

To: Invited Participants of Drive Electric Pennsylvania Coalition Meeting
From: Yborra & Associates and Meister Consultants Group, A Cadmus Company
Date: April 2, 2018
Re: Summary Results from Drive Electric PA EV Coalition Meeting on March 26, 2018

Introduction

On January 12th, the Pennsylvania Department of Environmental Protection (DEP) convened members of the Drive Electric Pennsylvania Vehicle Coalition – including representatives from policy and regulatory agencies, utilities, car manufacturers, and advocacy organizations, among others – to discuss the draft strategies for Pennsylvania’s Electric Vehicle Roadmap. The meeting was designed to:

- Review PA EV Roadmap **progress** to date and **next steps**
- Present results of **scenario modeling**
- Present **draft roadmap strategies**
- Gather **feedback** from stakeholders on draft roadmap strategies

These meeting notes primarily describe the feedback provided by the Coalition on 1) the overall weighting of the evaluation criteria categories, 2) the draft roadmap strategies and 3) the ratings assigned to each strategy’s evaluation criteria.

Evaluation Criteria Weighting and Ranking

Neil Veilleux (MCG) first introduced the five criteria that were used to evaluate each of the market interventions discussed during the last quarterly meeting. These five criteria were filtered down from the list of about 15 suggestions that the Coalition provided in January. Next, Neil described the weighting and ranking scheme that was developed to give each market intervention a “score”. Weightings (e.g. 10%, 20%, 30%) were applied to each of the five evaluation criteria to assign a relative importance to each criterion in the final score. Neil emphasized that these weightings can be adjusted if the Coalition would like to change their relative importance. The stakeholders seemed very eager to review the weighting scheme and provide further comment. Neil then presented the ranking scheme for each of the five criteria, which is on a scale of 1 to 5 (5 is better than 1). Again, Neil told the Coalition that these rankings can be adjusted based on feedback from the stakeholders, and that the initial rankings were assigned based on research by the Consulting Team and previous input from Quarterly Meetings #1 and #2. The highest scored interventions (Tier 1) are the draft roadmap strategies.

Roadmap Strategy Discussion

Neil then presented the methodology for scoring each of the 60+ strategies under consideration for the PA EV roadmap, then he outlined the “Draft” Tier 1 strategies to discuss with the stakeholders. Each of the Tier 1 (roadmap) strategies were discussed in detail, and that feedback is included below. The Consulting Team asked the stakeholders to provide written feedback on the Tier 2 (appendix) strategies via an online survey; this input will be used to replace strategies that were de-prioritized at the meeting and to provide additional content for the Tier 2 strategies to be included in the appendix.

Strategy #1: Utility Transportation Electrification Mandate/Directive

The primary comments from the Coalition on this strategy pertain to the differentiation of public EVSE and home/workplace EVSE. Stakeholders generally agreed that both types of EVSE should be included in this strategy. Stakeholders also commented that the specifics of such a utility mandate/directive/guidance could address a breadth of policies/disciplines including economics (e.g. tariffs, investment goals/timetables), education/outreach, market penetration goals (e.g., # if installations, % of market served), as well as other related metrics. As such, the stakeholders framed this mandate as being the fundamental strategy to set the future “rules of the road”, while other strategies in the roadmap should augment this one. Lastly, one stakeholder requested that HB 1446 be re-categorized as a “Public Planning and Investment” strategy.

Strategy #2: Residential Time-of-Use Rates

Stakeholders emphasized that both residential and commercial/fast-charging rate structures are essential to the roadmap, but that those policies should be designed differently. The Consulting Team suggested that residential and fast-charging TOU rates be combined under the same strategy in the roadmap but that they be designed differently in practice. Furthermore, it was also raised that electric distribution and generation follow different processes within the PUC, and therefore we should identify whether the strategy is targeting electric distribution or generation companies.

