Bolting Into The Future

Town of Westport Adds 2 Chevy Bolt EVs To Its Fleet

The Town of Westport has announced further progress to its march to net-zero by 2050 with the addition of 2 Chevrolet Bolt battery-electric vehicles to its fleet. The vehicles are the standard-level trim options and they are the new 2021 model.

Westport has been taking tangible steps to achieve its environmental objectives. These Bolts will be used for municipal inspections by the Engineering Division and the Tax Assessor. The current practice is for vehicles to be swapped out around every four years. As other vehicles turn over, the town plans to continue converting its inspection fleet to EVs.

The Bolt was selected due to its reasonable price, reputation for quality engineering, and being the right size. It has an EPA-rated range of 259 miles.

The Bolt typically comes with an 8-year/100,000-mile battery warranty. However, these vehicles were obtained through Enterprise Fleet Leasing and will almost certainly have been turned over before getting to that point.

Importantly, EVs last a long time, have a low maintenance profile and could lower carrying costs. This was taken into account when making this decision.







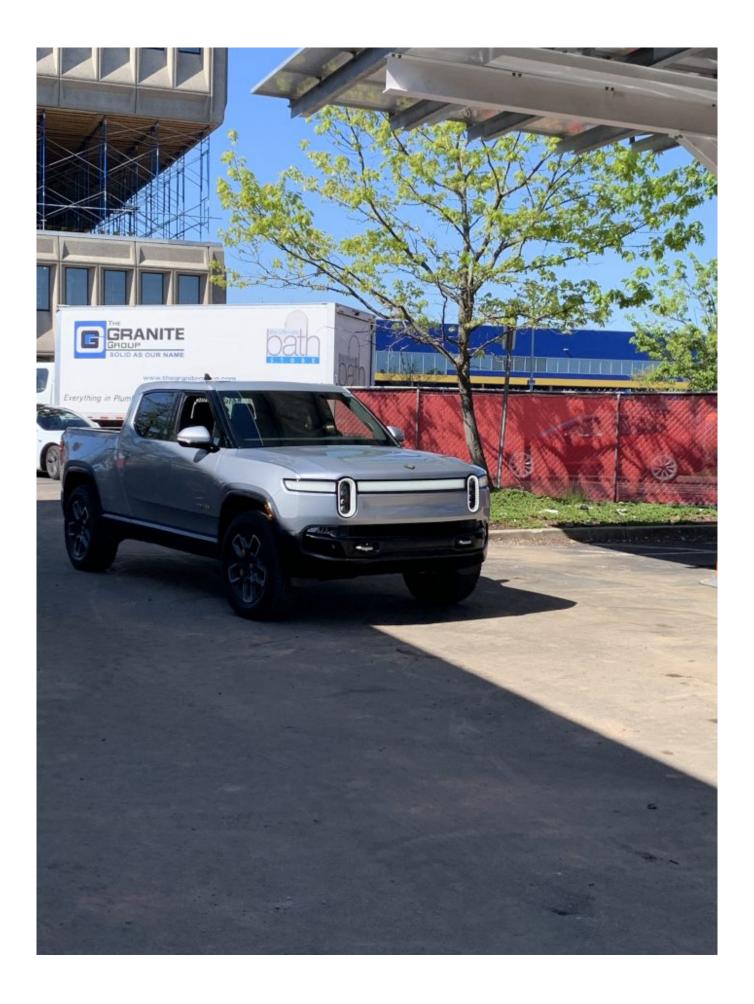
Rivian Makes Appearance in CT to Support SB 127

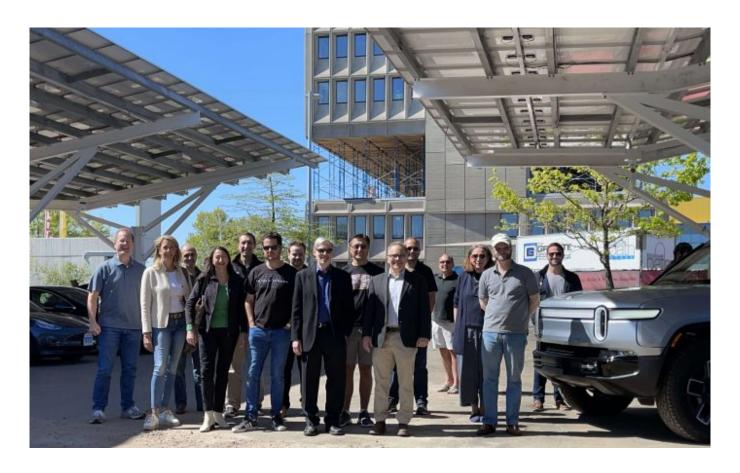
Rivian Brings New R1T to CT in Support of Direct Sales

