

DAVID Y. IGE  
GOVERNOR



RODERICK K. BECKER  
DIRECTOR

ROBERT YU  
DEPUTY DIRECTOR

EMPLOYEES' RETIREMENT SYSTEM  
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND  
OFFICE OF THE PUBLIC DEFENDER

**STATE OF HAWAII  
DEPARTMENT OF BUDGET AND FINANCE**

P.O. BOX 150  
HONOLULU, HAWAII 96810-0150

ADMINISTRATIVE AND RESEARCH OFFICE  
BUDGET, PROGRAM PLANNING AND  
MANAGEMENT DIVISION  
FINANCIAL ADMINISTRATION DIVISION  
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

**WRITTEN ONLY**

TESTIMONY BY RODERICK K. BECKER  
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE  
TO THE SENATE COMMITTEE ON WAYS AND MEANS  
ON  
HOUSE BILL NO. 1585, H.D. 1, S.D. 1

**April 3, 2019  
10:20 a.m.  
Room 211**

RELATING TO THE ENVIRONMENT

House Bill (H.B.) No. 1585, H.D. 1, S.D. 1: establishes an Electric Vehicle Charging System Rebate Program (EVCSR) within the Public Utilities Commission that provides rebates to persons who install a new electric vehicle charging system or upgrade an existing electric vehicle charging system; caps the total value of rebates issued each year at \$1,000,000; and creates the EVCSR Special Fund (Fund) and appropriates an unspecified amount out of the Fund for FY 20 and FY 21.

As a matter of general policy, the department does not support the creation of a special fund that does not meet the requirements of Section 37-52.3, HRS. Special funds should: 1) serve a need as demonstrated by the purpose, scope of work and an explanation why the program cannot be implemented successfully under the general fund appropriation process; 2) reflect a clear nexus between the benefits sought and charges made upon the users or beneficiaries or a clear link between the program and the sources of revenue; 3) provide an appropriate means of financing for the program or activity; and 4) demonstrate the capacity to be financially self-sustaining. In regards to H.B. No. 1585, H.D. 1, S.D. 1, it is difficult to determine whether the proposed special fund would be self-sustaining.

Thank you for your consideration of our comments.



**SanHi**

GOVERNMENT STRATEGIES

A LIMITED LIABILITY LAW PARTNERSHIP

DATE: April 2, 2019

TO: Senator Donovan Dela Cruz  
Chair, Committee on Ways and Means

*Submitted Via Capitol Website*

FROM: Tiffany Yajima

RE: **H.B. 1585, H.D.1, S.D.1 – Relating to the Environment**  
**Hearing Date: Wednesday, April 3, 2019 at 10:20 a.m.**  
**Conference Room: 211**

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Dear Chair Dela Cruz and Members of the Committee on Ways and Means:

On behalf of the Alliance of Automobile Manufacturers (“Alliance”), we submit this testimony on H.B. 1585, HD1, SD1.

The Alliance is a trade association of twelve car and light truck manufacturers including BMW Group, Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of North America, and Volvo Car USA.

The Alliance supports the intent of H.B. 1585, HD1, SD1 with respect to the establishment of a rebate program that incentivizes the installation or upgrade of electric vehicle charging systems in the state. Hawaii has one of the highest rates of adoption of passenger electric vehicles in the nation and currently there are roughly 8,330 passenger electric vehicles registered in the state.

Although the number of electric vehicles registrations continues to increase, passenger electric vehicles still account for less than 1% of all registered vehicles on the road in Hawaii. A larger network of electric vehicle charging infrastructure is essential to greater adoption of electric vehicles.

Publicly available electric vehicle charging infrastructure is a top consideration for consumers interested in driving an electric vehicle. Incentives that facilitate the build out of electric vehicle charging stations will help to make these vehicles a more viable option for consumers and would encourage greater consumer uptake of passenger electric vehicles in Hawaii.

Thank you for the opportunity to submit testimony on this measure.



**Testimony to the Senate Committee Ways and Means  
Wednesday, April 3, 2019 at 10:20 A.M.  
Conference Room 211, State Capitol**

**RE: HB 1585 HD1 SD1, RELATING TO THE ENVIRONMENT**

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** HB 1585 HD1 SD1, which would require the public utilities commission to provide rebates to persons who install a new electric vehicle charging system or upgrade an existing electric vehicle charging system. Establishes the electric vehicle charging system rebate program administrator. Creates, and appropriates moneys out of, the electric vehicle charging system rebate program special fund. Amends the uses for which funds from the energy security special fund may be used.

The Chamber is Hawaii's leading statewide business advocacy organization, representing 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The bill was also amended to include the following definition for "Applicant." Applicant means an individual: non-profit or for-profit corporation; local, state or federal government agency; homeowner association; or any other eligible entity as defined under rules adopted for the electric vehicle charging system rebate program."

The purpose of the bill is to create an incentive to build out a more robust electric vehicle infrastructure will make electric vehicles a viable option for more consumers, especially those who may not have a rooftop solar system that allows them to charge their electric vehicles at home at a lower cost.

We believe the present bill will create the necessary incentives for the installation of more electric vehicle infrastructure. Thank you for the opportunity provide comments on this matter.



DAVID Y. IGE  
GOVERNOR

MIKE MCCARTNEY  
DIRECTOR

## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
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Statement of  
**MIKE MCCARTNEY**  
Director

Department of Business, Economic Development, and Tourism

before the

**SENATE COMMITTEE ON WAYS AND MEANS**

Wednesday, April 3, 2019

10:20 AM

State Capitol, Conference Room #221

In consideration of

**HB 1585, HD1, SD1**

**RELATING TO THE ENVIRONMENT.**

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) **supports in part and opposes in part** of HB1585, HD1, SD1 that establishes an electric vehicle (EV) charging system rebate program within DBEDT, creates and appropriates moneys out of the EV charging station rebate program special fund, and amends the purposes for which moneys from the Energy Security Special Fund (ESSF) may be used.

DBEDT **supports** the creation of an electric vehicle charging system special fund to sustain a rebate program; however, DBEDT notes the definitions used for charging stations (Direct current fast charging system, electric vehicle charging system and Level two station) need to be modified to allow for flexibility as advances in technology emerge and to accurately reflect industry specifications.

DBEDT's has the following concerns:

- 1) DBEDT requests making modifications to lines 4-7 in Section 2(k)(3)(1). DBEDT prefers to use "Direct-current (DC) fast charging, as defined by either CHAdeMO and/or SAE."
- 2) DBEDT requests making modifications to Section 2(k)(3), striking lines 8-9, to avoid redundancy and confusion and modify lines 10-15 so that "Level two station" has the same meaning and specifications as used in section 291-71 for "Electric vehicle charging system."

DBEDT **strongly opposes** Section 3 which amends 201-12.8, HRS, such that DBEDT would no longer be able to use ESSF moneys to pay DBEDT's energy division staff positions. All energy office positions would be subject to layoffs unless a different source of funding is provided. It is essential that funding for the state energy office continues.

