

HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

(808) 587-3807

Testimony of **SCOTT J. GLENN, Chief Energy Officer**

before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Monday, February 10, 2020
2:00 PM
State Capitol, Conference Room 329

In SUPPORT of **HB 2462, HD1** **RELATING TO ELECTRIC VEHICLES.**

Chair Takumi, Vice Chair Ichiyama and members of the Committee. The Hawaii State Energy Office (HSEO) supports HB 2462, HD1, which establishes a refundable tax credit for the purchase of new electric vehicles (EVs).

Emissions from ground transportation such as passenger cars, light trucks, motorcycles, and heavy-duty vehicles still account for the largest share of energy sector emissions in the state. As noted in the 2016 Greenhouse Gas Inventory, transportation emissions in Hawaii were at 8.69 million metric tons of carbon dioxide equivalents, accounting for 51 percent of energy sector emissions. Ground transportation accounted for 47 percent of those transportation emissions. For Hawaii to meet its target to sequester more greenhouse gases than we emit as soon as practicable but no later than 2045, programs that support the adoption of cleaner transportation options are extremely important.

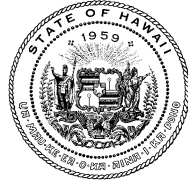
Eliminating emissions from ground transportation will require significant adoption of both public and privately owned EVs. The retail cost of EVs has been a barrier to greater adoption. Establishing incentives for the purchase of new EVs would aide consumers in the adoption of EVs and send a clear signal to the market of Hawaii's support. A market signal is important in that EV models are being introduced for new vehicle segments, such as light duty trucks, and positioning Hawaii as an EV positive market can help direct limited inventory of those new models to Hawaii. Increased adoption of EVs aligns with the state's clean energy goals and supports the HSEO's efforts to promote and lead efforts to incorporate clean transportation that reduce costs and address Hawaii's carbon emissions.

The HSEO will coordinate with identified agencies on implementation and defers to impacted state agencies on the budget considerations related to implementing an EV incentive program.

Thank you for the opportunity to testify.

DAVID Y. IGE
GOVERNOR

JOSH GREEN M.D.
LT. GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TAXATION

P.O. BOX 259
HONOLULU, HAWAII 96809
PHONE NO: (808) 587-1540
FAX NO: (808) 587-1560

RONA M. SUZUKI
DIRECTOR OF TAXATION

DAMIEN A. ELEFANTE
DEPUTY DIRECTOR

To: The Honorable Roy M. Takumi, Chair;
The Honorable Linda Ichiyama, Vice Chair;
and Members of the House Committee on Consumer Protection & Commerce

From: Rona M. Suzuki, Director
Department of Taxation

Re: H.B. 2462, H.D. 1, Relating to Electric Vehicles

Date: Monday, February 10, 2020

Time: 2:00 P.M.

Place: Conference Room 329, State Capitol

The Department of Taxation (Department) appreciates the intent of H.B. 2462, H.D. 1, and offers the following comments.

H.D. 1 creates a new refundable income tax credit for the purchase of electric vehicles with a cost of up to \$50,000. The credit amount is \$2,500 per vehicle and is available for the taxpayers who have less than an unspecified adjusted gross income. The measure has a defective effective date of July 1, 2050, but otherwise would be available for eight years starting with the taxable year beginning after December 31, 2020.

The Department notes that the \$50,000 limit on the cost of the electric vehicle is ambiguous. If the intent is to disallow the credit if the cost of the vehicle is more than \$50,000, this should be explicitly stated. It should also be clarified whether the \$50,000 limit applies to the cost of the vehicle itself or includes taxes and fees associated with the purchase.

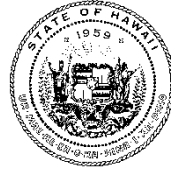
As currently written, "adjusted gross income" means Hawaii adjusted gross income (AGI). The Department suggests using federal AGI instead because it is a better indicator of a taxpayer's income. Hawaii AGI is often lower because the State doesn't tax items such as social security and employer contributed portion of pension income

It is also unclear whether the credit is intended to be available if the vehicle is purchased for business use. Subsection (a) tries to limit the application of the credit only to an individual's liability, but the measure does not prevent an individual from claiming the credit even if the vehicle is used for business. Sole proprietorships, partnerships, single-member LLCs, and multi-member LLCs are examples of business arrangements where any income tax dues would be paid on the return of an individual. The Department suggests being specific as to who this credit is available for and for what purposes.

Finally, the Department is able to administer this new credit starting with the taxable year beginning after December 31, 2020 provided that a functional effective date is inserted.

Thank you for the opportunity to provide comments.