With the fate of SB 127 hanging in the balance in the waning

days of the 2021 legislative session, a pre-production version of the Rivian R1T all-electric pickup truck made an appearance in CT. It could be found Thursday in Hartford, where legislators and the governor were given the opportunity to go for a drive and see the future of electro-mobility. The fate of the bill in the Senate is expected to be determined over the next few days. It would then still have to go before the House.

On Friday, a last-minute gathering came together, where some members of the EV Club CT, were also able to get a look. We hope to bring them back to CT once they have started production later this year.





Group photos by Paul Braren

Feb. CHEAPR Data And A Delay For The New Incentives?

Fleeting Model Y Rebate

February rebate data show 72 rebates awarded, totaling \$59,000. January was restated and increased from 68 to 77 rebates with a total spend of \$82,500.

The leading vehicle in terms of Feb. rebates was the Toyota Prius Prime, which accounted for 22 of the rebates, and was followed by the newer Toyota PHEV, the RAV4 Prime, with 11.

The RAV4 has been showing early signs of life. We don't know if the vehicle is supply constrained in CT as it is still being rolled out. These were the only two vehicles in double figures. With these two PHEVs dominating the rebates, the spend level was considerably lower than January.

The Model 3 accounted for only 2 rebates. As we have seen, the number of Model 3 rebates fluctuates wildly because only the base level is eligible for the incentive. The CHEAPR rebates don't track with overall sales of the vehicle. There were 4 Model Y rebates which is unlikely to continue. Tesla first reduced the price of the basic Model Y, which is why some of them qualified for incentives, but it subsequently pulled the vehicle off its online configurator.



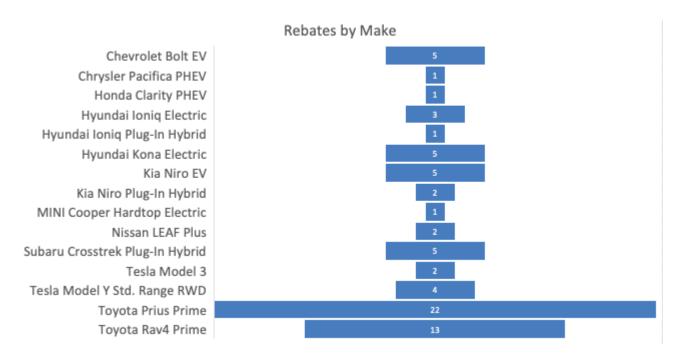
This was a tweet from Elon Musk that was published in Car and Driver. It was the sub-250

mile range that did not meet its standard of excellence. Off menu means it can still be ordered, but only by phone or in person in a showroom. It would not be surprising to see Tesla make some tweaks to the vehicle and then return it to the entrées. (UPDATE — We have heard that Tesla is not taking any new orders, not even off the menu, for the MY SR. If we are able to find out more details, we will update again.)

The CHEAPR board adopted a <u>new incentive</u> structure in February. The expectation was that it would become live on or about April 1. Some time was needed for the software

implementation. As of this writing on 3/27, there is nary a word on the CHEAPR website, nor a peep from DEEP. Communication is not DEEP's forte. No board meetings have been held since the new incentives were adopted and none have been announced. We are trying to find out if significant delays have been encountered.

These are the rebates by model for February:



EV Freedom Bill Unshackled

Transportation Committee Vote Moves Bill to Full Chamber

The Transportation Committee, by a vote of 26 to 10, moved SB 127 to the full chamber.

There were several legislators who voted in favor of the bill, but who specifically said they have not definitively made up their minds with respect to the upcoming vote on the floor of the chamber. We will publish some of the questions and objections when we update this post.

Transportation Committee Chair, Senator Haskell, deserves our thanks for his leadership in picking this up and moving it forward, after his predecessor on the committee had decided to set it aside. We also thank Rep. Steinberg who has been a consistent advocate for years in favor of this measure.