Thank you for the opportunity to testify.

# TAX FOUNDATION OF HAWAII

126 Queen Street, Suite 304

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: FUEL, EV Charging System Rebate Program

BILL NUMBER: HB 1585, SD-1

INTRODUCED BY: Senate Committees on Energy, Economic Development, and Tourism, and Transportation

EXECUTIVE SUMMARY: Establishes an electric vehicle charging system rebate program within DBEDT that provides rebates to persons who install a new electric vehicle charging system or upgrade an existing electric vehicle charging system. Caps the total value of rebates issued each year at an unspecified sum. Creates the electric vehicle charging station rebate program special fund, and feeds it with yet another earmark on the barrel tax.

SYNOPSIS: Adds two new sections to chapter 269, HRS, to establish the electric vehicle charging system rebate program and special fund. The amount of the rebate is unspecified.

Amends section 201-12.8, HRS, to prohibit the use of moneys from the energy security special fund to support the state energy office and to allow various new uses of the money in the fund, so that it will be used for the following:

- (1) To support the Hawaii clean energy initiative program and projects that ensure dependable, efficient, and economical energy, promote energy self-sufficiency, resiliency, and provide greater energy security for the State;
- (2) To support achieving the zero emissions clean energy target set forth in section 225P-5;
- (3) To fund the building energy efficiency revolving loan fund established in section 201-20;
- (4) To fund incentives to promote the adoption of electric vehicles, to develop electric vehicle charging infrastructure, and to upgrade electrical infrastructure to support the development of electric vehicle charging infrastructure;
- (5) To fund, to the extent possible, the greenhouse gas emissions reduction task force, climate change task force, and programs to increase the resiliency of public facilities through renewable energy systems; and
- (6) To fund, to the extent possible, the duties of the state building code council in section 107-24, as they relate to the development of energy conservation codes.

EFFECTIVE DATE: July 1, 2100.

STAFF COMMENTS: This bill makes extensive amendments to section 201-12.8, HRS, relating to the energy security special fund. It should be noted that this fund is now fed by an earmark on the environmental response, energy, and food security tax (the “barrel tax”).

Act 300, SLH 1993, enacted an environmental response tax of 5 cents per barrel on petroleum products sold by a distributor to any retail dealer or end user. The collections of the tax were deposited into the environmental response revolving fund until such time the balance in the fund reached \$7 million at which time the imposition of tax was suspended until the balance in the fund declined.

Act 73, SLH 2010, increased the amount of the tax to \$1.05 per barrel and provided that 5 cents of the tax shall be deposited into a newly established environmental response revolving fund; 15 cents shall be deposited into a newly established energy security special fund, 10 cents shall be deposited into a newly established energy systems development special fund; 15 cents shall be deposited into the newly established agricultural development and food security special fund; and the residual of 60 cents shall be deposited into the general fund between 7/1/10 and 6/30/15. Act 107, SLH 2014, extended the sunset date of the \$1.05 environmental response, energy, and food security tax from 6/30/15 to 6/30/30. Act 185, SLH 2015, extended the tax to fossil fuels other than petroleum products as well, based on the BTU equivalent.

The environmental response tax was initially adopted to set up a reserve should an oil spill occur on the ocean waters that would affect Hawaii's shoreline. The nexus was between the oil importers and the possibility that a spill might occur as the oil product was being imported into the state. Now that the fund has become a cash cow, lawmakers have placed numerous and sundry other responsibilities on the fund, including environmental protection, food security, and natural resource protection programs, energy conservation and alternative energy development, air quality, global warming, clean water, polluted runoff, solid and hazardous waste, drinking water, and underground storage tanks, including support for the underground storage tank program of the department of health. This bill will add even more responsibilities, including "support[ing] the zero emissions clean energy target," funding incentives to promote the adoption of electric vehicles and building out EV infrastructure, and funding the building code council so they can work on energy conservation codes.

The basic problem with the barrel tax is that it lacks transparency, and because the funds are earmarked, they largely avoid scrutiny by either lawmakers or the public. Rather than perpetuate the problems of the barrel tax, lawmakers should consider repealing it and funding all programs through appropriations against the general fund. At least program managers would then have to justify their need for these funds. This sort of proliferation of public programs needs to be checked as it appears to be growing out of hand and at the expense of the taxpayer.

Digested 4/1/2019



**TESTIMONY TO THE SENATE COMMITTEE ON WAYS AND MEANDS  
State Capitol, Conference Room 211  
415 South Beretania Street  
10:20 PM**

April 3, 2019

RE: HOUSE BILL NO. 1585 HD 1,SD 1, RELATING TO THE ENVIRONMENT

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee:

My name is Gladys Quinto-Marrone, CEO of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

BIA-Hawaii is in **support** of H.B. 1585 HD 1, SD 1, which would require the Public Utilities Commission to provide rebates to persons who install a new electric vehicle charging system or upgrade an existing electric vehicle charging system. This bill also establishes the electric vehicle charging system rebate program administrator, and creates, and appropriates money from the electric vehicle charging system rebate program special fund.

The bill was also amended to include the following definition for "Applicant:"

"Applicant means an individual: non-profit or for-profit corporation; local, state or federal government agency; homeowner association; or any other eligible entity as defined under rules adopted for the electric vehicle charging system rebate program."

The purpose of the bill is to create an incentives to build out a more robust electric vehicle infrastructure will make electric vehicles a viable option for more consumers, especially those who may not have a rooftop solar system that allows them to charge their electric vehicles at home at a lower cost.

We believe the bill, as currently drafted, will create the necessary incentives for the installation of more electric vehicle infrastructure.

We are in support of H.B. 1585 HD 1, SD 1, and appreciate the opportunity provide comments on this matter.





To: The Senate Committees on Ways and Means  
From: Brodie Lockard, Hawaii State Climate Lead, Organizing for Action  
Date: Wednesday, April 3, 2019, 10:20 am

**In strong support of HB 1585 HD1 SD1**

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee Members—

Organizing for Action strongly supports HB 1585 HD1 SD1.

In January 2018 an anemic 0.79 percent of passenger vehicles in the state were electric [1]. In February 2019 the percentage was still just 0.81. We should be doing everything we can to increase that percentage.

Installing or upgrading EV charging stations can cost up to \$10,000 apiece. Anyone paying so much to advance our clean energy future deserves a rebate.

Nearly every major automaker said in 2017 that they plan to move to all-electric vehicles (EVs), and will each introduce 10 to 50 new EV models within one to seven years. Volkswagen and General Motors have already scheduled the end of their gasoline vehicle production.

As the number of zero-emissions vehicles (ZEVs) in Hawaii inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. Large parking areas are especially important because ZEV drivers cannot just park "next door" where there might be a parking space and supply equipment point available. When gas-powered cars are no longer for sale—not long from now—will Hawaii be equipped to charge its ever-growing number of ZEVs?

