

## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LUIS P. SALAVERIA

MARY ALICE EVANS
DEPUTY DIRECTOR

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## Statement of LUIS P. SALAVERIA

Director

Department of Business, Economic Development and Tourism before the

# HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION and TRANSPORTATION

Tuesday, February 13, 2018

11:00 a.m. State Capitol, Conference Room 325

#### in consideration of HB2728 RELATING TO ENERGY

Chairs Lee and Aquino, Vice Chairs Lowen and Quinlan, and Members of the Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) offers **comments** on HB2728, which focuses on reducing and ultimately eliminating the use of fossil fuels in all public ground transportation by 2035.

Focusing on converting public ground transportation to clean transportation is consistent with DBEDT's support of near-term actions directly within the State's control. Eliminating fossil fuel in public ground transportation demonstrates the State's commitment to lead by example and is an essential step towards the decarbonization of transportation in Hawaii.

We offer the following suggestions for your consideration. DBEDT suggests the intent of this bill, "Public ground transportation" should be defined and clarify that State and County fleets are subject to the 2035 goal.

DBEDT also suggests that a feasibility study be included in HB2728 to identify a framework for the State to achieve the 2035 goal based on real-world cost impacts and presently available vehicle technologies. Findings from the feasibility study will enable DBEDT, in collaboration with the Department of Transportation and other relevant State agencies as well as the counties, to develop and implement a plan to transition their

fleets to 100% clean energy. Due to the need for a feasibility study, the implementation of a plan beginning in 2018 would be difficult to meet.

The near-term target benchmark of no less than 10% reduction in fossil fuel consumption in ground transportation by 2025 could be unrealistically aggressive and achieving the goal depends on factors outside the State's control. It would be beneficial to have a feasibility study, Forum discussions, and then the recommendation of an achievable benchmark from the Clean Ground Transportation Forum to better inform DBEDT's position on setting statutory benchmarks as identified in HB2728, Section 3, page 6, line 21.

We note that a 10% reduction in fossil fuel consumption is roughly equivalent to 100,000 Electric Vehicles (EV), thus 20% of all new vehicles sold in Hawaii through 2025 would need to be EVs. Hawaii is a national leader in EV adoption per capita; however, Hawaii's current EV market represents roughly 2% of annual vehicle sales in the State. While EV adoption would not be the only strategy to achieve a 10% reduction in fossil fuel consumption, it would be a significant contribution. The Clean Ground Transportation Forum could help identify a variety of concerns and strategies.

Thank you for the opportunity to provide comments on HB2728.

LEO R. ASUNCION

DIRECTOR OFFICE OF PLANNING

# OFFICE OF PLANNING STATE OF HAWAII

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Statement of LEO R. ASUNCION

Director, Office of Planning before the

## HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION AND

#### HOUSE COMMITTEE ON TRANSPORTATION

Tuesday, February 13, 2018

11:00 AM State Capitol, Conference Room 325

in consideration of HB 2728
RELATING TO CLEAN ENERGY TRANSPORTATION.

Chairs Lee and Aquino, Vice Chairs Lowen and Quinlan, and Members of the House Committees on Energy & Environmental Protection and Transportation.

The Office of Planning (OP) supports the intent of HB 2728, which establishes a Clean Transportation Initiative to reduce and ultimately eliminate the use of fossil fuels in all public ground transportation by 2035, and in all ground transportation, with a near term 2025 target benchmark. It also requires the Department of Transportation to collaborate with the Department of Business, Economic Development, and Tourism to achieve the goals of the Clean Transportation Initiative.

OP agrees with the proposed amendments to Section 226-17, Hawaii Revised Statutes, to increase energy security and self-sufficiency through the reduction and ultimate elimination of the use of fossil fuels in all public ground, however we defer to the Department of Transportation and State Energy Office regarding the target benchmarks and fiscal/procedural implementations of achieving these benchmarks.

Thank you for the opportunity to testify on this matter.

### OFFICE OF INFORMATION PRACTICES

STATE OF HAWAII NO. 1 CAPITOL DISTRICT BUILDING 250 SOUTH HOTEL STREET, SUITE 107 HONOLULU, HAWAII 96813

TELEPHONE: 808-586-1400 FAX: 808-586-1412

EMAIL: oip@hawaii.gov

To: House Committees on Energy and Environmental Protection

and on Transportation

From: Cheryl Kakazu Park, Director

Date: February 13, 2018, 11:00 a.m.

State Capitol, Conference Room 325

Re: Testimony on H.B. No. 2728

Relating to Clean Energy Transportation

Thank you for the opportunity to submit testimony on this bill, which would establish a Clean Transportation Initiative. The Office of Information Practices ("OIP") takes no position on the substance of this bill, but is testifying to recommend a technical amendment to a provision specifying that the Clean Ground Transportation Forum is not subject to the Sunshine Law.

It does not appear that the Clean Ground Transportation Forum would be a meeting of a board subject to the Sunshine Law in any event, so OIP does not have concerns about specifically stating that it is not subject to the Sunshine Law. However, the Sunshine Law is only part I of chapter 92, HRS, whereas this bill (at page 5, lines 1-3) exempts the Forum from all of chapter 92, including miscellaneous provisions on copy fees for government records and general powers of boards. A Sunshine Law exemption should be from "part I of chapter 92" only, so OIP recommends that the reference to "chapter 92" on page 5, line 3, be replaced with "part I of chapter 92."

Thank you for the opportunity to testify.





#### Testimony by:

JADE T. BUTAY INTERIM DIRECTOR

Deputy Directors ROY CATALANI ROSS M. HIGASHI EDWIN H. SNIFFEN DARRELL T. YOUNG

IN REPLY REFER TO:

## STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

February 13, 2018 11:00 a.m. State Capitol, Room 325

## H.B. 2728 RELATING TO CLEAN ENERGY TRANSPORTATION.

House Committees on Energy and Environmental Protection & Transportation

The Department of Transportation (DOT) offers **comments** on this bill which fosters the State's transition to one hundred percent clean ground transportation in partnership with the State Energy Office.

The DOT facilitates discussions on this topic with the Sustainable Transportation Forum which recognizes the dynamic challenges and complexities of achieving the aspirations of even the near-term benchmark of no less than 10% reduction in fossil fuel consumption in ground transportation by 2025. In order for the State to succeed, a framework and metrics that measures success are strongly suggested.

The DOT is committed through its zero-emissions vehicle fleet replacement plan to lead by example, which operationally is within the State's control. Personal vehicles, industry motor fleets and public transportation are outside the DOT's jurisdiction.

The DOT appreciates its Sustainable Transportation Forum for providing stakeholders of various transportation sectors discussion opportunities to ensure that environment, social, and economic considerations are factored into decisions affecting transportation activities that can be sustained into the indefinite future without causing irreparable harm to future generations of Hawaii.

Thank you for the opportunity to provide testimony.

