

TESTIMONY BY:

EDWIN H. SNIFFEN DIRECTOR

Deputy Directors
DREANALEE K. KALILI
TAMMY L. LEE
ROBIN K. SHISHIDO
JAMES KUNANE TOKIOKA

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

April 4, 2023 10:30 A.M. State Capitol, Conference Room 211 & Videoconference

H.B. 346, HD2 SD1 RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Senate Committee on Ways and Means

The Department of Transportation (DOT) **supports** this measure which seeks to require the design of new state facilities be electric vehicle charger-ready by requiring the Hawaii State Energy Office, in consultation with the Department of Accounting and General Services (DAGS) and the DOT, to evaluate the cost for retrofitting existing state facilities to make them electric vehicle charger-ready. The DOT further supports the DAGS to install or contract for the installation of retrofits and electric vehicle charging systems at selected state facilities using the appropriated funds.

Thank you for the opportunity to provide testimony.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D. GOVERNOR

MARK B. GLICK CHIEF ENERGY OFFICER

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

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(808) 587-3807 energy.hawaii.gov

Testimony of MARK B. GLICK, Chief Energy Officer

before the SENATE COMMITTEE ON WAYS AND MEANS

Tuesday, April 4, 2023 10:30 AM State Capitol, Conference Room 211 and Videoconference

In SUPPORT of HB 346, HD2, SD1

RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports HB 346, HD2, SD1, which requires that the design of new state facilities along with twenty-five percent of parking stalls to be electric vehicle charger-ready, the Hawai'i State Energy Office, in consultation with the Department of Accounting and General Services and Department of Transportation, to survey and identify high priority state facilities for which the office will consider cost assessments for retrofitting, and establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

In order to decarbonize our economy and meet Hawai'i's goal of a net negative carbon economy by 2045, our State government must lead by example. In 2021, the Governor signed ACT 74 to transition the State's light-duty fleets to zero-emission vehicles by 2035. The State builds on this leadership with HB 346, HD2, SD1, by expanding access to workplace electric vehicle charging in State facilities.

Workplace charging is extremely important since it can shift electric vehicle charging demand from peak hours – typically in the early evening – to times during the day when renewable energy is more economical and plentiful. Workplace charging also

Hawaiʻi State Energy Office HB 346, HD2, SD1 – Relating to Electric Vehicle Charging Infrastructure – Support April 4, 2023 Page 2

promotes equity by providing access to charging for residents of multi-unit dwellings and other locations where electric vehicle charging poses greater logistical challenges.

Thank you for the opportunity to testify.

JOSH GREEN, M.D. GOVERNOR KE KIA'ĀINA



KEITH A. REGAN COMPTROLLER KA LUNA HO'OMALU HANA LAULĀ

MEOH-LENG SILLIMAN DEPUTY COMPTROLLER KA HOPE LUNA HO'OMALU HANA LAULĀ

STATE OF HAWAI'I | KA MOKU'ĀINA O HAWAI'I DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | KA 'OIHANA LOIHELU A LAWELAWE LAULĀ

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

WRITTEN TESTIMONY

OF

KEITH A. REGAN, COMPTROLLER DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES TO THE

COMMITTEE ON WAYS AND MEAN

H.B.346, H.D. 2, S.D. 1

APRIL 4, 2023, 10:30 A.M.
CONFERENCE ROOM 211 AND VIA VIDEOCONFERENCE, STATE CAPITOL

RELATING TO ELECTRICAL VEHICLE CHARGING INFRASTRUCTURE.

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee, thank you for the opportunity to testify on H.B. 346, H.D. 2, S.D. 1.

The Department of Accounting and General Services (DAGS) **supports** H.B. 346, H.D. 2, S.D. 1 which requires that, where feasible and cost-effective, the design of new state facilities, when including parking, provide at least twenty-five percent of parking stalls to be electric charger ready.

DAGS also supports the requirement that the Hawaii state energy office, in consultation with the department of accounting and general services and the department of transportation, shall survey existing state facilities statewide that include parking and determine a priority order for retrofitting state facilities based on certain factors deemed relevant to its assessment.

Thank you for this opportunity to testify in support on this matter.



Email: communications@ulupono.com

SENATE COMMITTEE ON WAYS & MEANS Tuesday, April 4, 2023 — 10:30 a.m.

Ulupono Initiative <u>supports</u> HB 346 HD2 SD1, Relating to Electric Vehicle Charging Infrastructure.

Dear Chair Dela Cruz and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy and clean transportation choices, and better management of freshwater resources.

