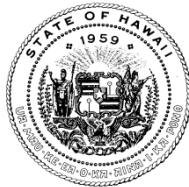


JOSH GREEN, M.D.
GOVERNOR



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

March 21, 2023

1:15 P.M.

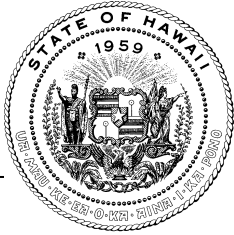
State Capitol, Conference Room 229 & Videoconference

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

Senate Committees on Transportation and Culture and Arts &
Energy, Economic Development, and Tourism

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 and the DOT, to evaluate the cost for retrofitting existing state facilities to make them electric vehicle charger-ready. The DOT further supports the Department of Accounting and General Services 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

Telephone: (808) 587-3807
Web: energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
**SENATE COMMITTEES ON TRANSPORTATION AND CULTURE AND THE ARTS
AND
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

Tuesday, March 21, 2023
1:15 PM
State Capitol, Conference Room 229 and Videoconference

In SUPPORT of
HB 346, HD2

RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

Chairs Lee and DeCoite, Vice Chairs Inouye and Wakai, and Members of the Committees, the Hawai'i State Energy Office (HSEO) supports HB 346, HD2, which requires that the design of new state facilities 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 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, 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

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

HSEO appreciates the amendments made to HB346, HD2, to allow HSEO the flexibility to complete a survey in line with the intent of the bill.

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 COMMITTEES ON
TRANSPORTATION AND CULTURE AND THE ARTS
AND
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

MARCH 21, 2023, 1:15 P.M.
CONFERENCE ROOM 229 AND VIA VIDEOCONFERENCE, STATE CAPITOL

H.B.346, H.D.2

RELATING TO ELECTRICAL VEHICLE CHARGING INFRASTRUCTURE.

Chairs Lee and DeCoite, Vice Chairs Inouye and Wakai, and Members of the Committees, thank you for the opportunity to testify on H.B. 346, H.D.2.

The Department of Accounting and General Services (DAGS) **supports** H.B. 346, H.D.2 which requires that, where feasible and cost-effective, the design of all new state building construction shall include parking areas that are electric vehicle 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 evaluate existing state facilities statewide that include parking and determine a priority order for retrofitting state facilities based on certain factors.

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



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

Co-Chairs:
Chair, DLNR
Director, OPSD

Commissioners:
Chair, Senate AEN
Chair, Senate WTL
Chair, House EEP
Chair, House WAL
Chairperson, HTA
Chairperson, DOA
CEO, OHA
Chairperson, DHHL
Director, DBEDT
Director, DOT
Director, DOH
Chairperson, DOE
Director, C+C DPP
Director, Maui DP
Director, Hawaii DP
Director, Kauai DP
The Adjutant General
Manager, CZM

**Testimony of
Leah Laramee
Coordinator, Hawai'i Climate Change Mitigation and Adaptation Commission**

**Before the Senate Committees on
TRANSPORTATION AND CULTURE AND THE ARTS
And
ENERGY, ECONOMIC DEVELOPMENT AND TOURISM**

**Tuesday, March 21, 2023
1:15 PM
State Capitol, Via Videoconference, Conference Room 229**

**In support of
HOUSE BILL 346 HOUSE DRAFT 2
RELATING TO ELECTRIC VEHICLE CHARGING
INFRASTRUCTURE**

House Bill 346 HD2 requires that the design of new state facilities 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 determine a priority order for retrofitting state facilities based on certain factors. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready and appropriates funds. **The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) supports this measure.**

Emissions from ground transportation account for over half of energy emissions as noted in the 2017 Greenhouse Gas Inventory. Reducing emissions from ground transportation is one of the major focuses of the Commission, and a transition to clean renewable fueled vehicles is a crucial strategy to achieve state goals.

In its November 2018 statement, the Commission emphasized that the state must explore and develop statewide policies and partner with counties to modernize parking policies and parking management, which will reduce overall emissions, congestion and vehicle miles travelled (VMT) from driving, and increase biking, walking, and transit use, to achieve state goals. It also identifies the need for the state and county to timely develop the infrastructure necessary to meet the anticipated demands to charge electric vehicles and this bill addresses this requiring charger ready infrastructure throughout State facilities.

Mahalo for the opportunity to testify in support of this measure.