DAVID Y. IGE
GOVERNOR



CURT T. OTAGURO
Comptroller
AUDREY HIDANO
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

WRITTEN TESTIMONY
OF
CURT T. OTAGURO
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
TO THE
HOUSE COMMITTEE
ON
CONSUMER PROTECTION AND COMMERCE

MONDAY, FEBRUARY 10, 2020, 2:00 P.M.
CONFERENCE ROOM 329, STATE CAPITOL

H.B. 2462 H.D. 1

RELATING TO ELECTRIC VEHICLES

Chair Takumi, Vice Chair Ichiyama, and members of the Committee, thank you for the opportunity to testify on H.B. 2462 H.D. 1.

The Department of Accounting and General Services (DAGS) offers support on H.B. 2462 H.D. 1 which offers an income tax credit for purchasing an Electric Vehicle.

Currently Act 168 Session Laws of Hawaii 2012 exempts Electric Vehicles for certain parking fees collected by State and County agencies. This law was enacted to encourage the adoption of the purchase of Electric Vehicles. **Studies show consumers would purchase these vehicles as pricing and driving range improve. This law has served its intended purpose and expires in June 2020.**

An alternative which provides a viable incentive would be a tax credit for purchasing an Electric Vehicle. H.B. 2462 may be more conducive for the consumer to purchase these vehicles. Additionally, this type of tax credit could also be applied to Level 2 or 3 Electric Vehicle Charging Station installations.

There is an approximate \$5000-\$8000 cost difference between a gas vehicle and a comparable Electric Vehicle. The tax credit may be a viable method to make Electric Vehicles more affordable.

Thank you for the opportunity to testify on this matter



STATE OF HAWAII
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION
COMMISSION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Testimony of
Anukriti Hittle
Coordinator, Hawaii Climate Change Mitigation and Adaptation Commission

Before the House Committee on
CONSUMER PROTECTION & COMMERCE

Monday, February 10, 2020
2:00 PM
State Capitol, Conference Room 329

In support of
HOUSE BILL 2462 HD1
RELATING TO ELECTRIC VEHICLES

House Bill 2462 HD1 proposes to establish an income tax credit of \$2,500 per new electric vehicle that costs up to \$50,000. **On behalf of the Hawaii Climate Change Mitigation and Adaptation Commission (Commission) I offer the following comments in support of this measure.**

The Hawaii Climate Change Mitigation and Adaptation Commission “recognizes the urgency of climate threats and the need to act quickly. It promotes ambitious, climate-neutral, culturally responsible strategies for climate change adaptation and mitigation in a manner that is clean, equitable and resilient.” The Commission, established by Act 32 SLH 2017 to uphold the United States’ pledges under the Paris Agreement, is the coordinating body for policies on climate change mitigation and adaptation for the state. It is a high-level multi-jurisdictional body that guides the priorities of the state’s climate response. Co-chaired by DLNR and Office of Planning, it consists of 20 members—chairs of four legislative committees, and executive department heads at the county and state levels.

Transportation (air and ground) is the single largest source of greenhouse gas emissions (GHG) in Hawaii, and mirrors a nationwide trend--according to EPA, transportation was the largest source of GHG emissions in 2017. Reducing emissions from ground transportation is one of two major focuses of the Commission, and a transition to clean renewable fueled vehicles is a crucial strategy to achieve state goals. Such conversions include electrification of transportation, and the use of clean, renewable fuels, and a tax credit program could be critical in promoting this transition to clean transportation.

Thank you for the opportunity to comment in support of this measure.

Co-Chairs:
Chair, DLNR
Director, Office of Planning

Commissioners:
Chair, Senate AEN
Chair, Senate WTL
Chair, House EEP
Chair, House WTH
Chairperson, HTA
Chairperson, DOA
CEO, OHA
Chairperson, DHHL
Director, DBEDT
Director, DOT
Director, DOH
Chairperson, DOE
Director, C+C DPP
Director, Maui DP
Director, Hawai'i DP
Director, Kaua'i DP
The Adjutant General
Manager, CZM



John Uekawa, President
Dave Rolf, Executive Director

HADA Testimony OPPOSED to HB2462 HD1
RELATING TO ELECTRIC VEHICLES

Presented to the House Committee On Consumer Protection & Commerce
at the Public Hearing 2 p.m., Monday, February 10, 2020
in Room 329 Hawaii State Capitol

by David H. Rolf for members of the Hawaii Automobile Dealers Association,
*Hawaii's franchised new car dealers, who provide sales, warranty work and other factory-certified
maintenance service for Hawaii's privately-owned and fleet-owned cars and light trucks*

Chairs Takumi, vice chair Ichiyama and members of the committee:

HADA dealers' opposition to HB2462 HD1, which proposes to establish an income tax credit of up to \$2,500 per new electric vehicle that costs up to \$50,000, relates to the lessons we've learned about electric vehicle adoption.

Our support for the original version of the bill, HB2462, was tied to the laudable proposal to use the barrel tax for its intended purpose, and the development of Vehicle-to-Grid (V2G) technology, whereby privately-owned EVs could provide needed electric power backfill power for the utility, when cloudy conditions, or low-wind conditions limited renewable generation of electricity on the grid.