Ulupono <u>supports</u> HB 346 HD2 SD1, which requires that the design of new state facilities be electric vehicle charger-ready; requires twenty-five percent of parking stalls to be electric vehicle charger-ready; requires the Hawaii State Energy Office, in consultation with the Department of Accounting and General Services and Department of Transportation, to survey and identify high priority state facilities for which the office will consider cost assessments for retrofitting; and, establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

Requiring qualifying facilities to be "EV-ready" is smart future-proofing. In 2021, the International Code Council (ICC) updated its building standards to include EV-ready provisos. One main rationale was that the cost of retrofits is significantly more expensive than when installed upfront, and such an upfront investment is a relatively small part of the total building cost. A recent case study in San Francisco estimated the costs of EV-readiness at the time of construction to be less than \$1,000 per parking spot.¹ Given that our recent research shows that a typical structured parking space can cost \$42,000–\$57,000 per space to build, this relatively low incremental amount seems worth the option to expand EV access.²

Additionally, the City and County of Honolulu passed Ordinance 20-17 requiring EV-readiness for certain new construction. Passing this State policy will ensure a consistent policy is applied statewide and that the State is leading by example with the least cost to taxpayers.

¹ https://energy-solution.com/wp-content/uploads/2016/09/PEV-Infrastructure-Cost-Effectiveness-Summary-Report-2016-07-20b.pdf

² https://ulupono.com/media/ivcfs2pu/the-cost-of-parking-in-hawaii-report-2020-08.pdf?sha=27ef1b3a



However, relying exclusively on new facilities means that the network will potentially remain incomplete. A comprehensive effort to develop a retrofit plan is also very prudent.

As our 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 the opportunity to testify.

Respectfully,

Micah Munekata Director of Government Affairs

Big Island Electric Vehicle Association

hawaiidriveelectric@gmail.com bigislandev.org



April 2, 2023

SUPPORT for HB346 HD2 SD1 - RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee members,

Big Island EV Association supports HB346 HD2 SD1, which "Requires that the design of new state facilities be electric vehicle charger-ready. Requires twenty-five percent of parking stalls to be electric vehicle charger-ready. Requires the Hawai'i State Energy Office, in consultation with the Department of Accounting and General Services and Department of Transportation, to survey and identify high priority state facilities for which the office will consider cost assessments for retrofitting. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready. Requires a report to the Legislature. Appropriates funds.

The electrification of transportation is inevitable and accelerating. Many manufacturers have declared their intention to stop producing internal combustion engine vehicles in response to global efforts to decarbonize, growing consumer demand for electric vehicles, and competition from electric vehicle (EV)-only manufacturers. As a result of competition, technical breakthroughs in batteries, and economies of scale, EVs are reaching price parity with gas vehicles.

These factors are leading more Hawaii residents to transition to EVs. There are now over 20,000 EVs in the state (around 2% of the passenger vehicles), and we expect that adoption will accelerate. To facilitate this transition, we must focus our attention on the creation of a robust network of public charging stations. This will help residents who don't have access to home charging or the means to purchase long-range EVs to drive electric.

HB346 HD2 SD1 helps as it will ensure that new state facilities can readily expand charging infrastructure while avoiding costly retrofits. HB346 HD2 SD1 will also enable the creation of a strategy for the retrofitting of state facilities. These will enable employees and residents to better operate their electric vehicles and increase the general adoption of clean transportation.

Suggested Amendments

We ask that you reconsider the requirement for only 25% of the parking stalls in new state facilities to be EV-Charger-Ready. Given our decarbonization goals, the inevitable transition away from gas vehicles, and the cost advantages of building right, the first time, it makes sense to allow our parking stalls to be ready for the eventual installation of charging stations. We recommend increasing the percentage to 100 or a figure higher than 25%.

We also recommend that HB346 HD2 SD1 be amended to require that new state facilities include electric vehicle charging stations, not just electric vehicle charging station-ready infrastructure.

Thank you for this opportunity to testify in support of HB346 HD2 SD1.

Sincerely,

Noel Morin - President

Big Island Electric Vehicle Association (bigislandev.org), established in 2011, is a grassroots non-profit group dedicated to accelerating EV adoption on Hawaii Island. Our members are EV owners and supporters.



WAM_04-04-23 HB346, 949

TO: THE COMMITTEE ON WAYS AND MEANS Senator Donovan M. Dela Cruz, Chair Senator Gilbert S.C. Keith-Agaran, Vice Chair

CONCERNING: HB 346, HD2, SD1 (SSCR1415) RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE HB 949, HD2 (SSCR1321) RELATING TO RENEWABLE ENERGY.

POSITION: Enthusiastic Support

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

The Environmental Caucus supports all legislation which promotes increasing access to electric power charging stations as integral to promoting the purchase and use of electric vehicles. We also support all bills which encourage and assist the private sector to install and use solar panels to create electricity.

Bill 346 would require new State facilities to include electric car charging stations and would encourage retrofitting current buildings, where plausible, with the same, and provides funds related to these requirements. The Hawaiian Islands would benefit in many ways from more people driving electric or hybrid cars but without infrastructure it will be difficult at best to achieve.

We also encourage you to pass HB949, which would encourage and assist middle and low income home owners to install solar panels and storage batteries for their energy needs and hopefully for adding power to the current grids.