<u>HB-2728</u> Submitted on: 2/12/2018 8:26:18 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	OCC Legislative Priorities	Support	No

Comments:



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

## HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION AND TRANSPORTATION Transfer Enhance 12, 2019 11,00 a.m. Page 225

Tuesday, February 13, 2018 — 11:00 a.m. — Room 325

## Ulupono Initiative <u>Strongly Supports</u> HB 2728, Relating to Clean Energy Transportation

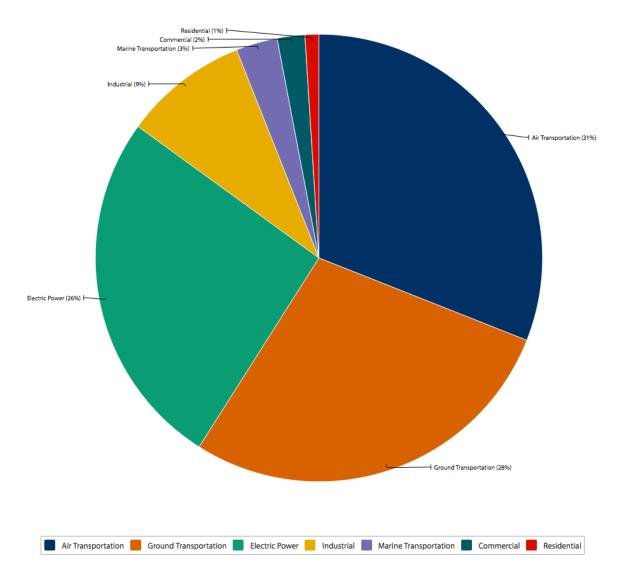
Dear Chair Lee, Vice Chair Lowen, Chair Aquino, Vice Quinlan, and Members of the Committees:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and better management of waste and fresh water. Ulupono believes that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

**Ulupono** <u>strongly supports</u> **HB 2728**, which establishes a clean transportation initiative, because it aligns with our goal of increasing the production of clean, renewable energy in Hawai'i.

In Hawai'i, while  $\sim\!20$  percent of electricity generation is renewable energy, less than 1 percent of energy use in transportation is renewable. Meanwhile, the transportation sector requires more energy than the electricity sector. Furthermore, about 28 percent of the state's primary energy usage is due to ground transportation, such as cars and trucks, which rely almost exclusively on imported fossil fuels for its energy. Electrifying ground transportation is presently the most efficient and impactful way to move transportation toward more renewable energy.





Yet, to fundamentally change the transportation sector from an imported fossil fuel based system to a renewable fueled sector is a monumental task. It will require leadership, collaboration, public support, financing, and patience with diligence. From prior experience working to make the electricity sector more renewable, it was extremely helpful that the State set goals and targets so that the public and private sector could work together to set goals and strategies to achieve them.

Aspirational goals are important to change mindsets and actions. For example, Hawaiian Electric's goal of 70 percent renewable electricity generation by 2030 was considered impossible at the time it was proposed, but now it is on the path to meet that ambitiously aspirational goal.

Since the transportation sector currently does not have goals, it has been difficult to bring all of the necessary stakeholders together and work on a common blueprint. The State is also the only authority with enough power to set the necessary statewide transportation



targets and motivate key stakeholders to work toward a common goal.

This bill is an important first step for Hawai'i to continue to reduce to dependence on imported fossil fuels.

As Hawai'i's energy issues become more complex and challenging, we appreciate these committees' efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay Managing Partner

#### **HB-2728**

Submitted on: 2/8/2018 3:54:30 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Hawaiian Civic Club of Honolulu	Support	No

#### Comments:

I fully support the intiative to be 100 percent clean ground transportation and eliminate the use of fossil fuels. As mentioned in the house bill, "The continued use of fossil fuels contributes to climate change, which poses a serious threat to the State's economy, public health, natural resources, and environment. Climate change is killing Hawaii's reefs and causing sea level rise, which is expected to result in \$19,000,000,000 in losses of coastal residences, businesses, and infrastructure. Climate change also poses a serious threat to public health by increasing the incidence of infectious diseases, asthma, and other health-related problems."

#### HB-2728

Submitted on: 2/10/2018 11:58:57 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Jake Andrews	Surfrider Foundation	Support	No	

#### Comments:

Aloha Honolulu County Council Members,

I am writing to you on behalf of the Surfrider Foundation's Oahu Chapter, in strong support, relating to the Clean transportation initiative on the island of Oahu.

My name is Jake Andrews and I love in the Honolulu county, off of Ward and the Kinau exit. Every morning I see the massive amounts of cars in traffic on H1 from my apartment windows. I do my part every day by riding an electric skateboard as my form of travel. I know not everyone can do this and its not entirely clean but passing this bill will help get hawaii and the entire world closer to clean energy transportation and move away from the use of fossil fuels.

Imagine if all the cars in that traffic were electric and were made and run by clean energy or other forms of renewable energy... its an amazing opportunity to be apart of and you have the power to make the choice and change.

Mahalo,

Jake Andrews

Surfrider Core Volunteer



49 South Hotel Street, Room 314 | Honolulu, HI 96813 www.lwv-hawaii.com | 808.531.7448 | voters@lwv-hawaii.com

## HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION HOUSE COMMITTEE ON TRANSPORTATION

Tuesday, February 13, 2018, 11 AM, Conference Room 325 HB 2728, Relating to Clean Energy Transportation **TESTIMONY** 

Douglas Meller, Legislative Committee, League of Women Voters of Hawaii

Chair Lee, Chair Aquino, and Committee Members:

**The League of Women Voters has concerns with HB 2728.** This bill establishes state policy and mandates state planning and initiatives to reduce use of fossil fuels for ground transportation.

The League opposes exemption of the proposed clean ground transportation forum from the Sunshine Law (Chapter 92, Hawaii Revised Statutes). And the League suggests that use of fossil fuels for air transportation is a larger problem than use of fossil fuels for ground transportation. According to the U.S. Energy Administration's website, "The transportation section accounted for more than half (51%) of Hawaii's total energy demand in 2015, led by jet fuel use."

Thank you for the opportunity to submit testimony.

<u>HB-2728</u> Submitted on: 2/11/2018 9:00:28 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Joan Gannon	West Hawaii CHC	Support	No	Ī

Comments:



To: The House Committees on Energy & Environmental Protection, and Transportation

From: Brodie Lockard, 350Hawaii.org, 808-262-1285

Date: Tuesday, February 13, 2018

#### In strong support of HB 2728

Dear Chairs Lee and Aquino, Vice Chairs Lowen and Quinlan and Committee members,

I am the founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org strongly supports HB 2728, with an amendment.

As of January 2018 there were 6,748 passenger electric vehicles in the state, out of 1,062,518 total registered passenger vehicles, or an anemic 0.64 percent [1]. We should be doing everything we can to increase that percentage.

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will greatly reduce Hawaii's greenhouse gas emissions.

