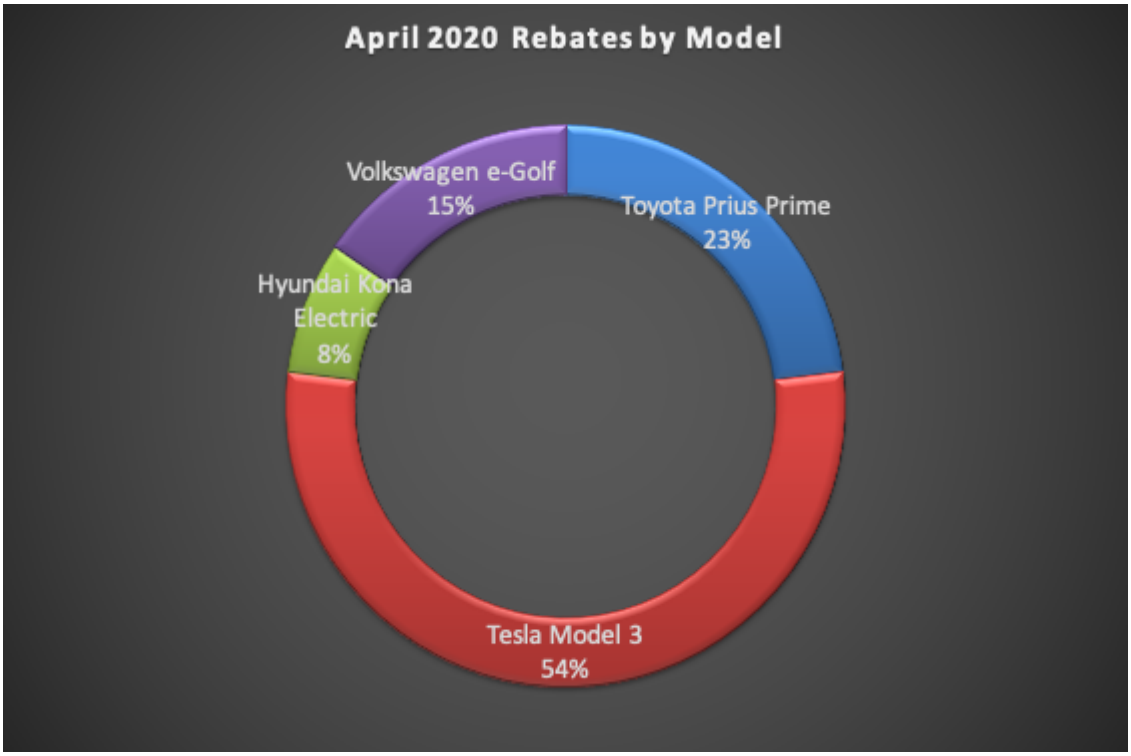
What if They Gave a Rebate and Nobody Came

Rebates at Lowest Level Ever

The lowest number of monthly rebates since its inception has been awarded by CHEAPR in April 2020, a not so grand total of 13, down from 90 in March.

There is almost no public reporting anymore of monthly new vehicle sales, but we know the automotive sector rapidly plunged in the latter half of March, which was felt over the duration of April. There have been some reports of a modest uptick in May.

Following the counter-intuitive increase in rebates in March (relative to Jan. and Feb.), when the rest of the world was collapsing, this is probably more in line with what will be the new normal for the time being. Tesla so dominates the EV market, as well as being the only manufacturer to post a sizable YOY sales increase in Q1, that how many Model 3s are rebate eligible is mostly what determines where the trend

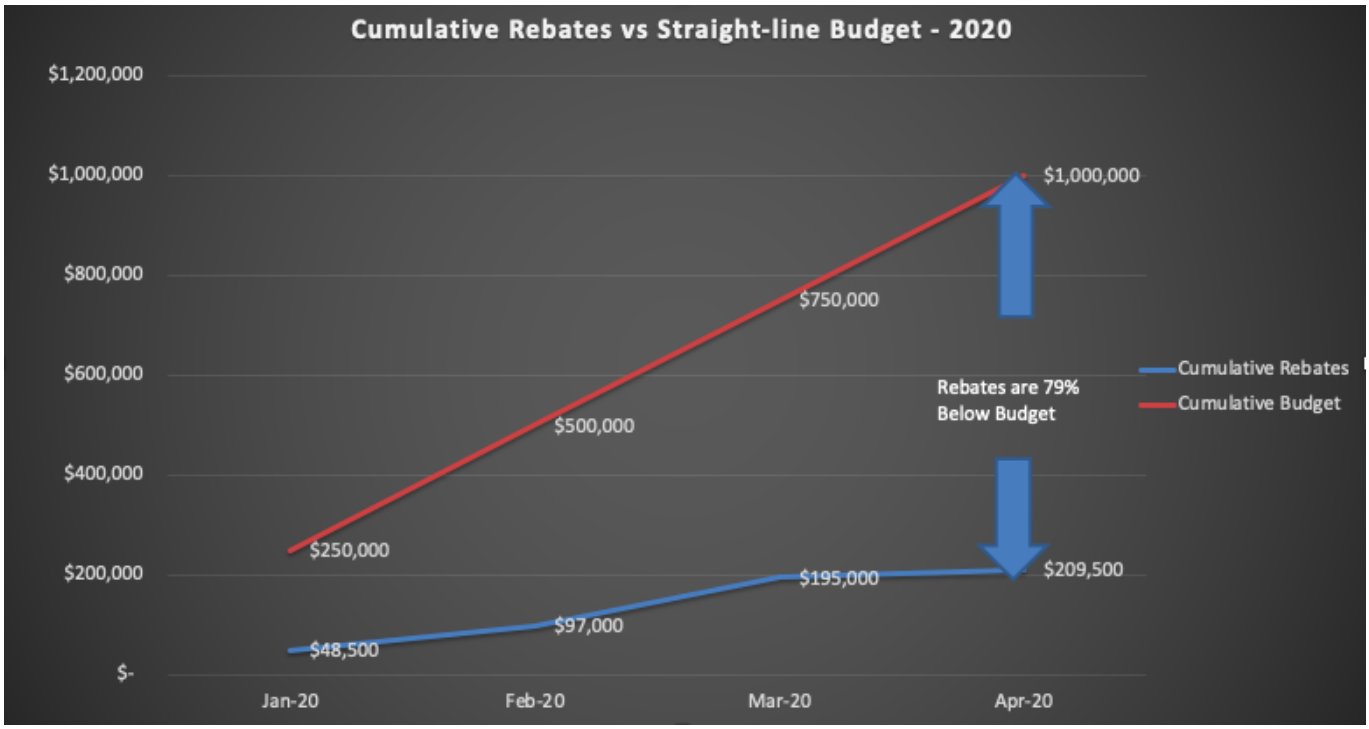


goes. It is also possible that some Model 3 supply disruption due to the temporary closure of the Fremont plant is part of the reason, as well. The Model 3 accounted for 54% of April rebates, which translates to all of 7. General Motors has been heavily discounting the Chevy Bolt, but there were no Bolt rebates in April.

CHEAPR Way Under Budget

This blog has been critical of the drastic restrictions imposed on rebate parameters in October 2019. DEEP told us at the Tesla Leasing Event in February that they were concerned that funds would run dry. That was a 3-month problem (Oct – Dec. 2019) until the new funding started, but the new CHEAPR board has yet to course-correct, despite pacing hugely under budget.

The CHEAPR budget is $3 million annually and there are no rules about how it is supposed to pace. There are good reasons for carefully managing the budget. Temporary funding disruptions are, well, disruptive. However, if we look at the budget on a straight-line cumulative basis and compare it to the dollar amount issued for rebates, by that definition it is pacing 79% below budget.



There is also the consideration of a forthcoming rebate for used EVs. To this point, there has been no announcement, and we are doubtful there will be one anytime soon because the Roadmap recommends that an outside contractor be engaged to design and implement it, meaning this presumably hasn't happened yet. We also expect that an incentive for a used EV will be lower than for a new vehicle, and will include an income cap, as well as a lower MSRP cap. We don't see this as a budget-buster.

