LATE \*Testimony submitted late may not be considered by the Committee for decision making purposes.

**JOSH GREEN, M.D.** GOVERNOR KE KIA'ĂINA



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

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 FINANCE**

H.B.1829, H.D. 1

FEBRUARY 28, 2024, 12:00 PM CONFERENCE ROOM 308 AND VIA VIDEO CONFERENCE, STATE CAPITOL

RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

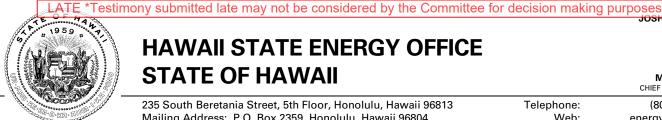
Chair Yamashita, Vice-Chair Kitagawa, and Members of the Committee, thank you for the opportunity to testify on H.B. 1829, H.D. 1.

The Department of Accounting and General Services (DAGS) offers **support** for H.B. 1829, H.D. 1, which requires that if parking is to be included in any new State building construction, the design provides at least twenty-five percent of parking stalls to be electric vehicle charger-ready; and requires the Hawaii State Energy Office in consultation with DAGS and the Department of Transportation to conduct a survey and identify certain high-priority State facilities that includes parking. This measure establishes a goal of the State to retrofit State facilities to be electric vehicle charger-ready; and appropriates funds to DAGS to assess the cost of, and install retrofits for electric vehicle charging systems at high-priority State facilities.

DAGS supports this measure which will expand workplace charging availability in State facilities and recommends an appropriation of \$250,000 to conduct cost assessments detailed in Section 5 of this measure.

H.B. 1829, H.D. 1 Page 2

Thank you for this opportunity to testify on this matter.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

GOVERNOR SYLVIA LUKE LT. GOVERNOR

MARK B. GLICK CHIEF ENERGY OFFICER

JOSH GREEN, M.D.

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

Telephone: Web:

(808) 451-6648 energy.hawaii.gov

# Testimony of MARK B. GLICK, Chief Energy Officer

before the HOUSE COMMITTEE ON FINANCE

Wednesday, February 28, 2024 12:00 PM State Capitol, Conference Room 308 and Videoconference

> In Support of HB 1829, HD1

# **RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.**

Chair Yamashita, Vice Chair Kitagawa, and members of the Committee, the Hawai'i State Energy Office (HSEO) supports HB 1829, HD1. The measure would require at least twenty-five per cent of parking stalls be electric vehicle (EV) charger-ready for any new state building construction that includes parking spaces. The measure also sets forth other requirements noted below and appropriates funds:

- HSEO, in consultation with the Department of Accounting and General Services and Department of Transportation, shall survey existing state facilities statewide that include parking and prioritize retrofitting those state facilities, among other things.
- It shall be the goal of the State to retrofit state facilities to be EV charger-ready.
- HSEO shall submit a report to the legislature including the results of the survey • identifying between four to ten high-priority state facilities to be retrofitted to include EV charging infrastructure.

To achieve Hawai'i's ambitious goal of reducing carbon emissions to 50% by 2030 and establishing a net-negative carbon economy by 2045, significant reductions in ground transportation emissions are imperative. HSEO's Hawai'i Pathways to Decarbonization, Act 238 Report pursuant to Session Laws of Hawai'i 2022 highlights transitioning toward

Zero Emission Vehicles as one of the two major facets to reducing emissions in ground transportation. This includes promoting the transition to battery electric vehicles which can significantly reduce emissions from vehicle operation<sup>1</sup>.

Emissions from ground transportation account for the largest share of energy sector emissions in the state. As noted in the 2019 Greenhouse Gas Inventory, transportation emissions in Hawai'i were at 4.03 million metric tons of carbon dioxide equivalents, accounting for 55 percent of total energy sector emissions. Ground transportation accounted for 38 percent of the transportation emissions.<sup>2</sup> For Hawai'i to meet its statutory target "to sequester more greenhouse gases than emitted as soon as practicable but no later than 2045", programs that support the adoption of cleaner transportation options are necessary and tremendously important.