The immediate costs of installing solar/photovoltaic systems with storage batteries the have made it difficult for average income families to consider doing it. The reduction in electricity costs may be significant but it takes a long time for the overall budget boost to be felt. Without an excellent credit rating and or savings set aside for it, it becomes another unaffordable dream for so many. It did not have to be this way but special interests have profited from the unnecessarily long delays in Hawaii producing more solar generated power.

This measure would be a valuable step in rectifying the inability of average home owners from benefiting from solar power.

Our state has made a major commitment to "clean" and renewable energy by 2045 which we can only hope will not be too late to make a difference in our area climate. One of the most practical ways to do this is to make it easier, more affordable, and more convenient for average income residents to install solar power on their homes and to invest in electric and hybrid transportation.

Martha E Randolph DPH Environmental Caucus SCC Representative Democratic Party of Hawaii



To: The Senate Committee on Ways and Means (WAM)

From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, April 4, 2023, 10:30am

In support of HB346 HD2 SD1

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and WAM Committee members;

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **supports HB346 HD2 SD1** that requires that the design of new state facilities be electric vehicle charger-ready, and requires twenty-five percent of parking stalls to be electric vehicle charger-ready. This measure further requires the Hawaii State Energy Office, in consultation with the Department of Accounting and General Services and Department of Transportation, to survey and identify high priority state facilities for which the office will consider cost assessments for retrofitting, and establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

The State should lead by example by expanding workplace charging availability in facilities. Adequate public charging is critical for the democratization of transportation. Charge anxiety is a big a worry for EV-driving condo-dwellers, renters, and potential EV buyers. While there are many in our community who have the benefit of home EV charging, many of our residents live in apartments, condos, or rentals and don't have this convenience. For them to adopt electric cars, they must have access to reliable and ubiquitous public charging, including workplace charging.

Most importantly, electric vehicles are better for the environment and the economy, and are a critical component in our fight against the climate crisis. They are the future for Hawaii. A future we must begin now. Requiring that the design of new state facilities be electric vehicle charger-ready will save taxpayers from expensive retrofit costs later on as we fully transition to clean energy transportation.

To achieve Hawaii's sustainable transportation and climate goals, we must decarbonize ground transportation as soon as possible. This bill supports those efforts. Workplace charging is a very effective strategy to accelerate Hawaii towards our clean transportation future. Please support and pass this important measure.

Mahalo for the opportunity to testify.

Sherry Pollack Co-Founder, 350Hawaii.org



TESTIMONY BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

HB 346 HD2 SD1

Relating to Electric Vehicle Charging Infrastructure

April 4, 2023 10:30 AM, Agenda Item #4 Conference Room 211, VIDEO CONFERENCE

June Chee
Program Manager, Electrification of Transportation
Hawaiian Electric

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

My name is June Chee, and I am testifying on behalf of Hawaiian Electric in support of HB 346 HD2 SD1, which seeks to encourage workplace charging by requiring state facilities to become electric vehicle (EV) charger-ready. Hawaiian Electric commends the legislature's proposal to encourage the State to lead by example by requiring all new state facilities to be EV-ready and evaluate existing state facilities to retrofit with EV charging. Increased access to workplace charging is a strategic initiative that creates equitable transportation options for employees and shifts energy demand. Additionally, these efforts will generate Hawaii-based data and costs for EV-ready infrastructure and make-ready infrastructure leading to more informed planning and budget assumptions statewide.

The Company is committed to supporting workplace charging by providing customer-focused charging infrastructure to incentivize the adoption of EVs and commercial EV charging time-of-use rates that encourage daytime charging. Hawaiian

Electric is excited to work with the Department of Accounting and General Services to evaluate power needs for additional EV charging at state facilities. Thank you for this opportunity to testify.



To: The Honorable Chair and Donovan Dela Cruz, the Honorable Vice Chair Gilbert Keith-Agaran, and Members of the Committees on Ways and Means

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing HB346 HD2 SD1 RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Hearing: Tuesday April 4, 2023, 10;30 a.m., room 211

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

The Climate Protectors Hawai'i STRONGLY SUPPORTS HB346 HD2 SD1!

The lack of vehicle charging infrastructure in Hawai'i is a major barrier to the needed transition to electric vehicles. This bill would help the State lead by example by requiring that <u>new</u> State facilities be designed to be **electric vehicle charger-ready**. It is less expensive to install electric vehicle chargers if the infrastructure is installed during construction. The electrification of transportation is coming and accelerating in Hawai'i and worldwide.

By requiring that new buildings be EV charger ready, this bill would help Hawai'i get State facilities ready for the transition to electric vehicles at least cost.

The bill also establishes a goal for the State to retrofit State facilities to be electric vehicle charger-ready and expand workplace charging availability. Charging while at work helps shift the electric peak demand from early evening to less expensive daytime hours, which benefits all electricity users. It also will make electric vehicles an option for those who lack access to charging at home in apartments, condos or rentals. Three State agencies will determine a priority order for retrofitting State facilities.

