

Joint Comments on the Draft Electric Vehicle Supply Equipment Initiative Plan, for Maine’s Volkswagen Beneficiary Mitigation Plan

The undersigned organizations thank the Efficiency Maine Trust (“EMT”) for the opportunity to submit written comments on the straw plan for Maine’s Electric Vehicle Supply Equipment Initiative (“Straw Plan”) developed pursuant to Maine’s Volkswagen Beneficiary Mitigation Plan.

Under Appendix D of the First Partial Consent Decree of the Volkswagen Clean Air Act Settlement (“Settlement”), Maine will receive nearly \$21.1 million to invest in a cleaner transportation system. Given that Maine’s transportation sector produces 53% of the state’s greenhouse gas (“GHG”) emissions,¹ these funds are an important opportunity to help move Maine towards a cleaner transportation system that reduces GHG emissions and accelerates the transition to modern, electric vehicles. As the Straw Plan states, the Maine Beneficiary Mitigation Plan dedicated the maximum allowable amount—15%, or \$3.15 million—to the deployment of electric vehicle supply equipment (“EVSE”). Increasing charging infrastructure will help achieve EMT’s dual goals of strengthening Maine’s economy through reduced driver costs and increased EV tourism from neighboring states and provinces, as well as reducing transportation-related emissions.² Expanded charging infrastructure will also advance the market transformation objectives of the Settlement and the Straw Plan.³

The Straw Plan presents three key programs: Initiative I—Priority EV corridors; Initiative II—Public Destination Fast Charging; and Initiative III—Medium-Traffic Level 2 Chargers. Our organizations support the goals of these three initiatives, though we caution that funding levels may not be sufficient for full implementation of the Straw Plan and urge EMT to prioritize them as set forth below. Accordingly, we propose opportunities to maximize EVSE penetration within the current budget and offer these recommendations to achieve EMT’s goals:

1. In Initiative I, refine corridor priorities and sequencing as detailed below to ensure electrification of key corridors while reserving funds for destination charging.
2. Along designated EV corridors, seek federal FAST Act designation⁴ with 50-mile spacing where feasible; and seek official “corridor pending” designation where 50-mile spacing is less cost-effective.
3. Modify Initiative II to identify specific high-priority municipalities or locations where charging infrastructure is needed but allow site-specific determinations on what type of charging infrastructure is best suited for that location (i.e. DCFC, Level 2).
4. Shift budget allocations and timelines to reserve \$500,000 for Initiative III in order to ensure a balanced portfolio of charging infrastructure across the state, including at workplaces, multifamily homes, and local destinations.

¹ See: 2018 Seventh Biennial Report on Progress Toward Greenhouse Gas Reduction Goals <http://www.maine.gov/tools/whatsnew/attach.php?id=778255&an=1>

² Straw Plan, at 5.

³ Straw Plan, at 7.

⁴ https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/index.cfm

5. Ensure core consumer protections and “future proofing” at all charging stations.
6. Maximize opportunities for EMT to learn from these programs in anticipation of future efforts and funding.

Initiative I

We support Initiative I’s establishment of Priority EV corridors for interstate and international travelers. As EV options expand, battery ranges increase, and consumers increasingly choose EVs to lower driving and maintenance costs, drivers are gaining comfort with long distance EV travel. A robust, reliable network of charging infrastructure along Maine’s most travelled corridors will further relieve range anxiety and encourage EV drivers to embark for Maine destinations, while providing large numbers of travelers and residents with increased exposure and access to EVs.

Given EMT’s finite resources, the range of installation costs, and the likelihood that EMT will have to fund a larger share of installation, operations, and maintenance in certain locations, our organizations recommend prioritizing EV corridors outlined in the Straw Plan and sequencing or modifying them accordingly:

- Phase I, slated for 2018, would bundle I-95, I-295, and Rt. 201 in a single solicitation.
- Phase II would include coastal Rt. 1/3 to Bar Harbor and Rt. 1A from Bangor to Ellsworth in a separate, bundled solicitation.
- Proposed charging infrastructure in Naples (on Rt. 302) and Bethel (on Rt. 2) would shift into Initiative II, enabling the type of charger to be better paired to the existing infrastructure and traffic density at each location.

Using a Phase II, which could begin in late 2018 to be executed in 2019, would also allow EMT—if it desires—to play a more active role in pre-identifying sites between Topsham and Ellsworth without holding up progress on the Phase I priorities.

Federal FAST Act “corridor ready” designation—which requires DC fast chargers separated by no more than 50-miles—is likely an appropriate objective for high-traffic or high-priority corridors, such as those included in Phase I. There is some indication that the federal government may provide some flexibility around the precise mileage between chargers, and that they will consider increasing the distance, perhaps in 2019. EMT should not view federal corridor ready designation and 50-mile distances as an absolute, but should balance the benefits of designation with the opportunity cost of potentially less investment across the whole Straw Plan.