EV Roadmap and CHEAPR

The subject of purchase incentives is accorded 15 pages in the EV Roadmap and it traces the origins and thinking about the program. It is still true today, as it was in 2015 when CHEAPR was begun, that while battery prices are on a downward trajectory, EVs have not yet reached cost-parity with ICE vehicles. Cited in the Roadmap is a stat from the Multi-State ZEV Action Plan that there was an average purchase price difference of greater than $10,000 between comparable EV and ICE vehicles in 2016. While EVs cost less to run and maintain, this headline price difference is a real barrier.

I have to say that it was a surprise to learn from the Roadmap that until 2020, CHEAPR was a pilot. For 5 years. Well, okay. With the legislation that was passed last year, it is now reconstituted with an independent board that remains situated in DEEP for administrative purposes.

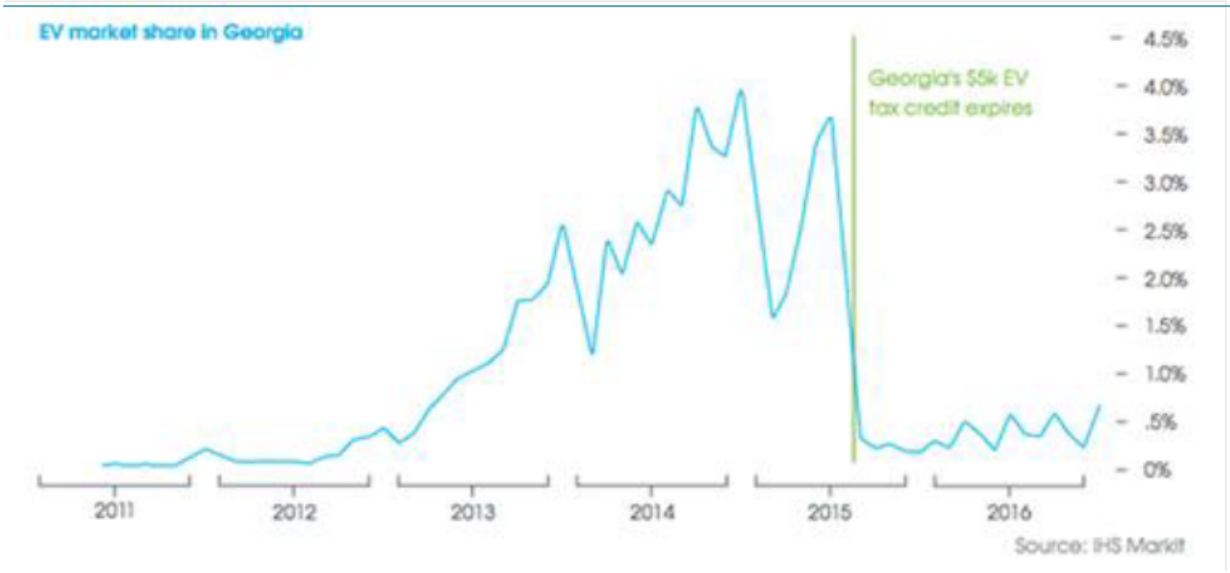
Something that *has* changed is that two manufacturers, Tesla and General Motors, have exceeded the unit sales threshold for the federal EV tax credit and have passed beyond the phase-out period. There is no federal incentive for vehicles from these two manufacturers. The Roadmap cites projections from EVAdoption that indicate the next automaker to cross the sales threshold will be Nissan in the latter half of 2021. (This projection predates the COVID-19 crisis.) Attempts in Congress to modify the program and raise the threshold have not met with success. In this context, CHEAPR assumes a larger role.

Value of Purchase Incentives

The EV Club of CT is a supporter of CHEAPR and available data indicate that incentives matter. CHEAPR has handed out 5,984 rebates through April 30, 2020. Given that there were 11,677 EVs registered in the state as of Jan 1, 2020, the program looks to have played a meaningful role. Survey-research of rebate recipients reports that over 80% of respondents cite the incentive as being either extremely or very important to their decision to acquire an EV.

The Roadmap cites experiences of similar programs in other states. One of them is Georgia, which has been cited previously in this blog, as a dramatic example of a “light switch test.” When Georgia lawmakers rescinded a generous tax credit of $5,000 and added an annual EV fee, sales fell off a cliff. This is a graphical representation of what happened that was published on page 89 of the Roadmap.

Figure 19: Effect of the Georgia state EV tax credit repeal on Georgia's EV adoption rates



Rebate Parameters

There are several variables that go into how much of a rebate if any, a given EV purchaser qualifies for, which we are calling rebate parameters (and which DEEP refers to as "bins).

- Available funding
- Rebate size and tiers
- MSRP cap
- Future consideration of a rebate for used EVs, along with a likely income cap.
- One rebate lifetime per licensed driver

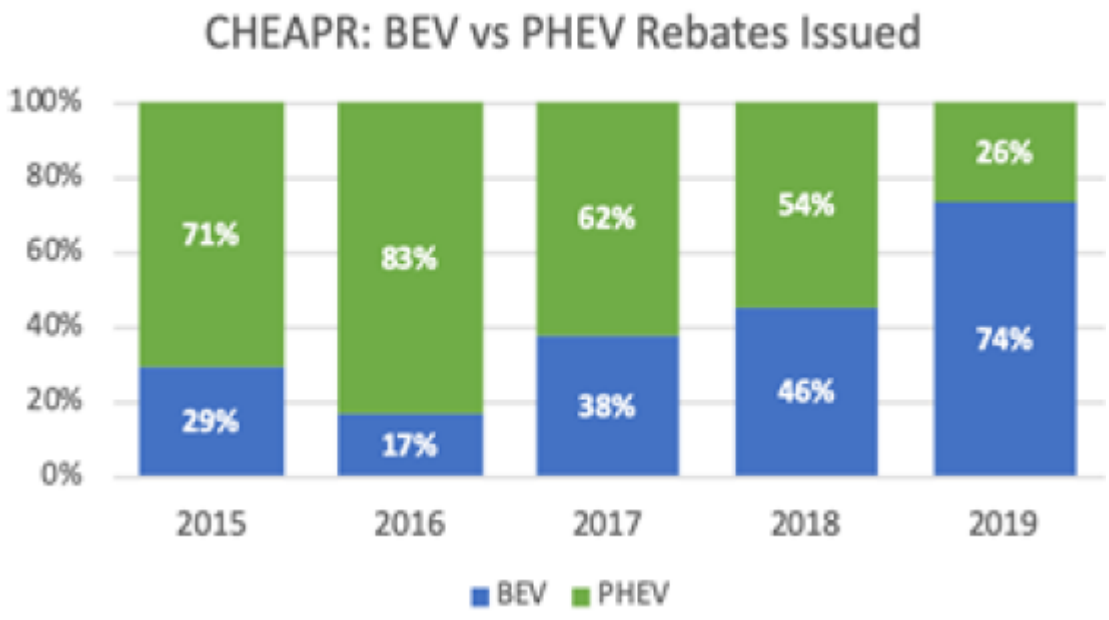
Rebates are offered for battery electric vehicles (BEV), Plug-in Hybrid Electric Vehicles (PHEV), and Fuel-Cell Electric Vehicles (FCEV). Rebate parameters have changed several times since the program began. The size of the rebate was originally pegged to the size of the battery pack but was modified in 2017 to be based on EPA-rated electric range. Battery pack size is not directly indicative of the range, so this approach makes sense. Also, over time, there are changes in technology (substantially longer ranges) and other aspects of the environment that gradually, but consistently, evolve.

The MSRP cap initially was $60,000. It was changed to $50,000 in October of 2018 and then to $42,000 where it currently stands. Rebate tiers are currently $5000 for any FCEV, $1500 for a BEV with a range of at least 200 miles, $500 for a BEV with a range of fewer than 200 miles, and $500 for any PHEV.