The Hawa'ii Legislature has declared that we are in a climate emergency. One way to address that emergency and help the State achieve its carbon net negative clean economy target (as soon as practicable but not later than 2045) is for **the State to lead by example** and reduce greenhouse gas emissions from fossil fueled internal combustion engines by preparing facilities to be ready with charging for electric vehicles.

Please pass this bill!

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)



April 4, 2023

TO: Senator Donovan Dela Cruz

Chair, Committee on Ways and Means

FROM: Tiffany Yajima

H.B. 346, H.D.2, S.D.1 – Relating to Electric Vehicle Charging

Infrastructure

Hearing Date: Tuesday, April 4, 2023 at 10:30 a.m. Conference Room: 211 and videoconference

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

On behalf of the Alliance for Automotive Innovation ("Auto Innovators") we submit this testimony in **support** of H.B. 346, H.D.2, S.D.1, which requires that the design of new state facilities be electric vehicle charger-ready and appropriates funds to install retrofits and electric vehicle charging systems at state facilities. This measure also requires state agencies to evaluate the cost to retrofit existing state facilities to make them ready for electric vehicle charging.

From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers and semiconductor makers – the Alliance for Automotive Innovation represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. The association is committed to a cleaner, safer and smarter personal transportation future.

Charging infrastructure is a key component to any comprehensive vision and strategy for EVs. Government support for zero-emission vehicles, electric vehicle charging infrastructure, and alternative fuel deployment is essential to the state's overall transition to cleaner transportation. This measure would accelerate broader EV adoption by growing the state's network of EV charging stations and offering widespread access and compatibility in charging stations across the state.

This measure also supports the implementation of Act 74, Session Laws 2021, as the state transitions its light-duty fleets to zero-emission vehicles by 2035. EV charging at state buildings not only supports state EV fleets but also facilitates opportunities for public vehicle charging and workplace charging by creating a convenient option for people who may not have access to charging at home. In addition, because the installation of EV chargers in new construction can be five times as cost effective as retrofitting existing facilities to add chargers after the fact, this measure makes good financial sense.

Auto Innovators are therefore in support of this bill and ask that you pass this measure.

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



SENATE COMMITTEE ON WAYS AND MEANS

April 4, 2023, 10:30 AM Conference Room 211

TESTIMONY IN SUPPORT OF HB 346 HD2 SD1

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

Blue Planet Foundation **supports HB 346 HD2 SD1**, which requires that new state buildings be electric vehicle charger-ready, evaluates the cost of retrofitting existing state parking facilities to be EV-ready, and sets a goal for retrofitting existing high priority facilities. This bill would increase access to workplace EV charging for state employees and save the state money on future EV charger installation costs.

Blue Planet supports the amendments made in the SD1 to clarify that a minimum of 25% of new parking stalls shall be made EV-ready, similar to what was enacted in the City and County of Honolulu's Ordinance 20-10 (Bill 25 (2019)) for new commercial and multi-residential buildings.¹

Electric vehicles are shaping the future of transportation

Electric vehicles are the fastest growing segment of new cars in Hawai'i. In 2022, the number of registered electric vehicles in Hawai'i increased more than 25%, compared to only a 1% increase in registered gasoline-powered vehicles.² There are currently over 22,000 electric vehicles registered in the state, a number that is expected to rise exponentially as more electric vehicles come to market, vehicle ranges increase, and the cost of electric vehicles decreases.

Battery costs have fallen precipitously over the past several years so that in many cases, the total cost of ownership for EVs is lower than for gasoline-powered vehicles. Experts expect battery prices to continue to fall, and as automakers increase the number of models and volume of EVs in the next few years, the upfront cost of EVs is expected to reach cost parity with conventional vehicles by 2024.³

¹ "Get your building ready for electric vehicles: Ordinance 20-10 Compliance Guide", *City and County of Honolulu*, June 2021, (https://static1.squarespace.com/static/5e3885654a153a6ef84e6c9c/t/6139768b7192cb11bb99ce90/1631155852707/EV-Ready+Compliance+Guide+%26+FAQ_Combined+%28September+2021%29.pdf)

² "Monthly Energy Trends", *DBEDT*, December 2022 (https://dbedt.hawaii.gov/economic/energy-trends-2/).

³ Slowik, Peter, et. al. "Assessment of Light-duty Electric Vehicle Costs and Consumer Benefits in the United States in the 2022-2035 Time Frame." *The International Council on Clean Transportation*. October 2022. (https://theicct.org/publication/ev-cost-benefits-2035-oct22/).

In part due to falling costs and increasing consumer demand, and in part due to government policies encouraging the transition towards EVs, nearly all of the world's leading automakers have announced aggressive strategies and investments in electric and plug-in hybrid vehicles over the past two years.⁴ This bill helps to prepare Hawai'i for the future demand for electric vehicles in our state.