Where a designated corridor can be covered in practical terms by a single charger but would need an additional charger to qualify as “corridor ready” due to the 50-mile distance requirement (such as Route 2), we suggest that a single charger be installed in an earlier phase, with a second charger planned to obtain “corridor pending” designation. (Route 302 may be eligible for corridor ready designation with a single DC fast charger in or around Naples which could be achieved in a modified Initiative II.)

At all charging locations, hosts should be required to provide appropriate consumer protections, detailed below. Strategic location of chargers in destination locations no more than five miles off

the highway would meet FAST Act “corridor ready” requirements and drive traffic to local shops and restaurants, allowing the investment to fulfill objectives of both Initiative I and II.

Initiatives II & III

The Straw Plan notes that Initiatives II and III are contingent upon the availability of funds following Initiative I. Our organizations strongly recommend shifting budget allocations to ensure progress on Initiatives II and III between the two phases of Initiative I. Destination charging and local charging—including at workplaces and multifamily dwellings—encourages Maine people with direct access to those sites to drive EVs while serving as a “second showroom” for others, increasing the visibility of EVs and facilitating market transformation.

Initiative II leverages destination charging to encourage tourist travelers and Maine drivers to embark to Maine destinations. Though DC fast charging is most appropriate for specific high-traffic destinations—such as Portland, South Portland, Freeport, Rockland, Bar Harbor, Naples, Bethel, and Farmington—Level 2 chargers may make sense in medium-traffic areas or at longer-stay destinations such as museums, colleges, and ski resorts. Modifying Initiative II to allow for DCFC and Level 2 chargers and offering an incentive that covers a fixed percentage of installation costs, dependent on charger type, would give EMT the greatest flexibility in securing cost-effective destination charging. In general, EMT should consider a greater focus on the most important locations and destinations to build the network, with more flexibility as to the technology and format of charging stations.

Initiative III presents a unique opportunity to equitably support charging stations that make EVs more viable for Maine consumers and commuters, in communities of various economic means, and EMT should dedicate \$500,000 to this effort. Municipalities, large employers,⁵ as well as property owners and managers and business owners, are potential partners in expanding cost-effective Level 2 charging. Deployment of Level 2 charging at multi-unit dwellings, a traditionally difficult market sector to address, should also be supported under this initiative.⁶ To maximize the public benefit of investments in workplace and multi-unit dwelling charging infrastructure, we urge EMT to adopt a project size threshold, and to require an educational and/or outreach component.

In evaluating EVSE proposals based on whether they support transformative technological changes, EMT should consider the multiple load management benefits that EVs and their

⁵ A federal survey found, for instance, that people are 20 times more likely to drive an EV if they have access to workplace charging. See Sarah Olexsak, *Survey Says: Workplace Charging is Growing in Popularity and Impact*, Off. Energy Efficiency & Renewable Energy, U.S. Dep’t Energy (Nov. 18, 2014), available at: <https://energy.gov/eere/articles/survey-says-workplace-charging-growing-popularity-and-impact>.

⁶ EV drivers do more than 80% of their charging at home. Department of Energy, Energy Efficiency and Renewable Energy, <https://www.energy.gov/eere/electricvehicles/charging-home>.

associated infrastructure can generate, including integration of variable generation and use of off-peak resources.⁷

The recommendations in this section are consistent with the Northeast Corridor Regional Strategy for Electric Vehicle Charging Infrastructure, developed by the Northeast States for Coordinated Air Use Management (“NESCAUM”) with input from the Governor’s Energy Office.⁸ Specifically, that strategy document emphasizes: attention to multi-unit dwellings, workplace charging, and active identification of destinations, including tourist destinations.⁹

Consumer Protections

Finally, consumer protections and “future proofing” such as electrical upgrade capacity should be required for all EV charging stations. This includes signage that clearly identifies EVSE locations and prices, sufficient lighting and pavement conditions, multiple payment options including credit cards and mobile technology, and universal access, regardless of membership or subscription structure. All charging stations should be included in public databases, and data from DC fast chargers and networked Level 2 chargers should be available for analysis by EMT and the Maine Department of Transportation.

Kathleen Meil, Policy Advocate, Acadia Center

Emily K. Green, Staff Attorney, Conservation Law Foundation

Kimberly Darling, Energy & Sustainability Coordinator, Town of Falmouth

Troy Moon, Sustainability Coordinator, City of Portland

Dylan Voorhees, Climate & Clean Energy Policy Director, Natural Resources Council of Maine

Barry Woods, Director of Electric Vehicle Innovation, ReVision Energy

Julie Rosenbach, Sustainability Director, City of South Portland

⁷ See, e.g., Electric Vehicles as Distributed Energy Resources, Rocky Mountain Institute (June 2016), available at

http://www.rmi.org/Content/Files/RMI_Electric_Vehicles_as_DERs_Final_V2.pdf.

⁸ NESCAUM, Northeast Corridor Regional Strategy for Electric Vehicle Charging Infrastructure 2018 – 2021 (May 16, 2018) available at: <http://www.nescaum.org/documents/northeast-regional-charging-strategy-2018.pdf>.

⁹ *Id.* at 11-13 and 18.