Testimony by:

FORD N. FUCHIGAMI DIRECTOR

Deputy Directors JADE T. BUTAY 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 2, 2017 8:30 a.m. State Capitol, Room 325

H.B. 1580 RELATING TO ENERGY

House Committee on Energy & Environmental Protection

The Department of Transportation (DOT) **supports** the intent to establish a working group to reduce and eliminate the use of fossil fuels through targets and goals outlined in the bill.

In 2015, the DOT convened the Sustainable Transportation Forum consisting of 150 + energy and transportation minded participants representing government, non-profit, private and public organizations.

Since its inception, the forum has made significant progress in the areas of building relationships with the counties, smart growth and mode shift.

The DOT feels it is important that this forum be given the opportunity to develop transportation energy metrics and articulate its agenda towards a sustainable transportation future without the bureaucracy of Chapter 92, H.R.S., that might unintendedly be created under this bill.

Thank you for the opportunity to provide testimony.

DAVID Y. IGE GOVERNOR

LUIS P. SALAVERIA DIRECTOR

MARY ALICE EVANS DEPUTY DIRECTOR



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt Telephone: (808) 586-2355 Fax: (808) 586-2377

Statement of LUIS P. SALAVERIA Director Department of Business, Economic Development and Tourism before the HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Thursday, February 2, 2017 8:30a.m. State Capitol, Conference Room 325 in consideration of HB1580 RELATING TO ENERGY.

Chair Lee, Vice Chair Lowen and Members of the Committee.

The Department of Business, Economic Development and Tourism (DBEDT) offers comments on HB 1580, which establishes a goal to reduce and ultimately eliminate the use of fossil fuels for ground transportation by 2045 and creates a working group to create metrics, identify a plan, and develop recommendations to achieve 100% renewable ground transportation statewide by 2045.

DBEDT supports setting a goal for the petroleum reduction in ground transportation and supports pursuing action plans promoting petroleum reduction by implementing existing technologies and innovative programs.

DBEDT will continue to work with the Department of Transportation and other stakeholders with expertise in the use of renewable energy for transportation. DBEDT proposes, through its Hawaii State Energy Office, to provide the Legislature a framework for transportation goals that support Hawaii's sustainable clean energy goals.

For the 2018 legislative session, DBEDT will complete research, report findings and recommendations, and propose legislation for a clean transportation goal consistent with Hawaii Revised Statutes §226-18, "Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation."

The research and analysis will take into account the interrelated nature of the electric system and transportation in order to take advantage of the synergies, and assess the energy infrastructure impacts, of various clean transportation tactics including multimodal strategies. Thank you for the opportunity to offer DBEDT's position on HB 1580.





HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Feb. 2, 2016, 8:30 A.M. Room 325 (Testimony is 7 pages long, including attachment)

TESTIMONY IN STRONG SUPPORT OF HB 1580

Aloha Chair Lee, Vice Chair Lowen, and Committee members:

Blue Planet Foundation **strongly supports** HB 1580, which sets a planning vision for the elimination of fossil fuels from ground transportation in Hawai'i by 2045. 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.

We provide minor **suggested amendments** on the portion of the bill calling for a working group. We also suggest a brief clarification in the bill's preamble, to confirm that this bill does not impose an individualized prohibition on gasoline vehicles. Answers to several Frequently Asked Questions are attached to this testimony.

The Importance of Establishing a Vision

The legislature has long stressed the importance of the state's transition to a renewable energy system. For example, in 2001's Act 272 the legislature adopted renewable standard for

electricity, recognizing "the economic, environmental, and fuel diversity benefits of renewable energy resources" and encouraging further development of renewable resources. The legislature found that "while Hawaii is a national leader in the development of renewable energy resources for electricity production, there may be more that the State can do to encourage the development and implementation of renewable energy. These efforts can reduce the amount of imported oil used for the generation of electricity."



More recently, Hawai'i's leaders set a vision for 100% renewable electricity by 2045. That vision has become a driving force in electricity planning,¹ and a focal point for a variety of key energy issues. But while Hawai'i has made substantial progress on policies, programs, and actions to reduce burning fossil fuels in the electricity sector, progress on reducing transportation fossil fuel consumption has lagged. And unlike for the electricity sector, state law has not yet specified target dates for progress on renewable transportation. This is one illustration of the importance of long-term targets in setting the state's course for the energy sector.

Some commenters are sure to believe that a 2045 target date is too aggressive. Others, particularly those driven by the urgency of the climate crisis, are equally sure to believe that 2045–30 years in the future—is too passive. Other than the passage of time, no studies, working groups, or other efforts will fully resolve that dichotomy.

But in either scenario, establishing a planning vision will spur alignment and collaboration on planning and infrastructure efforts, thus leading to more effective solutions. It will set market expectations, opening the door to innovation. And it will encourage personal action, to support the shared goal of island sustainability.