Beyond the obvious advantage of reducing greenhouse gases, zero-emission vehicles (ZEVs) provide many benefits:

ZEVs have lower maintenance costs because there are usually fewer fluids to change and far fewer moving parts. They have lower fuel costs, and many charging stations here are free. Even at today's low gas prices, charging an electric vehicle on the typical residential rate may save about 35 percent of fuel costs, compared to a similar-sized gasoline-powered sedan [3].

The prices of ZEVs and replacement batteries continue to drop, while the number of available ZEV models continues to increase. The charging time of ZEVs continues to fall, while their range and the number of charging stations in the State continues to climb.

ZEVs get free parking in state and municipal lots and street spaces, plus access to high-occupancy lanes with only a driver on board.

Please support HB 2728. It will go very far toward making our clean energy goals a reality.

Thank you for the opportunity to testify.

- [1] http://files.hawaii.gov/dbedt/economic/data\_reports/energy-trends/Energy\_Trend.pdf
- [2] https://www.eia.gov/state/analysis.php?sid=HI
- [3] https://www.hawaiianelectric.com/clean-energy-hawaii/electric-vehicles

Brodie Lockard 350Hawaii.org









## HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION HOUSE COMMITTEE ON TRANSPORTATION

February 13, 2018, 11:00 A.M.
Room 325
(Testimony is 2 pages long)

#### **TESTIMONY IN STRONG SUPPORT OF HB 2728**

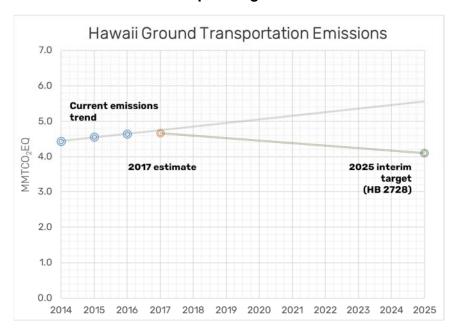
Aloha Chairs Lee and Aquino, Vice Chairs Lowen and Quinlan, and members:

Blue Planet Foundation **strongly supports** HB 2728, establishing a Hawaii clean transportation initiative within the Department of Transportation. This bill will help to promote alignment and collaboration in ongoing and future planning efforts for multiple aspects of the state's transportation energy sector.

Over one million gasoline-powered vehicles are on Hawaii's roads—and from them comes nearly five million metric tons of climate-changing carbon pollution. What's worse, while Hawaii has made good progress in reducing its carbon emissions from the electricity sector, emissions from ground transportation have been increasing in recent years.

This, in part, inspired the mayors from all four of Hawaii's counties in December, 2017, to pledge to transform ground transportation to 100 percent renewable fuel by 2045. The purpose of their action was to set a vision for clean, modern mobility options for all. This goal is necessary and achievable. The state should support these county goals with a complementary initiative to coordinate stakeholders and planning across the islands.

Registrations of electric vehicles (EVs)—one form of increasingly clean transportation—in Hawaii are growing faster than any other type of vehicle. State records show that EV registrations grew by 14% in 2016 while gas vehicle registrations dropped. In the past three years, the percentage of electric vehicles on our roadways grew 113% while gas cars dropped 5%. If those trends hold, electric vehicles will dominate within a couple



of decades—well before the 2045 goal.

There is every reason to believe these trends will accelerate. Nearly all automakers are moving to electric drivetrains for some or all of their vehicles. Toyota just announced that they will provide an electric option of every model they sell by 2025. In October, General Motors announced it is working to create an "all-electric future" and will develop 20 new electric models by 2023. Ford has committed to 13 new electric vehicles by 2023. Mercedes-Benz plans to electrify its entire portfolio by 2022, offering 50 electric and hybrid models. Volvo is going completely electric by 2019, and Volkswagen will have 300 EV or hybrid models by 2030.

While it's true that it will take some years to turn over the existing fleet of private vehicles that residents own, few of the cars on Hawaii's roads today will still be operating in three decades. The economics, comfort, and superiority of electric vehicles will win.

But it's critical that we manage this transition to clean transportation wisely. Electric vehicles and other forms of clean transportation can be an asset or a liability to our broader energy systems—how they are deployed makes the difference. A statewide clean transportation initiative will play a key role in managing that deployment. Coordination, smart policies, programs, and infrastructure are needed to enable everyone to make the change to cleaner transportation.

Many electric vehicles are already more affordable to own and operate than gas vehicles due to the fuel and maintenance cost savings. As manufacturing scales up, prices of electric vehicles continue to fall. Bloomberg Energy Finance projects that initial sale prices for new electric vehicles will be comparable with gas cars by 2022, and Merrill Lynch analysts expect it to happen by 2024.

The shared vision for 100 percent clean transportation isn't just about electric vehicles. Many vehicles today can use renewable alternative fuels such as locally produced biofuels and biodiesel. It also means more walking, biking, and public transportation opportunities—hallmarks of livable communities.

With the mayors' proclamations last December, Hawaii joined the ranks of several countries who have also recognized that fossil fuel-powered ground transportation needs to end. **Both France and Britain have set a target phasing out the sale of new gas cars by 2040**. India set a similar goal for 2030. Belgium, Sweden, and Norway are developing policies to do the same. Earlier this year, China announced plans to electrify its entire vehicle fleet.

These countries recognize the environmental imperative for setting long-term transportation policies. Here, policy is key, as the market fails to account for the environmental and social cost of carbon pollution from vehicles today.

A century ago, Hawaii moved quickly from horse-driven carriage to cars. Now, with a statewide concerted effort, we can put climate changing fossil fuels in our rearview mirror.

We urge these committees to advance HB 2728.

HB-2728 Submitted on: 2/11/2018 8:38:37 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	We Are One, Inc www.WeAreOne.cc - WAO	Support	No

Comments:

www.WeAreOne.cc



### Hawai'i Interfaith Power and Light

A religious response to global warming



To: Committees on Energy & Environmental Protection (EEP) and Transportation (TRN)

From: Hawaii Interfaith Power & Light (HIPL)

Date: Tuesday, February 13, 2018

Time: 11:00 a.m.

Place: Conference Room 325, State Capitol, 415 South Beretania Street

Re: Support for HB2728, Relating to Clean Energy Transportation.

Aloha e Chairs Lee and Aquino, Vice Chairs Lowen and Quinlan, and Members of the Committees on Energy & Environmental Protection and Transportation,

My name is Steve Lohse, I'm an environmental scientist and Legislative Liaison for Hawaii Interfaith Power & Light (HIPL). HIPL's interfaith community affirms and promotes responsible policy and effective action on energy and climate change. On behalf of HIPL, thank you for this opportunity to submit **Testimony in Support of HB2728** for the following reasons:

- (1) Hawaii commits by law to recognize the need to reduce reliance on fossil fuels, to consider levels and effects of greenhouse gas emissions, and to transition away from imported fuels and toward renewable local resources that provide secure and affordable energy. Please, do everything in your power at every opportunity to establish 100% clean and renewable energy for Hawaii without delay.
- (2) Fossil fuels will continue to decrease security and increase economic and environmental costs, both globally and locally, until Hawaii is fossil free. The cost of doing nothing far outweighs the cost of our transition to a fossil-free society! As quickly as possible, please eliminate the use of fossil fuels from all ground transportation.
- (3) Please make it as easy as possible for all transportation stakeholders to engage, but **please hold all stakeholders accountable** for their responsibilities in this critical fossil-free initiative.