The lack of EV charging is a significant barrier to adoption

The International Energy Agency 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, 80% of EV drivers charge their cars at home or at work. Residents in multi-unit dwellings or condos, however, are often unable to find a place to charge, preventing them from receiving the benefits of EVs. This is a fundamental equity issue in Hawai'i: a large segment of residents in Hawai'i live in multi-family housing, in part because single-family homes are financially out of reach for many. Because Hawai'i's public charging network is still inadequate, workplace charging options are few and far between. This bill helps to expand workplace charging options for employees that don't have the luxury of charging their EVs at home.

Installing EV-ready wiring is cheaper pre-construction

The most challenging aspect of EV charger installation is the common lack of electrical capacity and distributed subpanels to support broad deployment of charging infrastructure. Studies have shown that installing EV infrastructure at the time of construction can be 91% less expensive than post-construction retrofits, and that per stall installation costs can be reduced through economies of scale, by deploying more stations at time of construction. Requiring that the power capacity and conduit be set up during construction would dramatically reduce retrofit costs at the time of installation, creating significant cost savings for taxpayers.

By choosing not to plan for EV charging infrastructure in new construction, the state would be forced to pay expensive retrofit costs to upgrade power capacity later when their fleets have changed to EVs and their employees are driving EVs—a transition that is already well underway. This bill is about future proofing our new state buildings and encouraging the state "lead by example" for workplace charging.

Expanding EV charging infrastructure benefits all electricity users

⁴ Motavalli, Jim. "Every Automaker's EV Plans Through 2035 and Beyond." Forbes, October 2021. (https://www.forbes.com/wheels/news/automaker-ev-plans/).

⁵ Global EV Outlook 2017, International Energy Agency, June 2017, https://www.iea.org/reports/global-ev-outlook-2017.

⁶ Ibid

⁷ See http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf.

Expanding access to EV charging is critical to unlock benefits for all electricity users, not just for EV drivers. **Enabling EV charging during the middle of the day allows more low-cost solar to be added to the grid and helps the overall energy system**. When large numbers of EVs—which are essentially batteries on wheels—are connected to the electricity grid simultaneously, they could be used to help manage the system through demand response, load shifting, and other grid services.

Conclusion

Blue Planet strongly supports requiring EV-ready new construction to reduce barriers to EV adoption and address the expansive and urgent challenge of reducing carbon emissions from ground transportation in Hawai'i. By recognizing that automakers are rapidly moving towards electric vehicles and that a lack of charging infrastructure remains a barrier to more widespread adoption of electric vehicles in Hawai'i, lawmakers should incentivize the installation of publicly available charging stations for state employees to meet future demand and reduce unnecessary financial costs to the state.

For these reasons, Blue Planet is in strong support of HB 346.

Thank you for the opportunity to provide testimony.





DATE: April 4 2023 TIME: 10:30AM

PLACE: VIA VIDEOCONFERENCE and Conference Room 329

BILL: HB 346, HD2, SD1, Relating to Electric Vehicle Charging Infrastructure

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

On behalf of the Hawai'i Automobile Dealers Association (HADA), we are writing to **support** HB 346, HD2, SD1, relating to electric vehicle charging infrastructure. This bill requires that the design of new state facilities be electric vehicle charger-ready. It requires the Hawaii State Energy Office, in consultation with the Department of Accounting and General Services and Department of Transportation, to determine a priority order for retrofitting state facilities based on certain factors and establishes a goal of the State to retrofit State facilities to be electric vehicle charger-ready.

HADA supports working collaboratively with policy leaders to ensure that the state's clean energy goals are met. HADA is presently proactively discussing with stakeholders, including state agency leaders, many of the issues addressed in this bill. For example, we believe that infrastructure to support electric vehicle deployment is critical to support electric vehicle growth in Hawaii. We support measures that facilitate workplace charging and other public charging options which will allow more people to consider an electric vehicle.

HADA seeks to engage with legislators on issues of importance relevant to motor vehicles, our state's clean energy future, and safety. We thank you for the opportunity to testify.

The Hawai'i Automobile Dealers Association is the voice of more than 60 new car dealerships across the islands, accounting for over 4,000 direct jobs, \$6 billion total sales and more than \$250 million in general excise taxes paid.

Submitted on: 3/31/2023 12:55:36 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

I urge you to pass HB346 with amendments to sections 5 and 7 to include a substantial appropriation of funds and an effective date in 2023. Time is running out to reduce our carbon emissions before we pass climate tipping points that may prove irreversible. Hawaii's progress in adopting evs has been entirely inadequate, due in large part to the shortage of public charging infrastructure.

Submitted on: 3/31/2023 3:40:07 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lisa Diaz	Individual	Support	Written Testimony Only

Comments:

Aloha WAM Committee members:

I strongly support HB346: ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

All new state facilities MUST be electric vehicle charger ready. Hawaii State Energy office, AGS, and DOT also must evaluate & plan for the cost for retrofitting existing state facilities to make them electric vehicle charger ready. AGS must install or contract for the installation of retrofits and electric vehicle charging systems at state facilities. We must appropriate funding for EV charger ready capacity for all state facilities.

