



Before the Oregon House Committee on Energy and Environment

February 2, 2016

Testimony Submitted by Jeff Allen, Executive Director of Drive Oregon

Regarding House Bill 4036

Introduction

Chair Vega Pederson and Members of the House Energy and Environment Committee, thank you for the opportunity to testify today. For the record, my name is Jeff Allen, and I am Executive Director of Drive Oregon.

Drive Oregon is a nonprofit trade association working to grow the electric vehicle industry and promote electric transportation in Oregon. Our diverse membership includes approximately 100 companies and organizations from Oregon and nationwide including start-up firms, component suppliers, manufacturers of automobiles and other vehicles, universities, local governments, nongovernmental organizations, and other partners in electric mobility.

Drive Oregon strongly supports the transportation electrification elements of HB 4036.

Good for the Electric Vehicle Industry

One of the primary challenges to electric vehicle sales is that many consumers are unfamiliar with this relatively new technology. Electric utilities have a long history of educating their customers about the benefits of electric appliances, and HB 4036 will encourage and empower them to educate consumers about the benefits of a range of electric vehicles, from small two and three wheeled vehicles to cars, buses, and industrial equipment like forklifts.

HB 4036 will also help overcome a second challenge to electric vehicle adoption: the need to ensure ready access to charging infrastructure. Utility engagement in charging is important for several reasons. First, utilities have unique expertise and information that will help them to add charging infrastructure where it will do the most good, at the least cost. Second, utilities have the patience and the billing systems to recover those investments from users' increased electricity purchases over several years. Third, the costs of upgrading distribution systems, panels, and conduit often exceed the cost of charging equipment itself. Many utility programs, such as those recently approved by the California PUC, focus on these important investments – which tend to be neither

glamorous nor profitable for private charging firms.

Finally, active utility engagement will also help maximize the grid benefits of electric vehicles – for example, by encouraging charging when excess renewable energy is available.

Good for Low Income Consumers

HB 4036 emphasizes that “widespread transportation electrification requires that electric companies increase access to the use of electricity as a transportation fuel in low and moderate income communities,” and for good reason.

Pre-owned 2-3 year old Nissan Leafs are readily available today in Oregon for \$10,000 or less; with virtually no fuel or maintenance costs, low and moderate income families can gain an “electric dividend” by trading in an inefficient older gas guzzler. Many lower income families are poorly served by transit, making an electric vehicle an excellent choice.

However, lower income populations may find the upfront cost of installing a charging station daunting, and may be more likely to live in apartment buildings where charging is more challenging. Low-income communities may also be underserved by market-driven firms, particularly in the early days of new technology.

Utilities have a key role to play – and a key responsibility – to help bring charging to apartment buildings, developing readily accessible public fast charging, and otherwise supporting these communities’ use of electricity as a transportation fuel.

Good for Utility Customers

Growing numbers of electric vehicles will lower utility bills for all Oregonians. The main reason for this is that increasing electricity sales will allow utilities to spread the fixed costs of infrastructure like power plants across more sales, lowering the cost of each kilowatt-hour.

Since electric cars tend to charge at home, overnight, when there is excess cheap power available, they can provide a lot of value to utilities. One study by consulting firm *Energy and Environmental Economics* found that each electric car was worth between \$2,788 and \$9,799 to California utilities and ratepayers.¹ Work in Washington state has found similar results: electric car drivers actually lower power rates for everyone else.

Furthermore, the batteries in electric cars store a lot of power and can be used to help support and stabilize the grid. Simply by speeding or slowing the rate at which they are charged, they serve as a kind of “shock absorber” on the grid. By varying the rate of charge, these vehicles can also help absorb and integrate more intermittent renewable energy, such as solar or wind. Electric vehicles can also feed power back to the grid when needed, and large numbers of vehicles will help make this benefit more substantial.

Promotes Competition in Charging

Five or six years ago, when modern electric vehicles were first entering the market, some brash startup companies that were founded to provide Electric Vehicle Supply Equipment (EVSE) wanted to exclude utilities from the charging business as potential competitors. In hindsight, and with several of those companies now bankrupt, it is clear that providing electricity to drivers requires cooperation among automakers, utilities, and independent EVSE companies. All of these companies benefit from expanding numbers of electric vehicles.

There is plenty of room in this industry for both utilities and independent EVSE companies, which is why so many EVSE companies have joined us in endorsing HB 4036. Endorsers include small Oregon companies like OpConnect, EV4Oregon, and Shorepower as well as larger national EVSE companies like Schneider Electric, Greenlots, EV Connect, and SemaConnect.

Utilities have promoted electric lights, televisions, dishwashers, and other appliances without monopolizing the markets for those products and services. There is no reason to expect utilities to monopolize the EVSE market.

Finally, as an extra safeguard, HB 4036 includes language ensuring that utility involvement “stimulate innovation and competition,” and we are confident that both the legislation and the PUC review process will ensure that utility programs maintain consumer choice and a competitive EVSE marketplace.