The number of rebates awarded has declined significantly since the October change and it is obviously because the lower level now excludes almost all trim levels of the Model 3. This blog has discussed this previously on April 2nd and in earlier posts.

We also noted that the lowering of the MSRP caused a shift in the mix of rebates toward PHEVs, which we discussed here. (April is the low-volume exception.) But you wouldn't know this from the Roadmap, which on page 83, contains this exhibit of rebates by fuel-type.

Figure 15: Rebate percentages by vehicle type over time



The footnote indicates that the rebate data had been updated through July 26, 2019, in other words, before the changes were made. It seems clear that lowering the MSRP cap was counter-productive, both from the perspective of consumers being able to use the rebate along with making the funds less efficient

in terms of zero-emission miles subsidized. The market in general is trending toward BEVs which may eventually change things. But we strongly feel that the MSRP should be raised to at least $50,000 (same as MA) or higher (NJ is $55,000 and NY is $60,000). The rebate levels could be left in place while the run-rate is evaluated with the higher MSRP, whatever modeling has been done for used EVs, and projections for when this depressed market normalizes. We are not aware of the law allowing unused funds from one year to be carried forward.

Dealer Incentive

A headline that appeared over a NY Times story in 2015 read, “A Car Dealers Won’t Sell: It’s Electric.” The unwillingness of many dealers to sell EVs has been a persistent bottleneck. So the idea that DEEP included in the original CHEAPR formulation a $300 incentive that would go to the dealership for each EV sold seemed a worthwhile experiment. It may sound slightly farcical to pay a business that is in the business of selling cars to sell cars, but if that is what it takes to seed change, so be it.

The incentive was subsequently lowered from $300 to $150. In the Roadmap, DEEP openly questions whether it is worth it and whether the funds would be better allocated to consumers to stretch what is a modest budget when compared to incentives in other states. (For example, the New Jersey per capita funding is 50% higher.) DEEP also found that the majority of the incentives were kept by the dealership, i.e. not given to the salespeople, which was kind of the basic idea.

This was underscored by two EV Shopper Studies done by the Sierra Club in 2016 and 2019. In the latter study, it was found that 74% of dealers did not have a single EV on the lot. The study did not report out CT separately (only CA had sufficient sample size for that) but in the 2019 study, there were no local dealers among those visited in the research that scored the highest rating. Our EV Club does know of some

dealerships that do a good job with EVs and we appreciate them. We just wish they were the norm and not the exception.

VW Works Around Its Dealers in Germany

The most interesting recent development is from VW in Germany. They have announced that VW corporate will take responsibility for selling EVs and the dealers will only act as agents. Dealers will arrange test drives and deliver the car, but will not otherwise be part of the sales process. They will receive a fee for each vehicle they deliver and they will not have to buy the car. This last part is particularly interesting because it eliminates the risk of having to carry the cost of financing the vehicle if it is a slow-seller. It is the closest one can come to direct sales while still maintaining the franchise sales model and implicitly acknowledges its limitations. Here is a more detailed description published in ChargedEVs.

Dealer Recognition Program

Instead of the dealership financial incentive, we endorse DEEP's proposal to work with the CT Auto Retailers Association (CARA) and create a dealer recognition program. If this is promoted to the consumer, it could serve to avoid some of the negative feedback loop that currently exists. We encourage that care is taken in giving this award so it isn't vaporware. EV Club of CT works with the Sierra Club to conduct its EV Shopper Studies and our feedback to them will be to separately track visits to dealerships that are recognized in this way to see if their actions match the certification.

Fuel-Cell Electric Vehicle Incentive

CHEAPR has included FCEVs in its incentive plan from the beginning when incentives were set at $3,000. In July of 2016, the FCEV incentive was raised to $5,000. And when the MSRP cap was lowered to $42,000 for EVs, it was raised to $60,000 for

FCEVs (they're more expensive).

There have been exactly zero of these incentives awarded and there is a total of 3 FCEVs registered in the state. There is only 1 public hydrogen refueling station in CT.

FCEVs were dropped from the federal tax credit in 2017.

The rationale in the Roadmap is to support all promising new technologies and DEEP recommends continuing these levels for FCEVs for the duration of the current funding, which is through 2025. Their goals are modest: 591 FCEVs in the fleet and 6 or 7 refueling stations in the state by 2025. Keep in mind that a hydrogen refueling infrastructure has to be built from scratch. The other rationale that we have heard is that FCEVs have a longer range (and a short refueling time if you can find a place to fill up). The range part of that used to be the case, but now the longer-range BEVs have a similar range as FCEVs and higher mpg-e. Certainly, the differential in incentive can no longer be justified by range alone.

This blog is not against FCEVs, which are zero-emission vehicles. We do feel that DEEP/CHEAPR over-emphasizes them and, at times, uses them to represent CHEAPR in an intellectually dishonest way. At the Tesla Leasing Event in February, the DEEP spokesperson said that the CHEAPR program offers rebates of up to $5,000. It may be a convenient headline, but it is only true in the narrowest technical sense. For all practical purposes, the max rebate is currently $1500. And almost no Tesla qualifies for even that.

This is a link to the Roadmap. DEEP recommendations for CHEAPR are on page 92. We won't repeat them here.

As we have made clear, these are our priorities:

- Raise the MSRP cap.
- Move quickly to implement an incentive for used EVs.
- Raise rebate levels, funds permitting.

- Eliminate the dealer incentive and re-purpose those funds for consumers.
- Develop guidelines for a dealer recognition program, which hopefully includes some input from consumers.
- Publish rebate data at the dealership level as they do in New York. Arguably, that alone is a dealer recognition program.
- Make e-bikes eligible for incentives under CHEAPR.

And, finally, one area where we are in agreement with the Roadmap, is to look to the future and the potential for leveraging incentives by partnering with utilities, as part of TCI, and with the manufacturers.

DEEP EV Roadmap Takes The Scenic Route

EVs = Clean Air

"If I could wave my magic wand and we all had electric cars tomorrow, I think this is what the air would look like," said Ronald Cohen, a professor of atmospheric chemistry at UC Berkeley who has been studying the effects of the stay-at-home orders on air quality, as reported recently in the LA Times.

The Electric Vehicle Roadmap prepared by the Connecticut Department of Energy and Environmental Protection (DEEP) has been recently released. For all the research and policy thought that went into it, and there is quite a lot, the report reads with a striking lack of urgency and overlooks opportunities to start making immediate progress.

It is tragic that it took a pandemic and its collateral economic damage for us to breathe clean air. CT air quality is often poor as detailed in the Roadmap (p. 12). Worse, preliminary findings from a study conducted at Harvard Medical School indicate that breathing polluted air increases COVID lethality.

As bad as what we are currently enduring may be, it presents an opportunity for us to make changes. If we make the right choices, we can always have clean air, respond to the climate crisis, and create new green jobs. But this requires action. The recommendations in the Roadmap are mostly of a tentative or preliminary nature. These are a few examples.

Demand Charges

If we are to have enough public charging to mitigate range anxiety, we need more public DCFC (fast chargers), particularly along the Interstates. It isn't happening because utility demand charges, which weren't developed with EVs in mind, make commercial installations economically unviable. Note the "out of order" level 3 chargers on I-95 and the Merritt Parkway (our information is that out or order = turned off).

Photo: Matthew Kresch

Demand charges are extra fees imposed if electricity usage exceeds a certain threshold. The purpose is to pay for the infrastructure needed to support peak usage periods and it affects commercial customers. The fees can be substantial.

Pacific Gas and electric in California presented a rate design solution to the regulatory board in 2018 that would use a subscription formula to avert demand charges. The California Energy Commission released an extensive study of how to think about demand charges in an EV world in April 2019.

In contrast, this is the recommendation in the Roadmap: "DEEP recommends exploration of a sliding scale tariff approach for both Eversource and UI that is responsive to DCFC station utilization and EV market penetration."