Our opposition to the \$2,500 tax credit, in this HD1 version, is consistent with our long held position that credits and rebates, in effect, pay twice for the purchasing conduct the bill is trying to produce: 1) once, for the 2,000 or so electric vehicle customers who were going to purchase anyway without the credit, and again to incentivize purchases above the that number.

It's like paying \$5,000,000 in taxpayer money before you get a single additional EV purchase.

HADA proposes that a better use of those funds would be to amend the bill to call for the production of a print-tv-radio-internet education-of-the-vehicle-buying-public campaign, explaining to the buying public the benefits of electric vehicle purchases.

HADA appreciates the opportunity to testify on this measure.

David H. Rolf

For the Members of the Hawaii Automobile Dealers Association

HADA
Making Hawaii Better Together

HB-2462-HD-1

Submitted on: 2/9/2020 10:29:14 AM

Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dylan P. Armstrong	Individual	Support	No

Comments:



TESTIMONY REGARDING HB 2462 HD1

**being heard by the House Committee on Consumer Protection and Commerce
on Monday, February 10, 2020 at 2:00 PM in Room 329**

Aloha Chair Takumi, Vice Chair Ichiyama, and Members of the Committee:

Thank you for the opportunity to provide input on HB 2462 HD1 which would create an electric vehicle tax credit. Tesla supports the intent of this measure but is recommending a few amendments to avoid creating a program that does little to drive incremental adoption of electric vehicles.

Tesla's mission is to accelerate the world's transition to sustainable energy through the deployment of electric vehicles and sustainable energy storage and solar energy systems. Tesla is the only domestic mass-market automobile manufacturer that exclusively builds and sells electric vehicles. To date we have sold over 900,000 EVs globally. This experience gives us unique insight into what it takes to sell electric vehicles at volume and which policy mechanisms are most effective in motivating customer adoption.

In 2018, the state of the Hawaii established an ambitious goal to eliminate the use of fossil fuels from ground transportation by 2045, recognizing the profound economic, energy security and environmental challenges that dependency on fossil fuels imposes on Hawaii and its residents. Additionally, in 2018 Hawaii Electric issued its Electrification of Transportation Strategic Roadmap, which among other things, found that the deployment of electric vehicles yielded substantial operational benefits and cost savings to all customers.¹ Collectively these factors strongly suggest that a tax credit, like that proposed by this measure, is very much in the public interest.

Although Tesla is supportive of this measure's intent, we are concerned with the eligibility requirements which condition access to the tax credit on customer income. Such caps are premised on the notion that above a certain income level, an incentive program will suffer from extensive "free-ridership", with the credit going to customers who would have purchased an electric vehicle regardless of an incentive being offered. However, Tesla's experience indicates that this premise is incorrect and that the availability of a tax credit or incentives generally has a material impact on relative demand for electric versus conventional vehicles, regardless of income level. In fact, the Center for Sustainable Energy has found that over 80% of rebate recipients in three states (CA, NY, and CT) viewed the rebate to be moderately to extremely important in facilitating purchase of a clean vehicle.² Given this reality, the

¹ Hawaii Electric Electrification of Transportation Strategic Roadmap; pp. 35-36; March 29, 2018; available for download at https://www.hawaiielectric.com/documents/clean_energy_hawaii/electrification_of_transportation/201803_eot_roadmap.pdf

² Center for Sustainable Energy, 2018. Presentation for Public Workshop: Update to the 3-Year Plan for LDV Investments. https://energycenter.org/sites/default/files/docs/nav/resources/CVRP_Analysis_Update-2018-12-04.pdf



income cap appears to serve no discernible purpose. Every gallon of gas that any household avoids combusting by virtue of buying an electric vehicle instead of a conventional vehicle is equally beneficial in terms of advancing the state's policy goals and should be encouraged. Since most low-moderate consumers generally purchase used vehicles, restricting the supply of new EVs can have a negative impact on the supply of EVs in the secondary market.

Income caps can also create uncertainty about customer eligibility as many customers may not know if they will be eligible to receive the credit at the time they are considering the purchase of a qualifying vehicle. Certainty is fundamental to making an incentive program effective. If they are unsure if they will qualify for an incentive, customers will tend to ascribe it no value and as a result it will not materially influence their decision to buy an electric vehicle. Ironically, this gives rise the very "free-ridership" issue that the income threshold is ostensibly intended to safeguard against. In the face of uncertainty about their eligibility, only those customers that would have purchased an electric vehicle anyway will do so, and the tax credit will end up being a windfall.

