



**TESTIMONY BY:**

JADE T. BUTAY  
DIRECTOR

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

**LATE**

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

February 8, 2019  
2:00 p.m.  
State Capitol, Room 225

**S.B. 996**  
**RELATING TO ZERO-EMISSION VEHICLES**

Senate Committee(s) on Transportation  
& Energy, Economic Development and Tourism

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The Department of Transportation (DOT) **opposes** Senate Bill 996 which requires rental motor vehicle lessors to incorporate zero-emission vehicles into their fleets and creates a Hawaii zero-emissions vehicle infrastructure special fund and grant program to promote development of zero-emission vehicle infrastructure.

We are concerned with the funding sources supporting both the infrastructure special fund and grant program, which must provide a sound revenue stream to support infrastructure needs throughout Hawaii. Our consolidated airport rental car facility in Honolulu (under construction) and Kahului (recently completed) will need to be re-designed/retrofitted to accommodate zero-emission fleet requirements.

In addition, we are concerned on the financial impacts to our airport rental car concessionaires, which is by far our largest revenue generator at \$73 million, due to the uncertainty of zero-emission rental vehicles being rented. Maintaining sufficient revenue levels are required to meet existing debt obligations (to bond holders) and secure future financing requirements to complete current and future consolidated rental car facilities. Furthermore, rental car companies will be the only contributor to subsidize the statewide construction of alternative fuel infrastructure.

Thank you for the opportunity to provide testimony.

DAVID Y. IGE  
GOVERNOR



RODERICK K. BECKER  
DIRECTOR

ROBERT YU  
DEPUTY DIRECTOR

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

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

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

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

**WRITTEN ONLY**

TESTIMONY BY RODERICK K. BECKER  
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE  
TO THE SENATE COMMITTEES ON TRANSPORTATION AND  
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM  
ON  
SENATE BILL NO. 996

**February 8, 2019  
2:00 p.m.  
Room 225**

**LATE**

**RELATING TO ZERO-EMISSION VEHICLES**

Senate Bill (S.B.) No. 996 establishes the Hawaii Zero-Emission Vehicle Infrastructure (HZEVI) Grant Program in the Department of Transportation to promote the development of the refueling infrastructure for zero-emission vehicles; and requires rental motor vehicle lessors, owning and operating more than 200 light duty passenger vehicles (vehicles below 8,500 pounds gross weight) in the State of Hawaii, to incorporate zero-emission light duty passenger vehicles into their fleets within a certain timeframe. Lessors that fail to comply with the required number of zero-emission vehicles in their rental motor vehicle fleet shall pay a fine of \$1,000 per month for each vehicle below the required amount. This bill also establishes the HZEVI Special Fund that would generate revenues from the fines imposed on lessors.

As a matter of general policy, the department does not support the creation of any special or revolving fund which does not meet the requirements of Sections 37-52.3 and 37-52.4, HRS, respectively. Special and revolving funds should: 1) serve a need as demonstrated by the purpose, scope of work and an explanation why the program

cannot be implemented successfully under the general fund appropriation process;

- 2) reflect a clear nexus between the benefits sought and charges made upon the users or beneficiaries or a clear link between the program and the sources of revenue;
- 3) provide an appropriate means of financing for the program or activity; and
- 4) demonstrate the capacity to be financially self-sustaining. In regards to S.B. No. 996, it is difficult to determine whether the proposed special fund would be self-sustaining.

Further, this bill does not provide a special fund appropriation to support the program as envisioned in the bill.

Thank you for your consideration of our comments.



**ChargePoint, Inc.**

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Before the Senate Committee on Transportation

February 6, 2019

SB 996: Relating to Zero-Emission Vehicles

Aloha Chair Inouye, Vice Chair Harimoto, and members of the Committee,

On behalf of ChargePoint, Inc. (ChargePoint), I would like to testify in support for SB 996. The bill would establish targets for rental car fleet owners to incorporate zero-emission vehicles (ZEV) into their light-duty vehicle fleets, specifically requiring 100% of their vehicle fleets to be zero-emission by 2035. Additionally, this bill establishes the ZEV Infrastructure Special Fund which will provide grants to support the deployment of the ZEV charging infrastructure, with a priority for infrastructure deployed to support rental car fleets.