Lower Costs for Consumers Through Clean Transportation and Clean Electricity

Because electric vehicles will be one part of the clean transportation transition, the state's renewable electricity goal goes hand-in-hand with the transportation goal in this bill. Electricity is already a less expensive fuel alternative to gasoline. But a growing fleet of EVs can provide a double benefit by helping to balance renewable energy on the grid and lower the cost of electricity. This is a win-win. It also underscores the need to align the state's electricity targets with its transportation targets.

As noted in the attached Frequently Asked Questions, **a U.H. Engineering Professor has estimated that renewable electrified transportation can save utility consumers around \$150 million per year.** More details on economic benefits, the achievability of 100% renewable transportation, and other topics are included in the attached Frequently Asked Questions.

Suggested Amendments

We suggest adding a clarification to Section 1, to explain that by targeting 100% clean transportation in the state planning act, this bill does not create any individual prohibitions on using gasoline or diesel vehicles. A small and aging sector of such traditional vehicles (e.g. for the collector market or other uses) is likely to exist after 2045. This can be addressed through

¹ For example, Hawaiian Electric's most recent power plan indicates that the renewable energy standard will be met by 2040.

solutions such as biofuels.² Nonetheless, the bill's planning target can be satisfied if the state's transportation norms and infrastructure are powered without fossil fuels by 2045.

Because of the natural ties between renewable electricity and renewable transportation, we also suggest that the State Energy Office may be best suited for a lead or shared role in gathering stakeholder input and convening any working groups necessary to establish baseline mechanisms and evaluate options for accelerating clean progress on clean transportation.

SUGGESTED AMENDMENTS

Section 1.

. . .

... The purpose of this Act is to prepare for the transition to renewable ground transportation in Hawaii by:

(1) Establishing a <u>planning</u> goal for the reduction and ultimate elimination of the use of fossil fuels for ground transportation by 2045; and

(2) Directing the state energy office, in collaboration with department of transportation, electric utilities, energy advocates, other energy stakeholders, and members of the public with expertise in renewable transportation, to establish a working group that shall evaluate baseline metrics, and develop updated recommendations to set a course for one hundred per cent renewable ground transportation statewide by 2045.

As a planning goal, this Act does not create an individualized prohibition on gasoline vehicles.

Section 2. §264- Renewable ground transportation working group. (a) <u>The state</u> energy office of the department of business, economic development and tourism, in collaboration with the department of transportation and <u>others</u>, shall establish a renewable ground transportation working group that shall:

(b) The number of members of the working group shall be determined by the <u>administrator of the state energy office</u>, or the <u>administrator's</u> designee, who shall serve as the chair of the working group; provided that the working group shall include:

(1) One member representing the <u>department of transportation</u>; and
(2) As appointed by the chair, other state employees, county
employees, <u>and</u> members of the public who have expertise in the use of renewable energy for transportation.

Thank you for the opportunity to testify.

² See attached Frequently Asked Questions for more details on the local biofuel industry.

100% Clean Ground Transportation Frequently Asked Questions

Why is a 100% Clean Transportation Necessary?

Hawai'i's policy leaders have long stressed the importance transitioning the state's energy system to clean energy. This transition has been driven by economics, and also by concern for our shared environment. As described by Governor George Ariyoshi:

"Stewardship . . . mean living with the constant reminder that our actions occur in context of other people over generations."

Ground transportation accounts for around one-third of the state's fossil fuel consumption and greenhouse gas emissions. A resilient economy and a healthy environment require that we consider these impacts.

This is especially important in an age where 194 countries—essentially every country on earth—have agreed that it is imperative that we rapidly reduce greenhouse gas emissions.³

The state has long utilized planning targets as a way to set a course for reducing fossil fuel consumption in the electricity sector.⁴ This transformation is on track to reach the



goal of 100% renewable energy by 2045. In contrast, fossil fuel consumption for ground transportation is essentially unchanged from a decade ago.

Closing this gap will require many efforts by many entities, both today and in the future. The importance of HB 1580 is that it can align those efforts around a common vision, set by the state's leaders.

What are the Economic Benefits?

The transition to clean transportation creates many opportunities for cost savings. Some of these opportunities come in the form of more efficient multi-modal transportation (e.g. saving money with more walking, biking, and public transit). Other opportunities arise from fuel-cost savings.

³ See Paris Agreement, U.N. Framework Convention on Climate Change (2016).

⁴ See H.R.S. § 269-91.

For example, the transition to clean energy is sure to include more electric passenger vehicles, buses, and fleet vehicles ("EVs").⁵ This electrification trend provides a double benefit. First, the cost of powering an EV is generally less than powering an equivalent gasoline vehicle. So consumers can save money—today—by switching to an EV. Second, a growing fleet of EVs can help to balance renewable energy on the electric grid. This can lower the cost of electricity for everyone.

University of Hawai'i Engineering Professor, Matthias Fripp, has created a quantitative model of the state's transition to renewable energy. He has calculated that a 100% renewable transportation system, with smart EV charging to match renewable electricity generation, can be expected to **save utility consumers approximately \$150 million per year in fuel and electricity costs**.⁶

Blue Planet Foundation has evaluated recent projections for electricity rates in Hawai'i, comparing them to a World Bank estimate of the long-term trend for increasing oil prices, under a variety of transportation scenarios. This comparison indicates that we can expect electricity to remain the cheaper fuel option through 2045, and that the potential aggregate benefit in fuel savings is on the order of several billion dollars.



