could conceivably be some front-loaded revenue. Many of the new enhancements won't be ready until late in the year. Only $566,750 in consumer rebates were awarded in the first half of 2022 (plus expenditures for admin and dealer incentives) so the reserve will quite possibly increase. Finally, there will be additional funding coming in from the Regional Greenhouse Gases Initiative (RGGI) auction proceeds. It doesn't kick in right away and I have not heard a specific number, but a ballpark guess is $2-3MM.

Bottom line – we don't have to be overly concerned and there will be plenty of time to gather data to forecast and make

adjustments if necessary.

Volunteers for Sierra Club EV Shopper Study

Volunteers Needed For Sierra Club Rev Up EV Shopper Study, Round 3

The Sierra Club is fielding a third round of its Rev Up EV Shopper Study and is asking for help from the EV Club. Help is defined as visiting dealerships with a set of questions to ask and items to observe to assess if a dealership is making a serious effort to sell electric vehicles. The last study, like the new one, was national, and was done in 2019. At that point, there were serious deficiencies with respect to dealership commitment to EV sales. The prior study can be found here. These were some of the key findings:

74% of auto dealerships nationwide aren't selling electric vehicles.

Salespeople often failed to provide information on federal or state consumer incentives or were poorly informed or uninformative about EV technology.

10% of the time when volunteers asked to test drive an EV, the vehicle was insufficiently charged and unable to be driven.

44% of the dealerships that did sell electric vehicles had no more than two EVs available on the lot. Of the dealerships that sold EVs, more than 66% did not display EVs prominently, with vehicles sometimes buried far in the back.

A lot has changed in the macro EV environment since 2019 and we look forward to seeing the new findings. As we did last time, we will ask the Sierra Club to join us at a meeting to discuss the study results.

This link will take you to the Sierra Club page about the study. If you volunteer, they will follow up with you directly. Feel free to let the club know about your experience with the survey. We got some interesting additional texture last time from participating members – more like a focus group to complement the quantitative survey results.

It is not necessary to be a member of the Sierra Club or EV Club to participate. There are questions about the Tesla shopping experience in the study which serve as a useful point of comparison. We appreciate the participation of Tesla owners as well.

One final note. This club supports changing the franchise laws to allow direct sales by EV-exclusive manufacturers. Even though we and other like-minded individuals and organizations have not yet carried the day, these studies, and findings like that pictured above, have been an important data point in our arguments that excluding these companies from doing business in CT serves to slow EV adoption.

Keeping It Zero On The Road

Net-Zero Hotel Marcel Gets Electric Shuttle Bus

Ensconced under the solar canopy in the photo, in front of level 2 J-1772 chargers, is an electric shuttle van from Maxwell. The shuttle seats 14, including the driver. This is a battery electric van, i.e. 100% electric. Maxwell has been manufacturing these at its Southern California facility since 2019. It sports a 74 kWh battery, a range of 150 miles, and can take a DC fast charge using a CCS connector.

It is owned by the recently opened net-zero Hotel Marcel, and

is ready to provide guests with an emission-free and quiet ride to downtown New Haven, the Yale campus, Tweed Airport, or the nearby Amtrak station. The hotel can use it to transport wedding parties, and it has the range to reach Westchester and Bradley Airports.

Electric vans are projected to be a high-growth segment. Amazon has ordered 100,000 delivery vans from Rivian. FedEx is testing 150 electric delivery vans in Los Angeles, purchased from BrightDrop (General Motors.) There are reportedly around a half-million of this category of passenger van, now ripe for moving to electric.

The existing, quaint rules need updating. As part of the registration process, the vehicle had to pass an emissions test.

We are not aware of any other electric shuttle vans in the state. If you know of any, please tell us in the comments.

EV Registrations Up 19% in First Half of 2022

25,444 Registered EVs

The new number is the result of 5,441 EVs added to the rolls from January through June (and turnover of 1,379 EVs). This represents virtually the same pace relative to the 5,407 registered in the second half of 2021 and an improvement over the 4,335 year over year comparison.

Registrations are up 19% for the first half of this year and 48% from one year ago.

These numbers come from the DMV website which publishes top line data. The breakdown of battery electric vehicles, plug-in hybrids, make, model, and municipality are not yet available to us. We have a Freedom of Information Act Request on file and expect to receive the information before the end of the month.

This number puts us at 6.06 registered EVs per 1000 residents. As a point of comparison, Maryland just announced that they passed the 50,000 mark, which puts them at 8.13 per 1000 residents.

For our purposes, the definition of EV includes battery electric vehicles, plug-in hybrids, fuel cell vehicles, and battery electric motorcycles. This is what the state tracks. We'll have the breakdown when we receive the new files.

The state has set goals for itself via the Multi-State Zero Emission Action Plan of 150,000 by 2025 and 500,000 by 2030. A 48% increase in a year isn't bad, but that percentage pace will at minimum need to sustain itself off of an increasing base, meaning the absolute number increase will have to grow substantially.