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will also help reduce Hawaii's greenhouse gas emissions by helping to make parking and charging ZEVs a non-issue.

Please pass HB 1585 HD1 SD1. It will help pave the way for our clean energy goals, and the imminent end of gasoline cars.

Thank you for the opportunity to testify.

[1] [http://files.hawaii.gov/dbedt/economic/data\\_reports/energy-trends/Energy\\_Trend.pdf](http://files.hawaii.gov/dbedt/economic/data_reports/energy-trends/Energy_Trend.pdf)

[2] <https://www.eia.gov/state/analysis.php?sid=HI>

Brodie Lockard  
Hawaii State Climate Lead, Organizing for Action

TESTIMONY OF  
JAMES P. GRIFFIN, Ph.D.  
CHAIR, PUBLIC UTILITIES COMMISSION  
STATE OF HAWAII

TO THE  
SENATE COMMITTEE ON  
WAYS AND MEANS

April 3, 2019  
10:20 a.m.

Chair Dela Cruz and Members of the Committee:

**MEASURE:** H.B. No. 1585 HD1 SD1

**TITLE:** RELATING TO THE ENVIRONMENT.

**DESCRIPTION:** Requires the public utilities commission to provide rebates to persons who install a new electric vehicle charging system or upgrade an existing electric vehicle charging system. Establishes the electric vehicle charging system rebate program administrator. Creates, and appropriates moneys out of, the electric vehicle charging system rebate program special fund. Amends the uses for which funds from the energy security special fund may be used. Effective 7/1/2100. (SD1)

**POSITION:**

The Public Utilities Commission is in **support** of this measure offers the following comments and a proposed amendment for consideration.

**COMMENTS:**

The purpose of this bill is to establish a rebate program to incentivize installation of publicly available electric vehicle (“EV”) charging systems or upgrade existing EV charging systems. This bill would also allow the Public Utilities Commission (“Commission”) to contract with a third-party administrator to operate and manage this rebate program. The Commission is in support of this measure.

The Commission believes that by providing incentives for individuals, businesses, and agencies to implement EV charging system infrastructure, this measure will promote the growth of electric vehicle use in Hawaii, which will lessen the State's reliance on imported fossil fuels.

The Commission notes that the current version of this measure does not include an appropriation to provide funding for the EV charging system rebate program. As such, **the Commission respectfully recommends that this measure be amended to include an appropriation into the EV charging system rebate program special fund** sufficient to provide for the contemplated incentives and administration of the rebate program and the special fund.

Specifically, the Commission recommends that a new section be added to the measure, as follows:

SECTION \_\_\_\_\_. There is appropriated out of the general revenues of the State of Hawaii the sum of \$1,250,000 or so much thereof as may be necessary for fiscal year 2019-2020 and the same sum or so much thereof as may be necessary for fiscal year 2020-2021 to be deposited into the electric vehicle charging system rebate program special fund established pursuant to section 2 of this Act. The sums appropriated shall be expended by the public utilities commission for the purposes of this Act.

The Commission notes that the above suggested language does not provide a recurring source of funding for the electric vehicle charging system rebate program. If the Legislature intends for this program to continue to offer incentives beyond 2021, the Commission recommends a recurring source of funding be provided to ensure the viability of the electric vehicle charging system rebate program. Alternatively, if funding is only provided from the general fund, the electric vehicle charging system rebate program will be dependent upon new appropriations each year in order to continue to support electric vehicle charging.

Thank you for the opportunity to testify on this measure.

**HB-1585-SD-1**

Submitted on: 4/1/2019 9:49:20 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
David Mulinix	Testifying for Our Revolution Hawaii	Support	No

Comments:



To: The Senate Committee on Ways and Means  
From: Sherry Pollack, 350Hawaii.org  
Date: Wednesday, 4/3/19

**In support of HB 1585 HD1 SD1**

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the WAM committee,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. On behalf of our 6,000 members and supporters, 350Hawaii.org **supports HB1585 HD1 SD1.**

EVs play a key role in our transition to 100% clean energy. HB1585 HD1 SD1 helps to overcome a key barrier to EV adoption: the lack of adequate EV charging infrastructure. As the number of zero-emissions vehicles (ZEVs) in Hawaii inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them.

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill will help reduce Hawaii's greenhouse gas emissions by helping to make parking and charging ZEVs a non-issue. Please support HB 1585 HD1 SD1. It will help pave the way for our clean energy goals, and the imminent end of gasoline cars.

Thank you for the opportunity to testify on this important bill.  
Sherry Pollack  
Co-Founder, 350Hawaii.org

**HB-1585-SD-1**

Submitted on: 4/1/2019 2:50:32 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
pamela burrell	Testifying for apollo Kauai	Support	No

Comments:

We need to insentivise the installation of more EV charging stations.. this is the future, let's make it transition easily.

Mahalo for this consideration.

Pamela Burrell,Kalihiwai, Kaua'i

**HB-1585-SD-1**

Submitted on: 3/31/2019 5:17:38 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jonathan Boyne	Individual	Support	No

Comments:

EVs play a key role in our transition to 100% clean energy. HB1585 HD1 helps to overcome a key barrier to EV adoption: the lack of adequate EV charging infrastructure. As the number of zero-emissions vehicles (ZEVs) in Hawaii inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill will help reduce Hawaii's greenhouse gas emissions by helping to make parking and charging ZEVs a nonissue. Please support HB 1585 HD1. It will help pave the way for our clean energy goals, and the imminent end of gasoline cars.

**HB-1585-SD-1**

Submitted on: 3/31/2019 7:42:42 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
donald erway	Individual	Support	No

Comments:



**HB-1585-SD-1**

Submitted on: 3/31/2019 9:20:54 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Kanani Kai	Individual	Support	No

Comments:

**HB-1585-SD-1**

Submitted on: 3/31/2019 12:06:10 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
John NAYLOR	Individual	Support	No

Comments:

Encourage electric vehicles any way you can!

**HB-1585-SD-1**

Submitted on: 3/31/2019 2:03:43 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
christine trecker	Individual	Support	No

Comments:

**HB1585 HD1 SD1 is a smart forward-thinking bill. The rebate program it proposes will hopefully encourage more electric vehicle charging systems, an important step toward Hawaii's necessary transition to electric vehicles. I urge you to vote in favor of this bill.**

**Thank you for your consideration.**

**HB-1585-SD-1**

Submitted on: 3/31/2019 4:15:03 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Andrea Nandoskar	Individual	Support	No

Comments:

**HB-1585-SD-1**

Submitted on: 3/31/2019 9:22:53 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ted Bohlen	Individual	Support	No

Comments:

**HB-1585-SD-1**

Submitted on: 4/1/2019 6:18:32 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Severine Busquet	Individual	Support	No

Comments:

Aloha:

I have had an EV car for 6 months which provides me with highly comfortable communte out of noise and vibrations. In addition EVs reduce Hawaii's greenhouse gas emissions and play a key role in our transition to 100% clean energy.