The need for significant investment in charging infrastructure to meet Hawai'i's 2030 goal is evident from estimates for reliable access to charging. The California Energy Commission (CEC) concluded that a ratio of 7 EVs per public charger is needed to support the EV market, and Hawaii currently has 35 registered EVs per public charger.<sup>3</sup> The significant spread between current conditions and the CEC's estimate is evident that there is an unmet need in reasonably estimated public charging demand to support current adoption rates whether or not the CEC estimate is directly applicable to Hawaii.

All three mitigation scenarios in HSEO's *Hawai'i Pathways to Decarbonization* report assume Hawai'i will have one hundred percent zero-emission light-duty vehicle sales by 2035. This equates to twenty one percent of registered light duty passenger vehicles are reasonably needed to be zero emission vehicles by 2030 to achieve state emission reduction goals. Hawai'i needs to expand access to EVs and EV charging beyond the early adopters in single family unit dwellings. HB 1829, HD1, will support the adoption of EVs by employees living in multi-unit dwellings who often lack reasonable access to regular charging, thus fostering equity in electric vehicle (EV) adoption.

<sup>&</sup>lt;sup>1</sup> Hawai'i State Energy Office (2023). <u>Hawai'i Pathways to Decarbonization</u>, Act 238 Report to the 2024 Hawai'i State Legislature (Act 238 Report), page 104

<sup>&</sup>lt;sup>2</sup> State of Hawaii, Department of Health. Greenhouse Gas Inventory <u>Hawai'i Greenhouse Gas Emissions Report for</u> 2005, 2018, and 2019 (hawaii.gov)

<sup>&</sup>lt;sup>3</sup> From Alliance for Automotive Innovation "Get Connected Electric Vehicle Quarterly Report, Second Quarter, 2023"

Hawai'i State Energy Office HB 1829, HD1 - RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE - Support February 28, 2024 Page 3

In addition to the crucial role electric vehicles play in achieving our state's decarbonization goals, HB 1829, HD1, addresses a critical aspect of our renewable energy transition. By mandating that at least twenty-five percent of parking stalls in new state building construction be electric vehicle charger-ready, this bill not only promotes the adoption of cleaner transportation but also strategically contributes to managing energy demand.

One of the challenges in transitioning to renewable energy sources is the fluctuating nature of power generation coming from intermittent renewable resources. To maximize the benefits of our abundant renewable resources, it is beneficial to encourage electric vehicle owners to charge their vehicles during periods of high renewable energy availability. HB 1829, HD1, aligns with this objective by ensuring that a significant portion of parking spaces are equipped to support electric vehicle chargers, promoting daytime charging when renewable energy sources, such as solar, are more abundant.

This bill is a big step towards making EV adoption more inclusive and accessible, particularly for individuals who cannot easily charge at home. Beyond its impact on EV accessibility, the legislation also plays a crucial role in shifting energy demand away from peak periods, when renewable energy may be less available, towards times when our clean energy sources are abundant. This dual effect not only bolsters the reliability of our energy grid but also maximizes the environmental benefits inherent in the widespread adoption of electric vehicles.

Thank you for the opportunity to testify.



# Testimony of the Oahu Metropolitan Planning Organization

# COMMITTEE ON FINANCE

# Wednesday, February 28, 2024, at 12:00 PM

# CR 308 & Videoconference

# HB1829 HD1

**Relating to Electric Vehicle Charging Infrastructure** 

Dear Chair Yamashita, Vice Chair Kitagawa, and Committee Members,

The Oahu Metropolitan Planning Organization (OahuMPO) **supports HB1829 HD1 with comments**.

HB1829 requires that in the planning of any new state building construction with parking provisions, a minimum of twenty-five percent of parking spaces must be prepared for electric vehicle (EV) charging. Additionally, the bill directs the Hawaii State Energy Office in collaboration with the Department of Accounting and General Services and Department of Transportation, to conduct a survey to pinpoint key state facilities for prioritization and retrofitting. The bill also sets forth an objective for the State to retrofit existing state facilities with adequate infrastructure for EV charging.

This measure is consistent with Goal #7 of the Oahu Regional Transportation Plan, which is to improve air quality and safeguard our environmental assets. Ground transportation emissions constitute a fifth of all carbon pollution on Oahu (Ola Oahu Resilience Strategy, 2019), and promoting the expansion of EVs and increasing charging infrastructure is important for the health and well-being of Oahu's residents and visitors. Transitioning our transportation system towards renewable fuels alongside developing a more robust EV charging network promises many benefits, including decreased greenhouse gas pollution, reduced dependence on imported crude oil, and improved ambient air quality and public health.