Eversource Modifies Telematics Monitoring

Observant EV Owners Noticed Frequent Pings

Several people posting on Facebook and writing to the EV Club who have registered for the charging incentives via telematics noticed that their vehicles were being status-checked every 30 minutes. That is excessive from both a power consumption (it uses a modicum of power or battery drain) and data privacy perspective. And it had been doing this 24/7 since the program started. This only applies to Eversource customers as UI uses a different external vendor.

Eversource advised the EV Club that they are diminishing the frequency to once per hour, which still sounds like a lot, but is an improvement, and after the demand/response period ends after September, they will stop it altogether. They are testing alternatives and will roll out a new solution for 2023. There will also be a new managed charging program, likely with a two-tier option for enrollment. We will update those details as we get closer to the new year.

Thank you to those who called this out and supplied data.

Hotel Marcel Cluster of EV Chargers

The photo above is the solar canopy in the parking lot of the net zero Hotel Marcel in the Long Wharf area of New Haven. The newly opened hotel, powered by solar panels on the canopies and the roof of the building, is soon to be home to one of the newest clusters of EV chargers in the state.

There are 12 Tesla Superchargers, along with EVConnect level-2 chargers with J1772 connectors. The initial level-2 installation will be 10 level-2 ports (5 dual port units), eventually growing to 30 ports. The infrastructure for the expansion is already in place.

The level 2 chargers are under the canopy. The Superchargers are close to the canopy. Basically, whomever plugs in will have a sheltered walk to the front door of the hotel. The chargers are located at the far end of the lot to discourage ICEing.

The units are not live as of this writing. There is a "splice box" that has yet to arrive for the transformer. It is hoped that the units will be online by mid-August but we'll publish updates as more information becomes available. We are waiting for the chargers to come online to schedule a planned EV Club meeting at this facility.

There are also 2 level-2 ChargePoint chargers just a few feet away near the entrance to Ikea. These are in operation.

Level 3 Utility Incentives Fully Subscribed For Cycle One

Applicants Will Have To Wait

Good news/bad news. Demand is strong but the funding isn't there to fully meet it.

A crush of applications for incentives for DC Fast Chargers, the high-powered chargers that can recharge an EV to 80% inside of 30 minutes, most frequently located along highway corridors, has caused the program run by Eversource and United Illuminating to become fully subscribed just six months after its inauguration. This is a 9-year program that runs in three 3-year cycles. So the funds depletion could last until 2025.

Eversource and UI have requested additional funds, so there could be funds available sooner, but it is too soon to know details. Eversource and UI advise that if you had planned to submit an application to follow through with that submission. They continue to evaluate applications and this will establish your place in the queue.

There is still a substantial amount of funding available for level 2 (240 volt) chargers and grants are being made on an ongoing basis.

This does not affect the residential incentives program (which does not included DCFC).

CHEAPR Follow-UP

The increase in the MSRP cap is fully implemented. Vehicles with an MSRP of up to $50,000 are now rebate-eligible.

There are some vehicles that are eligible that are not yet on the list of eligible vehicles on the DEEP website. We have gotten a few inquiries about the Ioniq 5 in particular. DEEP is aware of that one and it will be added soon. If you are shopping for an EV and you don’t see it included where you think it should be, let us know and we’ll pass the info along. This applies not only to newly introduced models but also a new model year of an existing vehicle.