ChargePoint is the world's largest and most open electric vehicle ("EV") charging network with more than 60,000 Level 2 EV and DC fast charging spots around the country, including over 360 public and private ports in Hawaii. ChargePoint's customers include major employers, municipalities, universities, utilities, real estate developers and parking garage facility owners and operators that provide EV charging and related services to EV drivers. ChargePoint customers in Hawaii include the Aulani Disney Resort, the City and County of Honolulu, the University of Hawaii, Target, BMW of Hawaii, Kapolei Lofts, Maui Ocean Club, Maui Electric, and many more. Every 2 seconds, a driver connects to a ChargePoint station, and drivers on the ChargePoint network have driven over 1.2 billion gas-free miles.

SB 996 is a bold and innovative approach to solving one of the key issues of greenhouse gas emissions for the transportation sector in Hawaii. The predominance of the rental car market in Hawaii makes it a key sector to target for emissions reductions as Hawaii seeks to be carbon free by 2045. Additionally, it provides an opportunity for the State to leverage its' leadership in tourism through leadership in electrifying transportation. This bill also takes the appropriate step of combing the fleet target with funding to support the charging infrastructure that will be needed to fuel these ZEV vehicles. ChargePoint supports this legislation and respectfully asks for your Aye vote.

Thank you for the opportunity to provide this testimony.

Anthony Harrison  
Director of Public Policy  
ChargePoint, Inc.



**SanHi**

GOVERNMENT STRATEGIES  
A LIMITED LIABILITY LAW PARTNERSHIP

DATE: February 7, 2019

TO: Senator Lorraine Inouye  
Chair, Committee on Transportation

Senator, Glenn Wakai  
Chair, Committee on Energy, Economic Development, and Tourism  
*Submitted Via Capitol Website*

FROM: Matthew Tsujimura

RE: **S.B. 996 Relating to Zero-Emission Vehicles**  
**Hearing Date: Friday, February 8, 2019 at 2:00 p.m.**  
**Conference Room: 225**

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Dear Chair Inouye, Chair Wakai, and Members of the Senate Joint Committees:

We submit this testimony on behalf of Enterprise Holdings, which includes Enterprise Rent-A-Car, Alamo Rent-A-Car, National Car Rental, Enterprise CarShare and Enterprise RideShare (Van Pool).

Enterprise Holdings **strongly opposes** S.B. 996, which requires rental motor vehicle lessors with more than two hundred light duty passenger vehicles to incorporate zero-emission vehicles into the lessor's fleet by 2035. The bill also requires all rental motor vehicle lessors to report a list of the make, model, license plate number, and fuel type of each rental motor vehicle in the lessor's fleet to the Director of the Department of Commerce and Consumer Affairs. Lastly, the bill creates the Hawaii zero-emission vehicle infrastructure special fund.

Enterprise has been a leader in sustainability in its industry and has been committed to making efforts to incorporate sustainable transportation into its fleet. When electric vehicles came onto the market, Enterprise launched a new program locally to incorporate electric vehicles into their fleet and put them out for rent. Enterprise has also invested in sustainable transportation by incorporating fuel efficient vehicles, as well as car sharing and ride sharing services. Enterprise is supportive of State efforts to move toward sustainable transportation, and has participated in several working groups tasked with increasing the availability of zero-emission charging infrastructure.

The mandate in this bill requires that rental car companies incorporate electric, hybrid, or fuel cell vehicles in their fleet and meet a 10 percent requirement by 2021, 25 percent by 2023, 50 percent by 2025, 75 percent by 2030, and 100 percent by 2035. For every vehicle that does not meet this requirement, the companies would be penalized \$1,000 per month per vehicle.

Enterprise tried to encourage its customers to rent electric vehicles, but was unsuccessful. As a practical matter, the rental car industry is driven by market demand. When Enterprise incorporated several electric vehicles into their fleet, the vehicles were ultimately not selected by consumers to rent. Rental car companies cannot force customers to choose cars they do not want to rent. Due to their construction, electric vehicles tend to have small trunk space, so the cars are naturally less desirable for families who come to the islands on vacation.

This mandate is problematic for the industry and there will be implementation issues. Although Enterprise cannot know the exact reasons why its customers did not rent its electric vehicles, there are some logistical and practical reasons. First, the infrastructure needed to support electric vehicles is currently not adequate. Given that 85% of renters are tourists, if electric vehicles start to become a larger part of the fleet, it is unclear where tourists would charge their cars. Charging stations would need to be installed everywhere they are not now -- airport facilities (including the new consolidated facilities being planned), hotels, and other tourist destinations. None of these locations have enough charging stations to handle the influx of these vehicles on the road, nor do they have the capacity to install the significant numbers of charging stations in their parking lots that would be needed. Enterprise is concerned that the lack of customer support for zero-emission vehicles compounded by the lack of charging stations across the state will make this transition unfeasible. The potential impact on the cost of a rental car to local customers is significant.