Email: communications@ulupono.com

SENATE COMMITTEES ON TRANSPORTATION & CULTURE & THE ARTS AND ENERGY,
ECONOMIC DEVELOPMENT, & TOURISM
Tuesday, March 21, 2023 — 1:15 p.m.

Ulupono Initiative supports HB 346 HD2, Relating to Electric Vehicle Charging Infrastructure.

Dear Chair Lee, Chair DeCoite, and Members of the Committees:

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 supports HB 346 HD2, which requires that the design of new state facilities be electric vehicle (EV) 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 based for which the office will consider costs 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



**SENATE COMMITTEE ON TRANSPORTATION, CULTURE, AND THE ARTS
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

March 21, 2023, 1:15 PM
Conference Room 229

TESTIMONY IN SUPPORT OF HB 346 HD2

Aloha Chair Lee, Chair Decoite, and members of the Committees:

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

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.¹ 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 2024.²

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

¹ "Monthly Energy Trends", *DBEDT*, December 2022 (<https://dbedt.hawaii.gov/economic/energy-trends-2/>).

² 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/>).

over the past two years.³ **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.”⁴ Unlike gasoline car owners, 80% of EV drivers charge their cars at home or at work.⁵ 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.⁶ 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

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—

³ Motavalli, Jim. “Every Automaker's EV Plans Through 2035 and Beyond.” *Forbes*, October 2021. (<https://www.forbes.com/wheels/news/automaker-ev-plans/>).

⁴ *Global EV Outlook 2017*, International Energy Agency, June 2017, <https://www.iea.org/reports/global-ev-outlook-2017>.

⁵ *Ibid.*

⁶ See <http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf>.

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.

Suggested Amendment

HB 346 is currently written to require EV-ready charging infrastructure to support “Level 2” charging in new state facilities. To ensure this legislation achieves its intended impact of expanding access to EV-ready parking and meeting future EV demand, **Blue Planet recommends the bill be amended to require that at least 25% of new parking stalls be EV-ready.**

A similar requirement was enacted in the City and County of Honolulu via Ordinance 20-10 (Bill 25 (2019)), which was adopted in June 2020 and requires that 25% of new stalls for commercial and multi-residential buildings be EV-ready for Level 2 chargers.⁷

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.

⁷ “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)



To: The Honorable Chairs Chris Lee and Lynn Decoite, the Honorable Vice Chairs Lorraine Inouye and Glenn Wakai, and Members of the Committees on Transportation and Culture and the Arts and Energy, Economic Development and Tourism

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

Re: **Hearing HB346 HD2 RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.**

Hearing: Tuesday March 21, 2023, 1:15 p.m., room 229

Aloha Chairs Lee and DeCoite, Vice Chairs Inouye and Wakai, and Members of the Committees on Transportation and Culture and the Arts and Energy, Economic Development and Tourism:

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

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 **new** 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)

Hawaii Electric Vehicle Association
hawaiiev.org
info@hawaiieva.com



March 20, 2023

SUPPORT and suggested amendment for HB346 HD2 - RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

Dear Chairs Lee and DeCoite, Vice Chairs Inouye and Wakai, and Committee members,

Hawaii EV Association supports HB346 HD2, which: “Requires that the design of new state facilities 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.”

The electrification of transportation is inevitable but needs to be accelerated in Hawaii in order to meet state climate and energy goals. 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 helps as it will ensure that new state facilities can readily expand charging infrastructure while avoiding costly retrofits. HB346 HD1 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.

We recommend that HB346 HD2 be amended to call for the State Energy Office analysis to include a systemic assessment of the EV charging infrastructure, one that considers the existence, or

planned deployment, of charging equipment outside of state structures by the utility, private entities, and other programs such as NEVI .

Additionally, workplace charging facilities can benefit from less expensive and easily deployed Level 1 (110V) charging. These allow for the ‘topping off’ of vehicles parked for a long work shift, at airports, or other places where cars may stay for an extended period, and will be valuable for electric bikes and mopeds. This lighter-weight infrastructure should be considered in the retrofit plan, in addition to supporting Level 2 (240V) or DCFC (400V+) charging to support a variety of vehicle and usage scenarios.

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

Sincerely,

A handwritten signature in black ink, appearing to read "TH".

Tam Hunt
Board Member and Policy Manager
Hawaii EV Association

Hawaii EV Association is a grassroots non-profit group representing electric vehicle owners in Hawaii. Our mission is to accelerate the electrification of transportation through consumer education, policy advocacy, and electric vehicle charging infrastructure expansion. For more information, please visit hawaiiev.org.