In addition to EVs, electric micromobility devices and electric bicycles have also become more popular in the State, bolstered by initiatives like the Electric Mobility Rebate Program by the Hawai'i Department of Transportation. With this growing demand, it is crucial to provide adequate charging infrastructure and parking standards to accommodate these devices. Therefore, electric micromobility devices and electric bicycles should also be considered in this bill, with the provision of secure parking and charging spaces included for such devices. The OahuMPO is the federally designated Metropolitan Planning Organization (MPO) on the island of Oahu responsible for carrying out a multimodal transportation planning process, including the development of a long-range (25-year horizon) metropolitan transportation plan, referred to as the Oahu Regional Transportation Plan (ORTP) that encourages and promotes a safe and efficient transportation system to serve the mobility needs of people and freight (including walkways, bicycles, and transit), fosters economic growth and development, and takes into consideration resiliency needs, while minimizing fuel consumption and air pollution (<u>23 CFR 450.300</u>).

Mahalo for the opportunity to provide testimony on this measure.

Oahu Metropolitan Planning Organization 707 Richards Street, Suite 200 Honolulu, Hawaii 96813 Telephone: (808) 587-2015 | Fax: (808) 587-2018 www.OahuMPO.org



Email: <a href="mailto:communications@ulupono.com">communications@ulupono.com</a>

# HOUSE COMMITTEE ON FINANCE Wednesday, February 28, 2024 — 12:00 p.m.

### Ulupono Initiative <u>supports with comments</u> HB 1829 HD1, Relating to Electric Vehicle Charging Infrastructure.

Dear Chair Yamashita 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, clean transportation choices, and better management of freshwater resources.

**Ulupono** <u>supports with comments</u> HB 1829 HD1, which requires that if parking is to be included in any new state building construction, the design provide that at least twenty-five per cent of parking stalls 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 conduct a survey and identify certain high-priority state facilities; and establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

In December 2023, the Hawai'i State Energy Office specifically recommended that Hawai'i needs to "[p]ursue incentives for and streamline permitting for public EV charging infrastructure[,]" to meet our climate goals and exceed the current projected reductions of 54%.<sup>1</sup> The lack of access to charging is one of the top barriers to EV adoption.<sup>2</sup> As such, additional action is required, and making our state facilities EV charger-ready is a positive move.

The Public Utilities Commission designed time-of-use rates that economically incentivize using electricity during the day. Unfortunately, this rate design creates some challenges when compared to the average EV driver's charging pattern, which generally favors vehicle charging during the evening or overnight, when the vehicle is at home and not in use. Therefore, as this bill identifies, there is a need to invest in workplace charging, to better align the "charging opportunity" with lower cost time-of-use rates. Ulupono commends the Legislature in its efforts to lead by example, creating a pathway to develop robust workplace charging at state facilities, both as retrofits and in any new facility construction.

#### Investing in a Sustainable Hawai'i

<sup>&</sup>lt;sup>1</sup> https://energy.hawaii.gov/wp-content/uploads/2024/01/Act-238 HSE0 Decarbonization Report.pdf

<sup>&</sup>lt;sup>2</sup> https://www.osti.gov/biblio/1854730



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. In some cases, EV-ready costs were an estimated 0.13–0.17% of total construction costs, usually \$1,000 per space or less.<sup>3</sup> Other examples from California demonstrate that retrofits easily cost 2–8x as much as making new developments EV-ready.<sup>4</sup> Ulupono's own research shows that a typical structured parking space can cost \$42,000–\$57,000 per space to build, so this relatively low incremental amount seems worth the option to expand EV access.<sup>5</sup>

Additionally, the counties have EV-readiness requirements to varying degrees. Honolulu, Maui and Kaua'i all require some degree of EV-readiness, whereas Hawai'i County requires some EV-readiness with charging. Passing this state policy will ensure comprehensive statewide coverage at the least cost to taxpayers.

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.

Ulupono recommends reconsideration of the limiting language that new construction be EV charging-ready "where feasible and cost-effective." While the intent of this language is clearly to avoid unduly expensive or complex construction projects, this limiting language can also be interpreted to avoid making *any* investments because all EV-ready construction will likely be more costly than the alternative of doing nothing, even if such costs are negligible.