While it was not a problem 6 months ago, I am now strungling to find a EV-charger available during my commutes. The lack of adequate EV charging infrastructure is a key barrier to EV adoption.

For these reasons I support HB 1585 HD1 SD1 which will help by making parking and charging ZEVs a non-issue.

Thanks for your attention.

Severine Busquet

Honolulu, Hi 96825

**HB-1585-SD-1**

Submitted on: 4/1/2019 6:40:20 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Michele Nihipali	Individual	Support	No

Comments:

EVs play a key role in our transition to 100% clean energy. HB1585 HD1 helps to overcome a key barrier to EV adoption: the lack of adequate EV charging infrastructure. As the number of zero-emissions vehicles (ZEVs) in Hawaii inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill will help reduce Hawaii's greenhouse gas emissions by helping to make parking and charging ZEVs a nonissue. Please support HB 1585 HD1. It will help pave the way for our clean energy goals, and the imminent end of gasoline cars.

Mahalo for your consideration,

Michele Nihipali

54-074 A Kam Hwy.

Hauula, HI 96717

**HB-1585-SD-1**

Submitted on: 4/1/2019 9:41:04 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Sylvia Ching	Individual	Support	No

Comments:



**HB-1585-SD-1**

Submitted on: 4/1/2019 9:55:25 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Dale Jensen	Individual	Support	No

Comments:

Dear Ways and Means Committee Members,

EVs play a key role in our transition to 100% clean energy. HB1585 HD1 helps to overcome a key barrier to EV adoption: the lack of adequate EV charging infrastructure. As the number of zero-emissions vehicles (ZEVs) in Hawaii inevitably grows, the number of designated parking spaces and supply equipment points must grow to accommodate them. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. This bill will help reduce Hawaii's greenhouse gas emissions by helping to make parking and charging ZEVs a nonissue. Please support HB 1585 HD1. It will help pave the way for our clean energy goals, and the imminent end of gasoline cars.

Thank you,

Dale Jensen, Professional Engineer, Kailua, Oahu.

**HB-1585-SD-1**

Submitted on: 4/2/2019 7:40:55 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Amit Kamra	Individual	Support	No

Comments:

Charging infrastructure at dedicated parking spots at multi-unit residential buildings would be most useful to provide EV drivers the necessary comfort level that they will have a place to charge when they get home.

**HB-1585-SD-1**

Submitted on: 4/2/2019 8:22:50 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Cecilia Reid	Individual	Support	No

Comments:

**HB-1585-SD-1**

Submitted on: 4/2/2019 9:40:56 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Gary Miller	Individual	Support	No

Comments:

Anything that supports EV adoption should be encouraged.

Much Mahalo for your consideration on this important issue.

Gary Miller

**HB-1585-SD-1**

Submitted on: 4/2/2019 8:51:15 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Nanette Vinton	Individual	Support	No

Comments:

Honorable Chair Dela Cruz, Vice Chair Keith-Agaran and Committee Members,

I am writing in support of HB1585 HD1 SD1 regarding rebates for the installation of EV charging stations. I have been an EV owner since 2013 and am happy to see the significant growth in the number of EVs over the past few years. However, it seems that the number of EV chargers available for the public has not grown at the same pace.

I believe that having a proper charging infrastructure to support EVs whether they be at home, work, or public places is key to continued EV adoption and to support the State's Clean Transportation goals. Rebates for EV charger installation will provide needed incentives to property owners.

Sincerely,

Nanette Vinton

**HB-1585-SD-1**

Submitted on: 4/2/2019 9:26:05 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Peter Forman	Individual	Support	No

Comments:

Dear Ways and Means Committee members,  
I support HB 1585 HD1 SD1, as it gives financial incentives to business owners for installing EV charging equipment. The speed of EV charging makes overnight charging at home or daytime charging at work the most practical options and this bill would encourage businesses to install equipment that furthers this goal. Without sufficient charging infrastructure, many individuals simply cannot realistically convert to clean and sustainable power for their transportation needs.

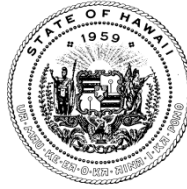
Respectfully submitted,

Peter Forman

EV owner

Kailua, Hawaii

DAVID Y. IGE  
GOVERNOR



**TESTIMONY BY:**

JADE T. BUTAY  
DIRECTOR

Deputy Directors  
LYNN A.S. ARAKI-REGAN  
DEREK J. CHOW  
ROSS M. HIGASHI  
EDWIN H. SNIFFEN

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

April 3, 2019  
10:20 a.m.  
State Capitol, Room 211

**H.B. 1585, H.D. 1, S.D. 1**  
**RELATING TO THE ENVIRONMENT.**

Senate Committee on Ways and Means

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The Department of Transportation (DOT) **supports the intent** of H.B. 1585, H.D. 1, S.D. 1 to establish an electric vehicle charging system rebate program and special fund administered by the Public Utilities Commission (PUC).

The DOT appreciates the electrification of transportation but defers to the PUC and the Department of Business and Economic Development who are identified as the implementing agencies in this bill.

Thank you for the opportunity to provide testimony.



**LATE**

Email: [communications@ulupono.com](mailto:communications@ulupono.com)

SENATE COMMITTEE ON WAYS & MEANS  
Wednesday, April 3, 2019 — 10:20 a.m. — Room 211

**RE: HB 1585 HD 1 - Relating to the Environment - Support, Request Amendments**

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee:

My name is Murray Clay and I am the Managing Partner of Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable clean renewable energy; and better manage waste and fresh water resources.

**Ulupono supports the intent and concept of this bill**, which establishes an electric vehicle charging system rebate program, because it will increase the use of more efficient, cleaner forms of transportation and help to reduce Hawai'i's dependence on imported fossil fuels. We offer the following amendments for the committee's consideration.

1. Stipulate the following rebate percentages and caps:

	<u>Level 2 - Single</u>	<u>Level 2 - 2+</u>	
	<u>Port</u>	<u>Ports</u>	<u>Level 3</u>
New Charger: Percent of Cost	30%	50%	70%
New Charger: Rebate Cap	\$2,000	\$6,000	\$35,000
Upgrade Charger: Percent of Cost		50%	70%
Upgrade Charger: Rebate Cap		\$3,000	\$28,000

2. Increase the limit of the annual total rebate funding to \$3 million per year. With this level of funding, more than 350 new/upgraded stations could be added. This increase would represent a 61-percent growth from the current number of charging stations in Hawai'i. If the committee prefers to keep the \$1 million cap, we respectfully recommend that the bill language explicitly states that the \$1 million cap is only for rebates and not administrative costs. If administrative costs are intended to be included in the cap, then the annual cap should be increased accordingly.