There is currently a temporary three-year demand charge waiver in place in CT. We're one year into it. Few seem to be aware of it. Regardless, a temporary waiver isn't going to accomplish anything due to the risk of stranded assets. The CT Public Utilities Regulatory Agency has recently issued an RFP for Program Design Proposals with a deadline of July 31. In other words, we're just getting started.

Time of Use

Time of Use pricing (TOU) is an important consideration both for making EV "refueling" cost-efficient as well as for grid optimization. If you have ever visited this Eversource page, you will see how little CT consumers have to work with. Or if you have tried the energy savings calculator on cutmybill.com, the limitation of only using normative data makes it of little use.

Utilities in Vermont, California, New York, and Massachusetts have implemented residential incentive programs that may include paying for a networked level 2 EV charger or moving the charging to a lower rate for off-peak times. It not only

saves the customer money; it saves the utility money as well due to avoidance of adding capacity. Con-Edison in New York has an incentive that works with a device that accesses the vehicle's telemetry and awards rebates for charging that occurs during off-peak times (even outside of Con-Ed territory).

That said, this is a complex and utility-specific topic. It involves considerations of whole-house or EV only. The latter requires either sub-metering or a networked level 2 charger. The recommendations in the Roadmap on page 68 are, "…explore the potential for an active managed charging program that incents EV drivers to charge during off-peak periods." "…current TOU rate tariffs should be optimized…" "DEEP will continue to monitor…programs in other jurisdictions…" DEEP alone can't implement TOU. The utilities must do it. The regulators need to approve it. We would have preferred to have seen more specific recommendations.

State Fleet

CT maintains a fleet of about 3,500 vehicles. The Roadmap recommends, "DAS (Department of Administrative Services) should develop a detailed light-duty fleet transition plan that outlines annual EV procurement targets for the state fleet, beginning with a 5 percent target of eligible state vehicles in 2020…" We assume "eligible" means mainly sedans, since that is the bulk of currently available EVs.

By way of contrast, New York City has replaced a third of its fleet of sedans with EVs as of 2019 and is targeting having 4,000 on the road by 2025. They report a savings of $550 per year per vehicle in fuel and maintenance for an EV sedan relative to its internal combustion engine (ICE) counterpart. And, by the way, they installed 568 charging stations and counting to support this fleet, 65 of which are solar-powered. Finally, the city plans to cut its fleet by 1,000 vehicles as

part of an effort to reduce on-road miles traveled. Based on the experience of NY and others, including some municipalities in the state, CT can move much more quickly with low risk.

Heavy-Duty Vehicle Vouchers

As noted in the Roadmap, California and New York have implemented voucher incentive programs to offset the acquisition cost of clean heavy-duty vehicles. CA has used this program to fund the deployment of over 4,000 such vehicles. The Roadmap: "DEEP will continue to monitor the effectiveness of freight truck voucher incentive programs in accelerating the adoption of freight trucks."

Transit Buses

The Roadmap addresses buses: "on and after January 1, 2030, at least thirty percent of all buses purchased by the state shall be zero-emission buses." If "at least thirty percent" equals 40% for the sake of argument, that means that the fleet would be 33% electrified by 2040.

New York City plans for its entire transit bus fleet to be zero-emission by 2040.

Purchase Incentives

CT has an EV purchase incentive called CHEAPR. Funding was renewed by the legislature last year at $3 million annually for 5 years beginning with 2020. The incentive plan in New Jersey funds $10 million per year, which translates to 50% higher per capita. And CHEAPR is pacing 75% under budget for this year due to restrictive parameters imposed in October 2019. The MSRP cap should be raised and the rebate levels re-evaluated.

The enabling legislation for the new CHEAPR funding also

authorizes an incentive for used EVs with an income cap. Good idea, as there are more than twice as many used vehicles sold each year relative to new vehicles, and it would make EVs more accessible to car-dependent lower-income households. The Roadmap recommends contracting with a program administrator. It is fine to go outside for needed expertise. We just don't understand why it wasn't done a year ago when the legislation was passed.

Direct Sales – MIA

A glaring omission is direct sales. This refers to what has been known informally as "the Tesla bill," which would allow Tesla to open stores in CT. (It goes beyond Tesla as there are other EV startups looking at this model). This is a politically fraught topic, but what is most disappointing is the way that politics seems to have influenced what is supposed to be a comprehensive policy document. Doing away with the antiquated dealer franchise laws wouldn't cost the state a penny (it would generate revenue) and would accelerate EV sales immediately.

As of January 1, 2020, there were 11,677 EVs registered in CT. The Multistate ZEV (Zero Emission Vehicle) Action Plan that the state has signed onto calls for about 500,000 registered EVs by 2030.

Many of the subject areas covered in the Roadmap involve more than just DEEP. However, other states have already implemented pilot studies or EV-friendly policies. They've run the numbers, and they see that moving to EVs lowers pollution, saves money, and brings benefits to the grid. We can learn from them while simultaneously moving forward. CT is behind the curve, yet this Roadmap takes the scenic route.

CT EV Coalition Responds to DEEP EV Roadmap

This is the text of a letter that was sent to DEEP in response to the issuance of their EV Roadmap, which was published last month.

November 12, 2019

Commissioner Katie Dykes

Deputy Commissioner Vickie Hackett

CT Department of Energy and Environmental Protection 79 Elm St.

Hartford, CT 0610 DEEP.EnergyBureau@ct.gov

Dear Commissioner Dykes and Deputy Commissioner Hackett:

Thank you for the opportunity to provide comments in response to DEEP's October 11, 2019 Notice and Opportunity to Comment on its draft Electric Vehicle Roadmap for Connecticut (draft Roadmap). The Connecticut Electric Vehicle Coalition (the EV Coalition or EVC) is a diverse group of clean energy advocates and businesses, organized labor, and environmental justice groups that support policies that will put more electric

vehicles (EVs) on the road in Connecticut to achieve significant economic, public health, and climate benefits for our state.

The Connecticut EV coalition strongly supports the state creating a more strategic and ambitious strategy on zero emission vehicle (ZEV) deployment, one of several key strategies that will help the state tackle climate change, improve the public health and air quality, as well as create economic development opportunities for the state.

The EV Coalition appreciates the significant work that went into developing the draft Roadmap and looks forward to working with the Department to finalize a product that will serve as a useful guide for stakeholders and the State in equitably achieving transportation sector emissions reductions consistent with Global Warming Solutions Act (GWSA) goals.

The transportation sector is the largest source of greenhouse gas emissions in the State and responsible for the majority of smog-forming nitrogen oxide emissions. Connecticut will not achieve its GWSA commitments or achieve health-protective ambient air quality standards without significant electrification of transportation and reductions in vehicle miles traveled. To be effective, we believe that the Roadmap must strike the right balance between providing sufficient direction and avoiding over-prescription. The Roadmap should provide clear guidance to relevant market actors about expected roles and responsibilities and clarify both prioritization and timing for the recommendations in the document. At the same time, the Roadmap should eschew prescribing specific technologies, particularly given that technologies in the transportation sector are rapidly evolving and detailed specifications may become less appropriate over the duration of the Roadmap’s planning horizon.

With regard to prioritization, the Roadmap should clearly identify what needs to happen and when in order to ensure the

state is on track to meet climate goals. The final Roadmap should include timeframes for its recommendations and identify high priority actions. As discussed further below, those high priority actions should include establishing aggressive public fleet electrification goals, including goals for transit fleets; conducting outreach to environmental justice communities to better understand local transportation and design electrified transportation solutions appropriate to each community; creation of a low-income EV rebate that is available for purchase of both new and used vehicles to help get more low-income residents into EVs; requiring the state's utilities to develop electric rates that mitigate the impact that current demand charges have on deployment of fast-charging stations; recommending the adoption of EV-ready building codes so that all new construction is pre-wired for Level 2 EV charging; and recommending the elimination of the prohibition on direct sales of EVs in Connecticut, along with additional incentives for existing dealers to increase sales of EVs.