As with the original version of this bill, Tesla also asks that the definition of electric vehicle be modified to ensure that the credit supports the purchase of vehicles that more meaningfully contribute to the underlying policy objectives. HRS 291-71, on which this measure relies, includes within the definition of electric vehicle those vehicles that have a battery system as small as 4 kilowatt hours (kWh). Assuming an efficiency of 3 miles of range per kWh of energy, this means that under the current definition, a vehicle that only gets 12 miles of all-electric range would receive the same tax credit as a pure electric vehicle that gets 200 miles of all-electric range. This is unreasonable, especially given that the relatively higher up-front cost of an electric vehicle is almost entirely attributable to the cost of batteries. To better target the tax credit, Tesla recommends that the amount of credit a vehicle can receive scale as a function of its all-electric range. For example, the credit could be calculated such that for every 10 miles of all electric range, as rated by the U.S. Environmental Protection Agency, a vehicle would be eligible to receive \$125 in tax credit, up to the \$2500 cap.

Tesla appreciates the opportunity to submit this testimony. While we strongly support establishing an EV tax credit, the current conditions on which the tax credit would be made available coupled with an overly broad definition of what constitutes an electric vehicle, will undermine the bill's ability meaningfully drive adoption of those vehicles that are needed to achieve the state's ambitious goal to eliminate Hawaii's reliance on fossil fuels for ground transportation.



Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE
Monday, February 10, 2020 — 2:00 p.m. — Room 329

Ulupono Initiative supports the intent of HB 2462 HD 1, Relating to the Electric Vehicles.

Dear Chair Takumi and Members of the Committee:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs at Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by creating more locally produced food; increasing affordable clean renewable energy and transportation options; and better managing waste and fresh water resources.

Ulupono supports the intent of HB 2462 HD 1, which establishes an income tax credit of \$2,500 for each electric vehicle purchased up to a cost of \$50,000 for those with an unspecified income.

Ulupono supports energy efficiency measures to lower consumption across the State. Electric vehicles (EVs) are an important avenue to address Hawai'i's pressing climate issues and align with the State's energy and environmental goals. Ground transportation makes up a significant portion of Hawai'i's reliance on imported oil and the largest contributor to our State's greenhouse gas emissions. EVs currently offer an effective option to progress clean renewable ground transportation and provide immediate benefits to Hawai'i.

However, if given the option, we do prefer an EV rebate program as proposed in the original HB 2462. Research has shown that a rebate is easier to implement and can directly reduce the purchase price of the vehicle, impacting monthly payments and buying decisions or ability. Furthermore, rebates often enable more access to the program which leads to a more balanced utilization of the rebate across various demographics.

Regardless, we do applaud legislators for recognizing the need to accelerate the purchase of zero emission vehicles, such as EVs. Not only will this help move the State's environmental, health and energy goals, but it will also signal to the market that Hawaii demands EVs, which should help create a more robust EV market across the State. Similar to a number of countries and cities across the globe, which have actually set policies to ban the future sale of new gasoline vehicles, the State of Hawai'i needs to continue to show the world that Hawai'i is serious about the sustainability and resiliency of our community by encouraging EVs as this bill proposes.

Thank you for this opportunity to testify.

Respectfully,

Amy Hennessey, APR
Senior Vice President, Communications & External Affairs

Investing in a Sustainable Hawai'i

HB-2462-HD-1

Submitted on: 2/9/2020 5:44:20 PM

Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Climate Protectors Coalition	Support	No

Comments:

Chair Takumi, Vice Chair Ichiyama, and Consumer Protection and Commerce Committee members:

The Climate Protectors Coalition **strongly supports** HB2462 HD1!

We are a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible, including by encouraging use of electric vehicles with a \$2,500 tax credit. Rebates as in HB2462 would be even better, but the Climate Protectors do support the tax credit in HD1. Please pass this bill. Mahalo!



**Hawaiian
Electric**

**TESTIMONY BEFORE THE HOUSE COMMITTEE ON
CONSUMER PROTECTION AND COMMERCE**

H.B. 2462, HD1

Relating to Electric Vehicles

Monday, February 10, 2020

2:00 PM, Agenda # 15

State Capitol, Conference Room 329

Michael Colón

Manager, Electrification of Transportation
Hawaiian Electric Company, Inc.

Dear Chair Takumi, Vice Chair Ichiyama and Committee Members,

My name is Michael Colón and I am testifying on behalf of Hawaiian Electric Company, Inc. (Hawaiian Electric) in support of H.B. 2462, HD1, Relating to Electric Vehicles. Hawaiian Electric supports this measure because it will help address one of the primary barriers to adoption of electric vehicles (EV), in helping to reduce the overall cost of purchase and supports the strong language that sets the State as a leader in fleet electrification.

H.B. 2462, HD1 would be a landmark bill establishing Hawaii as a leader in clean transportation, sending a strong signal to the rest of the country that we recognize the importance of transportation in addressing the growing challenges related to climate change. This bill would also send a strong signal that we all must be active participants in the transition to clean transportation to remain relevant and responsible in the years to come.

