



April 8, 2019

Mrs. Judith Whitney, Clerk  
Vermont Public Utility Commission  
112 State Street  
Montpelier, VT 05602

Filed electronically on e-PUC

Re: **Case No. 18-2660-INV** Investigation into promoting the ownership and use of electric vehicles in the State of Vermont

Dear Mrs. Whitney,

Thank you for the opportunity to provide information relevant to the Commission's ongoing investigation into electric vehicle ("EV") policies in the state of Vermont. Please accept these comments filed on behalf of the Sierra Club in the above-referenced docket, responding to the call for information in the Commission's March 22, 2019 Order. Sierra Club participates in dockets such as this one across the country, advocating for policies that help support the growth of EV adoption, ensure the benefits of transportation electrification reach low-income and other populations potentially underserved by the existing market, and create a pathway for future EV growth that effectively integrates EV load into the electricity grid. These comments specifically address the Commission's questions directed at public interest organizations.

### The Role of Public Interest Organizations

- 1. What role can public interest organizations play in educational programs in Vermont to convey the benefits of transportation electrification to Vermonters, including environmental benefits, lower maintenance and fuel costs, and lower costs for ratepayers generally?*

Sierra Club believes that public interest organizations have a critical role to play in educating the public about the widespread benefits of transportation electrification. Of course, the most effective public outreach will engage numerous voices, including the state, electric utilities, dealerships, and others.

As a grassroots organization, public education is central to our mission. Around EVs, Sierra Club maintains an up-to-date online EV buyer guide,<sup>1</sup> and participates in "ride and drive" events that bring EVs to city centers and give people the opportunity to test drive EVs without visiting a dealership.<sup>2</sup> As one example, National Drive Electric Week, held annually since 2011, helps bring awareness EVs and in particular to the environmental, public health, cost, and grid benefits of EV adoption. In 2018, National

---

<sup>1</sup> <https://content.sierraclub.org/evguide/>.

<sup>2</sup> <https://www.sierraclub.org/transportation/electric-vehicles>.

Drive Electric week held 321 events in 3 countries, 296 cities, and all 50 states, totaling more than 10,000 EV test drives.<sup>3</sup> This year, National Drive Electric week will be September 14-22, 2019.

In 2016, the Sierra Club launched Rev Up EVs—the first-ever multi-state investigation into the consumer EV shopping experience. Based on surveys from Sierra Club volunteers who called or visited 308 different auto dealerships and stores across ten states to inquire about EVs, Sierra Club documented the potentially considerable hurdle of engaging dealerships and incentivizing them to promote EVs, and identified dealerships that were effectively promoting and selling EVs.<sup>4</sup>

- 2. Please provide examples of programs from other states that are designed to ensure that the benefits of transportation electrification are not limited to citizens with higher levels of income.*

Though EV deployment has increased in recent years, people from disadvantaged communities are more likely to encounter the strongest barriers to EV adoption. For low-income families, a \$7,500 federal tax credit does not fully remove the economic barrier many people face when buying or leasing a car. Disadvantaged communities also face challenges to charging access, as they less frequently are homeowners and are often people who live in multi-unit buildings without dedicated charging spaces. There are policies that states can adopt to help transportation electrification benefits to reach utility customers across all income levels.

It is important to note at the outset that as addressed in the comments filed by Sierra Club and other organizations on March 1, 2019, transportation electrification provides numerous grid benefits that accrue to all utility customers, including those that do not drive EVs. Below we highlight a few of the existing EV programs from other states designed to benefit low-income drivers.<sup>5</sup>

### **Rebates for Low-Income Drivers**

*California:* the Charge Ahead California Initiative aims to bring one million electric cars, trucks, and buses to California by 2023. SB 1275 directs the California Air Resources Board (CARB) to create equity programs that increase access to and use of EVs among low and moderate income individuals. For example, prioritization of rebate payments are given to low-income consumers; and, through the Clean Cars 4 All Program, low-income eligible applicants may receive additional compensation of \$2,500 towards replacing a high-emission motor vehicle. Through CARB, the Community Housing Development Corporation (CHDC) has a Transportation Program that serves low-income residents in six Bay Area counties by providing a vehicle financing option for the purchase of a used HEV, PHEV, EV, or FCEV.

---

<sup>3</sup> <https://driveelectricweek.org/>.

<sup>4</sup> Mary Lunetta and Gina Copeland-Newfield, Sierra Club, “Rev-Up Electric Vehicles: A Multi-State Study of the Electric Vehicle Shopping Experience,” (2016), available at [https://content.sierraclub.org/creative-archive/sites/content.sierraclub.org/creative-archive/files/pdfs/1371%20Rev%20Up%20EVs%20Report\\_09\\_web.pdf](https://content.sierraclub.org/creative-archive/sites/content.sierraclub.org/creative-archive/files/pdfs/1371%20Rev%20Up%20EVs%20Report_09_web.pdf) (last visited April 7, 2019).