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

<sup>&</sup>lt;sup>3</sup> <u>https://www.cleanenergy.org/blog/ev-readiness-and-why-we-need-it-</u>

now/#:~:text=As%20a%20percentage%20of%20total,about%20%24920%20per%20parking%20spot.

<sup>&</sup>lt;sup>4</sup> https://www.energy.wsu.edu/documents/Regional%20Code%20Collab\_EV%20Research%20Summary 7-20.pdf

<sup>&</sup>lt;sup>5</sup> https://ulupono.com/media/ivcfs2pu/the-cost-of-parking-in-hawaii-report-2020-08.pdf?sha=27ef1b3a

To: The Honorable Chair Kyle Yamashita, the Honorable Vice Chair Lisa Kitagawa, and Members of the Finance Committee.

From: Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)

# Re: Hearing HB1829 HD1 RELATING TO THE ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Hearing: Wednesday, February 28, 2024, 12:00 p.m., room 308

Aloha Chair Yamashita, Vice Chair Lisa Kitagawa, and Members of the Finance Committee.

The Climate Protectors Hawai'i seeks to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate. The Climate Protectors Hawai'i SUPPORTS making new State buildings ready for electric vehicle charging to reduce greenhouse gas emissions and climate warming.

# The Climate Protectors Hawai'i STRONGLY SUPPORT HB1829 HD1!

Please pass this bill!

Mahalo!

Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)



To: The House Committee on Finance (FIN)

From: Sherry Pollack, 350Hawaii.org

Date: Wednesday, February 28, 2024, 12pm

# In support of HB1829 HD1

Aloha Chair Yamashita, Vice Chair Kitagawa, and members of the FIN Committee,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **supports HB1829 HD1** that requires that if parking is to be included in any new state building construction, the design provide that at least twenty-five per cent of parking stalls 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, conduct a survey and identify certain high-priority state facilities, establishing 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



February 26, 2024

# SUPPORT FOR HB1829 HD1 - RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Dear Chair Yamashita, Vice-Chair Kitagawa, and Committee members,

Hawaii Electric Vehicle Association **SUPPORTS** HB1829 HD1, which "Requires the design of all new state building construction where parking is to be included to provide that at least twenty-five per cent of parking stalls 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 conduct a survey and identify certain high-priority state facilities. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready."

This measure will help increase the number of publicly accessible EV charging stations and enable vehicle charging during the workday when renewable energy production is high.

We recommend an amendment to increase the new state building construction requirement so that 100 percent of the parking stalls are EV charger-ready. At a minimum, each stall should include conduits and any below-grade infrastructure to minimize future retrofit costs.

Thank you for this opportunity to testify.

Sincerely,

Noel Morin President 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

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

#### Hawaii EV Clubs

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



# HOUSE COMMITTEE ON FINANCE

February 28, 2024 at 12 PM Conference Room 308

# **TESTIMONY IN SUPPORT OF HB 1829 HD1**

Aloha Chair Yamashita, Vice Chair Kitagawa, and members of the Committee:

Blue Planet Foundation **supports HB 1829 HD1**, a House Majority Caucus bill 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 a minimum of 25% of new parking stalls shall be made EV-ready to Level 2, 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.<sup>1</sup>

# Electric vehicles are shaping the future of transportation

Electric vehicles are the fastest growing segment of new cars in Hawai'i. In 2023, the number of registered electric vehicles in Hawai'i increased more than 31%, compared to only a 1.5% increase in registered gasoline-powered vehicles.<sup>2</sup> There are currently over 29,000 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. Recent studies predict electric vehicles could hit price parity with fossil-fuel powered cars in 2024<sup>3</sup> and account

<sup>&</sup>lt;sup>1</sup> "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)

<sup>&</sup>lt;sup>2</sup> "Monthly Energy Trends", *DBEDT*, December 2023 (https://dbedt.hawaii.gov/economic/files/2024/01/Energy\_Trend.pdf/).

<sup>&</sup>lt;sup>3</sup> 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-costbenefits-2035-oct22/).

for two thirds of global car sales by 2030.<sup>4</sup> Experts expect battery prices to continue to fall and automakers are increasing the number of models and volume of EVs in the next few years.

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.<sup>5</sup> 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."<sup>6</sup> Unlike gasoline car owners, 80% of EV drivers charge their cars at home or at work.<sup>7</sup> 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.<sup>8</sup> 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

<sup>&</sup>lt;sup>4</sup> Carey, Nick. "As prices fall, two thirds of global car sales could be EVs by 2030, study says." *Reuters*. September 4, 2023. (https://www.reuters.com/technology/prices-fall-two-thirds-global-car-sales-could-be-evs-by-2030-study-2023-09-14/)

<sup>&</sup>lt;sup>5</sup> Motavalli, Jim. *"Every Automaker's EV Plans Through 2035 and Beyond." Forbes,* October 2021. (https://www.forbes.com/wheels/news/automaker-ev-plans/).

 <sup>&</sup>lt;sup>6</sup> Global EV Outlook 2017, International Energy Agency, June 2017, https://www.iea.org/reports/global-ev-outlook-2017.
<sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> See http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf.

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—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 1829.

Thank you for the opportunity to provide testimony.



# House Committee on Finance

# Hawai'i Alliance for Progressive Action (HAPA) Supports: HB1829 HD1

Wednesday, February 28, 2024 12:00pm, House Conference Room 308

Aloha Chair Yamashita, Vice Chair Kitagawa and Members of the Committees,

HAPA strongly supports HB1829 HD1 Requires the design of all new state building construction where parking is to be included to provide that at least 25% of parking stalls 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 conduct a survey and identify certain high-priority state facilities. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

Thank you for your consideration.

Respectfully,

Anne Frederick Executive Director



# **TESTIMONY BEFORE THE HOUSE COMMITTEE ON FINANCE**

# HB 1829, HD1 Relating to Electric Vehicle Charging Infrastructure

February 28, 2024 12:00 PM State Capitol, Conference Room 308

Terea Macomber Policy Strategy & Community Program Manager Hawaiian Electric

Dear Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee,

My name is Terea Macomber and I am testifying on behalf of Hawaiian Electric in **support of and requesting an amendment** to HB 1829, HD1, Relating to Electric Vehicle Charging Infrastructure 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. 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 as the State strives to meet the most progressive decarbonization goals in the country. Additionally, Hawaiian Electric supports the intent to retrofit prioritized facilities with make-ready infrastructure.

While we support this bill, we are requesting an amendment on page 3, line 16 to remove the limiting language "where feasible and cost-effective." The amendment would read as follows:

Page 2

Beginning July 1, 2024, where feasible and cost-effective, the design of all new state building construction where parking is to be included shall provide that at least twenty-five per cent of parking stalls be electric vehicle charger-ready.

Increased access to workplace charging is a strategic initiative that creates equitable, accessible EV charging options for employees and shifts energy demand. Hawaiian Electric supports workplace charging to incentivize the adoption of EVs and encourage off-peak charging when renewable energy is abundant. We support this bill and the State's leadership during this transition to an electrified future.

Thank you for this opportunity to testify in support of and requesting an amendment to HB 1829, HD1.

## <u>HB-1829-HD-1</u>

Submitted on: 2/27/2024 10:40:19 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Steve Parsons	Kauai Climate ACTION Coalition, Small Biz Owner	Support	Written Testimony Only

Comments:

Aloha Trusted Hawaii Lawmakers!

KCAC, with over a 150 members, strongly supports this bill, as we need to accelerate transition to EVs. Antarctica's doomsday Glacier is very close to collapse, as the last 3 years are the LOWEST on record for Sea Ice. I would submit that more important than the percentage of spaces is the rate of charging. Most new EVs can do level 2 charge at 48 amps or 11.5 Kw per hour or 44 miles of range per hour. So, we suggest this rate of charge as the Minimum amperage rating. In addition, we suggest that 5% of the parking lot be reserved for Level 3 Fast Charging. This starts at 50 Kw and most new EVs can charge at 150 Kw to 250 KW and go from 10% charge to 80% in about 15-20 mins. So, the speed of the chargers are more important than how many we have deployed in one spot. Remember, Fossil Fuel pollution KILLS over 9 Million people a year and causes harmful and harsh conditions for millions more that suffer from respiratory conditions, and YES this poisonous air pollution absolutely hurts the people, visitors and our ecosystems that give us life. Please ACT Boldly on this and any other bills that accelerate Hawaii completely off fossil fuels ASAP, as time IS running out! IMUA>>>>

With Mad Urgency,

Steve parsons, KCAC, Surfrider foundation member, Hawaii EV member, Sm Biz owner.



DATE: February 28, 2024

TO: Representative Kyle T. Yamashita Chair, Committee on Finance

**FROM:** Tiffany Yajima

RE: H.B. 1829, H.D. 1 – Relating to Electric Vehicle Charging Infrastructure Hearing Date: Wednesday, February 28, 2024 at 12:00 p.m. Conference Room: 308

Dear Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee on Finance:

The Alliance for Automotive Innovation ("Auto Innovators") submits this testimony in **support** of H.B. 1829, H.D.1, which requires that new state building construction be EV charger-ready, requires the State Energy Office to survey and identify high-priority state facilities to be retrofitted with EV charging infrastructure, establishes a goal to retrofit state facilities for EV readiness, and appropriates funds for this initiative.

The Alliance for Automotive Innovation represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers and semiconductor makers – 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 electric vehicles. By 2025, the auto industry will have invested more than \$330 billion to reach the goal of an electrified future. In addition, the auto industry is ramping up by delivering a new generation of ZEVs that includes 130 models for sale in the U.S. market by 2026, up from over 70 models today.

To facilitate the transition to a zero-emission transportation future, automakers support federal and state policies such as what is proposed in this bill to ensure that state buildings are equipped to support charging capabilities for electric vehicles. In addition, because many residents live in multi-unit dwellings that do not and possibly cannot support charging infrastructure, workplace charging in state facilities will provide a convenient, public option for EV charging that opens up the possibility of EV ownership to a broader audience. Furthermore, because

First Hawaiian Center 999 Bishop Street, Suite 1400 Honolulu, HI 96813 the installation of EV chargers in new construction can be several times as cost effective as retrofitting existing facilities to add chargers after the fact, this measure makes good financial sense.

For these reasons, Auto Innovators are in support of this measure and ask the committee to pass this bill. Thank you for the opportunity to submit this testimony.

Submitted on: 2/27/2024 11:49:40 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Dave Mulinix	Greenpeace Hawaii	Support	Remotely Via Zoom

Comments:

#### Aloha Chair, Vice Chair & Committee Members,

On behalf of Greenpeace Hawaii's memberw and supporters statewide, we Stand in SUPPORT of <u>HB1829 HD1</u> that requires the design of all new state building construction where parking is to be included to provide that at least 25% of parking stalls be electric vehicle charger-ready. It also requires the Hawaii State Energy Office, in consultation with the Department of Accounting and General Services and Department of Transportation, to conduct a survey and identify certain high-priority state facilities. Finally it establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

It is essential that our legislature focus on gettig our state off of fossil fuels as soon as possible, so we can do our part to address the growing Climate Crisis.

Please pass HB1829.

Mahalo,

Dave Mulinix, CoFounder & Statewide Organizer

Greenpeace Hawaii

Carbon Cashback Hawai`i carboncashbackhawaii@gmail.com carboncashbackhawaii.org



February 27, 2024

# SUPPORT FOR HB1829 HD1 – RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Dear Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee:

Carbon Cashback Hawaii supports HB1829 HD1, which "Requires the design of all new state building construction where parking is to be included to provide that at least twenty-five per cent of parking stalls 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 conduct a survey and identify certain high-priority state facilities. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready."

The Carbon Cashback Hawai`i is a group of climate action advocates across Hawai`i striving to pass legislation that effectively reduces carbon emissions while enabling a socially equitable transition.

We support **HB1829 HD1** as it will help increase the number of EV charging points and enable a more equitable adoption of electric vehicles. It will encourage charging electric vehicles during working hours when renewable energy production peaks. This shifts demand from evenings and nights when renewable energy production dips. Importantly, it allows the state to lead by example.

We strongly recommend that the requirement extends to 100% of parking stalls. This will future proof the entire parking facility and help avoid costly retrofits. The cost to install conduit beneath pavement when it is first laid is a fraction of retrofit. (EV charger – readiness for a portion of a parking structure may include at a minimum the conduits and raceways.)

Thank you for this opportunity to testify.

Please support HB1829 HD1.

Respectfully, Carbon Cashback Hawai`i

HB-1829-HD-1 Submitted on: 2/26/2024 5:13:02 PM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Daniela Escontrela	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill

Submitted on: 2/26/2024 5:19:33 PM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Arlene Twomey	Individual	Support	Written Testimony Only

Comments:

The Hawaii State government needs to do it's fair share of meeting out climate goals. This bill requires the design of all new state building construction where parking is to be included to provide that at least 25% of parking stalls 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 conduct a survey and identify certain high-priority state facilities. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

# <u>HB-1829-HD-1</u>

Submitted on: 2/26/2024 5:36:36 PM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Tadia Rice	Individual	Support	Written Testimony Only

Comments:

# PLEASE SUPPORT HB1829 HD1!

Submitted on: 2/26/2024 11:27:09 PM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
tlaloc tokuda	Individual	Support	Written Testimony Only

Comments:

I support this bill because we need more fast charge stations. The bill also establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

Mahalo,

Tlaloc Tokuida

Kailua Kona, HI 96740

Submitted on: 2/27/2024 8:33:39 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Nanea Lo	Individual	Support	Written Testimony Only

Comments:

Hello,

My name is Nanea Lo. I'm born and raised in the Hawaiian Kingdom. I live in Mōʻiliʻili. I'm writing in SUPPORT WITH AMMENDMENTS for HB1829 HD1. This pilot program should be expanded to more than one location. Piloting at only one school is insufficient.

HB1829 HD1 Requires the design of all new state building construction where parking is to be included to provide that at least 25% of parking stalls 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 conduct a survey and identify certain high-priority state facilities. Establishes a goal of the State to retrofit state facilities to be electric vehicle charger-ready.

HB2685 HD1 Establishes the solar hui program to allow multi-family residential property owners to invest into a solar hui investment fund to provide loans to low- and moderate-income households to install solar energy systems. ALICE (Asset Limited, Income Constrained, Employed) households would directly benefit from a program that helps overcome financial challenges such as high electricity costs and inflation.

HB2083 HD2 Authorizes the Department of Education to establish a recognition program to incentivize schools to submit to the Department a plan for the school to reach the local farm to school meal goal of 30% of food served in the school to consist of locally sourced products by 2030. Requires the Department of Education to establish a plant-based meal pilot program at Mililani high school no later than the 2025-2026 school year.

me ke aloha 'āina,

Nanea Lo, Mōʻiliʻili, Oʻahu

Submitted on: 2/27/2024 9:24:39 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Barbara Best	Individual	Support	Written Testimony Only

Comments:

Ideally, there would be charging stations in all stalls! But having all stalls EV charger-ready would be a substitute. Many renters, condo dwellers, visitors etc. would be able to use state buildings which would be most helpful. Mahalo,

Bobbie & Bill Best, Wailuku

HB-1829-HD-1 Submitted on: 2/27/2024 10:00:35 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Carole Mandryk	Individual	Support	Written Testimony Only

Comments:

Strongly support!

HB-1829-HD-1 Submitted on: 2/27/2024 10:30:19 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Cory Harden	Individual	Support	Written Testimony Only

Comments:

Aloha, in strong support! Cory

HB-1829-HD-1 Submitted on: 2/27/2024 10:37:12 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

Show state's support for EVs as encouragement for builders to copy.

Submitted on: 2/27/2024 12:19:42 PM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Shannon Rudolph	Individual	Support	Written Testimony Only

Comments:

SUPPORT

Submitted on: 2/27/2024 3:49:45 PM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
laurel brier	Individual	Support	Written Testimony Only

Comments:

Strong support for SB1829. As a state employee on Kauai for almost 40 years and an EV owner for 7 years it was a hassle trying to get use of one of the two EV chargers in the County parking lot. Kauai County has since stepped up and offers much needed EV stalls in the vicinity of the State and county offices. The State needs to provide for a future without fossil fuel vehicles as well. Live up to the Climate Emergency Declaration

Submitted on: 2/28/2024 8:50:20 AM Testimony for FIN on 2/28/2024 12:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Keith Neal	Individual	Support	Written Testimony Only

Comments:

#### SUPPORT FOR HB1829 HD1- ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Dear Chair Yamashita, Vice Chair Kitagawa, and members of the Committees.

The state and state facilities must lead the way in transportation electrification and energy efficient facilities. The State must retrofit state facilities to be electric vehicle charger-ready.

Please support HB1829 HD1.

Thank you for this opportunity to testify.

Respectfully,

Keith Neal

Waimea