Mahalo, to **EEP Chair Lowen, & EEP Committee members:** for leading to responsibly move our state in the right direction to become 100% renewable to protect Hawaii and our planet.

Mahalo with Aloha,

Lisa Diaz, 76-223 Haoa St.; Kailua-Kona, HI 96740

scidiaz@gmail.com

<u>HB-346-SD-1</u> Submitted on: 3/31/2023 3:41:33 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
B.A. McClintock	Individual	Support	Written Testimony Only

Comments:

Please support this bill. Mahalo.

Submitted on: 4/1/2023 9:35:18 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Keith Neal	Individual	Support	Written Testimony Only

Comments:

Support for HB346 HD2 SD1

Hawaii is the most fossil fuel dependent state in the nation. The state's transportation sector contributes a significant volume of pollution and planet changing emissions. It is a public safety issue that Hawaii becomes more electrified and less dependent on fossil fuels with the goal of energy independence.

- The transportation sector continues to contribute a significant volume of planet-warming emissions that pollute our waters and reefs.
- Hawaii Gasoline consumption alone represents over 30 million gallons per month. (source: DBEDT).
- Hawaii must install and maintain more EV charging stations for resident, commercial, and visitor access.

The state needs to lead the in the efforts to electrify its fleet and have facilities to be EV ready. It has the opportunity to accelerate progress in installing public and workplace charging.

Submitted on: 4/1/2023 11:32:12 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Helen Cox	Individual	Support	Written Testimony Only

Comments:

Aloha Chair and Committee Members,

Please pass HB346 HD2 SD1 which requires that the design of new state facilities be electric vehicle charger-ready. This is a necessary step if we are to transition to green transportation alternatives rather than burning fossil fuels. It is particularly important if the transition is to be equitable since not all state residents will have chargers at home. In addition to requiring that new facilities be EV charger-ready, the bill also calls for the Hawaii state energy office to survey and identify high priority state facilities for which the office will consider cost assessments for retrofitting those facilities. While it is far less expensive to design new facilities to be EV charger-ready and cost-prohibitive to retrofit all state facilities, there will be some facilities that should be retrofitted. Please pass HB346 HD2 SD1. Mahalo!

Helen Cox, Kalaheo, Kauai

Submitted on: 4/1/2023 12:27:40 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Fred W. Styer	Individual	Support	Written Testimony Only

Comments:

Let's get to zero CO2 emissions by 2035!

Fred W. Styer

2838 Mokoi St.

Lihue, HI 96766

Submitted on: 4/1/2023 12:44:49 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Stephanie Hall Morin	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support this bill, but I ask that you reconsider the requirement for only 25% of the parking stalls in new state facilities to be EV-Charger-Ready. Given our decarbonization goals, the inevitable transition away from gas vehicles, and the cost advantages of building right, the first time, it makes sense to allow our parking stalls to be ready for the eventual installation of charging stations. I recommend increasing the percentage to 100 or a figure higher than 25%.

Mahalo,

Stephanie Hall Morin

Submitted on: 4/1/2023 1:58:12 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

One of the better bills for supporting electrification of vehicles. Please support to help the EV infrastructure grow.

Submitted on: 4/1/2023 3:17:13 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Virginia Tincher	Individual	Support	Written Testimony Only

Comments:

Members of the Ways and Means Committee,

I support the intention of HB346 HD2 SD1 and would like to make a recommendation.

HB346 HD2 SD1 will ensure that new state facilities can readily expand charging infrastructure while avoiding costly retrofits and enabling the retrofitting of state facilities. These will allow employees and residents to better utilize electric vehicles and accelerate our transition to clean, efficient, and affordable transportation.

I ask that we reconsider the requirement for only 25% of the parking stalls in new state facilities to be EV-Charger-Ready. Given our decarbonization goals, the inevitable transition away from gas vehicles, and the cost advantages of building right, the first time, it makes sense to allow our parking stalls to be ready for the eventual installation of charging stations. I recommend increasing the percentage to 100% or a figure higher than 25%.

There are now over 20,000 EVs in the state (around 2% of the passenger vehicles), and we expect that adoption will accelerate. To facilitate this transition, we must focus on creating a robust network of public charging stations. This will help residents who don't have access to home charging or the means to purchase long-range EVs to drive electric.

Adequate public charging is a MUST for the democratization of transportation. While many in our community benefit from home EV charging, many of our residents live in apartments, condos, or rentals and don't have this convenience.

Virginia Tincher, Oahu

<u>HB-346-SD-1</u> Submitted on: 4/1/2023 7:46:24 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Brodie Lockard	Individual	Support	Written Testimony Only

Comments:

I support HB346.