3. Potentially assign the Public Benefits Fee Administrator (PBFA) to administer the rebate program, as it already manages rebate programs that promote energy efficiency and they are currently responsible for implementing our EV charging rebate pilot

*Investing in a Sustainable Hawai'i*



program. If the Public Utilities Commission is not willing to manage the program, then this could be another viable option. However, further legislation would be required to enable the PBFA to administer the EV charging rebate program, as the Public Benefits Fee Administrator is not currently authorized to receive funding directly from the State and run such a program (per Hawaii Revised Statute 269-122).

4. Specify that the program administrator must set up and be prepared to launch the EV charging rebate program by December 31, 2019 to align with the rebate eligibility date stated in the bill.
5. Lastly, we have concerns over the removal and inability of barrel tax funding to directly support the energy division. However, we defer to the committee's preference of funding sources to maintain the objectives and goals of the energy division.

Electric vehicles (EVs) are an important avenue to address Hawai'i's pressing climate issues and align with the State's health, energy and environmental goals. While Hawai'i's electric power sector continues to make progress toward its 100 percent renewable portfolio standard (RPS) mandate, our transportation sector has received little attention.

EVs currently offer an effective option to progress clean renewable ground transportation and immediate benefits to Hawai'i:

- EVs can alleviate Hawai'i's high cost of living
- EVs provide immediate impact to reduce our dependence on fossil fuels and decrease greenhouse gas (GHG) emissions
- EVs are prime for market acceleration
- Hawai'i should be doing more to promote EVs and EV infrastructure

### **EVs Can Alleviate Hawai'i's High Cost of Living**

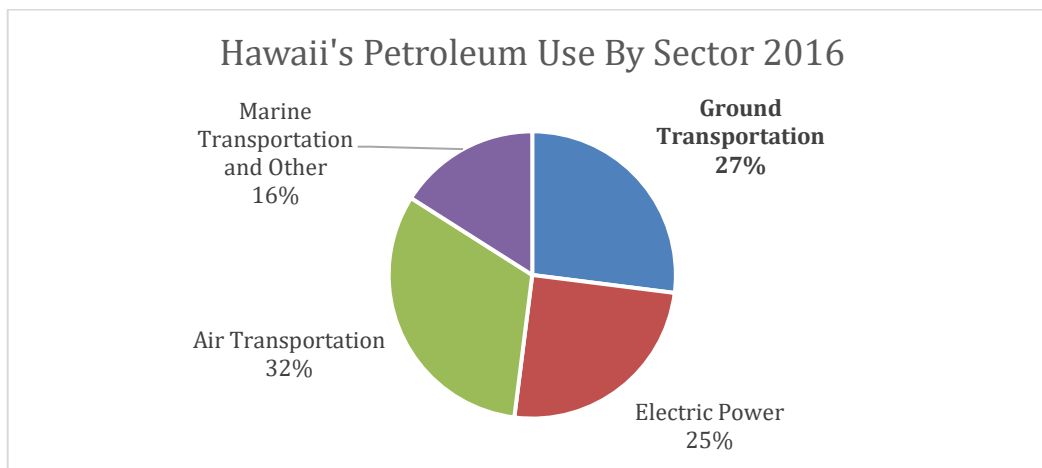
EVs are an increasingly affordable option for all. For example, the 2019 Nissan Leaf's average MSRP is \$33,095. After the Federal tax credit is considered, the purchase price is \$25,595, which is less than the best selling sedan in the country, the 2019 Toyota Camry. Attachment A to our testimony compares the purchase price of non-luxury EVs with top-selling sedans and the Toyota Tacoma (the top selling vehicle in Hawai'i).

EVs are also cheaper to operate and maintain because they have fewer moving parts and are more fuel-efficient. According to a recent study by the Union of Concerned Scientists, Honolulu drivers could save more than \$500 per year by switching to an EV.

### **EVs Provide Immediate Energy and Environmental Impact**

Ground transportation alone utilizes more than a quarter of the state's imported petroleum. Electrifying ground transportation will reduce our demand for imported fossil

fuels, keeping millions of dollars in the state and cutting harmful tailpipe pollution from the air that our we all breathe.



*Source: Hawaii State Energy Office – Hawaii Energy Facts & Figures*

Converting from petroleum-based vehicles to EVs immediately reduces GHG emissions, helping combat climate change and its impacts on our islands. EVs produce zero-emissions at the tailpipe, and even when full lifecycle emissions (from manufacturing through disposal) are considered, EV emissions are approximately 50 percent lower than internal combustion engine (ICE) vehicles. Thus, EVs directly improve the health of our communities as well as the globe.

EVs can also support the integration of more renewables on the electric grid with smart charging technology and rate structures. Thus, proliferating EVs throughout Hawai'i can help accelerate progress towards the State's 100 percent RPS goal, as well as contribute to the State's Paris Agreement commitments and carbon neutral goal.

### **EVs Are Prime For Market Acceleration**

From a market perspective, EV adoption in Hawai'i has shown impressive growth, and the state ranks second in the nation behind California in the number of EVs per capita. As of November 2018, there were more than 8,000 passenger EVs registered in Hawai'i, a 24 percent growth from the previous year, but lower than the national average of 81 percent growth. This progress is despite not having strong supporting policies as seen in other states, municipalities and countries.

Based on global and local trends, these adoption numbers are expected to increase exponentially by 2030. Major automobile manufacturers, from Volvo to Volkswagen, have announced plans to offer electric versions of all their vehicle models. Even Ford has announced plans for an all-electric F-150 pickup truck, the top selling vehicle in the country. Policies across the globe are further supporting this transition; in fact, Britain and France have committed to end sales of gas-powered vehicles by 2040.

However, we simply cannot wait. A new report by the United Nation Intergovernmental Panel on Climate Change warns global human-caused emissions of carbon dioxide need to fall 45 percent by 2030, and it will “require rapid, far-reaching and unprecedented changes in all aspects of society.” We must be proactive and act now with strong policy.

### **Hawai‘i Should Be Doing More**

EVs are the future, but they currently only represent less than one percent of all passenger vehicles in the state. Hawai‘i must be proactive to encourage this still nascent market and be prepared with the necessary infrastructure.

Public EV charging stations are a vital component of the EV system. They provide access to charging for drivers who may not be able to charge at home, such as residents who live in multifamily dwellings, and alleviate range anxiety for all EV drivers, a top cited barrier to purchasing EVs. Similar to the benefits that community solar offers to renters and apartment residents, public chargers open up the opportunity and feasibility of owning an EV to more people, increasing equity and access.

Additionally, public charging stations can promote the adoption of EVs in the tourism industry and rental car fleets. According to a survey we commissioned in June 2018, 56 percent of visitors said they probably would have rented an EV if the option were available to them. Of the respondents that indicated they probably would not rent an EV, the top reason for not wanting to rent one was concerns about driving range and finding a charging station. Increasing the number and visibility of public charging stations should encourage rental car companies to add EV options.