YEA	NO
Chair Lemar (D)	Rep. Blumenthal (D)
Chair Haskell (D)	Rep. Conley (D)
Rep. Bello (D)	Rep. Dauphinais (R)
Rep. Berger-Girvalo (D)	Sen. Cassano (D)
Rep. Carney (R)	Sen. Lopes (D)
Rep. Chafee (D)	Sen. Martin (R)
Rep. Concepcion (D)	Sen. Somers (R)
Rep. Devlin (R)	Rep. Rebimbas (R)
Rep. Goupil (D)	Sen. Kissel (R)
Rep. Haines (R)	Sen. Needleman (D)
Rep. Harrison (R)	
Rep. Labriola (R)	
Rep. McCarthy Vahey (D)	
Rep. Meskers (D)	
Rep. Michel (D)	
Rep. O'Dea (R)	
Rep. Rosario (D)	
Rep. Simms (D)	
Rep. Smith (D)	
Rep. Steinberg (D)	
Rep. Thomas (D)	
Rep. Zawistowski (R)	
Rep. Zupkus (R)	
Sen. Abrams (D)	
Sen. Osten (D)	
Rep. Reyes (D)	

This is the final roll call.

What I inferred from the hearing today reinforces what I watched/read during the public testimony period. Legislators are hearing from dealers, of course, who oppose the legislation. They are also hearing from constituents and constituents are supporting the legislation. There is no negative sentiment among the public about this bill.

We don't take anything for granted. When we have updates with

respect to further negotiations around the bill or voting in one or both chambers, we will post them (among other things).

Tesla is keeping its <u>"Engage"</u> page live for ease of contacting your legislators.

Well-Attended Press Conference Shows Support For EV Direct Sales

Headline photo courtesy of Will Cross

Post by Barry Kresch

Grassroots Momentum for the EV Freedom Bill

The atmosphere was electric as about 100 EV enthusiasts came to Westport from all over the state for a press conference supporting The EV Freedom Bill, legislative bill number SB 127. Lame puns aside, I have been part of this EV Club for 9 years, and this issue feels like it has been around for most of them, but today felt different. The grassroots energy was palpable in a way that it hadn't been in the past. Perhaps it is due to Tesla registrations having grown to almost 6,000 in the state. Or the excitement of new, really cool, EV companies entering the market also looking to sell direct. Or energized engagement on the political front.

This bill, which in earlier guises had come to be referred to as the "Tesla Bill," would permit EV-exclusive manufacturers that do not have an existing franchise dealer network to open stores in CT. At today's event, Tesla was joined by Rivian and Lucid. Others are expected to adopt this business model or, more to the point, this or some other new model not envisaged in the existing dealer franchise laws that were written almost 100 years ago.

The bill also requires that companies opening stores have a sustainable model for servicing vehicles that are sold here.

The Way Forward In A Changing World

Passing this bill would be a tangible step toward supporting innovation. The industry is changing. Fissures are showing in the traditional automobile business, despite their actions to forestall competition by keeping new EV companies out of the state. 17% of Cadillac dealers opted to drop the franchise rather than embrace GM's making this its centerpiece EV brand. Volvo announced an aggressive timeline of moving to an allelectric lineup by 2030 and moving EV sales online in the short-term. We don't know the fine print of how this changes the relationship between the dealers and the manufacturer. If sales are online, do the dealers ever take title to the vehicle? And if they don't, are they still a dealer? We reached out to Volvo for elucidation but have not received a response. We are guardedly optimistic that these changes are signs of a more serious effort to sell EVs.

SB 127 was introduced by Sen. Will Haskell, who organized the press conference, and Rep. Jonathan Steinberg, both of whom represent local districts. There were a number of other state and local officials present. This was the speaker order lineup:

- Senator Will Haskell (SB 127 co-sponsor)
- Barry Kresch, President of the EV Club of CT

- Rep. Jonathan Steinberg (SB 127 co-sponsor)
- Jim Marpe Westport First Selectman
- Jeff Curry Lucid Motors
- Kaitlin Monaghan Rivian
- Lori Brown League of Conservation Voters
- Daniel McInerney International Brotherhood of Electrical Workers
- Senator Bob Duff Majority Leader
- Former Senator Art Linares

Paul Braren has posted video of all of the speakers on his blog.