<sup>5</sup> These policies are set out in detail in Sierra Club and Plug In America’s EV Policy Toolkit, “AchiEVe: Model State & Local Policies to Accelerate Electric Vehicle Adoption” (June 2018), available at <https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/EV%20Policy%20Toolkit.pdf> (last visited April 8, 2019).

*Oregon:* Oregon currently offers a \$1,500 - \$2,500 rebate (depending on battery size) for the purchase or lease of a new EV (and \$750 rebate for electric motorcycles). On top of that incentive, drivers with low-moderate income are eligible for an additional rebate up to another \$2,500 for the purchase of an EV. The program is funded through 2023 using revenues from a state tax imposed on car dealers.<sup>6</sup>

### **Electric Car-Sharing Programs**

Los Angeles, California: BlueLA is a 100% EV car-sharing program, geared toward low-income residents. Members are not required to return the vehicle to the same place they picked it up. This gives working families the option to pick up an EV from a location near their home and drop it off at a location near a public transportation hub if needed, making the program more flexible and convenient.<sup>7</sup>

### **Charging Access in Underserved Communities**

San Diego, California: The San Diego Gas & Electric (SDG&E) Power Your Drive Program is deploying 350 EV site installations and 3,500 charging stations at workplaces, multi-unit dwellings, and in disadvantaged communities. SDG&E pays for the EV stations and installation; the site host pays a one-time participation payment: \$630/port for workplace, \$235/port for MUDs, and \$0 for disadvantaged community installations.<sup>8</sup>

#### *3. What other suggestions or ideas do you have for the role of public interest organizations?*

Sierra Club works diligently to engage and educate our members, the public, and decision-makers about the direct connection between transportation policies and our current climate crisis. This connection has become even more critical as current research has identified the rapidly shrinking window of opportunity we have to reduce greenhouse gas emissions in order to avoid the most devastating effects of climate change. In states like Vermont, where the transportation sector accounts for the largest share of the state's greenhouse gas emissions, public interest organizations have a key role to play in educating the public and decision-makers about the consequences of transportation-related policies.

To this end, we urge the Commission to make the strongest possible recommendations for action in its report to the legislature. As Green Mountain Power explained in its presentation at the March 15, 2019 PUC workshop, its 2017 partnership with Nissan to give customers \$10,000 off the price of a Nissan Leaf proved highly effective, increasing Leaf sales at the participating dealership from approximately 2-3 per month to approximately 200 over four months.<sup>9</sup>

That level of incentive is one that must be considered if the state is serious about reaching its climate objectives. Resources for the Future prepared a report for the Vermont Legislature in January 2019 that, among other things, modelled nationwide EV purchase incentive of \$1,000, \$3,000, and \$5,000 on

---

<sup>6</sup> <https://www.oregon.gov/deq/FilterDocs/zev-faq.pdf>.

<sup>7</sup> More information is available at <https://www.bluela.com/about-bluela>.

<sup>8</sup> More information is available at <https://www.sdge.com/residential/electric-vehicles/power-your-drive>.

<sup>9</sup> See Green Mountain Power, Presentation, "Cutting Carbon: Promoting Electric Vehicle Programs & Outlook," at 3 (March 15, 2019).

top of the federal tax credit of up to \$7,500.<sup>10</sup> This study, which was based on a national market and not specific to Vermont consumers, concluded that a \$1,000 rebate would likely increase a state's plug-in vehicle sales by approximately 10 percent over predicted sales without the rebate.<sup>11</sup> With EVs and hybrids accounting for less than 1 percent of new vehicle sales in Vermont,<sup>12</sup> and with less than 3,000 total EVs and hybrids currently on the road in the state, modest incentives are unlikely to see Vermont achieve its climate objectives.

In January 2019, Energy Action Network released its assessment of Vermont's progress toward achieving the state's climate objectives. Energy Action Network modeled one path for how Vermont could achieve our Paris Climate Agreement commitment to reduce the state's greenhouse gas emissions to at least 26%–28% below 2005 levels by 2025.<sup>13</sup> Energy Action Network's modelled pathway, which it based on "currently available energy technologies and proven best practices," requires EV ownership to hit 90,000 vehicles in Vermont in 2025.<sup>14</sup> As the report notes, this would require policies to push the state far beyond a business-as-usual pathway for EV ownership. "[A]doption would need to grow about 65% each year, significantly faster than it has been to date. For context, an estimated 264,000 new vehicles will be sold in VT by 2025, which means EVs would have to make up a third of those vehicle sales."<sup>15</sup>

The following chart compares current EV adoption in Vermont to where EV adoption needs to be in order to meet out 2025 climate objectives under the Energy Action Network pathway and the state's 2016 Comprehensive Energy Plan:<sup>16</sup>

---

<sup>10</sup> Resources for the Future, "An Analysis of Decarbonization Methods in Vermont," at 28 (January 2019), available at <https://legislature.vermont.gov/Documents/2020/WorkGroups/House%20Natural/Decarbonization/W~Marc%20Hafstead~Decarbonization%20-%20Final%20Report~1-22-2019.pdf> (last visited April 7, 2019).