Hawaii EV Board

Noel Morin, President
Nanette Vinton, Secretary, and Treasurer
Bill Bugbee – Director
Tam Hunt - Director
Sonja Kass – Director
Rob Weltman – Director

Hawaii EV Clubs

Big Island EV Association
Kauai EV
Maui Nui EV
Tesla Hawaii Club

HB-346-HD-2

Submitted on: 3/18/2023 7:42:10 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
Logan Lee	Testifying for Climate Future Forum	Support	Written Testimony Only

Comments:

Aloha Chair Lee and Chair DeCoite and members of the TCA and EET committees:

I'm writing on behalf of the Climate Future Forum in support of HB346 HD2 This bill should be part of a holistic effort to require all new construction be EV ready. The additional cost is small, especially compared to the retrofit costs. Also, this bill would facilitate the State's transition to cleaner transportation solutions.

The Climate Future Forum is supporting the legislative agenda that about 80 students developed with eight Hawai'i state legislators on December 3rd, 2022. (website: www.climatefuturehawaii.org)

Respectfully,
Logan Lee
Climate Future Forum Steering Committee Member



Aloha Committee Members,

My name is Arwen Revere and I am a high school student from Kailua. Today, I am representing the environmental organization Wild Kids. We are testifying in strong support of HB346. The adoption of electric vehicles in the state of Hawai'i is expected to continue to grow at increasingly high rates. There is a great 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 this vital legislation and protect our planet for future generations.

Thank you for hearing our testimony,

Arwen Revere on behalf of Wild Kids

Big Island Electric Vehicle Association

hawaiidriveelectric@gmail.com

bigislandev.org



March 19, 2023

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

Dear Chairs Lee and DeCoite, Vice Chairs Inouye and Wakai, and Committee members,

Big Island EV Association supports HB346 HD2, which ***“Requires that the design of new state facilities 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.”***

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 helps as it will ensure that new state facilities can readily expand charging infrastructure while avoiding costly retrofits. HB346 HD2 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

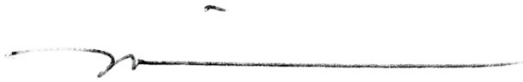
We recommend that HB346 HD2 be amended so require that the design of new state facilities include electric vehicle charging stations.

Additionally, workplace charging facilities can benefit from less expensive and easily deployed Level 1 (110V) charging. These allow for the ‘topping off’ of vehicles parked for long periods and

will be valuable for electric bikes and mopeds. This lighter-weight infrastructure should be considered in the retrofit plan, in addition to supporting Level 2 (240V) or DCFC (400V+) charging to support a variety of vehicle and usage scenarios.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Noel Morin', followed by a long horizontal line extending to the right.

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.



**Hawaiian
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEES ON
TRANSPORTATION AND CULTURE AND THE ARTS
AND
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

HB 346 HD2

Relating to Electric Vehicle Charging Infrastructure

March 21, 2023

1:15 PM, Agenda Item #1

Conference Room 229, VIDEO CONFERENCE

June Chee

Program Manager, Electrification of Transportation
Hawaiian Electric

Aloha Chairs Lee and DeCoite, Vice Chairs Inouye and Wakai, and Committee Members,

My name is June Chee, and I am testifying on behalf of Hawaiian Electric **in support of HB 346 HD2**, 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.

HB-346-HD-2

Submitted on: 3/20/2023 10:44:33 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

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,

The Kauai CLimate Action Coalition strongly supports this bill,especially since it HELPS Hawaii residents fight the high cost of ICE (Internal Combustion Engines) Transportation AND Fights Climate Change by reducing the DEADLY Climate Pollution that is emitted by ICE. Hawaii needs to electrify EVERYTHING ASAP, if we hope to slow the deadly onslaught from Climate change. Please ACT Boldly to do everything in your POWER to Electrify EVERYTHING in Hawaii ASAP! Imagine, NO SMOG, NO POISON going into the lungs of our most vulnerable Keiki and Kapuna or destroying native plants and species, NOT contributing to SEA LEVEL RISE AND Acidification of the Ocean that is Killing our coral reefs. Imagine, then ACT and pass this and any other Legislation that accelerates us OFF Fossil Fuels! IMUA>>>

Mahalo,

Steve Parsons,

Hanapepe Kauai, Kauai Climate Action Coalition, Kauai EV, Uber Driver, Tesla Owners Club
Kauai Director, Surfrider Foundation, Realtor with NAR's Green Designation