In prior comments, the EV Coalition urged DEEP to support its Roadmap with analysis of public charging infrastructure needs.1 We appreciate DEEP using the EVI Pro-Lite tool for this purpose in the draft Roadmap.2 DEEP should clarify, however, why the infrastructure need figures identified in the Roadmap using the EVI Pro-Lite tool differ from those provided in the final Governor's Council on Climate Change recommendations,3 and include figures regarding the charging infrastructure needs for supporting 500,000 ZEVs in Connecticut in 2030. In addition, we urge DEEP to conduct sensitivities around key parameters (e.g., ratios of plug-in hybrid electric vehicles to battery electric vehicles, distributions of battery ranges across the vehicle fleet, and availability of home charging) to better understand ranges of public and workplace Level 2 (L2) and DC Fast Charging (DCFC) plug needs for 2030.

Recommendations regarding Equity:

The draft Roadmap minimally addresses equity and environmental justice issues. We commend the acknowledgement to prioritize these communities, but believe the final Roadmap needs to go further. Connecticut's current transportation sector favors the single-occupancy vehicle and trucks. Low-income and minority communities are often among the worst affected by air pollution caused by these vehicles, affecting their respiratory and cardiovascular systems, and the environments in which they live. Any further action to electrify the state's transportation sector needs to address outstanding equity issues. While the policies noted below are addressed within our comments on the relevant sections of the draft Roadmap, we present them below for emphasis.

Connecticut should provide incentives for the purchase of older model EV's in order to expand the option of an EV purchase to low and moderate-income households. Currently, our EV rebates only apply to the sale or lease of a new EV, this should be altered to include a low- income rebate applicable to both new *and used* EVs so lower-income households can take advantage of the program.

In addition, a minimum percentage of the benefits of electrified transportation programs should be established for environmental justice communities and state-identified Economic Opportunity Zones. In addition to the types of community-specific programs intended to identify electrified solutions to the specific transportation needs of these communities (discussed below), it may be appropriate to carve out a percentage of EV charging stations to be sited in environmental justice communities particularly in areas where residents shop, work, and attend school and church.

Since public transportation is more widely used in low-income and minority communities the Roadmap should also prioritize the need for more electric buses and school buses. Electric buses do double-duty – they reduce emissions and take cars off the road, lessening Connecticut's road congestion problems.

With the proper mix of EV charging stations, EV rebates, and electric buses, we can ensure that the Roadmap properly acknowledges our most overburdened and underserved communities.

Recommendations regarding Public and Private Fleets:

While public fleets comprise only a small fraction of total vehicles in Connecticut, they are ideally designed for the state to truly "lead by example." Studies show that increasing consumer awareness and familiarity with electric vehicles is important in influencing consumer purchasing decisions. Public fleets are one of the areas where Connecticut has the greatest direct control over the rate of vehicle electrification and creates opportunities to (1) increase direct EV driving experience with state employees and (2) increase the public visibility of EVs on our roads.

The current recommendation regarding the state fleet in the draft Roadmap—that the state "should consider setting targets for annual EV procurement for the state fleet, beginning with the goal of 5 percent of state vehicle in the first year"—is too weak: The state must set aggressive targets for electrifying public fleet vehicles.

Section 93 of Public Act 19-117,4 establishes several targets for EV deployment within the state fleet, which should inform the recommendation in the EV Roadmap.

- PA 19-117 requires, beginning January 1, 2030, that at least 50 percent of cars and light-duty trucks, and 30 percent of buses, purchased or leased for the state fleet to be “zero-emission.”
    - In light of the state’s express policy of reducing GHG emissions and need to reduce other air pollutants, we urge the state to go beyond the minimums established by the legislature and adopt a policy of procuring 100 percent zero-emission vehicles where such vehicles meet the performance needs for which they will be used, leading to stronger public fleet commitments: with a goal of ensuring that at least 50 percent of the cars and light-duty trucks and 30 percent of transit buses in the State’s fleet are zero-emission by 2030.
- PA 19-117 expands the Department of Administrative Services (DAS) commissioner’s annual legislative reporting requirements to include a procurement plan that aligns with these state fleet requirements and a feasibility assessment for the state’s purchase or lease of zero-emission medium and heavy-duty trucks; and
    - In alignment with the policy recommendation above, the feasibility analysis should be limited to the ability of commercially-available zero-emission vehicles to meet the performance needs required by the state. Any cost-benefit analysis should include estimated fueling and maintenance costs over the full useful life of the vehicle.
- PA 19-117 requires the DAS commissioner to study the feasibility of creating a competitive bid process for procurement of zero-emission vehicles and buses, and authorizes the commissioner to proceed if it would achieve cost savings.
    - The final EV Roadmap should encourage DAS to explore this option, as well as the possibility of joint procurement opportunities with municipalities and other

Regarding DEEP's recommendation to update and publish guidelines for the installation of EVSE at state-owned facilities and public and private EV charging stations, DEEP has the authority to do this, and we encourage the agency to move forward with this activity. Using its ability to "lead by example," state-owned and operated facilities should adopt minimum percentage charging requirements for parking areas, and such requirements should be included within all state-funded school construction projects. DEEP promoted similar recommendations to be included within the state building code for new residential and commercial construction, and these recommendations should establish the floor for state-owned and operated buildings.

Connecticut should support and incentivize electrification of private fleets by: (1) working with private actors and utilities to provide advisory services to fleet owners considering electrification; (2) developing rebates or incentives to support associated charging infrastructure needs; and (3) requiring utilities to develop rate designs that mitigate the impact of demand charges.

Recommendations regarding EVs beyond LDVs:

We strongly support incentives to electrify MDV and HDV. Connecticut should look to New York's truck voucher incentive program5 to identify ways to incentivize purchases of cleaner, electric MDV and HDV.

While we encourage including fleet conversion to EVs as part of the electric utilities' distribution system planning, DEEP should recognize that private fleet charging depots will likely need to be sited on-premises, so it may not be possible to target underutilized electric distribution circuits for fleet charging depots.

Accordingly, we should not let load decisions be the sole determinant in driving our EV infrastructure decisions. While it is clear that there are potential benefits from using EVs as a source of load smoothing and energy storage, the EV Roadmap should prioritize infrastructure investment where such investments will meet EV demand and benefit local communities. The goal should be to develop a comprehensive plan for building out our charging infrastructure in a manner that maximizes the combined, total benefits of increased EV deployment.

As noted in the GC3's December 2018 Report, some of the largest GHG reductions from the transportation sector are likely to be achieved by increased investment in EV buses6, and these investments will likely be in our largest cities and most heavily-trafficked transportation corridors. While these are likely not areas with excess distribution capacity, nevertheless this is one critical area where investment must be made. The electric distribution companies (EDCs) should provide location-specific maps where excess distribution capacity exists so they may be evaluated against other criterial that would support investment in EV charging infrastructure.

Additionally, EV time-of-use rates can be an effective mechanism for shifting vehicle charging to off-peak times when the distribution system may be otherwise underutilized.

With respect to the pending California Advance Clean Trucks rule, we encourage Connecticut to continue to develop policies that leverage California's authority to enact stringent motor vehicle emissions standards and polices beyond the floor established by the federal government. We should not pause our efforts pending the outcome of the current federal lawsuit, but rather position ourselves to act quickly when the court rules in favor of California and Section 177 states, including Connecticut.

Recommendations regarding Expanding EV Charging Infrastructure:

1. Building codes and permitting requirement recommendations

To encourage widespread adoption of EVs to meet Connecticut's GHG reduction goals, policies must support the necessary infrastructure build-out to encourage consumer confidence with respect to "range anxiety" and support public education regarding EV technology. One critical component is expanding EV charging infrastructure, particularly in settings that vehicle purchasers cannot directly control (e.g., charging in public and semi-public/workplace settings, charging at multi-unit dwellings). It is also critical that new construction be capable of supporting EV charging infrastructure so that charging stations can be cost-effectively added as the need for them grows.