Submitted on: 4/1/2023 11:16:47 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruth Robison	Individual	Support	Written Testimony Only

Comments:

Adequate public charging is a MUST for the democratization of transportation. While many in our community benefit from home EV charging, many of our residents live in apartments, condos, or rentals and don't have this convenience. Thank you.

Submitted on: 4/2/2023 8:14:07 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Roberta Baker	Individual	Support	Written Testimony Only

Comments:

HB346 is a good start BUT please consider increasing the mandate from 25% to 100%. In the spirit of "build it right the first time" it's so much easier then having to retrofit later.

Submitted on: 4/2/2023 10:07:54 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
David Sanders	Individual	Support	Written Testimony Only

Comments:

I support the intention of HB346 HD2 SD1 and would like to make a recommendation.

HB346 HD2 SD1 will ensure that new state facilities can readily expand charging infrastructure while avoiding costly retrofits and enabling the retrofitting of state facilities. These will allow employees and residents to better utilize electric vehicles and accelerate our transition to clean, efficient, and affordable transportation.

Please reconsider the requirement for only 25% of the parking stalls in new state facilities to be EV-Charger-Ready. Given our decarbonization goals, the inevitable transition away from gas vehicles, and the cost advantages of building right, the first time, it makes sense to allow our parking stalls to be ready for the eventual installation of charging stations. I recommend increasing the percentage to 100 or a figure higher than 25%.

mahalo

David Sanders

Submitted on: 4/2/2023 11:22:39 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Paul Fishman	Individual	Support	Written Testimony Only

Comments:

Yes, but why only 25% of parking spaces? Has someone done the math to justify that number? If not, please, someone: do the math. Is the projected need in a decade or two more like 50%? 100%? How many electric cars are coming? How many of us live in apartments and condos that are not and will not be retrofitted? Without a charger available in our building, we rely on shopping center chargers which are woefully inadequate to present demand - a few spaces either almost always full or broken.

Submitted on: 4/2/2023 12:19:51 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Barbara Best	Individual	Support	Written Testimony Only

Comments:

There aren't enough charging stations for the EVs needed for our transition to EVs, but at least we need stations at state facilitites.

<u>HB-346-SD-1</u> Submitted on: 4/2/2023 12:47:40 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Shannon Rudolph	Individual	Support	Written Testimony Only

Comments:

Support

Submitted on: 4/2/2023 1:02:03 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lorn Douglas	Individual	Support	Written Testimony Only

Comments:

ALoha,

this bill is exactly inalignment with the State's goals for a clean transportaion future. Your anticipated support is appreciated.

Lorn DOuglas

Lower Puna

Submitted on: 4/2/2023 1:35:11 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Will Caron	Individual	Support	Written Testimony Only

Comments:

Adoption of electric vehicles in the state is expected to continue to grow at increasing rates. There is a need for a network of charging infrastructure to support this growth and ensure that there is an equitable transition to clean transportation.

The clean energy transition will be facilitated by shifting energy demand from peak times to times during the day when renewable energy is abundant. In order to facilitate this shift, electric vehicle drivers will need access to workplace charging.

In addition, workplace charging will offer a convenient option for charging, which may open up the possibility to purchase an electric vehicle for people who may not have access to charging at home, including many low- and moderate-income families.

For these reasons, the state should expand workplace charging availability in state facilities. Please pass HB346 HD2 SD1.

Submitted on: 4/2/2023 1:37:41 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Emily Garland	Individual	Support	Written Testimony Only

Comments:

Adoption of electric vehicles in the state is expected to continue to grow at increasing rates. There is a need for a network of charging infrastructure to support this growth and ensure that there is an equitable transition to clean transportation.

The clean energy transition will be facilitated by shifting energy demand from peak times to times during the day when renewable energy is abundant. In order to facilitate this shift, electric vehicle drivers will need access to workplace charging.

In addition, workplace charging will offer a convenient option for charging, which may open up the possibility to purchase an electric vehicle for people who may not have access to charging at home, including many low- and moderate-income families.

For these reasons, the state should expand workplace charging availability in state facilities. Please pass HB346 HD2 SD1.

Submitted on: 4/2/2023 5:26:23 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Michael Koster	Individual	Support	Written Testimony Only

Comments:

We need EV infrastructure, lots of it, as quickly as possible if we are to stave off ever-more severe results of climate change. EVs are the fastest growing segment of new cars in Hawai'i and play an integral role in our clean energy future. 4 out of 5 EV drivers charge their cars at home or at work, which makes increasing access to workplace charging critical. Please vote yes on HB346 and contribute to this important clean energy transition by requiring upgraded electrical and smart grid infrastructure.

Submitted on: 4/2/2023 7:54:37 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Steve Parsons	Testifying for Kauai Climate ACTION Coalition, Small Biz Owner	Support	Written Testimony Only

Comments:

Aloha Trusted Hawaii Lawmakers!