Hawai‘i’s EV charging infrastructure has not kept up with current demand and is ill-prepared for future projected EV adoption levels. In October 2015, there were 8 EVs for every public charging station in Hawai‘i, and in June 2018, there were 13 EVs per charger. This worsening ratio implies it is becoming more difficult for EV owners to find public charging stations and signals inadequate infrastructure support for EVs, which impedes EV adoption and our transition away from fossil fuel vehicles.

Based on our experience as investors in multiple charging station companies, it is currently financially challenging for private businesses to own and operate charging stations. Another challenge for private entities is supplying charging stations in underserved areas, which are particularly unprofitable due to underutilization but are needed to provide broad EV coverage. An EV charging station rebate program would reduce the financial burden and promote the proliferation of EV charging stations, helping ensure an encompassing charging network that serves low-income and multi-unit dwellings residents across the island.

More than 25 other states and municipalities, including Delaware, Maryland and

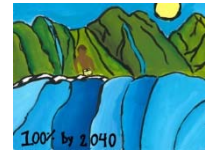
Pennsylvania, recognize the importance of EV infrastructure and already offer generous EV charging station incentive programs. To build momentum, Ulupono recently partnered with Hawai'i Energy to fund and launch a pilot EV charging station rebate program. The limited pilot, which ends in June 2019, aims to promote the installation of Level 2 charging stations at workplaces and multi-unit dwellings and to demonstrate the potential of a larger, statewide incentive program. Ulupono committed up to \$150,000 in funding for the pilot.

If the State of Hawai'i is serious about the health, sustainability and resiliency of our communities, it should encourage EVs and EV infrastructure.

As Hawai'i's energy issues become more complex and challenging, we appreciate this committee's efforts to look at policies that support clean ground transportation. Thank you for this opportunity to testify.

Respectfully,

Murray Clay  
Managing Partner



**LATE**

## SENATE COMMITTEE ON WAYS AND MEANS

April 3, 2019, 10:20 A.M.

Room 211

(Testimony is 2 pages long)

### TESTIMONY IN STRONG SUPPORT OF HB 1585 HD1 SD1

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Committee:

Blue Planet Foundation **strongly supports** HB 1585 HD1 SD1, establishing an electric vehicle (EV) charging system rebate program. This policy will help to address the critical gap in our transition to a low-cost, low-carbon future: the lack of charging for EVs, particularly at businesses and multi-unit residential properties.

Electric vehicles are the fastest growing segment of new cars in Hawaii. In 2018, EV registrations grew 25 percent, while registrations of gasoline-powered vehicles grew only 0.8 percent.<sup>1</sup> We expect over 10,000 EVs registered in Hawaii by the end of the year—a number that is expected to grow exponentially as new EV models with longer ranges and lower prices hit the market.

Electric vehicles will play an integral role in Hawaii's clean energy future. While EVs that use the existing electricity grid to charge still use mostly fossil fuel, they use that fuel 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 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.

Over one million gasoline-powered vehicles are on Hawaii's roads—and from them comes nearly five million metric tons of climate-changing carbon pollution. What's worse, while Hawaii has made good progress in reducing its carbon emissions from the electricity sector, emissions from ground transportation have been increasing in recent years.

House Bill 1585 helps to overcome a key barrier to EV adoption: the lack of adequate EV charging infrastructure.

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<sup>1</sup> DBEDT Monthly Energy Trends, January 2019 (<http://dbedt.hawaii.gov/economic/energy-trends-2/>).

The International Energy Agency has found that “the availability of chargers emerged as one of the key factors for contributing to the market penetration of EVs.” Unlike gasoline car owners, charging behavior for EV owners indicates that more than 80% of EV drivers charge their cars at home or at work.<sup>2</sup> In addition, a large share of the Hawaii population lives in high density, multi-unit residential buildings. The vast majority of parking facilities currently lack EV chargers.

House Bill 1585 creates a rebate program to incentivize the installation of EV charging stations. Blue Planet Foundation respectfully requests that the Committee clarify that the funding for the electric vehicle charging system rebate program come, at least in part, from Hawaii’s barrel tax. Blue Planet Foundation supports the use of the fossil fuel tax for this purpose. It makes sense to tap the source of our problem—imported fossil fuels—to help fund solutions, such as EV charging infrastructure.

**House Bill 1585 would accelerate Hawaii’s transition away from fossil fuels by:**

- Dramatically expanding EV charging options for the many Hawaii residents that don’t currently have access to charging at home, such as those living in multi-family residential buildings;
- Sparking an increase in EV charging options for the tourism sector, as hotels, businesses, and popular tourist destinations utilize the rebate; and
- Boosting visitors’ confidence in renting an EV, knowing that they’ll have adequate options for charging during their stay on our islands.

**Blue Planet Foundation also supports the provisions in the HD1 SD1 version that better align the use of funds from the energy security special fund with our state’s clean energy and renewable transportation goals.** Monies from this fund can and should be used to deploy new solutions for resiliency, enhanced electric vehicle adoption and infrastructure buildout (like the electric vehicle charging system rebate program), and improved energy efficiency in our existing building stock and new construction.

We respectfully request that the Committee forward HB 1585 HD1 SD1 amended to take effect upon approval. We also request that the Committee clarify in the bill that the funding for the rebate program come from the barrel tax.

Thank you for the opportunity to testify.

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<sup>2</sup> <https://www.iea.org/publications/freepublications/publication/GlobalEVO Outlook2017.pdf>



**HB-1585-SD-1**

Submitted on: 4/2/2019 10:46:46 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jon Yoshimura	Testifying for Tesla	Support	No

Comments:

**TESLA'S TESTIMONY REGARDING HB 1585 HD1 SD1**

**being heard by the House Committee on Ways and Means on Wednesday, April 3, 2019 at 10:20 a.m.**

**Conference Room 211**

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee:

Thank you for the opportunity to provide testimony regarding HB 1585 HD1 SD1, which would establish a rebate program to support the deployment of electric vehicle (EV) charging infrastructure. For reasons further detailed below, Tesla strongly supports efforts to expand EV charging access, recognizing the fundamental role it plays in driving EV adoption, including rebate programs like those proposed by this bill. Tesla offers a number of amendments below that we urge the Committee to consider in the interest of enhancing the bill's efficacy in driving incremental charging infrastructure deployment and EV adoption.

Tesla's mission is to accelerate the world's transition to sustainable energy. The electrification of the transportation sector is a critical part of this to the degree it represents among the most significant sources of greenhouse gas emissions through the combustion of fossil fuels. Nationally, the transportation sector accounts for almost 30% of GHG emissions.[\[1\]](#) By supporting efforts to transition to EVs, Hawaii can leverage its 100% renewable energy goals to greatly advance efforts to address climate change, reduce pollution and improve air quality, and enhance the state's economic and energy security.