There is widespread consensus that the best time to prepare a location for the future installation of EV charging infrastructure is during the initial construction, rather than post-construction retrofitting. A recent analysis by Energy Solutions for the California Electric Transportation Coalition (CalETC) found that installing EV ready parking spaces during a building retrofit can save four to six times the cost of a standalone installation.7

The EV Coalition strongly supports the adoption of EV-ready building codes. DEEP must be an active participant in the adoption of updated building codes to ensure the necessary accessibility to EV charging as market penetration of EVs increases. To that end, DEEP should support adoption of EV-ready legislation through provision of templates for use in

municipal building codes and zoning ordinances. The State has been presented with the opportunity to support EV-ready construction and has so far failed to act. The Code Adoption subcommittee of the State Codes and Standards Committee recently declined to adopt “EV ready” standards for new residential and commercial construction, citing increased cost and the relatively low number of EVs currently registered in Connecticut. This narrow view fails to adequately take into account the cost of building retrofits to accommodate charging infrastructure, as well as the clear market and industry signals regarding the future trajectory of EV adoption nationwide. The State must take this opportunity to support EV-ready infrastructure and enable Connecticut to lead the way toward an emissions-free transportation sector.

Additionally, local zoning requirements must not act as a barrier to deploying EV infrastructure in residential or commercial structures. Rather, requirements should encourage expansion of EV-ready infrastructure. Parking requirements must take into account the need to support a minimum level of EV charging spaces, as appropriate for the particular building structure. At a minimum DEEP should support building codes that mandate 10 percent of spaces be pre-wired for EV charging. Relating to ADA requirements, the Codes committee need not establish new ADA-compliant requirements; rather, the committee needs only to clarify how EV charging stations should comply with existing ADA requirements.

We support DEEP’s recommendation to consolidate permitting for Level 2 EVSE and DCFC installations. Such permitting would be better streamlined if: (1) applications could be submitted electronically and (2) a schedule of permit prices were published.

1. Siting recommendations

While grid impacts should be minimized if and when possible, that should not be the sole determining factor in site

selection. Rather, demand and transportation needs should be allowed to shape charging infrastructure location.

1. Public charging infrastructure ownership recommendations

The EV Coalition supports DEEP's recommendation that EDCs be permitted to rate-base make-ready investments in EV supply equipment in appropriate contexts. Utilities are uniquely positioned to encourage development of public EV charging infrastructure. DEEP should advocate in the PURA docket a clear expectation that utilities will submit proposals to support deployment of public EV charging stations.

As discussed further in other sections of these comments, carve-outs to ensure a percentage of EV charging stations are located in low-income and underserved communities are well-intentioned, but may not be the best way to support the transportation needs of these communities. The objective should be to improve access to clean, electrified transportation options that also improve public health, rather than proportional deployment of EV charging stations. Investments in low-income and underserved communities must be tailored to their specific transportation needs. For example, investments in electrified car or ride-sharing services or electrified transit buses may be more beneficial than charging infrastructure for certain communities. Community-specific assessments are necessary to determine the transportation needs of different communities.

Recommendations regarding Consumer Charging Experience, Interoperability, Pricing

Transparency, and Future Proofing:

Fostering a positive consumer charging experience is critical to the successful transition to EVs in Connecticut. The challenge in addressing consumer experience through recommendations in the Roadmap is that, because technology is evolving so rapidly in this space, there are risks about being too prescriptive about specific technologies. As noted throughout these comments, the Roadmap should avoid dictating specific technological requirements.

For example, with regard to the proposed requirement that new electrical infrastructure installed at publicly funded DCFC stations be capable of supporting 150 kW charging stations or greater, we appreciate the intent of ensuring future-proofing of investments. However, the Roadmap should be crystal clear that this requirement pertains to the EVSE and not to the chargers themselves. In other words, the "make ready" infrastructure should be future-proofed to support the eventual installation of at least 150kW, but it does not make sense at this time to require actual installation of 150 kW chargers at every DCFC location. With regard to forms of payment, rather than prescribing specific requirements, it is preferable to defer to the existing statutory requirements on this issue found in C.G.S. § 16-19ggg.

With regard to signage and other standardization of charging experience, regional cooperation in this area is important as the region is relatively small with a large amount of cross-border traffic. Driver confusion regarding the availability of charging stations in neighboring states will negatively impact public perception and consumer adoption of EVs.

Finally, we support the draft Roadmap's recommendation to establish a fine for ICE-ing and authorize state and municipal

police and parking enforcement authorities to ticket vehicles in

violation of the law. This is low-hanging fruit and should be adopted. EV charging stations need to be available for EV drivers when needed.

Recommendations regarding Residential and Workplace Charging:

We support adoption of a right-to-charge law prohibiting Multi-Unit Dwellings (MUDs) and condominium associations from restricting lessees or condo owners with designated parking spaces from installing EV charging equipment and associated metering. Relevant stakeholders (e.g., condo owners) should be involved in the legislative process. In other jurisdictions this has led to common-sense approaches that were widely supported.

We further support DEEP's efforts to ensure that the PURA docket evaluates and addresses approaches to manage EV load, which can take the form of rate design and/or managed charging or demand response programs. Technology needs to be able to support load management.

DEEP should adopt policies to encourage workplace charging in a manner that is technology-neutral and future-proofs these investments. For example, new infrastructure should be able to support L2 charging. The installation cost for L2 wiring is similar to the installation cost of L1 wiring. Thus, there is little value add to wiring only to support L1 charging.

Recommendations regarding Rate Design:

Rate design can be an effective tool for helping to manage EV load, and will be increasingly important as the number of EVs charging in Connecticut continues to increase. We agree with DEEP that if EV-only rates are going to be implemented, it is critical that they not require an additional revenue-grade meter, the cost of which is likely to cancel out the potential savings that an EV owner could accrue through off-peak charging. There are multiple alternatives to second meters to measure the EV component of household load. It can be measured using the embedded metering in smart, networked L2 chargers and advanced household meters that can parse load and identify the EV-specific component. We anticipate that EV load will soon be able to be measured through the communications capabilities of the vehicles themselves. The EV Roadmap should endorse the development of rate designs, including EV-only rate designs, that will help manage EV load. But in light of the rapid technological advances occurring, it is important that the Roadmap not be overly prescriptive about technologies through which EV-only rates can be implemented. The Roadmap should call for the utilities to be taking a proactive role and taking responsibility for managing EV load.

In addition to being a tool for managing EV load, rate design can be critical to removing barriers to deployment of DCFC stations. Demand charges are a major barrier to deployment of public (non-fleet) DCFC. As analyzed by RMI in the context of EVgo’s charging station fleet in California,8 particularly at low levels of utilization, demand charges can swamp volumetric charges under traditional commercial demand rates, thereby undercutting the business case for private installation of DCFC. Demand charges can also pose a barrier to fleet charging, including for depot charging of transit buses.

Developing rate designs that address this barrier is critical to enabling deployment of electric transit buses in the state.

The concept of Eversource's Rate Rider (which shifts the demand charge into the volumetric charge)9, is well-intentioned, but the current language of the Rate Rider is vague and confusing. There are good examples around the country of modifications to traditional demand charges that send appropriate price signals to station owners such as the recently-approved PG&E throughput-based subscription fee approach.10 Ultimately, we recognize that there is no one-size-fits-all approach to designing alternatives to traditional, demand-based rate structures. Each utility will need to design a rate that works best for its service territory. Regardless of the manner by which utilities address this challenge, their respective solutions should (1) be equitable and available to all DCFC, both existing and new, and (2) address the challenge through a predictable, transparent, and sustainable rate design, rather than a short-term incentive.

Recommendations regarding Innovation:

We appreciate the enthusiasm in the draft Roadmap for vehicle to grid (V2G) technology.