With a sense of urgency for the effective stewardship of our community, our economy, and our environment, we rely on your leadership to help transition Hawaii to secure, affordable, 100% clean and renewable transportation energy without delay. As always, thank you for all that you do!

Aloha no,

Hawaii Interfaith Power & Light (HIPL)

Steve Lohse, HIPL Legislative Liaison, 808-499-5406, <a href="lohse@hawaii.edu">lohse@hawaii.edu</a>

HIPL embraces the following goals:

- raise awareness of the deeply spiritual nature of energy and climate challenges;
- advocate energy policies that promote conservation, efficiency, and renewables;
- provide inspiration, resources, leadership, and education for effective action and community building.

# HOUSE OF REPRESENTATIVES THE TWENTY-NINTH LEGISLATURE REGULAR SESSION OF 2018

#### **COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION**

Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

#### **COMMITTEE ON TRANSPORTATION**

Rep. Henry J.C. Aquino, Chair Rep. Sean Quinlan, Vice Chair

#### **NOTICE OF HEARING**

DATE: Tuesday, February 13, 2018

TIME: 11:00 a.m.

PLACE: Conference Room 325

State Capitol

415 South Beretania Street

#### Hawaii Bioeconomy Trade Organization

Position: Support with Comments

We give testimony in support for **HB2728**. However, with strong recommendation towards including both Air and Marine Transportation in the overall goal. When we consider the complete energy and fuel supply and consumption stack we must consider all sectors and not merely one. 33% of the fuel consumed goes to air transportation, with another 28% going to marine consumption. We suggest a more holistic approach to these energy security concerns so that we may transition more deliberately and not cause unintended stress and strain in other sectors.

CAAFI, Alaska Airlines and many other stakeholders have committed to alternative fuel sources. We can, once again, provide the leadership as a State as we address our peculiar energy needs.

Many thanks for your time and consideration

Carl Campagna
Executive Director
Hawaii Bioeconomy Trade Organization
808-383-7699
Ccampa1@msn.com



February 12, 2018 DATE:

TO: Representative Chris Lee

Chair, Committee on Energy & Environmental Protection

Representative Henry Aquino Chair, Committee on Transportation

Submitted Via Capitol Website

RE: H.B. 2728 – Relating to Clean Energy Transportation

Hearing Date: Tuesday, February 13, 2018 at 11:00 a.m.

**Conference Room: 325** 

Dear Chairs Lee and Aguino and Members of the Joint Committees:

On behalf of the Alliance of Automobile Manufacturers ("Alliance"), we submit this testimony regarding H.B. 2728. The Alliance is a trade association of twelve car and light truck manufacturers including BMW Group, Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of North America, and Volvo Car USA.

The Alliance supports efforts to increase the penetration of alternative fuel vehicles and to increase the availability of supporting infrastructure. Automobile manufacturers have invested heavily in the research and development of alternative fuel vehicles, and respect efforts to reduce petroleum consumption in the transportation sector. Alliance members are investing \$100B into the electrification of their vehicles by 2025.

An increase in electric vehicles also requires a corresponding increase in the number of charging stations. Generally, 1 charging station is necessary for every 10 electric vehicles in the State. While the Alliance fully supports and moves towards electrification, they also realize that cooperation with the State and the Counties is necessary to ensure a smooth transition to electric vehicles.

The Alliance does have concerns over the term "public ground" transportation." Neither the current law nor H.B. 2728 defines this term. We ask that the committee include a definition of "public ground transportation," that excludes private motor vehicles.

Thank you for the opportunity to testify on this measure.

<u>HB-2728</u> Submitted on: 2/12/2018 10:59:28 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Milholen	Kokua Hawaii Foundation	Support	No

Comments:



#### **TESTIMONY REGARDING HB 2728**

# being heard by the House Committee on Energy and Environmental Protection and the House Committee on Transportation on Tuesday, February 13, 2018 at 11:00 a.m. Room 325

Aloha Chair Lee, Chair Aquino and Members of the Committees:

Thank you for the opportunity to provide testimony regarding HB 2728, which seeks to facilitate efforts to reduce and ultimately eliminate Hawaii's dependence on fossil fuels in the transportation sector. Tesla supports establishing such a target as a means to drive near and long-term policy development, which will result in the type of progress in eliminating reliance on fossil fuels commensurate with the challenge that ongoing dependency on fossil energy represents. Tesla also supports the bill's language regarding electric vehicles (EVs). As the bill recognizes, transitioning to EVs offer myriad benefits, including economic and public health benefits. Additionally, as Hawaii increasingly relies on renewable energy to meet its electrical needs, EVs have an important role to play in integrating these resources in the energy system.

Although Tesla supports this bill and the establishment of a clean transportation initiative as described therein, it should be noted there are a number of barriers that are clearly understood today which HB 2728 could and should be expanded to address. In particular, the State need not wait for the recommendations coming out of the envisioned clean transportation initiative before taking steps to address some of these well-understood barriers to electric vehicle adoption. Chief among these is limited access to EV charging. Particularly for those living in multi-unit dwellings, the absence of readily accessible charging greatly limits the willingness of residents to purchase or lease an electric vehicle, despite the many advantage that EVs offer relative to conventional vehicles.

Tesla is a proponent of the concept of "charge where you park" not "park where you charge". In other words, access to charging needs to be sufficiently ubiquitous so as not to require significant behavioral changes or additional burden on those adopting EVs. Addressing this will require significant investment in EV charging infrastructure, especially in locations such as parking structures where vehicles are typically parked for an extended period, like those facilities serving multi-unit dwellings and workplaces. By deploying level 2 charging infrastructure in these locations, as well as in commercial buildings, the State could significantly address one of the key barriers preventing more widespread adoption of EVs. To that end, Tesla recommends two substantive amendments to the bill:

First, the Hawaii Public Utilities Commission should be directed to invite applications from the State's electric utilities to support utility investment in EV charging infrastructure. These investment plans should be tied to a goal of supporting at least 250,000 electric vehicles on Hawaii's roads by 2045 and should prioritize the deployment of level-2 EV charging infrastructure in multi-unit buildings, workplaces or commercial buildings.



Second, the State Building Code Council should promulgate regulations that require all new or significantly renovated parking facilities with two or more spaces serving multi-unit dwellings, workplaces or commercial buildings to include "EV-Ready" infrastructure on at least 20% of the parking spaces, with minimum infrastructure to support at least one EV space per parking facility. "EV-ready" infrastructure refers to all of the conduit, wiring, electrical panel capacity, breaker space and other equipment necessary to bring sufficient power to parking spaces at a minimum of 240V/40 Amperes capacity per space.