Strategy #3: Utility-Supported EVSE investment

Stakeholders agreed that this strategy should be included in the roadmap, and requested the following amendments to this strategy:

- The wording of this strategy be altered to not imply that there is not already a private EVSE market, merely that utility-supported EVSE investment could accelerate current market adoption rate. Stakeholders liked the terms “jumpstart” and “catalyze” the market.
- Provide additional examples of this type of strategy from other states besides Washington State, as many of the policies enacted in WA were done when EV range was much lower and their barriers were different.
- Ensure that the timeline of this strategy come directly after the utility transportation electrification mandate timing.
- Include both state and regional components to this strategy, including non-attainment regions (perhaps as outlined in HB 1446)
- Highlight that VW funding can be used for this strategy.
- Also mention that this PUC mandate/directive/allowance be revisited as the market matures for potential exit or phase-out of utility rate-based EVSE investments once critical mass has been achieved.

Strategy #4: Expanded and Improved AFIG Rebate Program

The Coalition felt that this strategy is a critical piece of their roadmap, and that the rebate amount should be increased to expand its utility to lower income populations. Stakeholders requested the following amendments to this strategy:

- Include a low-to-moderate income (LMI) component to this strategy, perhaps with an income threshold and/or a sliding scale to that greater benefits are given to those with less resources.

- Amend the wording of the investment increasing over time to be clear that the rebates themselves will not be increasing as EV adoption increases over time; rather, the total amount of funding should be larger at the beginning of the program to incent early adopters.
- The lifetime of the program needs to be addressed in the strategy description
- This strategy should be written to recommend a continual revision of the Alternative Fuel Incentive Grant program as needs change over time and dial back support as the market matures. Such changes could include the qualifying vehicles (vans, trucks, or other medium to heavy duty vehicles) or the mechanism for assigning rebates amounts (i.e. through performance based incentives or income tiers)
- Several suggested that the AFIG program should shift focus toward EVSE away from EVs as market adoption.

At this point and several other points in the meeting, one stakeholder requested that fuel cell electric vehicles and hydrogen infrastructure be included in the roadmap and in future DEPA activities.

Strategy #5: EV Mandate or Goal

Stakeholders showed immense support for this strategy, and suggested it should be put forward as the first and most important strategy of the roadmap (“super-strategy”). There was broad agreement within the Coalition that this strategy should be designed as a goal (Executive Order) rather than a legislatively-mandated target, since the former would be much more politically feasible in PA. The following requests were made by the Coalition for this strategy:

- This strategy should harness OEM and EV dealer support
- The roadmap should suggest developing an EV adoption goal based on a realistic but accelerated target (i.e. Business As Usual scenario model)
- The goal should not be enforced legislatively, but used to measure progress over time
- There should be separate goals for light-duty, medium-duty, and heavy-duty EVs, as well as for consumer/fleet/commercial EVs and the goals should be reviewed and adjusted as the market matures and available commercially viable technologies options expand.
- One stakeholder mentioned that PA could join the ZEV MOU states.

Strategy #6: EV Ready Codes

The stakeholders generally felt that this strategy would be very difficult to achieve in PA, and that the political feasibility ranking should be decreased to one. Furthermore, there was interest in ranking the cost-effectiveness of this strategy higher than two and expanding this strategy to include educational programs for consumers relating to building codes. An announcement was made during this discussion that the US Department of Energy and the US Environmental Protection Agency are working with ASHRAE to release a federal standard for EV-ready building codes in ASHRAE 189.1, which could be referenced in the text of roadmap. To make this strategy more feasible and applicable on both the state and local level, it was suggested that this strategy be more focused on zoning ordinances rather than building codes because municipalities cannot control building codes. One suggestion for this strategy is to recommend the development of an EV-ready model that can be adapted by municipalities in their zoning ordinances. It was clarified that any strategy involving codes should only be adopted for new construction and not for retrofitting of existing buildings.