In the long term, when EVs are widespread, it will be valuable to be able to harness the stored energy in the batteries of parked vehicles. However, we do not believe that V2G should be identified as a high priority in the final Roadmap. Rather, it is critical in the near term to develop strategies for effective unidirectional smart charging (V1G) management of new EV load.

Recommendations regarding Leveraging Incentives to Promote Equitable, Affordable EV Adoption—CHEAPR Program:

The CHEAPR program has the potential to greatly boost EV adoption. Indeed, studies and modeling show that rebates that reduce the up-front purchase price of vehicles are a strong driver of EV adoption.11 Based on modeling that Synapse Energy Economics conducted for the Sierra Club in New York, it may be valuable to increase the sizing of the CHEAPR rebate for battery electric vehicles.12 Ultimately, the incentives should be sized such that the CHEAPR incentive, in addition to other federal and state incentives, is projected to put Connecticut on track to meet its transportation sector GHG commitments.

Additionally, the CHEAPR program will need to be scaled up to achieve 500,000 ZEVs on Connecticut roads by 2030 in order for the state to meet its climate goals.13 To that end, CHEAPR will need a large and sustainable source of funding. DEEP should explore the possibility of utilizing the Transportation and Climate Initiative (TCI) as a funding source for the CHEAPR program.

DEEP should also evaluate the merits of a low-income adder to the rebate in conjunction with other potential strategies to promote access to EVs for low-income and underserved communities, and extending the low-income rebate to the purchase of used vehicles. One alternative that warrants further consideration is a “cash for clunkers” program similar to what California and British Columbia have developed.

Finally, the EV Roadmap should recommend elimination of the current prohibition on direct sales of EVs, which is stifling

sales of EVs in the state. The models that comprise the majority of national EV sales are not being sold in Connecticut. At the same time, the Roadmap should recommend additional incentives for existing auto dealers to increase their sales of EVs. More outreach to dealers regarding the existing CHEAPR dealer incentive is needed, given low levels of awareness by dealers, and additional incentives should be explored, such as: state reimbursement of the percentage of dealership local property tax equal to the percentage of EVs sold by the dealer each year, to a cap of 50%; state waiver of state income tax on all staff salaries based on percentage of EVs sold, to a cap of 50%; reimbursement of 100% of EV charging infrastructure and charging electricity costs at all CT dealer locations; free training for all CT dealers in EV sales using the PlugStarDealer.com program or a similar program; and/or higher CHEAPR rebates for all dealer cars used as service loaners and company cars.

Recommendations regarding Education and Outreach:

We support a coordinated approach to education and outreach among state actors and support a role for utilities and OEMs.

Connecticut should continue to support and participate in the regional Drive Change Drive Electric (DCDE) campaign and the Destination Electric Program to build upon and increase consumer awareness in the state and the region. We support the partnership framework among automobile manufacturers and state governments of the DCDE Campaign. While the campaign provides good web-based resources for learning about electric vehicles, there may be additional opportunities for proactive outreach and promotion. Such opportunities include cross-linking with other relevant state (such as DMV) and municipal (particularly for the Destination Electric program) websites.

We agree that OEMs should (and must) be active participants in advertising and marketing EVs in Connecticut, leveraging their years of experience in promoting conventional vehicles. Among the roles OEMs can play:

- Creation of informational and marketing materials for dealerships. While we assume that OEMs currently do this to some extent, we recommend an expansion of these efforts targeted to EV
- Providing additional dealer incentive for EV
- Providing supplemental consumer rebates for EV Purchases. For example, Nissan has partnered with the CT Green Bank to provide an additional manufacturer incentive of between $2,500 and $5,000 for the purchase of a Nissan Leaf.
- Providing well-promoted community "Ride and Drive" events, in partnership with the state, municipalities, and local businesses.

As noted above, we strongly support the recommendation to conduct focused outreach in underserved communities to inform the development of integrated approaches for deploying electrified transportation services strategically and addressing barriers to EV ownership by low- income households. We emphasize that the deployment of electrified transportation services should be informed by community priorities with respect to the type of services desired, whether that is increased access to light-duty EVs to replace older, unreliable personal transportation or the deployment of more electric buses and other clean transit options, with increased convenience and affordability.

Recommendations regarding

Funding Mechanisms to Support Sustainable Incentive and EV Infrastructure Programs—VW EVSE:

VW EVSE expenditures should be coordinated with the utility programs that arise from the PURA ZEV docket.14 DEEP should focus on ensuring that key market segments, such as MUD L2, public transit corridor DCFC, and in-town DCFC, are being addressed.

A portion of the VW funding should be earmarked to support access to electrified transportation for communities that bear an outsize share of transportation emissions. DEEP should conduct outreach into these communities to better understand transportation needs and use VW EVSE funds to support charging infrastructure for transportation programs that will meet these needs (for example, communities that could be better served by car or rideshare programs). This is preferable to simply deploying a percentage of stations in overburdened communities.

Respectfully submitted,

The Connecticut Electric Vehicle Coalition

- Acadia Center*
- Connecticut Fund for the Environment*†
- Connecticut Green Buildings Council
- Connecticut Nurses Association
- Connecticut Roundtable on Climate and Jobs*

- Connecticut Citizen Action Group
- ConnPIRG
- Conservation Law Foundation
- ChargePoint*
- Chispa-CT*
- Clean Water Action*
- CT League of Conservation Voters
- CT 350
- Drive Electric Cars New England
- Eastern CT Green Action
- Electric Vehicle Club of Connecticut*
- Energy Solutions, LLC
- Environment Connecticut*
- Greater New Haven Clean Cities Coalition,
- Hamden Land Conservation Trust
- Hartford Climate Stewardship Council
- International Brotherhood of Electrical Workers*
- Interreligious Eco-Justice Network
- New Haven Climate Movement
- Northeast Clean Energy Council
- People’s Action for Clean Energy
- Proton OnSite
- Plug In America*
- RENEW Northeast
- Sierra Club*†
- Solar Connecticut,
- Tesla,
- Union of Concerned Scientists

* Connecticut EV Coalition Steering Committee Membership

Footnotes:

1 CT EV Coalition Feb. 21, 2019 Cmts at 2.

2 Draft Roadmap at 20.

3 Governor’s Council on Climate Change, Building a Low Carbon

Future for Connecticut 29-30 (December 18, 2018).

4 An Act Concerning the State Budget for the Biennium Ending June 20, 2021, and Making Appropriations Therefor, and Provisions Related to Revenue and Other Items to Implement the State Budget.

5 *See* NYSERDA, New York Truck Voucher Incentive Program, available at https://www.nyserda.ny.gov/All-Programs/Programs/Truck-Voucher-Program.

6 *See* Governor's Council on Climate Change, Building a Low Carbon Future for Connecticut (December 18, 2018).

7 Energy Solutions, Plug-In Electric Vehicle Infrastructure Cost Analysis Report for CALGreen Nonresidential Update (September 16, 2019), available at: https://caletc.com/energy-solutions-report-finds-that-increasing-the- number-of-electric-vehicle-capable-parking-spaces-at-new-buildings-and-adding-ev-capable-parking-spaces-to-existing-buildings-when-undergoing-certain/.

8 Rocky Mountain Inst., EVgo Fleet and Tariff Analysis Phase 1: California (Apr. 2017).

9 Available at https://www.eversource.com/content/docs/default-source/rates-tariffs/ev-rate- rider.pdf?sfvrsn=e44ca62_0.

10 *See* PG&E, PG&E Proposes to Establish New Commercial Electric Vehicle Rate Class (Nov. 5, 2018), available at https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20181105_pge_proposes_to_establish_new

_commercial_electric_vehicle_rate_class; PG&E, PG&E's Commercial Electric Vehicle Rate (Nov. 20, 2018), available at https://caltransit.org/cta/assets/File/Webinar%20Elements/WEBINAR-PGE%20Rate%20Design%2011- 20-18.pdf.