Hawaii has achieved the second highest electric vehicle adoption per capita and has done so with relatively few electric vehicle incentives. This bill would create a

virtuous circle of funding to bolster the EV market and increase the market competitiveness of these vehicles against fossil fuel burning vehicles. Contrary to prevailing belief, electric vehicle prices are anticipated to come down in the near term, making this bill even more influential in incentivizing adoption and making it more affordable for individuals to convert to EV.¹ Consumers respond positively to vehicle-purchase incentives especially rebates as they tend to prefer an immediate benefit over future savings.

Hawaiian Electric considers the expanding benefits for clean fuel vehicles as an important incentive towards incentivizing adoption. Reducing barriers to adoption and facilitating the electrification of transportation is one of the Company's top priorities established in our *Electrification of Transportation Strategic Roadmap*. In addition, the Company applauds the requirement that such vehicles are "integrated intelligently," which the Company interprets as being demand response capable when the technology and programs become available.

The Company is committed to an EV strategy that acknowledges the need for more sustainable transportation options. Done correctly, this bill can continue the tremendous progress that the state has made towards a cleaner and more sustainable transportation future.

Accordingly, Hawaiian Electric supports H.B. 2462, HD1. Thank you for this opportunity to testify.

¹ https://www.greencarreports.com/news/1126308_electric-car-battery-prices-dropped-13-in-2019-will-reach-100-kwh-in-2023; <https://cleantechnica.com/2019/04/17/bnef-shocker-electric-cars-price-competitive-in-2020-as-battery-costs-plummet/>; <https://articles2.marketrealist.com/2019/08/how-tesla-model-3-lowering-ev-prices-us/#>; <https://about.bnef.com/blog/battery-pack-prices-fall-as-market-ramps-up-with-market-average-at-156-kwh-in-2019/>; <https://www.iflscience.com/technology/battery-costs-drop-even-faster-electric-car-sales-continue-rise/>



HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 10, 2020, 2:00 P.M.

Room 329

(Testimony is 3 pages long)

TESTIMONY IN SUPPORT OF HB 2462 HD1

Aloha Chair Takumi, Vice Chair Ichiyama, and Committee members:

Blue Planet Foundation supports HB 2462 HD1, providing a tax credit for the purchase of an electric vehicle (EV) below a certain price point. The measure also includes limits the tax credit to filers below an unspecified adjusted gross income level.

Hawaii currently lacks any tax credits or monetary incentives to encourage the adoption of clean electric vehicles. Last year, a new surcharge was added to register an EV, and this year all state incentives for EVs (free city and state parking and HOV lane use) are set to expire. Unless the legislature acts this session, Hawaii will have no incentives to encourage the purchase of clean vehicles—a situation at odds with the numerous state climate and clean energy policy goals.

Urgent Need for Clean Vehicle Policy

Despite policies adopted by the legislature to set a goal of carbon neutrality for Hawaii by 2045 and for the state to achieve the Paris Climate Agreement objectives, Hawaii is failing to make progress on carbon emissions reductions from the ground transportation sector. Carbon emissions from Hawaii's cars and trucks grew approximately 6% in 2019 over 2018 levels—an increase of nearly 600 million pounds of greenhouse gas. Overall fossil fuel use for ground transportation statewide is up 10% over the past decade (see Figure 1 on the second page of this testimony). Hawaii drivers are increasingly choosing larger, heavier vehicles, which are often less fuel efficient. According to the Hawaii Auto Dealers Association, pickup trucks and sport utility vehicles accounted for 67.9% of Hawaii vehicle sales in 2018, an increase from 48.7% in 2012. Hawaii currently has no policies to reverse this trend. Unlike numerous other states, Hawaii has no rebates or monetary incentives to encourage the adoption of clean electric vehicles.

Real world evidence demonstrates that increasing fuel prices are a weak incentive for consumers to adopt fuel efficient or fuel-free alternatives until the price of gasoline exceeds \$4 to \$5 per gallon. Unfortunately, despite the highest fuel costs in the nation, Hawaii's consumers

info@blueplanetfoundation.org

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do not choose more efficient vehicles compared to the national average. Additional policy measures are needed to discourage the purchase of gas guzzling vehicles and accelerate adoption of clean, electric vehicles.