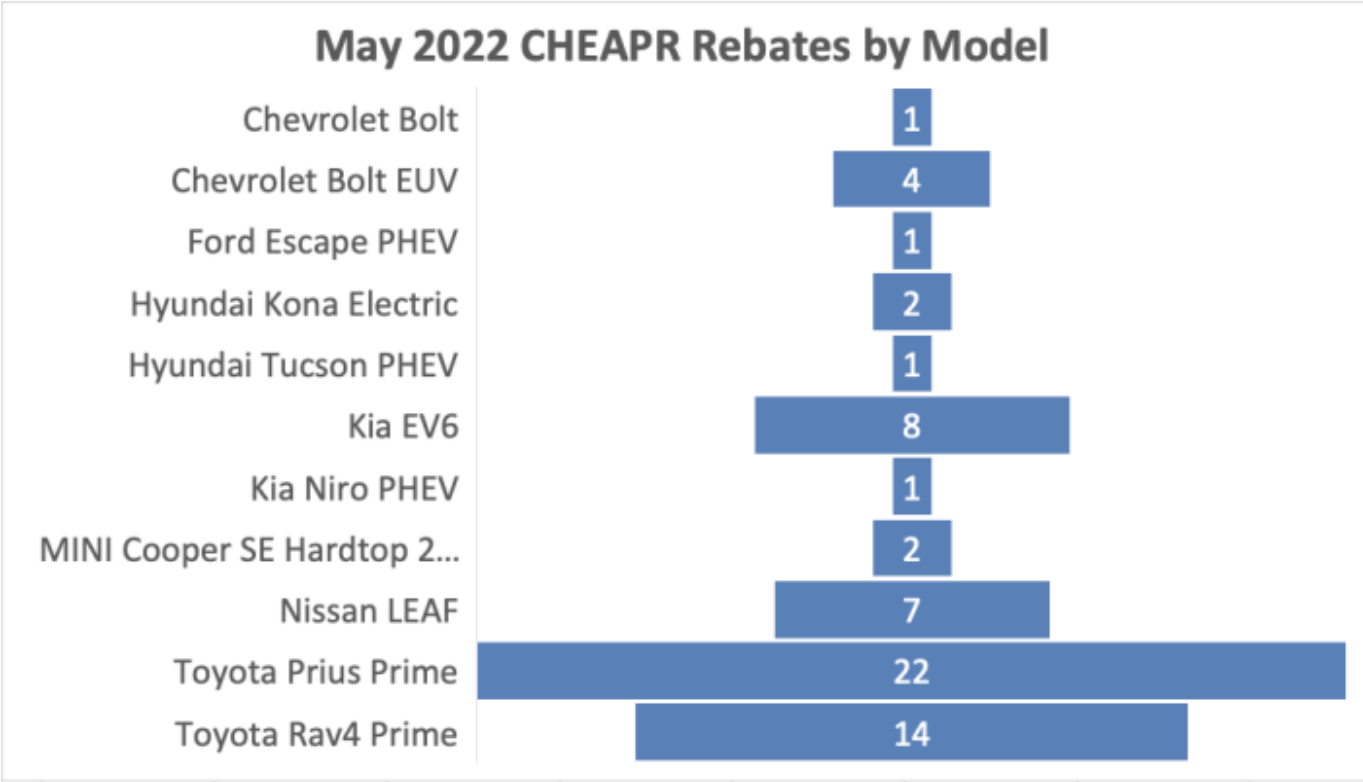
CHEAPR May 2022

$50K MSRP Cap Effective July 1

The first of the changes to the incentive program has been implemented as of July 1, namely an increase in the $42,000 MSRP cap to $50,000. This is still below the average cost of an EV, but at least it helps keep up with inflation to some degree and enables additional models to be eligible, a mix of BEVs and PHEVs, including the BMW 3 Series PHEV, BMW i3, Polestar 2, and Ford Mustang Mach-E. Not all trim levels may fall within the price cap. A reminder, the price cap applies to the base price of the trim level, excluding taxes, title, destination charges, and options. It also excludes any dealer markup. The DEEP website is not 100% up to date with respect to eligible vehicles. If you are in the process of buying an EV that you think should be eligible but you're being told by a dealer that it isn't, it could be a matter of the database not being updated. Contact cheapr@energycenter.org. If that doesn't work, you can reach out to the club.

May Rebate Data

The low level of rebates continues and it will be 2 months at least before we see the impact of the higher MSRP cap, longer for the other program changes. There were 63 rebates – 39 PHEV, 24 BEV – also the typical recent pattern with the Toyota PHEVs getting the most action. Otherwise, there was a modest pop with the Kia EV6, which going forward will have more eligible trim levels under the new price cap. There were no income-limited rebates.



The Telematics Vampire

Home Charging Incentives Come With Unexpected Cost

When Eversource and United Illuminating began offering incentives to offset the cost of buying and installing a level 2 home charging unit, the incentives also include up to $200/annually for participation in the managed charging program. (Participation in the managed charging program is mandatory if one takes the incentives for charging hardware/installation.) The only current version of managed charging that is operational at this time is the

demand/response program, where during designated high-demand times occurring from June through September, the utility can throttle the rate of charge which would roughly lower the speed of the charge to the equivalent of a level one trickle-charge for the duration of the event.

Of course, at the point at which this program was inaugurated, there were already over 21,000 EV owners and some number (we don't know how many) of installed home chargers. The majority of these EVs (based on number of registrations) are eligible to participate in the demand/response program without having an approved charger by using telematics. This way, the utility controls the rate of charge directly with the vehicle.

Through the work of Roger Kappler and Will Cross of the Tesla Owners Club, and Paul Braren of the EV Club, we have learned that the utility "wakes up" the car to check charging status on a frequent basis, as often as every 30 minutes. What is really strange is that this checking is happening all the time (24/7/365) and not just during designated demand/response periods, hence the"vampire" charge. The car is using power even though it is sitting there doing nothing. Like your cable box (or sentry mode if you are a Tesla owner). Roger estimates that the charge is the equivalent of .5-1% per day, which at 20 cents per kWh, works out to about $70 annually. The program pays a one time $100 enrollment incentive for telematics plus the above-noted $200 for demand/response. This passive electric use takes quite a bite out of that. If the vehicle isn't plugged in, then it contributes to range loss.

Per Roger, Eversource has reported that it will be fixed but that it could take as long as 6 months.

The detailed Facebook post can be found here. (Note: This is a closed FB group.)

This does not apply if you are using an approved smart charger as far as we know. (We're checking.)

This is not occurring with UI customers (according to UI). If any UI customers notice this, please leave a comment!