The mandated fleet conversion proposed in S.B. 996 does not address the current need for additional infrastructure. The current design of the Consolidated Rental Car Facility cannot accommodate widespread charging conduits. At most, the new facility would only be able to support a few charging stations per rental car company, and certainly not an entire fleet of rentals.

There is also a lack of charging facilities across the state to support a complete conversion of all rental cars to zero-emission vehicles. This lack of infrastructure will result in tourist renters searching for charging stations and waiting for their vehicle to fully charge. Compounding this issue is that tourists may not know how to properly charge their vehicles. The lack of charging stations will lead to vehicles that are not fully charged, which leads to more stalled vehicles and more traffic.

S.B. 996 would create the zero-emission vehicle infrastructure special fund, to be used to "promote the development of fueling infrastructure for zero-emission vehicles [...] and to facilitate and demonstrate financially sustainable business models for infrastructure." Enterprise is concerned that the rental car industry is being unfairly targeted to fund statewide fueling infrastructure. The bill does not limit use of the fund or the infrastructure to the rental car companies, who will be the sole contributor to the fund. Enterprise believes the fund is unfairly targeting the rental car industry to subsidize statewide construction of alternative fuel infrastructure.

For the above reasons, we respectfully oppose this measure and ask that it be held in committee.

Thank you for the opportunity to submit testimony.

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

S.B. 996

**Relating to Zero Emission Vehicles**

Friday, February 8, 2019  
2:00 PM, Agenda # 3  
State Capitol, Conference Room 225

Brennon Morioka  
Director, Electrification of Transportation  
Hawaiian Electric Company, Inc.

Aloha Chair Inouye and Chair Wakai, Vice Chair Harimoto and Vice Chair Taniguchi and Committee Members,

My name is Brennon Morioka and I am testifying on behalf of Hawaiian Electric Company Inc. and its subsidiary utilities Maui Electric Company, Limited and Hawaii Electric Light Company, Inc. (“the Hawaiian Electric Companies”) in support of S.B, 996, Relating to Zero-Emission Vehicles. The purpose of S.B. 996 is to expedite the incorporation of zero-emission vehicles into rental fleets and to create a special fund that enables the development of refueling infrastructure to support greater adoption of clean transportation.

On the whole, the Companies support the intent of this bill in that it seeks to accelerate the state’s transition to clean transportation by leveraging a highly visible subset of our transportation mix, namely rental fleet vehicles. However, the Companies have concerns about the timing for zero-emissions vehicle compliance and the tourist industry’s ability to develop supporting charging infrastructure accordingly. With the

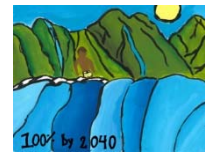
targeted zero-emissions vehicle ratios established in the proposed bill, there may be significant challenges in establishing sufficient refueling infrastructure in the locations, such as hotels and key landmarks by the designated target dates.

Infrastructure installation, and retrofits in particular, require significant design, permitting, and construction which may not be completed by the time vehicle compliance is required. The result could negatively impact tourists through insufficient refueling opportunities and potentially cause a negative customer experience with a zero-emissions vehicle. As an alternative, the Companies suggest focusing first on infrastructure development incentives at targeted tourist destinations and landmarks, to ensure robust availability of refueling opportunities before taking the lead on rental fleet vehicle requirements.

Another concern relates to the potential revenues to be generated by the proposed fines under proposed section 437D-A. Considering that the bill primarily targets the larger rental fleet companies, it is unlikely that there would be sufficient revenues generated by ongoing non-compliance. This could result in an underfunded infrastructure special fund, with limited resources to support the crucial refueling counterpart to the measure. The Companies suggest refocusing this proposed bill to make refueling infrastructure the primary objective and find alternative sources of funding to support its development.

The Companies are committed to an electric vehicle strategy that acknowledges the need for more sustainable transportation options. Accordingly, the Hawaiian Electric Companies support S.B. 996. Thank you for this opportunity to testify.





**SENATE COMMITTEE ON TRANSPORTATION  
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

February 8, 2019, 2:00 P.M.