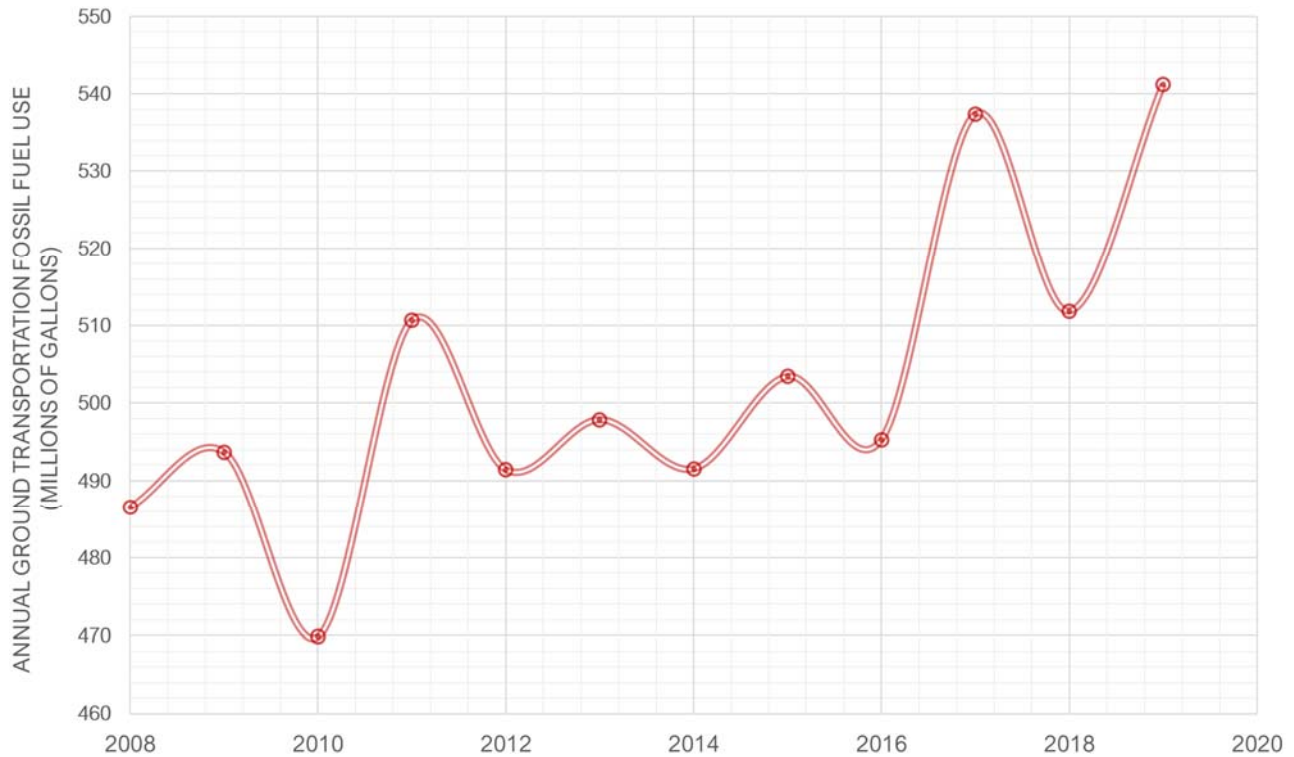


Figure 1: Hawaii Annual Fossil Fuel Consumption for Cars and Trucks

Electric Vehicles Key to Hawaii’s Renewable Energy Future

Electric vehicles play a critical role in Hawaii’s clean energy future. While EVs that use the existing electricity grid to charge still use some fossil fuel (except on Hawaii Island), they use that fuel far more effectively than burning fuel directly in a typical gasoline engine. This is why EVs are much less expensive to “fuel” per mile than their gasoline counterparts. Further, by using stored electrical energy, EVs can take better advantage of intermittent solar, wind, and other clean energy resources. Most vehicles sit idle over 22 hours of the day, so they can become *de facto* energy storage devices if their batteries are plugged into the grid when they are not in use. With smart grid infrastructure in place, EVs become an essential component to electricity load and clean energy resource balancing—in addition to providing clean mobility solutions for Hawaii residents.

Electric vehicles (EV) are the fastest growing segment of new cars in Hawaii. Over roughly the past year (January 2018 – January 2019), EV registrations statewide increased by 31%, while

registrations of gasoline-powered vehicles grew only 1 percent.¹ We expect the number of registered EVs to grow substantially as new EV models with longer ranges and lower prices hit the market. Still, nearly 1,050,000 fossil fuel-powered vehicles are on Hawaii's roads—and from them comes nearly five million metric tons of climate-changing carbon pollution. Per mile, gasoline-powered vehicles cost more to fuel, operate, and maintain than their zero emission electric counterparts.

Many states provide a variety of incentives for the purchase of electric vehicles—waiving the state excise tax for the purchase, eliminating registration fees, providing exemptions, or direct financial incentives. California, Colorado, Connecticut, Maryland, Massachusetts, New York, Pennsylvania, Texas, and Utah provide direct tax credits or rebates in one form or another for the purchase of EVs. To meet its climate and clean energy goals, Hawaii should follow suit with a direct EV tax credit.

While Blue Planet strongly supports the tax credit proposed in HB 2462, we respectfully request that committee members also consider the “feebate” policy originally proposed in HB 2493 (deferred by TRN/EEP). This elegant policy solution would place a larger tax on the sale of vehicles that pollute more per mile than average and use those funds to provide a rebate for lower-cost electric vehicles. The concept is based on the “polluter pays” principle: consumers who purchase low efficiency vehicles pay extra for the privilege of polluting—and in this case the additional payment is used to incentivize clean vehicles. The proposed policy is revenue neutral, meaning that it will require no additional money from the general fund or existing funds.