We strongly support this bill as it will help accelerate EV adoption and make all state facilities Healthier Environments. However, we feel that it doesn't go far enough. Instead of EV Ready, we encourage actual installation of EV 2 chargers at the highest charge rate possible. Climate Pollution is Killing us and the species we share this planet with. You will also help your employees fight inflation, as EVs are much cheaper to drive AND help them have healthier homes and communities. It will most likely increase employee retention and morale! Please be a good ancestor to future generations and ACT Boldly on this and all other bills that accelerate Hawaii OFF fossil Fuels!

IMUA>>>

Steve Parsons, Member of: Kauai Climate ACTION Coalition, Kauai EV, Surf-Rider Foundation, Green Focused Realtor Hanapepe Kauai

Submitted on: 4/2/2023 10:33:18 PM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Cory Harden	Individual	Support	Written Testimony Only

Comments:

Aloha legislators,

Please pass this bill to help us move away from greenhouse gas-emitting vehicles!

mahalo,

Cory Harden

Submitted on: 4/3/2023 7:43:36 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Diane Ware	Individual	Support	Written Testimony Only

Comments:

Dear Chair and Committee Members,

Hawai'i State must lead in creating EV infrastructure. I am an EV owner and have EV charging anxiety everywhere I drive on the Big Island. I count on chargers at Target in Hilo to get me home in Volcano. The uphill drive uses over 110 miles.

I support the intention of HB346 HD2 SD1 and would like to make a recommendation. HB346 HD2 SD1 will ensure that new state facilities can readily expand charging infrastructure while avoiding costly retrofits and enabling the retrofitting of state facilities. These will allow employees and residents to better utilize electric vehicles and accelerate our transition to clean, efficient, and affordable transportation.

I ask that we reconsider the requirement for only 25% of the parking stalls in new state facilities to be EV-Charger-Ready. Given our decarbonization goals, the inevitable transition away from gas vehicles, and the cost advantages of building right, the first time, it makes sense to allow our parking stalls to be ready for the eventual installation of charging stations. I recommend increasing the percentage to at least 50% or a figure higher than 25%.

• There are now over 20,000 EVs in the state (around 2% of the passenger vehicles), and we expect that adoption will accelerate. To facilitate this transition, we must focus on creating a robust network of public charging stations. This will help residents who don't have access to home charging or the means to purchase long-range EVs to drive electric. Mahalo from 99-7815 Kapoha Volcano 96785

Submitted on: 4/3/2023 7:44:17 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Forest Frizzell	Individual	Support	Written Testimony Only

Comments:

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

I am testifying in support of House Bill 346 HD2 SD1, which requires 25% of parking stalls in new state facilities be made electric vehicle charger ready and sets a goal to retrofit existing state buildings to be EV-ready.

HB 346 is an important bill to ensure that we are "future proofing" new state buildings for the demand of electric vehicles, which are the fastest growing segment of new cars in the state. It also encourages the state to lead by example for workplace charging, increasing electric vehicle charging options for Hawai'i residents who currently don't have access to charging at home or at work, which remains a major barrier to electric vehicle adoption.

The most challenging aspect of EV charger installation is the common lack of electrical capacity in parking stalls to support charging infrastructure. By choosing not to plan for EV charging infrastructure in new state facilities, the state would be forced to pay for expensive retrofit costs to upgrade power capacity and wiring to their parking stalls. HB 346 plans for this transition to electric vehicles, saving taxpayer money on expensive retrofit costs.

For these reasons, I support "EV-ready" new construction and ask that you pass HB 346.

Thank you for the opportunity to provide testimony.

Forest Frizzell, Waimanalo, 96795

Submitted on: 4/3/2023 9:24:18 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ronald "Ron" Reilly	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Dela Cruz and members of the Ways and Means Committee,

Re Strong support for HB346

Studies confirm the common understanding that making buildings EV charger-ready during construction is far more cost effective (by several orders of magnitude), than expensive retrofitting of existing buildings.

This bill will help to reduce barriers to EV adoption and address the urgent challenge of reducing carbon emissions from ground transportation in Hawai'i.

Thank you for your consideration, Ron Reilly, Volcano Village

Submitted on: 4/3/2023 9:47:40 AM

Testimony for WAM on 4/4/2023 10:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Keala Dickhens	Testifying for Blue Planet	Support	Written Testimony Only

Comments:

HB 346 is an important bill to ensure that we are "future proofing" new state buildings for the demand of electric vehicles, which are the fastest growing segment of new cars in the state. It also encourages the state to lead by example to increase EV charging options for Hawai'i residents without current access to charging at home or at work, both of which are major barriers to electric vehicle adoption.

Planning for future EV infrastructure enables the state to avoid expensive retrofit costs needed to upgrade power capacity and wiring to parking stalls. HB 346 plans for this transition to electric vehicles, saving taxpayer money on these retrofit costs.

I support "EV-ready" new construction and ask that you pass HB 346.

Thank you for the opportunity to provide testimony.

Keala Dickhens, Honolulu, HI 96813