Keeps More Money in Oregon

Electric vehicles stimulate Oregon’s economy by returning money to owners that would otherwise be spent on imported gasoline. One study found that every dollar shifted out of gasoline spending produces 16 times more jobs.² Each electric car purchased can increase total Oregon GDP by as much as \$2,000 a year³, with corresponding increases in jobs and tax revenue. Oregonians spend about \$6 billion a year on gasoline, so the potential benefits of this “electric dividend” are enormous – and not just for the families that buy electric vehicles.

Good for the Environment

The carbon benefits of electric vehicles are dramatic. The Union of Concerned Scientists found that electric vehicles in our region have the CO₂ emissions equivalent of a 94 MPG car⁴ – and that is before the coal in Oregon’s mix is replaced by renewable energy, as required by this bill.

Maintains PUC Oversight

HB 4036 establishes the importance of transportation electrification under state law, and directs utilities to develop and file applications for programs.

However, it is important to note that the Public Utility Commission maintains its extremely important oversight role. The PUC must review and approve utility applications, ensuring that they provide net benefits to ratepayers, improve efficiency and flexibility, provide consumer options, and are reasonably expected to be used and useful.

Drive Oregon and our members plan to engage actively with the utilities as they work to develop their proposals, and we expect the PUC, its staff, and other stakeholders to review utility proposals closely as well. This process will provide an important safeguard to ensure that utilities engage in a way that provides the benefits we have outlined.

Conclusion

Oregonians have questions about electric vehicles, and one of the first places they will turn for answers is their local electric utility. Utilities have a long history of educating customers, and they are in a unique position to help grow this market.

Oregon's electric vehicle industry strongly urges your support for HB 4036.

Thank you for the opportunity to testify before you today. I would be happy to answer any questions.

Attachment: Letter of support dated 2/1/2016

¹ https://www.ethree.com/documents/E3-NRDC_EVs_Paper_Final_20150129.pdf

² <http://www.caletc.com/wp-content/uploads/2012/11/Economic-Jobs-Assessment->

² <http://www.caletc.com/wp-content/uploads/2012/11/Economic-Jobs-Assessment-Exec-Summary.pdf>

³ <http://driveoregon.org/wp-content/uploads/2015/02/Oregon-EV>Returns.pdf>

⁴ <http://www.ucsusa.org/clean-vehicles/electric-vehicles/life-cycle-ev-emissions#.VqkYKFIyf8F>



February 1, 2016

Honorable Chair Jessica Vega Pederson and Honorable Members
House Committee on Energy and Environment
Oregon State Legislature
900 Court St. NE
Salem, Oregon 97301

Dear members of the House Energy and Environment Committee:

As companies active in Oregon's electric vehicle industry, we are writing to express our strong support for the transportation electrification elements of House Bill 4036, the Oregon Clean Electricity and Coal Transition Plan.

This common sense proposal is good for the electric vehicle industry, for utility ratepayers, for the environment, and for Oregon's economy.

Good for the Industry. The biggest problem facing the electric vehicle market today is that most consumers don't know these vehicles exist. Electric utilities have a long history of educating their customers about the benefits of electric appliances, and experience has shown that an actively engaged utility will help accelerate electric vehicle sales. Utilities also have the expertise to add charging infrastructure where it will do the most good, at the least cost, and have the patience to recover those investments over several years.

Good for Utility Ratepayers. While some critics have claimed HB 4036 will "subsidize" charging, there is ample evidence that electric vehicles lower rates for all Oregonians. Electric cars tend to charge overnight, when demand is low, and let utilities spread fixed costs to more customers. One California study found that each electric car was worth between \$2,778 and \$9,799 to the utility and its ratepayers over its lifetime.¹ House Bill 4036 requires that any utility investments produce net benefits to ratepayers, and requires Oregon's Public Utility Commission to review utility proposals against that benchmark.

Good for the Economy. Electric vehicles stimulate Oregon's economy by returning money to owners that would otherwise be spent on imported gasoline. One study found that every dollar shifted out of gasoline spending produces 16 times more jobs.² Each electric car also brings a \$7,500 federal tax credit to Oregon, and can increase total Oregon GDP by as much as \$2,000 a year³, with corresponding increases in jobs and tax revenue. Oregonians spend about \$6 billion a year on gasoline, so the potential benefits of this "electric dividend" are enormous – and not just for the families that buy electric vehicles.

Good for the Environment. The carbon benefits of electric vehicles are dramatic. The Union of Concerned Scientists found that electric vehicles in our region have the CO2 emissions equivalent of a 94 MPG car⁴ – and that is before the coal in Oregon's mix is replaced by renewable energy as required by this bill.

Oregon's electric vehicle industry strongly urges your support for HB 4036.

Sincerely,



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John Chapman
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¹ https://www.ethree.com/documents/E3-NRDC_EVs_Paper_Final_20150129.pdf

² <http://www.caletc.com/wp-content/uploads/2012/11/Economic-Jobs-Assessment-Exec-Summary.pdf>

³ <http://driveoregon.org/wp-content/uploads/2015/02/Oregon-EV>Returns.pdf>

⁴ <http://www.ucsusa.org/clean-vehicles/electric-vehicles/life-cycle-ev-emissions#.VqkYKFIyf8F>