Journalist David Pogue recorded remarks that were played to the group. A schedule conflict prevented him from appearing in person but you can hear what he had to say. (His remarks are just short of 4 minutes.)

https://evclubct.com/wp-content/uploads/2021/03/Poque-Com.mp3

The presentations took place at the Westport Train Station in front of a depot building with a solar array that powers the building and 4 adjacent EV charging stations. These were the first solar-powered public chargers in the state. They were installed in 2012, which is when I met the club founder, Leo Cirino, and became a member.

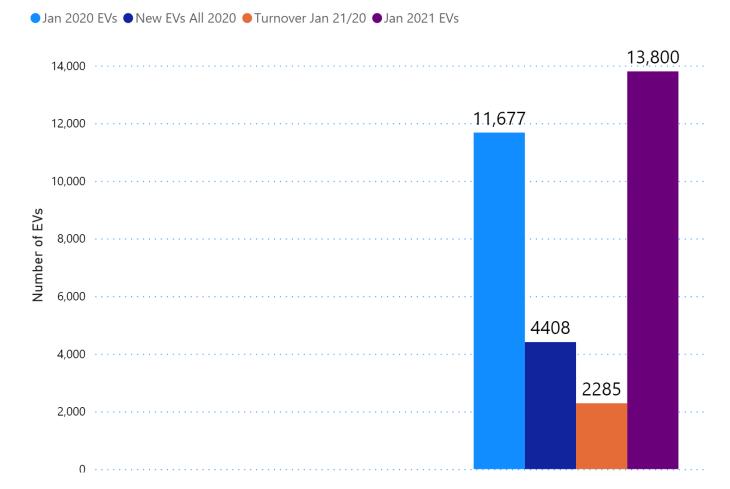


Model Y and Lucid Air — charging stations are to the right of the building by the white Chevy Volt

Long Way To Go

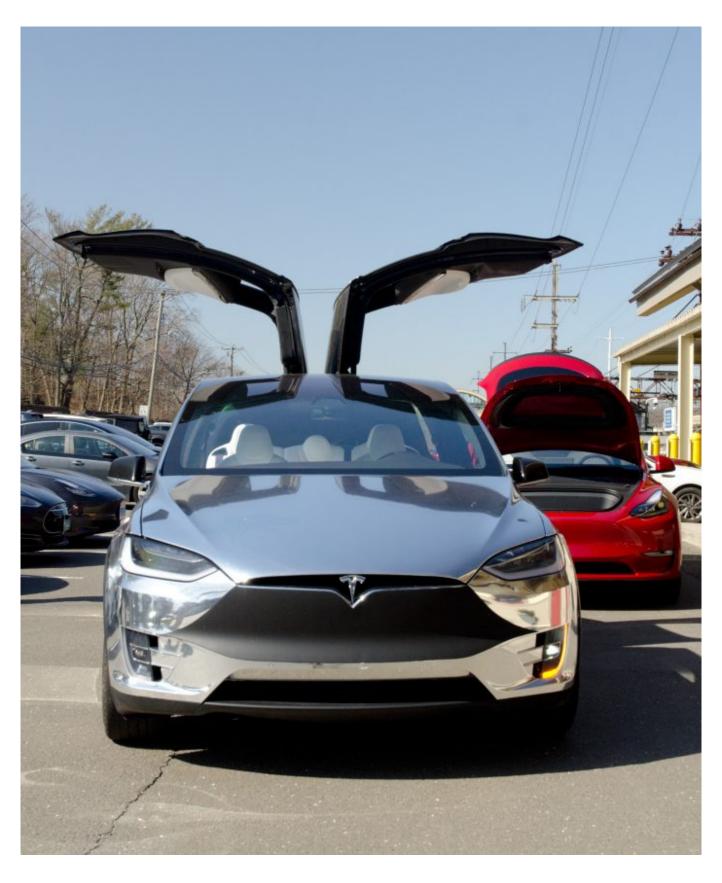
In his remarks, Sen. Haskell noted that the state had a long way to go to reach its goal of 500,000 EVs in the fleet by 2030. I've written a lot about that and noted that given where we are today, 13,800 EVs, it will be necessary to maintain a 49% compound annual growth rate to get there. This may sound high, and it is, but it is actually worse than it sounds because this figure is growth in net registrations. Each year, there are new vehicles added to the file, but there is also turnover from vehicles leaving the file. In 2020, the turnover was the equivalent of 52% of the vehicles that were new to the file. So from an acquisition perspective, it means we need to double each year. Without SB 127, we'll never get there.