Room 225

(Testimony is 4 pages long)

**LATE**

**TESTIMONY IN STRONG SUPPORT OF SB 996**

Aloha Chair Inouye, Chair Wakai, and members of the Committees:

**Blue Planet Foundation supports Senate Bill 996**, which requires that an increasing percentage of rental cars used in Hawaii be zero-emission vehicles (ZEVs) until the rental fleet is entirely comprised of ZEVs. The rental car industry operates the state’s largest vehicle fleets, and the frequent turnover of the vehicles (estimated to be about 13 months) means far more ZEVs entering the secondary market at a discounted cost, allowing many more Hawaii residents to experience the benefits of ZEVs and help Hawaii reach its clean energy goals faster.

Blue Planet Foundation is a local, mission-driven nonprofit committed to clearing the path for 100% clean energy in Hawaii and believes that zero-emissions vehicles, like battery electric vehicles (EVs) and hydrogen fuel cell vehicles, will play a pivotal role in helping to eliminate fossil fuel use for both the ground transportation and the electricity sectors. ZEVs are better for the environment, can lower household transportation costs, and can help Hawaii’s electric utilities achieve 100% renewable electricity while lowering household electric bills.

The volume and model types of battery electric vehicles coming onto the market are expected to dramatically increase in the next five to seven years due to falling battery costs and EV-incentivizing policies from nations around the world, particularly those of China, the world’s largest vehicle market.

The longer driving ranges, lower costs, and larger selection of models will make it possible for many of Hawaii’s residents to lower their carbon footprints and take advantage of the economic benefits that EVs offer. However, there are two challenges to efficient EV adoption that SB 996 attempts to address: (1) the availability and accessibility of public charging facilities is a significant barrier, particularly for those living in apartments and condominiums, and (2) only a small percentage of the state’s population has the financial resources to purchase new cars— i.e. it could take a number of years for the influx of quality, affordable EVs to trickle down to the secondary market and become available to most people in the state.

**Availability and accessibility of public charging facilities for rental fleets and the public**

The fines imposed by this bill will allow for the creation of a special fund that will be administered as a grant program for the build-out Hawaii’s electric vehicle infrastructure

[info@blueplanetfoundation.org](mailto:info@blueplanetfoundation.org)

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network. Priority will be given to those locations that will facilitate increased EV adoption in rental fleets, to ensure adequate charging options for the newly integrated ZEVs.

The development of public charging facilities necessary to enable a high penetration of battery EVs in the rental market would be more than adequate to meet the charging needs of the state's population simultaneously. Those public chargers are integral to EV adoption, as they serve as primary charging for those living in multi-family properties and as backup charging for those who are able to charge their vehicles at home.

### **Secondary market of quality, affordable EVs**

While there are no publicly available figures on the total number of rental cars on Hawaii's roadways, some have estimated the number to be around 40,000, which would make rental cars by far the largest vehicle fleets in the state.

Additionally, due to proprietary nature of the rental car business, there is no publicly available data on the average turnover rate for rental car fleets in Hawaii; some national estimates put the average turnover time at around 13 months.<sup>1</sup>

By any estimates, however, incorporating meaningful ratios of ZEVs into rental car fleets would translate into thousands of more ZEVs entering the secondary vehicle market each year. This would mean that many more of Hawaii's residents could afford to buy a ZEV, reducing their carbon footprints and lowering their transportation costs.

Rental cars represent the largest vehicle fleets in Hawaii. Policies that expedite the scaling of ZEVs into rental car fleets will not only decrease the carbon footprint of the visitor industry, but due to the high frequency of fleet turnover, will translate into a huge influx of ZEVs onto the secondary market, making them affordable for far more Hawaii residents.

### **Falling Prices and More Models**

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 conventional 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 upfront cost parity with conventional vehicles by 2024.<sup>2</sup>

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<sup>1</sup> The Motley Fool, *Surprising Facts about the Rental Car Industry*, <https://www.fool.com/investing/general/2012/07/13/surprising-facts-about-the-rental-car-industry.aspx>.

<sup>2</sup> See Bloomberg New Energy Finance, <https://bnf.turtl.co/story/evo2018?teaser=true>.