Access to charging represents one of the more fundamental challenges impairing demand for electric vehicles. Without easy and convenient access to EV charging, drivers will be less inclined to choose an EV over a conventional vehicle. EV charging currently suffers from the "last mile" problem, or more accurately, the "last fifty feet" problem. Specifically, while the electrical grid is fairly ubiquitous, in order to support EV charging it needs to be expanded to bring the power to where EVs are actually parked.

This typically requires incremental investments in infrastructure on the customer side of the meter including electrical panel capacity, conduit and wiring, in addition to, in the case of Level 2 and Level 3 charging, the charging station itself. While for new construction, where EV charging infrastructure can be incorporated into the initial plans, the costs of deploying Level 2 EV charging infrastructure are quite modest, in the case of retrofits to existing buildings, these costs can be non-trivial.<sup>[2]</sup> State or utility support can be especially helpful in these instances.

It is worth noting that such support can offer meaningful benefits beyond the direct recipients of the funding and associated charging services. As HECO has detailed in its Electrification of Transportation Strategic Roadmap, by increasing the utilization of its fixed infrastructure, EV adoption can actually help reduce energy costs to all ratepayers.<sup>[3]</sup> This is in addition to the broad, public policy benefits that EV adoption provides in terms of reduced greenhouse gas emissions, improved air quality, etc.

Regarding the bill's proposed incentive structure, Tesla supports the percentage-of-cost framework, capped by a dollar amount per project. This is consistent with the approach we've seen in other jurisdictions and ensures that project developers have some "skin in the game".<sup>[4]</sup> It also ensures that incentives provided are commensurate with project costs while ensuring equitable access to funds.

Tesla offers a number of amendments to the bill that we believe will improve the extent to which the program supports EV adoption.

First, Tesla encourages modifying the eligibility criteria so that the program allows for the deployment of infrastructure in dedicated parking stalls, particularly in the context of multi-unit residential buildings. As currently drafted, the bill appears to prohibit using rebates to support the deployment of charging systems that "serve a single person, such a as a reserved parking stall or single-family residence". While Tesla agrees that it would not be reasonable to use limited funds to offset the costs of deploying charging at single-family homes, given the relatively low costs of these deployments and relatively few barriers that prevent doing so, we disagree with the prohibition on supporting the deployment of charging stations in dedicated parking stalls in the context of multi-unit residential buildings. Because public or shared accessibility necessarily means that an EV driver cannot depend on the charging station being available when they get home, this requirement undermines the certainty that prospective EV drivers need in order to feel comfortable purchasing and relying on an EV. Additionally, for entities that own and operate parking facilities that serve multi-unit residential buildings, they may be reluctant to allocate parking spaces for public or shared use and will be disinclined to participate in the program.

Second, Tesla seeks clarification regarding the eligible costs the rebates proposed in the bill would address. In Tesla's experience, the more substantive cost tends to be in the "make-ready" infrastructure, essentially all of the componentry needed to bring sufficient electrical service to a parking stall to support charging rather than the charging station itself. Tesla requests that these elements be part of the cost-basis for



determining the level of rebate a given project is eligible to receive. The current language in the bill refers to “the cost of installation”. Tesla encourages including additional language that clearly indicates that this encompasses any necessary upgrades to a parking structure’s electrical capacity as well as all conduit, wiring and other equipment that is specifically needed to bring power sufficient to support EV charging.

Third, Tesla encourages modifying the bill such that it focuses on Level 2 charging station deployments. The relative cost between Level 2 and Level 3 chargers is significant. According to the US Department of Energy, the all-in costs of a Level 2 charging station range from \$1000 to \$19,200. The all-in costs of a Level 3 charging station range from \$14,000 to \$91,000.<sup>[5]</sup> Given these huge differentials in cost, Tesla recommends limiting the amount of funds that can go to Level 3 systems to no more than 25% of the proposed annual budget. By focusing on Level 2 deployments, Tesla believes the limited funding envisioned under the program can go much further in supporting EV adoption.

Finally, although Tesla understands the appeal of requiring that rebates go to charging systems that “can regulate their time of use, be networked and co-optimized with other electric vehicle charging systems, and otherwise provide grid services or other benefits to the utility and the electric grid”, we are concerned that conditioning eligibility on all of these criteria risks making the perfect the enemy of the good. Each of these proposed capabilities is laudable and should be considered and encouraged, but not required. It is important to keep in mind both the nascent state of EV adoption in Hawaii as well as the results of HECO’s analysis in its Electrification of Transportation Strategic Roadmap (referenced above) which indicates that even unmanaged charging yields net ratepayer benefits. To that end, Tesla recommends softening the language in Section (k)(2) as follows (underline represents insertions, strikethrough indicated deletions):

“Electric vehicle charging system rebates should enhance broader public clean energy and grid resiliency goals by ~~supporting~~ encouraging, but not requiring the deployment of electric vehicle charging systems that can regulate their time of use, be networked and co-optimized with other electric vehicle charging systems, ~~and~~ or otherwise provide grid services or other benefits to the utility and electric grid; and”

Tesla appreciates the opportunity to submit this testimony in support of HB 1585 HD1 SD1 and encourages the Committee to pass this important measure with the amendments discussed above.

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[1] US Environmental Protection Agency; see <https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions>

[2] See “Plug-in Electric Vehicle Infrastructure Cost Effectiveness Report”; Energy Solutions and Pacific Gas and Electric, November 2016. Available for download at <http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf>

[3] Electrification of Transportation Strategic Roadmap, pp. 35-36; Available for download at <https://www.hawaiianelectric.com/clean-energy-hawaii/electrification-of-transportation>.

[4] See, for example NV Energy’s program. Details available at <https://www.nvenergy.com/cleanenergy/electric-vehicles>.

[5] “Costs Associated with Non-Residential Electric Vehicle Supply Equipment”; pg. 3 U.S. Department of Energy, November 2015; Available for download at [https://afdc.energy.gov/files/u/publication/evse\\_cost\\_report\\_2015.pdf](https://afdc.energy.gov/files/u/publication/evse_cost_report_2015.pdf)

**LATE**

**HB-1585-SD-1**

Submitted on: 4/2/2019 10:57:10 AM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Bernard M Moret	Individual	Support	No

Comments:

Dear legislators,

My wife, Carol Fryer, and I, both registered voters in the county of Hawaii, would urge you to pass this bill. Given that the state of Hawaii has a well defined goal of clean and renewable energy by 2045, one component will be a transition from gas- and diesel-powered vehicles to electrical vehicles, almost certainly battery-powered, using renewable clean electrical energy. Facilitating this transition means encouraging residents to replace their cars with internal combustion engines with electric cars and that in turn means setting up an infrastructure for the charging of these cars. The natural place to charge them on the islands, given the short distances, is at home or at work. There are already bills under consideration to mandate accommodations for electric cars in multi-unit apartments/condos and in all governmental buildings; private businesses are increasingly installing chargers for their employees. HB1585 completes the picture by providing homeowners with incentives to install home chargers. Together, these bills help us advance towards the goal set for 2045.