<sup>11</sup> *Id.* at 119.

<sup>12</sup> *Id.* at 115.

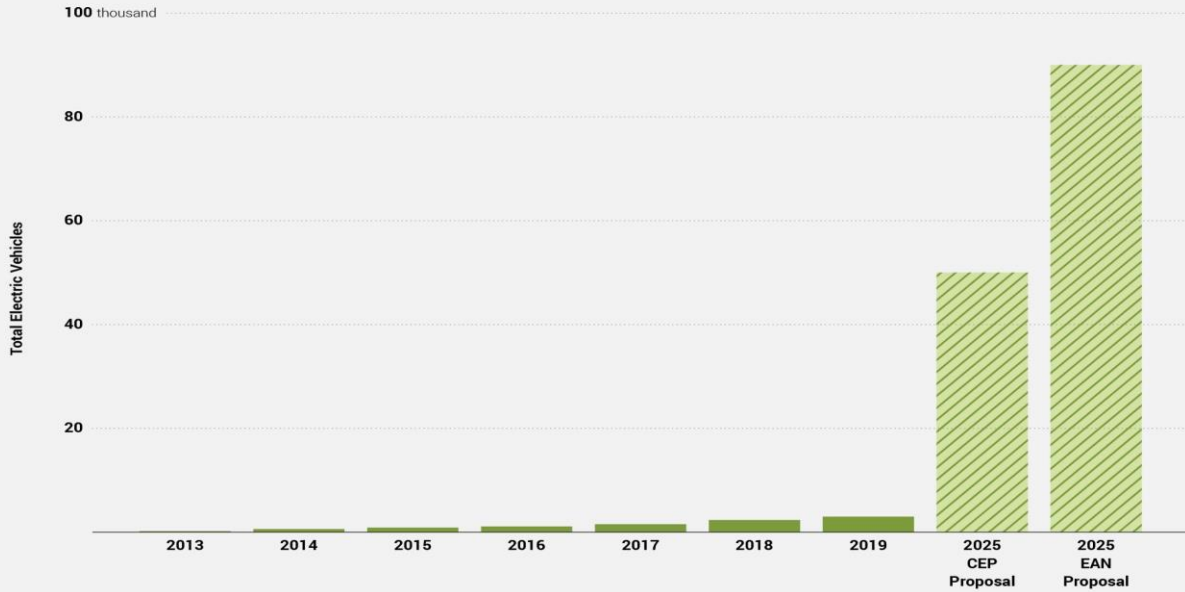
<sup>13</sup> Energy Action Network, The Benefits of Achieving Vermont's Energy & Emissions Commitments: 2018 Annual Progress Report (January 2019), available at <https://www.eanvt.org/wp-content/uploads/2019/02/EAN-report-2018-highres-compressed.pdf> (last visited April 6, 2019).

<sup>14</sup> *Id.* at 8.

<sup>15</sup> *Id.* at 15.

<sup>16</sup> Elizabeth Gribkoff, "State needs 1575% boost in EVs in six years to meet energy goals," VT Digger (Mar. 1, 2019), <https://vtdigger.org/2019/03/01/state-needs-1575-boost-evs-six-years-meet-energy-goals/>.

# Vermont electric vehicle 2025 targets



CEP is the Comprehensive Energy Plan by the state of Vermont  
EAN is the Energy Action Network, a clean energy advocacy group based in Vermont



SOURCE: Drive Electric Vermont

Clearly Vermont must implement strong, forward-looking climate and transportation polices if the state has any hope of achieving its climate goals.

Thank you for the opportunity to provide input on the Commission's ongoing efforts to accelerate EV adoption and promote transportation electrification in Vermont.

If you have any questions about the material in the comments, please do not hesitate to contact me at 415.200.9778 or [nathaniel.shoaff@sierraclub.org](mailto:nathaniel.shoaff@sierraclub.org).

Respectfully submitted,

Nathaniel Shoaff  
Senior Attorney  
Sierra Club Environmental Law Program  
2101 Webster Street, Suite 1300  
Oakland, CA 94612  
(415) 200-9778  
[nathaniel.shoaff@sierraclub.org](mailto:nathaniel.shoaff@sierraclub.org)

\_\_\_\_\_/s/\_\_\_\_\_  
\_\_\_\_\_

Robb Kidd  
Conservation Program Manager  
Sierra Club Vermont  
P.O. Box 492  
Montpelier, VT 05602  
(802) 505-1540  
[robb.kidd@sierraclub.org](mailto:robb.kidd@sierraclub.org)