Turnover Analysis for 2020



There are many that we need to thank for a successful event including members of the EV Club and the Tesla Owners Club, not only for coming, but also for reaching out to our legislators; the public officials who support this bill; the IBEW; and Tesla, Rivian, and Lucid.

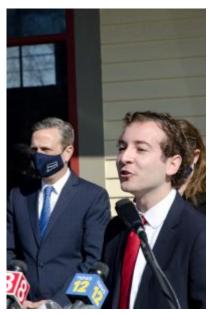
As encouraging as it was to see this level of support, it's not over. The bill will be called for a committee vote on Wednesday. If it passes, then it goes before the full chamber. It feels like we're only to the quarter-finals. We will update this space as we move up the brackets.



Tesla Model \boldsymbol{X} in chrome wrap. Model \boldsymbol{Y} on the right.







Lucid Air Interior, Who are those masked men — Barry Kresch and Bruce Becker getting set for the presser, Senator Haskell speaking about the bill (Majority Leader Duff in the background)

One final note: We have been asking people to tell their legislators they support this bill. That doesn't stop with the press conference or even the committee vote. It is important they hear from you. Tesla has set up an "engage" page for CT that enables a 1-click message or the opportunity to customize it for yourself. You may have to set up an account. You don't need to be a Tesla owner to do that.

Is This Really Happening — OEMs Bypassing Dealers?

Volvo Is First Manufacturer to Bypass Dealers for EV Sales

When we blogged about the EV Freedom Bill, SB 127, a short while back, one of the facts that we unearthed was that in Germany, Volkswagen had basically given up on its dealerships to sell EVs. It began selling them corporately, using the dealerships as agents. And their strategy worked! The company had a successful introduction of its ID.3 last fall and saw it become a top-selling BEV in Europe. (This car is not being brought to the USA. VW is now taking orders for its larger sibling, the ID.4 in this country.)

It was an interesting development, but it didn't necessarily mean that we would see the same thing happen here given franchise laws that are generally more restrictive than in Germany, where manufacturers are allowed to own stores. Well, not so fast. The New York Times reported a story about Volvo announcing a transition to an all BEV lineup by 2030, 5 years sooner than what was viewed as an aggressive announcement by General Motors.

If you stay with the article as far as the 13th paragraph, this little tidbit is reported:

"In another break from the practice of traditional carmakers, Volvo's electric models will be sold exclusively online."

Volvo is implementing a no-haggle sales policy. Like Tesla.

Dealers are being used only for test drives and delivery. In other words, the dealer becomes an agent. Exactly what VW is doing in Germany.

This was punctuated by a club member who lives in Fairfield County and had made an inquiry about the XC40 Recharge a while back. He was invited to an up-close and personal encounter with the car — in New York City. (There is no shortage of Volvo dealers locally.) Here is the invitation:

VOLVO



you're invited.

We are hosting an exclusive event featuring the XC40 Recharge in your area. It's a unique opportunity to experience our pure electric compact SUV up close and personal. While there, you can also be among the first to see the just-revealed new pure electric Volvo C40 Recharge.

As always, your safety is our top priority. Advance appointments are required to ensure that you can explore the vehicles without crowding. Be assured that the vehicles are sanitized between appointments.

We look forward to seeing you.

When:

March 3 - March 13, 2021 10:00 AM - 6:00 PM By reservation only, Monday through Saturday (Closed Sunday)

Where:

Volvo Cars Manhattan 565 11th Avenue New York, NY 10036 (corner of W 43rd St. and 11th Ave.) We presume this is a temporary strategy to prepare for the transition to all-electric. Or perhaps a hybrid strategy like Volvo's corporate sibling Polestar, which has only 3 dealerships in the country. If it isn't, then there will be no Volvo dealers and Volvo will have to shake hands with Tesla. Nonetheless, it is a dramatic announcement, and we wonder if this will result in legal wrangling. On the other hand, maybe they're glad not to have to sell an EV.