Hawaii is failing to reduce its carbon emissions from cars and trucks. House Bill 2462 HD1 seeks to rectify this by providing an incentive to purchase clean electric vehicles.

Thank you for the opportunity to testify.

¹ DBEDT Monthly Energy Trends, February 2020 (<http://dbedt.hawaii.gov/economic/energy-trends-2/>).



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The House Committee on Consumer Protection & Commerce
From: Brodie Lockard, Founder, 350Hawaii.org
Date: Monday, February 10 2020, 2:00 pm

In strong support of HB 2462 HD1

Dear Chair Takumi, and members:

350Hawaii strongly supports HB 2462 HD1.

This bill will help EV adoption a great deal. If the lost revenues seem like too much, wait until the bills come in for climate change damages.

Every government official around the world, at every level, is thinking, “Well, we can’t fix climate change.” And sure enough, every government official around the world, at every level, is not fixing climate change. But someone needs to pitch in. Hawaii needs to pitch in.

The transportation sector contributes more to the Climate Crisis than any other sector of Hawaii’s economy. More than two-thirds of the fossil fuel imported into the State is used for transportation.

Driving an EVs is the single biggest contribution a resident can make to fight the Climate Crisis. But they’re still expensive, even though they may be cheaper than a gas car over the life of the vehicle. And the federal tax credit goes away soon, maybe this year.

Our four mayors have already committed to fully-electric fleets.

It’s time for the State to step up. HB 2462 would lead the way for every vehicle in the state to be electric.

Brodie Lockard
Founder, 350Hawaii.org

HB-2462-HD-1

Submitted on: 2/9/2020 8:33:03 PM

Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments:

HB-2462-HD-1

Submitted on: 2/10/2020 4:44:48 AM

Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Kunitake	Individual	Support	No

Comments:

Dear Chair Takumi and Members of the Committee on Consumer Protection and Commerce,

I am writing in support of HB2462 HD1, which establishes an income tax credit of up to \$2,500 per new electric vehicle that costs up to \$50,000. Sunsets on 12/31/2028. Effective 7/1/2050. (HD1)

We need more incentives to get drivers to purchase electric vehicles which do not use fossil fuels. As we develop more clean renewable energy sources (e.g. wind and solar), we need to transition to devices that will use these renewable energy sources. The exhaust from vehicles continue to warm our planet and create more unhealthy air pollution. We need to find more ways to incentivise consumers to change their behaviors to use more renewable energy resources.

Please pass this bill.

Mahalo,

Caroline Kunitake

HB-2462-HD-1

Submitted on: 2/9/2020 10:43:24 PM

Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Victoria Anderson	Individual	Support	No

Comments:

Please pass this important bill!

HB-2462-HD-1

Submitted on: 2/10/2020 8:18:39 AM

Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

Hello,

My name is Nanea Lo. I am a lifelong resident of Hawai'i on O'ahu. I am writing in to say I support this bill.

me ke aloha 'Ä• ina,

Nanea Lo

DAVID Y. IGE
GOVERNOR



TESTIMONY BY:

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LATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

February 10, 2020
2:00 P.M.
State Capitol, Room 325

H.B. 2462, H.D. 1
RELATING TO ELECTRIC VEHICLES.

House Committee(s) on Energy & Environmental Protection and Transportation

The Department of Transportation **supports** this bill which establishes the electric vehicle rebate program of the Public Utilities Commission to award rebates for the purchase of new electric vehicles.

The DOT concurs with the Public Utilities Commission who are best suited to administer the electric vehicle rebate program to incentivize the purchase of new electric vehicles.

The DOT continues to work and collaborate with the Hawaii State Energy Office on strategies towards the electrification on transportation in order to meet timelines of the State's clean transportation goals.

Thank you for the opportunity to provide testimony.

HB-2462-HD-1

Submitted on: 2/10/2020 10:23:08 AM

Testimony for CPC on 2/10/2020 2:00:00 PM

LATE

Submitted By	Organization	Testifier Position	Present at Hearing
Noel Morin	Big Island EV Association, Hawaii Electric Vehicle Association	Support	No

Comments:

Dear Chair Lowen, Vice Chair Wildberger, and members:

I lead the Hawaii Electric Vehicle Association and Big Island Electric Vehicle Association. We strongly support HB2462 HD1.

Hawaii's transportation sector contributes more to the climate crisis than any other sector. Our ground transportation consumes about a third of our imported fossil fuel – it contributes to significant carbon emissions. Unfortunately, our gasoline consumption and emissions are still increasing. We must be more aggressive in the decarbonization of our transportation sector; electrification is way to accomplish this. Electric vehicles are many times more efficient than fossil fuel vehicles (80% vs 20%) and naturally contribute to dramatic emissions reductions. They will help enable us to achieve energy independence, don't contribute to air and noise pollution, and are also more cost effective to maintain and operate.