We believe the inclusion of these two proposed amendments would significantly change the trajectory of EV adoption in Hawaii, by addressing one of the fundamental barriers that currently limits customer adoption.<sup>1</sup>

We look forward to working with the Chairs Lee and Aquino and other stakeholders, including the electric utilities, the Public Utilities Commission and the State Building Code Council to explore and further flesh out these ideas to ensure the development of a robust and effective policy that balances the needs and interests of all.

Thank you for the opportunity to submit this testimony.

<sup>&</sup>lt;sup>1</sup> A copy of our proposed amendments is attached for the Committees' consideration.

#### Report Title:

DOT; DBEDT; Renewable Energy; Clean Transportation Initiative

#### Description:

Establishes a clean Transportation Initiative to reduce and ultimately eliminate the use of fossil fuels in all public ground transportation by 2035, and in all ground transportation, with a near term 2025 target benchmark. Requires the Department of Transportation to collaborate with the Department of Business, Economic Development, and Tourism to achieve fthe goals of the Clean Transportation Initiative. Clarifies that the transportation objectives of the State Planning Act include the reduction and ultimate elimination of the use of fossil fuels in all public ground transportation by 2035, and in all ground transportation thereafter. Repeals the Initiative on 1/31/2046.

### A BILL FOR AN ACT

RELATING TO CLEAN ENERGY TRANSPORTATION.

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that Hawaii's dependence on imported fossil fuels drains the state economy of billions of dollars each year. In addition, the volatility of imported fuel prices creates significant risks for the economy and adds to the cost of living for local families.

The legislature notes that on a per mile basis, it is significantly less expensive to commute in an electric vehicle than it is to commute in a gas-powered automobile. Residents can lower their cost of living by relying on local renewable energy for transportation, and by transitioning to less expensive renewable vehicles and transportation systems.

The legislature further finds that autonomous electric vehicles already operating on public roads in cities around the country. The emergence of these vehicles signals an approaching revolution in transportation that has the potential to dramatically reduce costs for consumers and change the way people commute. However, in order for local consumers and families to benefit from these changes and properly transition away from expensive fossil fuel vehicles, Hawaii must be prepared with critical infrastructure elements, such as electric vehicle charging stations.

The legislature further finds that widespread adoption of electric vehicles can benefit the grid by helping integrate increasing amounts of renewable generation serving Hawaii's electricity needs.

The legislature further recognizes that the challenge associated with limited charging infrastructure to support electric vehicle adoption is especially acute at multi-unit dwellings and workplaces.

The legislature further finds that the continued use of fossil fuels contributes to climate change, which poses a serious threat to the State's economy, public health, natural resources, and environment. Climate change is killing Hawaii's reefs and causing sea level rise, which is expected to result in

## H.B. NO.

\$19,000,000,000 in losses of coastal residences, businesses, and infrastructure. Climate change also poses a serious threat to public health by increasing the incidence of infectious diseases, asthma, and other health-related problems.

The purpose of this Act is to begin the State's transition to one hundred percent clean ground transportation in Hawaii by:

- (1) Establishing a clean ground transportation initiative to reduce and ultimately eliminate the use of fossil fuels in:
  - (A) All public ground transportation by 2035 and
  - (B) All ground transportation, which includes a near term 2025 target benchmark;
- (2) Requiring the department of transportation to collaborate with the state energy office to assist stakeholders in making all public ground transportation clean transportation by 2035, and to identify a plan to and develop recommendations to help make all ground transportation clean transportation; and
- (3) Clarifying that the transportation objectives of the State Planning Act include the reduction and ultimate elimination of the use of fossil fuels in all public ground transportation by 2035, and in all ground transportation thereafter.
- (4) Requiring the Hawaii Public Utilities Commission to direct the state's electric utilities to submit applications for programs and investments to drive the deployment of charging infrastructure necessary to support 50,000 electric vehicles by 2025, 100,000 electric vehicles by 2030 and 250,000 electric vehicles by 2045.
- (5) Requiring the State Building Code Council to develop and promulgate regulations regarding the deployment of electric vehicle (EV) ready infrastructure in newly constructed and significantly renovated parking facilities serving multi-unit dwellings, workplaces and commercial buildings.

SECTION 2. Chapter 264, Hawaii Revised Statutes, is amended by adding a new section to part I be appropriately designated and to read as follows:

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## H.B. NO.

§264- Hawaii clean transportation initiative. (a) The department of transportation, in collaboration with the state energy office of the department of business, economic development, and tourism shall: (1) Assist stakeholders with planning to reduce and ultimately eliminate the use of fossil fuels in all public ground transportation by 2035, as identified Section 196-10.5(a)(8); (2) Identify a plan to deploy necessary infrastructure and make progress toward the one hundred per cent clean ground transportation goals of reducing and ultimately eliminating the use of fossil fuels in all ground transportation, as identified in in section 196-10.5(a)(9); (3) Develop recommendations regarding the additional steps necessary to help achieve the goals of this section; and (4) Convene stakeholders in a clean ground transportation forum to solicit input on the department of transportation's clean transportation activities and implement any changes that will help achieve the goals of this section. (b) the department of transportation shall include recommendations as developed pursuant to this section in the report the department submits annually to the legislature pursuant to part II of Act 100, Session Laws of Hawaii 1999, as amended by Act 154, Session Laws of Hawaii 2005. (c) The clean ground transportation forum convened by the department pursuant to this section shall not be subject to chapter 92. (d) For purposes of this section, "clean transportation" means ground transportation that does not consume fossil fuels. SECTION 3. Section 196-10.5, Hawaii Revised Statutes, is amended by amending subsection (a) to read as follows: (a) There is established within the department of business, economic development, and tourism, a Hawaii clean energy initiative program to manage the State's transition to a clean energy economy. The clean energy program shall design, implement, and administer activities that include: (1) Strategic partnerships for the research, development, 40 testing, deployment, and permitting of clean and renewable technologies;

- (2) Engineering and economic evaluations of Hawaii's potential 1
- 2 for near-term project opportunities for the State's renewable
- 3 energy resources;
- 4 (3) Electric grid reliability and security projects that will
- 5 enable the integration of a substantial increase of electricity
- 6 from renewable-energy resources;
- 7 (4) A statewide clean energy public education and outreach plan
- 8 to be developed in coordination with Hawaii's institutions of
- 9 public education;
- **10** (5) Promotion of Hawaii's clean and renewable resources to
- 11 potential partners and investors;
- 12 (6) A plan, to implemented from 2011 to [2030]2045 to transition
- 13 the State to a clean energy economy;
- 14 (7) A plan, to be implemented from 2011 to [2030] 2045 to assist
- each county in transitioning to a clean energy economy; 15
- **16** (8) A plan, to be implemented between 2018 and 2035, to reduce
- **17** and ultimately eliminate the use of all fossil fuels in public
- 18 ground transportation by 2035; and
- 19 (9) A plan, to be implemented beginning in 2018, to deploy
- 20 necessary infrastructure and make progress toward the one
- 21 hundered per cent clean ground transportation goals of reducing
- 22 and ultimately eliminating the use of fossil fuels in all ground
- 23 transportation; provided the plan and its implementation shall
- 24
- not achieve less than a ten percent reduction in fossil fuel
- 25 consumption relative to 2015 levels by 2025, and shall include
- **26** metrics to measure an evaluate progress toward the goals of this
- 27 section; provided further that two years prior to the completion
- 28 of the plan and every five years thereafter, a report shall be
- 29 submitted to legislature that includes:
- **30** (A) Progress towards the established target benchmark; and
- 31 (B) A new target benchmark for the reduction of fossil fuel
- **32** consumption in ground transportation for the subsequent five
- 33 years."