Carbon Credits for EV Charging Stations

Forth EV Offsets Flyer (1)

This link to the CT Green Bank has more information

2020 Wraps With a Bang

2 Environmental Wins Conclude the Year

2020 is a year most of us will be happy to see in the rearview mirror. But the last couple of weeks have brought two wins that deserve to be celebrated.

Transportation Climate Initiative

Governor Lamont signed the Transportation Climate Initiative Memorandum of Understanding today, December 21. TCI is a cap and invest program that will place a tax on fossil fuel at the wholesale level that will yield funds for the state to invest in clean transportation. It is anticipated that \$89 million could flow to the state in 2023, rising to \$117 million in 2032 with a reduction in greenhouse gas emissions of 26%. The program is similar in overall design to the RGGI cap and invest program that has been in place for power plants. The TCI iteration is more complex in that there are many more point sources of pollution. The reason the funds are not anticipated until 2023 is that there is still a considerable amount of rulemaking that has yet to occur. For a thorough piece of reporting on this, see this article in the CT Mirror.

Monetizable Credits for EV Charging Stations

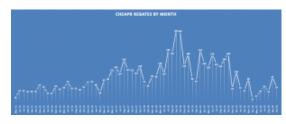


The second piece of good news is that the CT Green Bank has established a carbon credit monetization program for the owners of EV charging stations. This is not for residential owners. It is for businesses or other entities that control dozens or hundreds of charging stations. Details here.

CHEAPR

We have been closely following the CHEAPR saga, the year-long and still unresolved effort to revise program parameters, and have been publishing monthly program status from the CHEAPR

dataset. It is anticipated that the board will vote on this reasonably soon.



CHEAPR Rebate History

Events

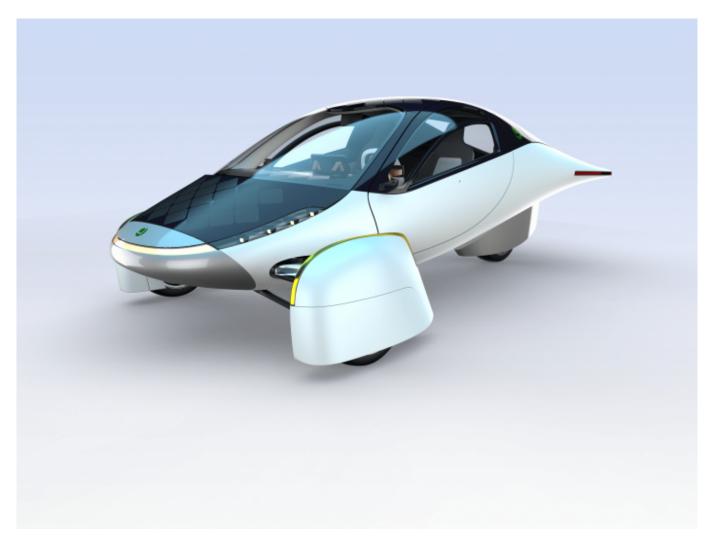


2020 started off with one of the best-attended events in the club's history when Westport Police Chief, Foti Koskinas, brought the fully customized Tesla Model 3 cruiser to a club meeting in February. After that, the pandemic lockdown threw sand in the gears of our event

planning, though we still managed to hold 2 socially distanced outdoor events. The first was a fully-subscribed <u>EV parade</u>, held in partnership with Sustainable Fairfield, during National Drive Electric Week. The second was a test-drive event of the <u>Polestar</u> 2 BEV and the Polestar 1 PHEV.

There are a number of new EV introductions anticipated for 2021 and we hope to preview some of these for members. One thing that we can tease is a tentatively scheduled mid-year test-drive event for the new Aptera EV, a 3-wheeled vehicle





with fully integrated solar and the lowest drag coefficient of any vehicle, the top trim level has an electric range of 1,000 miles for about \$46,000.

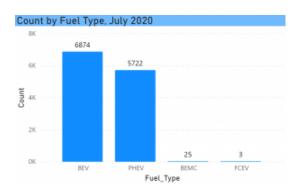


FreeWire Charger

As we were forced to move into Zoom mode to hold events, we lined up several speakers. We had Gabe Shenhar from Consumer Reports give us a detailed, early preview of his Tesla Model Y test-drive. Peter Millman spoke to us about Community Choice Aggregation, and John Erdman of FreeWire spoke about their

charging solution with a self-contained battery that allows DCFC high-speed charging while avoiding demand charges.