Electric vehicles are becoming more available and diverse. There will soon be a form factor that meets all needs. That said, the cost of electric vehicles is a barrier to adoption. A tax credit for the purchase of an electric vehicle will incentivize residents to make the shift from gas to electric. This is especially important given that more affordable EV models no longer qualify for the Federal Tax Credit.

I recommend that this be passed with amendments – 1) tiered credit based on pure-electric miles potential of the car, 2) that it not be contingent on the taxpayer's credits,

I recommend that the credit be structured in a manner that incentivizes the purchase of electric vehicles with the highest pure-electric range. This will allow consumers to opt for cars with the lowest emissions potential. One way to do this is to allow for the credit to be based on the nature of the car's ability to drive in pure-electric mode, e.g.,

- \$2500 – for Battery Electric Vehicles and Fuel Cell Electric Vehicles
- \$1000 – for Plug In Hybrid Electric Vehicles with >30 mile pure-electric mile range.

- \$500 – for Plug In Hybrid Electric Vehicles with <30 mile pure-electric mile range.

Our focus must ideally be to incentivize non-fossil fuel vehicles. While Plug In Hybrids might offer an acceptable transitional vehicle, particularly in MUD-dense environments, we need to incentivize models with high pure-electric miles. Of course, the optimum are pure-electric vehicles - there are several with over 150 miles of range, more than enough for most residents.

Another amendment is to not make the credit contingent on the taxpayer's total tax credits for a given taxable year. Consumers of all income levels can and should be enticed to shift to zero-emissions vehicles and a tax credit can be an effective means to encourage adoption.

Hawaii has the opportunity to lead in the electrification of transportation. We have many reasons for doing so – to contribute to the healing of our planet, to enable energy independence, and to improve the quality of life of Hawaii's residents. HB2462 HD1 offers a way to achieve this.

Thank you for your support of this measure.

Noel Morin

President - Hawaii Electric Vehicle Association, Big Island Electric Vehicle Association

(808) 987-7428

HB-2462-HD-1

Submitted on: 2/10/2020 10:10:16 AM

Testimony for CPC on 2/10/2020 2:00:00 PM

LATE

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Sanek	Individual	Support	No

Comments:

I support this as an EV owner to help encourage EV adoption and cleaner air for everyone.

LATE

HB-2462-HD-1

Submitted on: 2/10/2020 10:13:10 AM
Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
debra allen	Individual	Support	No

Comments:

Please approve this bill which will encourage future EV purchases and in turn help our environment. Thank you

LATE

HB-2462-HD-1

Submitted on: 2/10/2020 10:33:49 AM

Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Bernard M Moret	Individual	Support	No

Comments:

My wife, Carol Fryer, and I, both registered voters in Hawaii County, would like to assert our strongest support for HD 2462 HD1. (N.B.: the "effective date" in the draft is 7/1/2050; shouldn't it be 7/1/2020?)

Internal combustion engines (ICE) in ground transportation are the cause of over 1/3 of the pollution in the state. The state has set a goal of 2045 for 100% renewable electrical production; this should also be a target for complete conversion of ground transportation to electricity instead of fossil fuels, so that all ground transportation also becomes 100% pollution-free, using only renewable energy.

HB 2642 rightly targets residents with limited disposable income who would like to make the transition, but need some help, esp. given that there is hardly any used market for electrical vehicles at present. Helping Hawaii residents to make that transition will complement other state initiatives to encourage the development of a charging network.

Electric vehicles are clearly the future, esp. given the energy-independence goals of the state: they do not produce emissions, they are silent, they are predicted to last 2-4 times longer than ICE cars (thus reducing the acute disposal problem of old cars), they have proved significantly safer than ICE cars (fewer accidents and fewer injuries in accidents), and they go 3-4 times farther for the same amount of energy consumed.

The time to accelerate the transition is now, as new models will come on the market this year and next from every manufacturer and as current trends in fossil fuel consumption show an alarming increase across the state.

Respectfully submitted,

Bernard Moret & Carol Fryer

LATE

HB-2462-HD-1

Submitted on: 2/10/2020 10:53:21 AM
Testimony for CPC on 2/10/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Tamlyn Hunt	Individual	Support	No

Comments:

I strongly support a new EV tax credit for Hawaii. California and other states have had very good experience with such tax credits and it's time for Hawaii to put some action behind its rhetoric on getting off fossil fuels. The tax credit will help low and middle income earners to afford a new EV, which can still be expensive. Combined with the federal tax credit of \$7,500 this state credit will shave up to \$10,000 off the sticker price, making a \$35,000 EV far more affordable at just \$25,000, well within the reach of most earners.