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- 1 SECTION 4. Section 226-17, Hawaii Revised Statutes, is amended to read as follows:
- 3 "(a) Planning for the State's facility systems with regard to
  4 transportation shall be directed towards the achievement of the
  5 following objectives:
- 10 (2) A statewide transportation system that is consistent with
  11 and will accommodate planned growth objectives throughout
  12 the State; and
- 13 (3) Increased energy security and self-sufficiency through the reduction and ultimate elimination of the use of fossil fuels in all public ground transportation by 2035, and in all ground transportation thereafter."
- 17 Section 5. Section 269, Hawaii Revised Statutes, is amended by adding a new section entitled Clean Ground Transportation
  19 Infrastructure to read as follows:
- 20 "(1) The Hawaii Public Utilities Commission shall direct 21 Hawaiian Electric Company, Inc.; Maui Electric Company, Limited; 22 Hawaii Electric Light Company, Inc. and Kauai Island Utility 23 Cooperative to file applications for programs and investments to 24 accelerate the widespread deployment of electric vehicle charging infrastructure sufficient to support 50,000 battery 25 **26** electric vehicles by 2025, 100,000 battery electric vehicles by 27 2030, and 250,000 vehicles by 2045.
  - (2) By January 1, 2019 the Commission shall, in consultation with the Department of Transportation and the State Energy Office, issue guidelines to the utilities to inform their applications. In developing these guidelines, the Commission shall ensure the following:
- 33 (a) The utility applications shall be submitted to the Commission no later than April 1, 2019.

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- 1 (b) The applications prioritize the deployment of EV charging infrastructure in multi-unit dwellings, workplaces and commercial buildings.
- 4 (c) The applications allocate at least ten percent of the 5 funding in support of the objectives of the section toward the deployment of EV charging infrastructure in low-income and disadvantaged communities.
- 8 (d) The applications consider and address electrification 9 of medium and heavy-duty vehicles in addition to light duty vehicles.
- 11 (3) The Commission shall approve, or modify and approve, the
  12 applications for proposed programs and investments of an
  13 electrical corporation in electric vehicle charging
  14 infrastructure by August 1, 2019.
- initiastructure by August 1, 2019.
- 15 SECTION 6. Section 107, Part II, Hawaii Revised Statutes, is
  16 amended to read as follows:
- 17 (1) No later than April 1, 2019, the State Building Code
  18 Council shall promulgate regulations regarding the deployment of
  19 EV-Ready Infrastructure in newly constructed or substantially
  20 renovated parking facilities serving multi-unit dwellings and
  21 workplaces.
  - a) These regulations shall require that at least 20% or at least one space, whichever is greater, of parking spaces in each parking facility of two spaces or more and permitted to be constructed or significantly renovated after June 31, 2019, serving a multi-unit dwelling, workplace, or commercial building shall be equipped with EV Make-Ready Infrastructure.
- 28 SECTION 6. Section 107-21, Hawaii Revised Statutes, is amended 29 to read as follows:
- "EV Ready Infrastructure" is defined as all of the conduit,
  wiring, electrical panel capacity, breaker space and other
  equipment necessary to bring sufficient power to parking spaces
  at a minimum of 240V/40 Amperes capacity per space.
- 34 SECTION 57. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

- 1 SECTION 86. This Act shall take effect upon its approval;
- 2 provided that section 2 of this Act shall be repealed on January
- **3** 31, 2046.



### HB-2728

Submitted on: 2/13/2018 7:57:47 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Robert King	Pacific Biodiesel Technologies	Support	No

### Comments:

Pacific Biodiesel is in strong support of the intent of this bill. We applaud all efforts to move transportation towards 100% renewable fuel.





### HADA TESTIMONY WITH COMMENTS On HB2728

#### RELATING TO CLEAN ENERGY TRANSPORTATION

Presented to the House Committee on Energy and Environmental Protection and the House Committee on Transportation
At the Public Hearing, 11 a.m. Tuesday, February 13, 2018
Conference Room 325, Hawaii State Capitol

Chairs Lee and Aquino, Vice Chairs Lowen and Quinlan, and members of the committees:

The members of the Hawaii Automobile Dealers Association, Hawaii's franchised new car dealers, appreciate the opportunity **to offer comments** on this bill which proposes to establish a Clean Transportation Initiative to reduce and ultimately eliminate the use of fossil fuels in all public ground transportation by 2035, and all ground transportation, with a near term 2025 target benchmark.

Hawaii's new car dealers have been ardently pursuing the clean energy goals set by the Hawaii Clean Energy Initiative, established in 2008, which included a goal period ranging from 2010 to 2030. This bill proposes new goals in the ground transportation sector extending out through 2045

Hawaii's new car dealers anticipate that the uptake of electric vehicles and hydrogen fuel cell electric vehicles will accelerate as more of these renewable energy vehicles become available, and as China, the world's largest motor vehicle market moves in the same direction.

New car dealers have already worked to bring electric vehicles to the islands, installed charging infrastructure, and helped to make Hawaii second only to California in per-capita electric vehicle ownership. Dealers look forward to working with public and private stakeholders to make sure that infrastructure is in place to allow every household to affordably own and operate a renewable fuel vehicle.

Dealers point out, however that they can sell only what their customers are willing to buy and the manufacturers are willing to make, and EVs will have to make economic sense for broad-based-customer uptake to take place.

In our association's most recent *HawaiiDealer* magazine, HADA president Brian Kitagawa wrote:

"The electrification factor in the auto industry has become a focus of much discussion."

"Governor David Ige issued an executive order (EO 07-17) November 22, 2017, involving HADA and the UH Engineering Department in the development of the a driverless bus as a shuttle to the rental car facility at the Daniel K. Inouye International Airport. Driverless technology involves much electrification in transportation."

"Less than a month later, on December 12, 2017, Hawaii's four county mayors issued a joint proclamation, with the Hokule'a in the background, which set a goal for 100% renewable energy in ground transportation through 2045—making Hawaii as the first state in the nation with all its counties having set such a 100% goal."