In part due to falling costs and increasing consumer demand, and in part due to government policies supporting EVs, **nearly all of the world's leading automakers have announced aggressive strategies and investments in electric vehicles during the past two years.**

Perhaps the biggest single factor contributing to this dramatic

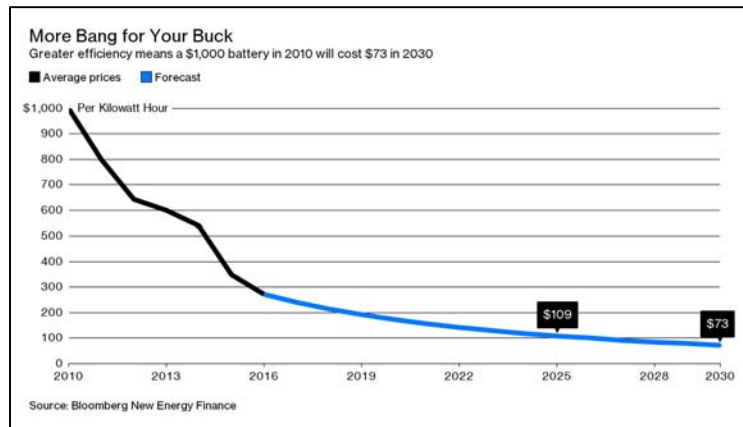
strategic shift towards electric is the fact that the world's largest auto market, China, has announced that it is working on a policy that would ban internal combustion engine vehicles outright as soon as 2030.

### Conclusion

Zero-emission vehicles are better for the environment and the economy, and can help Hawaii's electric utilities achieve 100% renewable electricity. The rental car industry operates the state's largest vehicle fleets and the frequent turnover of the vehicles would translate into far more ZEVs entering the secondary market, allowing many more Hawaii residents to participate in the benefits of ZEVs.

We believe that this bill will help to dramatically expedite the uptake of ZEVs in Hawaii and help to develop a public charging network necessary to accommodate those vehicles.

Thank you for the opportunity to testify.



**SB-996**

Submitted on: 2/7/2019 1:56:03 PM

Testimony for TRS on 2/8/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melodie Aduja	Testifying for O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

**LATE**

**SB-996**

Submitted on: 2/7/2019 7:07:31 PM

Testimony for TRS on 2/8/2019 2:00:00 PM

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

Comments:



**LATE**

To: The Senate Committee on Transportation  
and  
The Senate Committee on Energy, Economic Development, and Tourism  
From: Sherry Pollack, 350Hawaii.org  
Date: Friday, 2/8/19

**In strong support of SB996**

Aloha Chairs Inouye and Wakai, Vice Chairs Harimoto and Taniguchi, and members of the TRS and EET committees,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **strongly supports SB996 with some suggested amendments.**

Incorporating large numbers of zero-emission vehicles into rental motor vehicle fleets would significantly reduce carbon emissions, increase the number of zero-emission vehicles entering the secondary market, making them more affordable to more Hawaii residents, and demonstrate to all who visit the State that Hawaii is a leader in clean energy and sustainable transportation.

However, the definition of "zero-emission vehicle" should not include plug-in hybrid electric vehicles. The legislature has the opportunity—and the power—to mandate very significant use of *real* zero-emission vehicles with this bill. Don't water it down by allowing sort-of-clean vehicles. Rental car companies will have to buy many new cars to comply with SB996; they should buy fully electric or hydrogen ones, not ones that will perpetuate our embarrassingly high percentage of imported fossil fuels.

Secondly, the definition of "Hydrogen fuel cell vehicle" should specify hydrogen made from renewable sources. Hydrogen can be produced in many ways, including by burning fossil fuels.

Thirdly, I strongly urge that the targets for implementation be accelerated to achieve 100% by 2030 rather than 2035 to be more in sync with what scientists say is necessary to achieve the needed reductions in greenhouse gas emissions. Climate change is very much upon us. Important measures like this should take effect absolutely as soon as possible. The UN IPCC report makes clear we have kicked the can down the road for far too long and must take immediate responsibility for the damage we've already done.

Zero-emission vehicles are better for the environment and the economy, and can help Hawaii's electric utilities achieve 100% renewable electricity. They are the future for Hawaii and rental car fleets are the most logical place to accelerate progress on EV adoption statewide.

Thank you for the opportunity to testify in strong support of this very important bill.  
Sherry Pollack  
Co-Founder, 350Hawaii.org

**SB-996**

Submitted on: 2/7/2019 6:57:44 AM

Testimony for TRS on 2/8/2019 2:00:00 PM

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

Comments:

Dear Honorable Committee Members:

Please support SB996. Hawaii stands to bear the brunt of climate change, which is already occurring. Zero-emission vehicles are a step in the right direction.

Thank you for the opportunity to present my testimony.

Andrea Quinn