To: The Senate Committee on Transportation and Culture and the Arts (TCA)
and
The Senate Committee on Energy, Economic Development, and Tourism (EET)
From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, March 21, 2023, 1:15pm

In support of HB346 HD2

Aloha Chairs Lee and DeCoite, Vice Chairs Inouye and Wakai, and 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** that requires that the design of new state facilities be electric vehicle charger-ready, and that the Hawaii state energy office, in consultation with the department of accounting and general services and department of transportation, survey and identify high priority state facilities for which the office will consider cost assessments for retrofitting. In addition, this measure 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

HB-346-HD-2

Submitted on: 3/16/2023 6:09:14 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

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

Comments:

This is a common sense bill. Please support it. Mahalo.

HB-346-HD-2

Submitted on: 3/17/2023 8:35:18 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
Caroline Azelski	Individual	Support	Written Testimony Only

Comments:

In support of HD2.

Thank you.

HB-346-HD-2

Submitted on: 3/18/2023 10:38:37 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

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

Comments:

Members of the Transportation and Culture and the Arts Committee and the Energy, Economic Development and Tourism Committee,

Mahalo for this opportunity to testify in support of HB346 HD2

As an EV owner and supporter of enabling the transition to EVs. I am testifying in support of HB346 HD2 to require new state facilities to be electric vehicle charger-ready.

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

HB346 HD2 is a win for Hawaii's future.

Virginia Tincher, Oahu

HB-346-HD-2

Submitted on: 3/18/2023 2:56:27 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
TOM DIGRAZIA	Individual	Support	Written Testimony Only

Comments:

Strong support.

HB-346-HD-2

Submitted on: 3/18/2023 8:18:11 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

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

Comments:

--The electrification of transportation is inevitable and accelerating. There are now over 20,000 EVs in the state (around 2% of the passenger vehicles), and it is expected 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 helps us achieve our clean transportation goals as it 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 support HB346 HD2!

HB-346-HD-2

Submitted on: 3/18/2023 6:08:00 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

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.

HB-346-HD-2

Submitted on: 3/18/2023 8:47:10 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
Jotis Russell-Christian	Individual	Support	Written Testimony Only

Comments:

Aloha,

--The electrification of transportation is inevitable and accelerating. There are now over 20,000 EVs in the state (around 2% of the passenger vehicles), and it is expected 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 helps us achieve our clean transportation goals as it 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.

Mahalo nui for the opportunity to testify,

Jotis Russell-Christian

HB-346-HD-2

Submitted on: 3/19/2023 10:51:08 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

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

Comments:

EVs are vital & will be mandated so we must be ready with charging stations.

HB-346-HD-2

Submitted on: 3/20/2023 8:13:51 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
Melissa Barker	Individual	Support	Written Testimony Only

Comments:

Honorable Members,

I respectfully ask that you support HB346 HD2 which requires new state facilities be electric vehicle charge ready.

Thank you for your attention and consideration.

Melissa Barker

Kapaa, HI

HB-346-HD-2

Submitted on: 3/19/2023 2:05:17 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

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

Comments:

Aloha Chair and Committee Members,

Please pass HB346 HD2. 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. The bill is important for both state employees as well as those using state facilities. 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. Mahalo!

Helen Cox, Kalaheo, Kauai

HB-346-HD-2

Submitted on: 3/20/2023 8:28:54 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
P Noel Bobilin	Individual	Support	Written Testimony Only

Comments:

The electrification of transportation is inevitable and accelerating. 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 will allow employees and residents to better utilize electric vehicles and accelerate our transition to clean, efficient, and affordable transportation. Thank you

HB-346-HD-2

Submitted on: 3/20/2023 8:59:05 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

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

Comments:

Support

HB-346-HD-2

Submitted on: 3/17/2023 8:11:51 AM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
Tina Sprague	Individual	Comments	Written Testimony Only

Comments:

Effective 7/1/3000?

Requires that the design of new state facilities 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. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready. Appropriates funds. Effective 7/1/3000. (HD2)

HB-346-HD-2

Submitted on: 3/16/2023 8:58:33 PM

Testimony for TCA on 3/21/2023 1:15:00 PM

Submitted By	Organization	Testifier Position	Testify
Gerard Silva	Individual	Oppose	Written Testimony Only

Comments:

Not worth the time and money!!!