



SENATE COMMITTEE ON TRANSPORTATION & ENERGY SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH Feb. 3, 2016, 1:20 P.M.

Room 225 (Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 234

Aloha Chair Inouye, Chair Baker, Vice Chair Dela Cruz, Vice Chair Nishihara,

Blue Planet Foundation **supports** the acceleration of electric vehicle (EV) infrastructure, particularly in areas that have been identified as gaps in the existing infrastructure development.

Electric vehicles can enable both lower transportation costs, and lower electricity costs.¹ But as noted in Section 1 of the bill, the working group established by Act 164 found that the processes for installing EV infrastructure can be challenging in multi-user dwellings (MUDs). Thus, it makes sense to be proactive in ensuring that MUD residents will have the same access to EVs as other residents.

There are a number of potential paths to achieving this goal, such as more workplace charging, more public fast charging, and other solutions. These solutions are likely to work in concert to help EV charging to keep pace with EV adoption on the roads. Providing the Public Benefits Fee Administrator (PBFA) with flexibility to invest in MUD EV infrastructure is also a sensible component. We understand from the California Energy Commission that California's public benefits fund is similarly enabled to invest in EV charging.

This legislative guidance is extremely important, given that the context of the PBFA is to reduce electricity consumption. EVs will increase electricity consumption. But because they are more efficient than comparable gasoline vehicles, they will reduce total energy consumption. Thus, EVs are consistent with the overarching goal of the PBFA. SB 660 can clarify that consistency.

For these reasons, we support this bill and the recommendations of the Act 164 working group, and we urge you to pass this bill for the benefit of consumers who live in MUDs.

Thank you for the opportunity to provide this testimony.

¹ For example, U.H. Engineering Professor Matthias Fripp has calculated approximately \$150 million in annual energy savings from combining electrified vehicles with smart charging.



HADA testimony in STRONG SUPPORT of SB 234 RELATING TO ELECTRIC VEHICLES

Presented to the Senate Committee on Transportation and Energy and the Senate Committee on Commerce, Consumer Protection and Health

> at the public hearing to be held 1:20 p.m. Friday, February 3, 2017 in Conference Room 225, Hawaii State Capitol

by the Members of the Hawaii Automobile Dealers Association Hawaii's franchised new car dealers

Chairs Inouye and Baker, Vice Chairs Dela Cruz and Nishihara and members of the committees:

I am David Rolf, representing the members of the Hawaii Automobile Dealers Association, Hawaii's franchised new car dealers, who have remained strong in their support of the transition to renewable energy for use in vehicles in Hawaii. The association supports this bill which seeks to facilitate the installation of electric vehicle charging stations in multiple unit dwellings through the use of funds from the public benefits fee--a 1.5% fee currently attached to each electric bill.

It will take such public policy funding measures to assist the state in reaching the goals of the Hawaii Clean Energy Initiative, which include a goal for 40% renewable energy use by 2030, with an additional 30% reduction coming from efficiency.

Electric Vehicles (EVs) fall into the category of vehicles that can fulfill the state renewable energy goals in the ground transportation sector, notwithstanding the fact that currently much of the energy on the electric grids in the state is generated through the use of fossil fuels, and some electric vehicles have range extending capabilities employing the use of fossil fuel.

So, what's just up the road?

See the attached graph prepared by HADA in 2010 to show the uptake rate of EVs and hydrogen fuel cell electric vehicles "needed" to reach the goals of the Hawaii Clean Energy Initiative (HCEI).



HADA's Golden Gate Graph, nicknamed because of its resemblance to the bridge, shows the projected annual sales of new cars and light trucks, including, the 400,000 electric and hydrogen fuel cell vehicles "needed" to meet the Hawaii Clean Energy Initiative's goals—40% of the light vehicles in operation. So far, HADA's projections have been surprisingly accurate. The red and blue bar levels are laudable goals but likely unattainable without a strong communications plan—starting with \$3 million needed from the Public Benefits Fee fund. With gasoline prices remaining low for the foreseeable future, recent EV uptake numbers are not currently hitting the HADA projection.

There's a great need to facilitate installation of EV charging station infrastructure in Hawaii's multiple unit dwellings

Dealers report that attractive offers for EVs often see sales results limited by the inability of condominium unit owners to arrange for the installation of the needed EV charging station infrastructure in their buildings. This bill seeks to facilitate the installation of condominium unit charging stations through use of the funds generated by the public benefits fee. In the past, this fee has been primarily used to reduce electric consumption through subsidies for energy-saving appliances.

Negawatts versus Megawatts

Requests by HADA for \$3 million from the public benefits fee funds for an EV Benefits media campaign were not entertained because the fund was created for so-called "Negawatt programs" (energy saving programs) instead of use to promote EVs which would be considered a "Megawatt program" because more EVs would create more use of electricity, not less. However, one purpose of the public benefits fee fund is the displacement of fossil fuel.

Displacement of fossil fuel: "Teaching the Duck to Fly"

When energy stored in thousands and thousands of EV batteries can be used as "backfill" to the electric grid during peak energy times, then oil-fired generators can be kept off-line.

On a daily time-of-use graph, the fossil-fuel-produced electricity line, displayed with the renewable fuel-produced energy line resembles a floating duck.

When renewable-created energy from storage (in EV batteries) is fed back into the grid, the reduction in fossil fuel streamlines the profile of the duck—resembling a duck in flight.



Thus "teaching the duck to fly."



The addition of thousands of EVs to the Hawaii grid, if there is a capability developed to backfill during times of peak use, then fossil-fuel-using generators can be kept off line—actually creating...**a displacement of fossil fuel.**

New car dealers have enjoyed a thrilling, sometimes curvy, road up the hill, filled with great views, and exciting turns, for the past few years.

The same could be said for the Hawaii economy, which always seems to closely correspond to the bars on the graph showing the activity at new car dealerships.

New vehicle sales, after topping off, like old Pharaoh's dream, are in for some leaner years ahead. One can plan for just about anything ahead using these projected new car numbers.

There will remain about a million cars on the roads. The average of about 50,000 new cars and trucks imported each year, is offset by the 50,000 older vehicles coming off the roadways because the average lifespan of vehicles of about 20 years.

Hawaii's population will increase through 2030, but the number of vehicles on the roadways will remain relatively constant at one million vehicles because alternative public transportation is being developed, and people nowadays are doing more walking and biking.

Another positive factor is that electronic commuters--those employees working at home via computer—are becoming more prevalent.

As public policy programs continue to encourage the voluntary uptake of Electric Vehicles, the state can continue on its path of reaching the state's goals with regard to energy use in the ground transportation sector.

HADA dealers are ardently working to continue the process of Hawaii's transition to renewable fuel vehicles.

Respectfully submitted, David Rolf Executive Director, Hawaii Automobile Dealers Association Ph: 808 593-0031 HADA office

"Teaching the Duck to Fly" graphics source:

Lazar, J. (2016). *Teaching the "Duck" to Fly, Second Edition*. Montpelier, VT: The Regulatory Assistance Project. Available at: http://www.raponline.org/document/download/id/7956

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<u>SB234</u>

Submitted on: 2/2/2017 Testimony for TRE/CPH on Feb 3, 2017 13:20PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

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