Respectfully submitted,

Bernard Moret



**LATE**

“Advancing the Commercial Property Management Industry through Education, Networking and Advocacy”

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Testimony to the  
Senate Committee on Ways and Means

April 3, 2019  
10:20 a.m.  
State Capitol - Conference Room 211

RE: HB 1585 HD1 SD1 Relating to the Environment

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and members of the committees:

We are testifying on behalf of the Building Owners and Managers Association of Hawaii. BOMA Hawaii supports energy efficient alternatives in transportation. We support this bill.

As electric vehicle usage increases, there has been a corresponding need for electric vehicle charging stations. This emerging need is creating a marketplace demand. There are some who are reluctant to take on the cost of installing EV charging stations (installation cost, lost revenue from lost parking spaces, etc.), which also includes ongoing maintenance and management responsibilities, and liability. This bill is a positive step toward addressing these costs.

The Building Owners and Managers Association Hawaii is a primary source of information on office building development, leasing, building operating costs, energy consumption patterns, local and national building codes, legislation, occupancy statistics and technological developments.

If this bill advances, we request to be included as part of the dialogue concerning its impacts on the community and economy.

Thank you for the opportunity to testify in support of this bill.

**LATE**

**HB-1585-SD-1**

Submitted on: 4/2/2019 3:11:10 PM  
Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support HB1585.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihe

**HB-1585-SD-1**

Submitted on: 4/2/2019 6:40:37 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Concetta DiLeo	Individual	Support	No

## Comments:

Tesla is a fast, energy-efficient, and with fewer problems than a gas-run car. It is also exceptionally safe, quiet, reliable, and easy to care for. Tesla has been very supportive of the homeless population, because they have supplied all the energy for the homeless village off Sand Island Road.



# Environmental Caucus

## The Democratic Party of Hawai'i

**LATE**

### SENATE COMMITTEE ON WAYS AND MEANS

April 3, 2019 10:20 a.m. Room 211

In **SUPPORT** of **HB1585 HD1 SD1**: Relating to the Environment

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Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee Members,

On behalf of the Environmental Caucus of the Democratic Party of Hawai'i (ECDPH), we **support HB1585 HD1 SD1**, relating to the environment.

Climate change and efforts to mitigate its effects is the single most pressing issue of our time. There is no question that we must address climate change posthaste. With the recent Intergovernmental Panel on Climate Change (IPCC) special report (2018) there is clear consensus among scientists globally that we must limit global warming to 1.5 degrees Celsius to avoid catastrophic and irreversible effects that would impact all of humankind. To reach this goal, we must cut global anthropogenic carbon emissions in half by 2030 and reach net zero emissions by mid-century. It is evident that “rapid and far-reaching transitions in energy, land, urban and infrastructure, and industrial systems (IPCC SR 2018)” are necessary.

There are two central ways to combat climate change: 1) Reduce/eliminate carbon and other greenhouse gas emissions and 2) sequester carbon back into the Earth. This bill addresses the former. The electrification of the transportation sector is critical as it represents among the most significant sources of greenhouse gas emissions through the combustion of fossil fuels. By supporting efforts and incentivizing the to transition to electric vehicles (EVs), Hawai'i can leverage its 100% renewable energy goals to greatly advance efforts to address climate change, reduce pollution and improve air quality, and enhance the state's economic and energy security. However, access to charging represents one of the more fundamental challenges impairing demand for EVs. Without



# Environmental Caucus

## The Democratic Party of Hawai‘i

easy and convenient access to EV charging, drivers will be less inclined to choose an EV over a conventional vehicle. Please pass this bill.

Mahalo for the opportunity to testify in **support of HB1585 HD1 SD1**.

Kimiko LaHaela Walter

Interim Chair, Energy and Climate Change Subject Committee, Environmental Caucus of the Democratic Party of Hawai‘i

State Central Committee Representative, Environmental Caucus of the Democratic Party of Hawai‘i



**LATE**

**TESTIMONY BEFORE THE SENATE COMMITTEE ON  
WAYS AND MEANS**

H.B. 1585, HD1, SD1  
**Relating to the Environment**

Wednesday, April 3, 2019  
10:20 AM, Agenda #19  
State Capitol, Conference Room 211

Michael Colon  
Director, Electrification of Transportation  
Hawaiian Electric Company, Inc.

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee Members,

My name is Michael Colon and I am testifying on behalf of Hawaiian Electric Company, Inc., Maui Electric Company, Limited and Hawai'i Electric Light Company, Inc. ("the Hawaiian Electric Companies") in support of H.B. 1585 HD1, SD1 which seeks to establish an electric vehicle charging system rebate program within the Public Utilities Commission.

This bill has the potential to be a landmark bill for EV charging in the state, by taking an important step towards supporting and incentivizing the development of one of the crucial components of a clean transportation future. Hawaiian Electric has been at the forefront of the transition to clean transportation and continues to make investments and develop programs that will eventually eliminate the need to import fossil fuels for transportation and energy production in the state. As a developer of electric vehicle charging infrastructure, the Hawaiian Electric Companies recognize that the robust availability of vehicle charging infrastructure is essential to reducing barriers to adoption of electric vehicles. Studies have shown that the availability of public vehicle charging is

a key factor when car buyers consider purchasing a new electric vehicle, even if the customer ultimately intends to charge solely at their residence.

The Hawaiian Electric Companies appreciate the many challenges individuals and organizations face when trying to convert to electrified transport. In particular, the upfront cost to purchase and install charging equipment can be daunting, and H.B. 1585, HD1, SD1 promises to reduce or eliminate these concerns for many future electric vehicle drivers and facility owners. The Companies also acknowledge that low-cost solutions, such as level 1 charging may be appropriate in certain circumstances and should also be considered for inclusion in the rebate, where applicable. Providing increased access to EV charging in public, at workplaces, commercial locations, and multi-family buildings are all key priorities identified in the Companies' *Electrification of Transportation Strategic Roadmap*. This bill will continue the tremendous progress that the state has made towards a cleaner and more sustainable transportation future.

Accordingly, the Hawaiian Electric Companies support H.B. 1585, HD1, SD1. Thank you for this opportunity to testify.

**LATE**

**HB-1585-SD-1**

Submitted on: 4/2/2019 8:23:14 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Gary K. Tomita	Individual	Support	No

Comments:

My name is Gary K. Tomita. I am in support of this bill. It is important to note that currently residents in older apartment or condominium complexes have no means to charge an EV. A prime example is my cousin who lives in a condo off of Ward Avenue. He purchased a gasoline powered new vehicle despite wanting to purchase an EV or hybrid. He said he had not choice.

This bill would give building owner's a positive incentive to install a charging system. Thereby, giving tenants an option. I ask you to please support this bill.

Thank you for your anticipated support.

Respectfully submitted,

Gary K. Tomita

A Tesla EV owner

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