11 Studies have found a significant increase in EV sales with

the implementation of rebates among low- and moderate-income households. Scott Hardman, *The Effectiveness of Financial Purchase Incentives for Battery Electric V9ehicles*, 80 Renewable and Sustainable Energy Reviews 1110 (2017), https://phev.ucdavis.edu/wp- content/uploads/2017/09/purchase-incentives-literature-review.pdf.

12 Synapse Energy Economics, Inc., Transforming Transportation in New York: Roadmaps to a Transportation Climate Target for 2035 (September 2019).

13 *See* Governor's Council on Climate Change, Building a Low Carbon Future for Connecticut 28 (December 18, 2018).

14 PURA Docket No. 17-12-03RE04.

† To whom correspondence should be directed. Josh Berman, Sierra Club. Email Josh.Berman@sierraclub.org or phone (202) 650-6062. Charles Rothenberger, Connecticut Fund for the Environment. Email crothenberger@ctenvironment.org or phone (203) 787-0646, x122.

EV Roadmap – Text of Notice for Technical Meeting happening on Feb. 8, 2019

The Department of Energy and

Environmental Protection (DEEP) issued the attached Notice of Technical Meeting for February 8, 2019, from 9 a.m. to 4:30 p.m. ET, in the Gina McCarthy Auditorium, DEEP Headquarters, 79 Elm Street, Hartford, Connecticut.

The purpose of the technical meeting is to inform the recommendations of the EV Roadmap. The technical meeting will consist of four panel discussions with subject matter experts presenting on key topics, followed by a question and answer session with the audience.

November 26, 2018

AN ELECTRIC VEHICLE ROADMAP FOR CONNECTICUT

NOTICE OF SCOPING MEETING AND OPPORTUNITY FOR PUBLIC COMMENT

As recommended by the Comprehensive Energy Strategy issued on February 8, 2018, the Department of Energy and Environmental Protection (DEEP) initiates this proceeding to develop an electric vehicle roadmap (EV Roadmap) for Connecticut. The EV

Roadmap is anticipated to identify Connecticut-specific policies, programs, and strategies that the State of Connecticut should pursue to optimize deployment of electric vehicles (EVs) and associated infrastructure. Moreover, the EV Roadmap is intended to support development of a self-sustaining EV market, and ensure that increased electricity demand from EV deployment is a benefit rather than an impairment to the electric grid.

DEEP will conduct a scoping meeting on December 14, 2018, at 10 a.m. EST, in Hearing Room 2 at DEEP's New Britain Office, Ten Franklin Square, New Britain, Connecticut. The purpose of the meeting is to brief stakeholders on the proposed scope of the EV Roadmap proceeding and to take public comment on the proposed scope of the EV Roadmap, which is provided below.

Draft Scope EV Roadmap

Overview

The EV Roadmap will outline the 2030 vision and objectives necessary to support the deployment of increasing numbers of light-duty zero emission vehicles (ZEVs) in Connecticut necessary to meet air quality and climate goals and to inform the parameters DEEP will consider when soliciting electric vehicle supply equipment (EVSE) infrastructure proposals under the VW NOx Mitigation Grant. In so doing, the document will review and describe a summary of user trends and projections, regional and federal efforts to date, and zero emission options beyond light-duty fleet applications.

Accelerating ZEV adoption and creating a robust fueling infrastructure Even with increasing demand, a growing roster of vehicle models, and an expanding network of both public and private infrastructure, the EV market is still in an early stage of maturation. To further support development of a self-sustaining EV market and the necessary infrastructure, the EV Roadmap will build on existing efforts already underway and

make recommendations on the following elements:

- Education, outreach, and marketing
- Public and private fleet strategies
- Sustainable funding in the form of incentives, financing, manufacturer partnerships, or other
- Partnering with dealerships
- Bringing clean transportation options to low- to moderate-income communities
- Streamlining building codes and permitting
- Future proofing
- Interoperability
- Consistency of customer experience
- Data collection (EV registrations, charging station data, etc.)

Fueling/charging cases

Increasing market penetration of ZEVs requires increased deployment of fueling/charging infrastructure. In turn, accessible and reliable infrastructure will support and encourage further adoption of ZEVs in the state. Building out self-sustaining fueling/charging networks will require ongoing private-public partnerships and open communication to ensure that planning efforts are coordinated among multiple fueling/charging cases, including public, residential, and workplace charging.

The EV Roadmap will discuss and make recommendations on the following fueling/charging cases:

Public

- Public charging infrastructure ownership models
- EV fast charging
- Corridors, destinations, state facilities and properties, around town
- Hydrogen refueling stations

Residential • Single family homes

- Multi-unit dwellings

Workplace

- Workplace charging opportunities
- Outreach to promote workplace charging
- Opportunities to reduce impact of charging during peak hours
- Workplace charging host guidance
- Leadership recognition

Rate design and demand charges

Rate design and demand charges for residential, commercial and industrial customers set market signals. Market signals may be necessary to encourage beneficial off-peak charging that improves the efficiency of the grid and reduces costs for all electric ratepayers. Further, ZEVs can be a demand- response resource and/or function as distributed energy storage, enabling a reduction in investments in new electricity infrastructure and shifting load from peak to off-peak hours.

The EV Roadmap will explore and recommend crafting a rate design and demand charge strategy that encourages EV adoption while mitigating adverse electric demand and costs and harnesses the benefits of EV flexible load capabilities.

ZEV’s beyond light-duty vehicles

The EV Roadmap will discuss emerging applications for medium- and heavy-duty vehicle and non- road electrification in order to identify cost-effective strategies that target transportation electrification opportunities beyond light-duty vehicles including fleet and freight applications.

Planning forward with VW EVSE

As a part of the Volkswagen settlement, Connecticut has been allocated almost $56 million for use towards offsetting the excess oxides of nitrogen (NOx) emissions caused by VW's actions. DEEP's plan for the allocation of VW funds is set forth in the State of Connecticut Mitigation Plan and focuses on extensive mitigation projects to reduce NOx from a wide array of mobile sources. In accordance with a federal Consent Decree (Appendix D-2), Connecticut reserved up to 15 percent of these funds for electric and hydrogen vehicle infrastructure/EVSE.

EVSE project funding, like NOx mitigation funding, will be awarded through an open, competitive and transparent process that will comply with all applicable state and federal procurement requirements.

In November 2018, DEEP issued $12.1 million for a variety of clean air projects. DEEP will offer additional rounds of funding at a later date and will include a competitive grant opportunity for electric and hydrogen vehicle charging/fueling infrastructure. The EV Roadmap will both inform and outline funding priorities in this category.

DEEP plans on following the preliminary timeline detailed below:

Action Preliminary Timeframe DEEP initiates EV Roadmap proceeding and notices scoping meeting November 21, 2018 DEEP scoping meeting December 14, 2018, at 10:00 a.m.

Comments due on proposed scope December 20, 2018, by 4:00 p.m.

DEEP technical meeting January 2019 DEEP issues draft EV Roadmap February 2019 DEEP hearing on draft EV Roadmap February 2019 Comments due on draft version EV Roadmap March 2019 DEEP issues final EV Roadmap April – May 2019

By way of this Notice, DEEP is accepting public comment on the proposed scope of the EV Roadmap proceeding through December 20, 2018, by 4:00 p.m. EST. Written comments may be filed electronically on DEEP's website or submitted to DEEP.EnergyBureau@ct.gov. All materials submitted by stakeholders in this proceeding will be posted on DEEP's Energy Filings website under the matter "EV Roadmap." Any questions can be directed to Debra Morrell at (860) 827-2688 and/or via e-mail at DEEP.EnergyBureau@ct.gov.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or wish to file an ADA or Title VI discrimination complaint. Any person needing a hearing accommodation may call the State of Connecticut relay number – 711. Requests for accommodations must be made at least two weeks prior to any agency hearing, program or event.

Notice filed with the Secretary of State on November 26, 2018.