Data



EVs by Fuel Type July 2020

We continued with our tracking of EV adoption levels in the state, which is published to the website via the Interactive EV Dashboard. This is the only publicly available, free-of-charge, resource for this level of detail that we are aware of. We also submitted an information request to obtain CHEAPR rebates by dealership. We have had numerous requests for dealership recommendations and this was our way of responding to this using quantifiable data that applies statewide.

Opinion Leadership

The club continues to present to interested organizations, participate on panels, respond to media requests, and publish opinion pieces, in the latter case with Op-Eds in The Hartford Courant, The Hartford Business Journal, and CT News Junkie.

As we gradually emerge from this pandemic cocoon, we look forward to a more active year in 2021. We have a speaker on January 14th who will be discussing a federal carbon tax proposal. You may ask how this intersects with TCI and that is one of our questions.

Best wishes for a safe and healthy holiday season!

Mustang goes Electric with Mach-E

The Ford Motor Company bets the Mustang brand on the battery-electric Mustang Mach-E!

Post by Larry Thompson



The original Mustang was launched in 1964 at the World's Fair in New York (pictured). It had a 6 cylinder gasoline engine producing 101 horsepower and could go from 0-60 mph in 8.2 seconds. It cost \$2,400 and sold 22,000 cars on the first day, more than 400,000 cars in 1965, and more than 10 million to date.

Times change, and the 2021 Mach-E is a battery-electric SUV with a 75-98 kWh battery located between the wheels for maximum cornering performance. The performance (GT) model has 459 horsepower and can go from 0-60 mph in less than 4 seconds. The Mach-E has a range of 210-300 miles and can be charged at home or any EV charging station with Combined

Charging Systems (CCS) connectors.

Ford tells us the car can charge from 10% to 80% capacity in 38 to 45 minutes using public Level 3 charging stations. Compatible charging providers include EVGO, Blink Charging, and Chargepoint. Every Mach-E also comes with 250 kilowatthours of free charging at more than 400 Electrify America fast-charging stations. Additionally, the FordPass Charging Network consists of more than 13,500 charging stations in North America.

Because the Mach-E is a battery-electric vehicle, it produces no tailpipe emissions or greenhouse gases which helps reduce the effects of climate change.

Mach-E Arriving in Showrooms Later This Month

The Mach-E will be in showrooms in late November and vehicle shipments are expected by the end of the year. Pricing ranges from \$42,895 to \$61,600. As of this writing (November 2020), the Mach-E qualifies for a Federal incentive of \$7,500. However, there is no incentive in Connecticut as the CHEAPR program currently only provides incentives for EVs with a maximum MSRP of \$42,000.



Thanks to the folks at Stevens Ford and Lincoln in Milford, Connecticut for providing the opportunity to photograph the Mach-E.

Aug CHEAPR and October Vote

Few CHEAPR Rebates Given in August

Another tepid, desultory, underwhelming (I'm running out of adjectives — feel free to help in the comments) month for the CHEAPR program with only 40 rebates given out and a total dollar amount of \$28,000. This is the second-lowest month of the year and continues the dispiriting (another adjective!) trend we have seen since November 2019. One interesting item: there were 9 rebates for the new Toyota RAV4 Prime plug-in hybrid. Between the RAV4 Prime and the Prius Prime, Toyota vehicles dominated the rebate activity. The reporting has been that the plug-in RAV4 Prime is a severely supply-constrained vehicle at present and there was some doubt that any would make it out of California, but apparently, they have.

Note: CHEAPR often restates the prior month when issuing new data. In this case, July has increased from 57 to 62 rebates and it is incorporated into the title graph.

Decision Time

The next CHEAPR meeting is scheduled for October 9 at 11:00 AM.

The Center for Sustainable Energy (CSE) presented a set of proposals for program revisions in July. The agenda includes a vote on the new program. The meeting is scheduled for only one hour, so we don't expect much discussion. We do not know if this will be an up or down vote on the package or if the items will be considered individually. We know that despite 3 meetings and public comments, there isn't a consensus on all

the items.

This is what we know to the best of our information.

The package that will likely be presented to the board in October will have no differences relative to what was proposed in July.