Auto industry projections, however, show that the efficiencies produced by gasoline engines and gasoline-electric plug-in hybrid vehicles will continue to play a role through 2045—while 100% renewable energy in vehicles will comprise a large portion of the energy powering vehicles on the roadways in 2045."

There is no question, however, that the electrification factor, is proving to be a major influence affecting what we'll see in the auto industry over the next three decades."

In comments today appearing on the auto wires, Peter Welch, president and CEO of the National Automobile Dealers Association, wrote about the advent of the electrification of the car. His commentary is presented here in our testimony, in its entirety, because it offers insights into the goal process in California and the predicted national adoption rates for EVs.

#### By Peter Welch, NADA, President & CEO

This is an incredibly exciting time to be in the transportation industry.

New cars and trucks are safer and more efficient than ever. Automakers are introducing new technologies every day and will be deploying scores of new models with technologically advanced drivetrains and other features in the coming years. Partnerships on highly autonomous vehicle deployment abound between technology companies and OEMs. And all of this is happening while we are seeing major advances in internal combustion engine (ICE) vehicles.

For nearly 30 years, automakers have spent billions of dollars on the development and deployment of battery electric (EV), hybrid, plug-in hybrid and fuel-cell vehicles. It started in 1990, when California adopted its zero emission vehicle (ZEV) mandate, requiring 2 percent ZEVs in 1998, 5 percent in 2001, and 10 percent in 2003 and subsequent model years.

Yet despite a variety of government incentives, take-up has been slow, with EVs representing only 0.6 percent of new-car sales nationally in 2017 and 2.6 percent of new-car sales in California.

There are a host of reasons why consumers aren't buying EVs at the rate regulators have tried to force-feed them, including expense, range, recharging

speed, residual value uncertainty, utility, performance and insufficient recharging infrastructure. Most Americans won't consider a vehicle that compromises their convenience or current mobility needs, let alone pay more for one—especially when today's advanced ICE vehicles and their hybrid variations present affordable and convenient alternatives.

However, the pendulum is beginning to swing in the other direction. In the past two years, EV sales increased significantly, and we expect those sales to increase sevenfold by 2027 to around 4 percent nationwide. In the next 10 years, the price of EV battery packs with ranges of 250 miles or more are expected to drop significantly, to \$100 per kWh. This could, for the first time, put the cost of EVs on a price parity with ICE vehicles. And dozens of new EVs in popular segments like crossovers will be introduced in the next decade. Indeed, many traditional automakers have said they believe the future of the vehicle is "all electric."

Local dealerships are excited about being a part of that future and know that replacing America's fleet of 266 million ICE vehicles with EVs could be a sales bonanza unlike any the industry has ever seen.

But even as prices are coming down and other obstacles are being addressed, prospective customers continue to ask pointed questions about the practicality of owning an EV—especially questions about recharging access and recharging speed, because most Americans don't have their own garage or a dedicated nightly parking spot. While owners of ICE vehicles and hybrids take refueling for granted, EV owners simply don't have that luxury.

There are 168,000 filling stations across America—many with 10 or more pumps—that dispense 40 million fill-ups every single day, so you can quickly and easily extend your vehicle's range, over and over again, without ever thinking about it. But battery technology and infrastructure are simply not widely ready for fast charging. That's why the U.S. Department of Energy's Office of Renewable Energy has identified "the ability to refuel quickly or to fast charge" as a critical obstacle to wider adoption of EVs.

Even in the face of these real-world realities, some say dealers should do more to push EVs on their customers. That's not how it works. According to a recent survey by Cox Automotive, 74 percent of today's vehicle buyers purchased the vehicle they selected online prior to visiting a dealership. Local dealers are merchants; they stock, sell and service what their customers want to buy, own and drive—and they always will.

As Automotive News publisher Jason Stein wrote from CES in January, we should be careful not to let the promise of new technologies get too far out in front of the actual consumer marketplace. If the automotive industry really wants to achieve wide-scale acceptance of EVs, the solution goes far beyond sales incentives and introducing new models. We need to face the gritty reality that widespread acceptance of EVs will require closing the gap between the pumps that refuel today's cars and trucks and the plugs that will be needed to continuously and quickly repower the cars and trucks of tomorrow.

Hawaii's new car dealers strongly support the transition to clean energy in the ground transportation sector as evidenced by the significant investments Hawaii's new car dealers have already made in electric vehicle and hydrogen fuel cell electric vehicle inventory, electric vehicle and hydrogen fuel cell electric vehicle maintenance equipment and training, and dealership electric vehicle and hydrogen fuel production and dispensing infrastructure.

Connected autonomous vehicles (CAVs) will play a large role in accelerating the adoption of EVs and HFCEVs since most of the self-driving vehicles will utilize electric vehicle powertrains.

It is thus important that Hawaii establish a process to upgrade and support next generation wireless broadband infrastructure throughout the state to facilitate the adoption of these self-driving vehicles.

The members of the Hawaii Automobile Dealers Association thank you for the opportunity to testify on this bill.

Respectfully submitted,

David H. Rolf For the members of the Hawaii Automobile Dealers Association

Submitted on: 2/11/2018 12:46:30 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Graham	350.org	Support	No

#### Comments:

I am writing in support of HB 2728 for the following reasons:

We need to increase the percentable of passenger electric vehicles used in Hawaii. As of January 2018 there were 6,748 passenger electric vehicles in the state, out of 1,062,518 total registered passenger vehicles, or an anemic 0.64 percent [1].

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will greatly reduce Hawaii's greenhouse gas emissions.

Beyond the obvious advantage of reducing greenhouse gases, zero-emission vehicles (ZEVs) provide many benefits:

The prices of ZEVs and replacement batteries continue to drop, while the number of available ZEV models continues to increase.

ZEVs have lower maintenance costs because there are usually fewer fluids to change and far fewer moving parts.

ZEVs have lower fuel costs, and many charging stations here are free. Even at today's low gas prices, charging an electric vehicle on the typical residential rate may save about 35 percent of fuel costs, compared to a similar-sized gasoline-powered sedan [3].

The charging time of ZEVs continues to fall, while their range and the number of charging stations in the State continues to climb.

ZEVs get free parking in state and municipal lots and street spaces, plus access to high-occupancy lanes with only a driver on board.

Passing this shows a commitment to becoming fossil free that show the state of Hawaii's commitment to take care of the aina.

Mahalo, Janet Graham

Submitted on: 2/11/2018 12:42:52 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo		Support	No

Comments:

Hello,

I'm respectfully writing to say please support this bill.

As of January 2018 there were 6,748 passenger electric vehicles in the state, out of 1,062,518 total registered passenger vehicles, or an anemic 0.64 percent [1]. We should be doing everything we can to increase that percentage.

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will greatly reduce Hawaii's greenhouse gas emissions.