Strategy #7: Marketing and Education Campaign

There was agreement among the stakeholders that this strategy be expanded to include both the consumer and fleet customers, as well as various other target audiences (i.e. dealer networks and OEMs), with specific messaging and channels for each of those audiences. It was suggested that the cost-effectiveness ranking could be increased if it is tied to educating customers about incentives. One stakeholder advised against the use of billboards, as they tend to be expensive and less effective.

Strategy #8: Innovative Financing

The Coalition felt this strategy is too broad and vague as is, but that the study of financing mechanisms would be worthwhile to see if there is even a business case for such endeavors. Furthermore, this type of strategy is better-suited for higher-cost vehicles such as MDV and HDV than for LDV, which are not typically bank-financed (and therefore potentially out of scope). The stakeholders communicated that, if this strategy is retained for the roadmap, it should:

- Focus on LMI populations, municipalities, and OEMs
- Be integrated into this strategy if it is included in the roadmap.
- Require that applicants use DOE tools to understand cost of ownership and other financial metrics before purchase

One stakeholder offered to reach out to his connection in the Investment Fund to explore possibilities and report back to the Coalition. Overall, the Coalition did not feel strongly that this strategy be retained in the roadmap, suggesting that it had a high score because it is not expensive to execute but that it also is not a very impactful strategy.

Strategy #9: Medium- and Heavy-Duty Fleet Voucher Program

One stakeholder pointed out that there is a federal program that already exists for MDV and HDV alternative fuel vehicles. He recommended that the Consulting Team check to see if this program passed the last round of federal budget cuts. If the program still exists, this strategy would need to be designed on top of the federal program. Another stakeholder requested that considerations for municipalities be included, as they do not receive tax credits. DEP suggested that this strategy may be out of scope, since the roadmap is only focused on LDV, and that it could instead be packaged into the AFIG strategy within its areas for future expansion. Finally, this strategy has the option to leverage VW funding, which should also be mentioned in the roadmap.

Strategy #10: State grants to local jurisdictions

There was general agreement that this strategy should be included in the roadmap, but that there should be a requirement to target both rural and urban communities to ensure equitable distribution of funds. Stakeholders also suggested that the political feasibility ranking be lowered.

Appendix A: List of Meeting Participants

Adam Walters, PA DCED
Andrew Blum, PennDOT
Brendan Baatz, ChargEVC
Corinne Lillis, WGAL (reporter)
Dan Miller, Press Journal
Dave Althoff, PA DEP
Deborah Klenotic, PA DEP Press
Emily Wier, Greenlots
Erin Camp, MCG-Cadmus
Geoff Bristow, PA DEP
Hayley Book, PA PUC
Jack Christiansen, PA Turnpike Commission
Jake Newton, DCNR
Janet Warnick, PA DEP
Jarod West, DCNR
Jennie Demjanick, PA DEP
JK Brinkley, Ecker Seamans
Joanne Backmann, VEIC
Joanne Tosti-Vasey, Bellefonte Borough
Kevin Miller, ChargePoint
Kevin Siedt, First Energy
Kirk Brown, REACH Strategies
Lindsay Baxter, Duquesne Light
Loudon Campbell, Ecker Seamans
Marie Bedard, Lion Electric Co.
Mark Hand, PA DEP
Matt Wurst, PA PUC
Mike Grimm, WGAL (photographer)
Natalie Cook, The Winter Group
Neil Veilleux, MCG-Cadmus
Noah Garcia, NRDC
Paula Devore, DCNR
Paul Kydd, Partnerships One
Peter Rego, Lion Electric Co.
Peter Spadaro, PA DCNR
Rick Price, PRCC
Rob Graff, DVRPC

Ryan Emerson, DCED
Shelby Linton-Keddie, Duquesne Light Co.
Stephe Yborra, Y&A
Thomas Au, Clean Air Board
Toby Grove, Fox93
Tom Bonner, PECO
Tom Schuster, Sierra Club
Tony Bandiero, EP-ACT
Travis Andren, Seedling LLC
Travis Eckert, Charge Forward
William Agee, PPL