- No e-bike incentive or even a pilot test. Ix-nay on this from the DEEP attorneys.
- A used-EV income-limited (lower/middle income, or LMI) incentive (non-controversial).
- A supplemental LMI EV incentive (non-controversial).
- No changes to base incentive levels or to the MSRP cap.
- No changes to the much higher fuel-cell vehicle incentive, which stands at \$5000 with an MSRP cap of \$60,000.

UPDATES as of 10/25/20

Modeling scenarios include:

- Maintaining the current (since 10/19) MSRP cap of \$42K or raising it to \$50K.
- Base BEV incentives of \$2500 or \$1500.
- A possible temporary "stimulus" additional sample of \$1750 for BEVs and FCEVs, and \$500 for PHEVs.
- \$500 increase to \$2500 for the LMI incentive.
- Possible inclusion of scenarios with base-level incentives less than \$1500.

Incentive Levels and MSRP Cap

Much commentary, from board members, public attendees, and public comments, was in favor of raising the base incentives and the MSRP cap to at least where they were before DEEP lowered them in October 2019. These currently stand well below comparable incentive programs in nearby states. The CSE was

tasked with modeling scenarios and they forecasted that there was a possibility that demand would exceed available funds, thus risking disruption. This blog doesn't buy that line of argument for several reasons.

- A pandemic and recession of unknown duration make for a difficult environment in which to model. There is a lot of guesswork here, exacerbated by the fact that there are no empirical data on the take-rates for the new LMI incentives. A disruption would likely only occur if the economy roars back and the participation rates are at the high end of estimates.
- The dealership contingent spoke out for a higher MSRP cap. They argued that leases have grown in popularity to about half of all new car sales, and people can manage a lease payment on a vehicle they can't afford to buy. Also, we are soon to see a wave of crossover and SUV EV launches, and these popular form factors are more expensive than sedans.
- Based on our <u>analysis</u>, and comments from the dealers, there isn't much of a used EV market at this time. The incentive will help, but it will take some time for auction bids to be influenced such that inventory can build. Also, used Teslas are probably too expensive for an LMI limited buyer (and we don't know how the rules will work for them – they may not qualify – something we will seek to find out).
- At the July meeting, when CSE proposed this incentive regime, they advised that the LMI system development would cause it not to be available until Q1 2021. We don't know if they have been able to work on it during this period when the program isn't finalized, but there could potentially be a delay.
- There is more money available DEEP has indicated that the unspent funds from 2020 (they have only given out \$398,000 in consumer rebates), as well as unspent bridge financing from 2019, will be rolled over into 2021. This

- will yield approximately \$4.9 million in available funds (compared to the \$3 million budget).
- The CHEAPR mission seems to be increasingly skewed towards the equity part of the mission. This blog supports the LMI incentives (and e-bikes, for that matter), but also sees the mission as just getting more EVs on the road. The program has fallen seriously short of that in the past year.

For these reasons, we think the best course is to raise the incentives and collect data. There will be plenty of time to course-correct if necessary. CHEAPR has an important role to play in moving people to drive electric. This is attested to by consumers, dealers, and our <u>data</u>. Let's allow it to fulfill its potential.

Closing Pet Peeve

The \$5000 fuel-cell rebate has never been given out in the 5+ years of the program's existence, and there is no sign it will be anytime soon. You can't buy one of these vehicles at present, and there is only 1 public hydrogen refueling station in the state. And yet, DEEP continues to use this as its headline incentive. It is misleading. It can be seen in the first sentence of the first paragraph on the CHEAPR home page. It was spoken out loud by Tracy Babbidge during the Sustainable Fairfield Webinar on September 28th. It was said by Victoria Hackett when she spoke at the Tesla leasing kickoff in February. Those are the occasions we are aware of but this is clearly not inadvertent. They are not helping themselves.

Editors Note: The October 9th meeting did not yield a resolution. A letter from the EV Coalition was debated that proposed a different structure. No vote was taken.

Meeting Details

We encourage members of the public to listen in! This is the Zoom info:

Webinar Information:

Join Zoom Meeting

https://ctdeep.zoom.us/j/99938032925

Meeting ID: 999 3803 2925

One tap mobile

+16468769923,,99938032925# US (New York)

Meeting ID: 999 3803 2925

Find your local number: https://ctdeep.zoom.us/u/adlDH6PJuC