Beyond the obvious advantage of reducing greenhouse gases, zero-emission vehicles (ZEVs) provide many benefits:

The prices of ZEVs and replacement batteries continue to drop, while the number of available ZEV models continues to increase.

ZEVs have lower maintenance costs because there are usually fewer fluids to change and far fewer moving parts.

ZEVs have lower fuel costs, and many charging stations here are free. Even at today's low gas prices, charging an electric vehicle on the typical residential rate may save about 35 percent of fuel costs, compared to a similar-sized gasoline-powered sedan [3].

The charging time of ZEVs continues to fall, while their range and the number of charging stations in the State continues to climb.

ZEVs get free parking in state and municipal lots and street spaces, plus access to high-occupancy lanes with only a driver on board.

thank you,

Nanea Lo

<u>HB-2728</u> Submitted on: 2/11/2018 5:50:03 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Patricia Blair		Support	No

Comments:

Submitted on: 2/11/2018 6:14:43 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
L.M. Holmes	Dr.	Support	No	ı

# Comments:

We need to transition off fossil fuels more quickly than we are. Not even 1% electric vehicles? Let's pick up the pace.

Submitted on: 2/11/2018 6:54:37 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
tlaloc tokuda	n/a	Support	No

#### Comments:

I belong to 350 HI and our main aim is to keep fossil fuels in the ground. Supporting any legislation that moves in this direction is also part of our strategy, I support HB2728 for the following reasons:

As of January 2018 there were 6,748 passenger electric vehicles in the state, out of 1,062,518 total registered passenger vehicles, or an anemic 0.64 percent [1]. We should be doing everything we can to increase that percentage.

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will greatly reduce Hawaii's greenhouse gas emissions.

Beyond the obvious advantage of reducing greenhouse gases, zero-emission vehicles (ZEVs) provide many benefits:

The prices of ZEVs and replacement batteries continue to drop, while the number of available ZEV models continues to increase.

ZEVs have lower maintenance costs because there are usually fewer fluids to change and far fewer moving parts.

ZEVs have lower fuel costs, and many charging stations here are free. Even at today's low gas prices, charging an electric vehicle on the typical residential rate may save about 35 percent of fuel costs, compared to a similar-sized gasoline-powered sedan [3].

Tesle and other companies are bring the cost of batteries down. The charging time of ZEVs continues to fall, while their range and the number of charging stations in the State continues to climb.

ZEVs get free parking in state and municipal lots and street spaces, plus access to high-occupancy lanes with only a driver on board.

- [1] http://files.hawaii.gov/dbedt/economic/data\_reports/energy-trends/Energy\_Trend.pdf
- [2] https://www.eia.gov/state/analysis.php?sid=HI

[3] https://www.hawaiianelectric.com/clean-energy-hawaii/electric-vehicles					

Submitted on: 2/11/2018 8:59:55 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack		Support	No

#### Comments:

We must take bold action and do everything possible to combat climate change before we reach the tipping point. Addressing greenhouse gas emissions from our transportation sector must be part of those efforts. The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii. Please support this bill.

Thank you for the opportunity to submit testimony

Submitted on: 2/10/2018 10:42:42 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jonathan Boyne		Support	No

#### Comments:

As of January 2018 there were 6,748 passenger electric vehicles in the state, out of 1,062,518 total registered passenger vehicles, or an anemic 0.64 percent [1]. We should be doing everything we can to increase that percentage.

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will greatly reduce Hawaii's greenhouse gas emissions.

Beyond the obvious advantage of reducing greenhouse gases, zero-emission vehicles (ZEVs) provide many benefits:

The prices of ZEVs and replacement batteries continue to drop, while the number of available ZEV models continues to increase.

ZEVs have lower maintenance costs because there are usually fewer fluids to change and far fewer moving parts.

ZEVs have lower fuel costs, and many charging stations here are free. Even at today's low gas prices, charging an electric vehicle on the typical residential rate may save about 35 percent of fuel costs, compared to a similar-sized gasoline-powered sedan [3].

The charging time of ZEVs continues to fall, while their range and the number of charging stations in the State continues to climb.

ZEVs get free parking in state and municipal lots and street spaces, plus access to high-occupancy lanes with only a driver on board.

Submitted on: 2/11/2018 5:25:51 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Mary True		Support	No

## Comments:

I support this bill because the future is renewables and, as an island, we need to distance ourselves from fossil fuels as much as possible.

Submitted on: 2/11/2018 7:56:46 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Reed		Support	No

#### Comments:

The use of fossil fuel contributes to rising sea level. Transportation is the major use of fossil fuel in Hawaii and we are fast approaching the time when we will wish everyone had made the switch. NOW is the time to begin that switch. There are already several proven electric cars available and each manufacturer has plans to introduce several more. Not sending our money off Island to pay for fossil fuel and instead fueling our cars with Island produced clean energy will enrich our economy. This is the way to start!

<u>HB-2728</u> Submitted on: 2/11/2018 9:34:38 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Barbara L. George		Support	No	

Comments:

SUPPORT!

Submitted on: 2/12/2018 10:46:05 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
John NAYLOR	N/A	Support	No

## Comments:

This just makes sense! And yet history proves that if the rule of law is not applied, it won't happen on time. Please make it so.

Mahalo,

John Naylor Makawao

<u>HB-2728</u> Submitted on: 2/12/2018 11:44:42 AM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Seena Clowser		Support	No

Comments:

Submitted on: 2/12/2018 12:48:33 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Meredith Buck		Support	No

#### Comments:

As of January 2018 there were 6,748 passenger electric vehicles in the state, out of 1,062,518 total registered passenger vehicles, or an anemic 0.64 percent [1]. We should be doing everything we can to increase that percentage.

The transportation sector uses almost two-thirds of all petroleum consumed in Hawaii [2]. This bill will greatly reduce Hawaii's greenhouse gas emissions.

Beyond the obvious advantage of reducing greenhouse gases, zero-emission vehicles (ZEVs) provide many benefits:

The prices of ZEVs and replacement batteries continue to drop, while the number of available ZEV models continues to increase.

ZEVs have lower maintenance costs because there are usually fewer fluids to change and far fewer moving parts.

ZEVs have lower fuel costs, and many charging stations here are free. Even at today's low gas prices, charging an electric vehicle on the typical residential rate may save about 35 percent of fuel costs, compared to a similar-sized gasoline-powered sedan [3].

The charging time of ZEVs continues to fall, while their range and the number of charging stations in the State continues to climb.

ZEVs get free parking in state and municipal lots and street spaces, plus access to high-occupancy lanes with only a driver on board.

Submitted on: 2/12/2018 1:45:56 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lana Brodziak	Self	Support	No

# Comments:

I support HB2728. Please help get more zero emission vehicles on the road with the upcoming phase out of tax incentives.



<u>HB-2728</u> Submitted on: 2/12/2018 5:48:48 PM

Testimony for EEP on 2/13/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lucia You	Individual	Support	No

Comments: