



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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

Telephone:
Web:

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

(808) 451-6648
energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
**SENATE COMMITTEES ON GOVERNMENT OPERATIONS
AND
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

Tuesday, March 19, 2024
3:01 PM
State Capitol, Conference Room 225 and Videoconference

In Support of
HB 1829, HD1

RELATING TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

Chairs McKelvey and DeCoite, Vice Chairs Gabbard and Wakai, and members of the Committees, 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 operation¹.

According to 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.² Emissions from ground transportation account for the second largest share of energy sector emissions in the state, following stationary combustion. 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 38 registered EVs per public charger.³ 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. At least 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

¹ Hawai'i State Energy Office (2023). [Hawai'i Pathways to Decarbonization, Act 238 Report to the 2024 Hawai'i State Legislature \(Act 238 Report\), page 104](#)

² State of Hawaii, Department of Health. Greenhouse Gas Inventory [Hawai'i Greenhouse Gas Emissions Report for 2005, 2018, and 2019 \(hawaii.gov\)](#)

³ From Alliance for Automotive Innovation "Get Connected Electric Vehicle Quarterly Report, Third Quarter, 2023"

EVs by employees living in multi-unit dwellings who often lack reasonable access to regular charging, thus fostering equity in electric vehicle (EV) adoption.

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.

In regards to an appropriation, HSEO supports the measure so long as it does not adversely impact priorities identified in the Executive Supplemental Budget Request for FY2025.

Thank you for the opportunity to testify.