Is 100% Clean Transportation by 2045 Possible?

Much like in the electricity sector, many factors will influence the pace of the state's transition to clean energy. While some of those factors remain unknown (as is expected for a 30-year planning horizon), several important factors are apparent today:

1. The Rise of Battery Electric and Fuel Cell Vehicles

While familiar clean transportation options (like biofuels, walking, biking, public transit, etc.), and emerging technologies (like hydrogen) will undoubtedly play an important role, we expect the emergence of electric vehicles (EVs) to quickly and radically shift the state's transportation energy landscape.

⁵ For example, auto executives recently polled by KPMG identified EVs as the top trend in the car market between now and 2025.

⁶ See M. Fripp, Effect of Electric Vehicles on Design, Operation and Cost of a 100% Renewable Power System (Apr. 2016).

In Hawai'i, the growth rate of EV sales has far outpaced other fuel options. On a more global scale, important factors such as the cost of producing batteries for electric cars has fallen dramatically, from around \$1,000 per kWh to less than \$200. As we enter the second

generation of modern EVs, a steadily increasing variety of models are coming onto the market with lower prices, larger batteries, and longer driving ranges. Nearly every major auto manufacturer is investing heavily in battery electric and/or hydrogen fuel cell electric vehicles, and views zero emission vehicles as the longterm solutions for transportation fuels.



Hawai'i is particularly well-suited for the this acceleration of EV adoption because electric batteries perform well in our year-round warm climate. Our island geography often restricts the distances we need to drive, making range anxiety less of an issue compared to other locations. Hawai'i is already in the top three states by proportion of registered vehicles that are electric, and we have the second highest ratio of electric charging stations to population of any state.

2. Transportation will Become More Multi-modal, Networked, Autonomous

The future of transportation in Hawai'i is likely to include more efficient land use that reduces travel demand and travel distances, significant improvements in mass transit, bicycling and pedestrian infrastructure, and new mobility alternatives such as autonomous taxis and other networked 'mobility as service' options. These changes are likely to shift a sizable percentage of Hawai'i's trips from personal automobiles to alternative modes and to significantly reduce transportation energy use.

With sufficiently transformative policies, the small sector of gasoline vehicles can be a small fraction of the total ground transportation sector (around 6%).

3. Biofuels are a Near-Term and Long-Term Option

Hawai'i is home to one of the leading pioneers of biofuel production, Pacific Biodiesel. Today, the state is producing commercial quantities of biofuels using local feedstocks.

In a report commissioned by DBEDT in 2010, the consultant firm Black & Veatch Corporation performed an analysis of the potential for biofuel production in the state of Hawai'i. The report found that the maximum theoretical capacity of biofuel production in the state was equal to the equivalent of 848 million gallons of "green gasoline" or 779 million gallons of "green diesel" per year (see chart below). This is around 2.5 times the total amount of gasoline and diesel used in ground transportation in Hawai'i today.

Table 1-6. Maximum Theoretical Hawai'i Biofuel Production Potential.					
Feedstock	Biofuel	Ethanol	Green Gasoline	Green Diesel	Green Jet Fuel
	10 ¹² Btus/yr	million gal/yr	equivalent	equivalent	equivalent
			million gal/yr	million gal/yr	million gal/yr
Energy Crops	101	1,202	786	722	751
Cellulosic Wastes	8	95	62	57	59
Total:	109	1,297	848	779	810

Source: DBEDT (2010). "The Potential For Biofuels Production in Hawaii"

The report also concluded that "...it should be quite achievable for biofuels produced from instate resources to displace 20 percent [over 50 million gallons] of the gasoline and diesel fuel needed for vehicle transportation in Hawai'i. This could be accomplished using about 10 percent of available agricultural land for energy crop production to supply the required biomass feedstock."

In short, local biofuels are a viable option for powering significant portions of the transportation sector.



P.O. Box 37158, Honolulu, Hawai`i 96837-0158 Phone: 927-0709 henry.lifeoftheland@gmail.com

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

DATE: Thursday, February 2, 2017 TIME: 8:30am PLACE: Conference Room 325

re: HB 1580 Relating to Energy

SUPPORT, PROPOSED AMENDMENT

Aloha Chair Lee, Vice Chair Lowen, and Members of the Committee

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 47 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

The bill proposes that the Hawai`i Department of Transportation (DOT) and the State Energy Office (SEO) of the Department of Business, Economic Development, and Tourism (DBEDT), shall establish a ground transportation working group which shall create a plan, and develop metrics, in order to end fossil fuel use in transportation by 2045.

The legislature clearly has the authority, through state gasoline taxes, and through the Public Utilities Commission, which regulates transportation utilities, to phase out fossil fuel based transportation.

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

"§264- Renewable ground transportation working group. (a) (2) Identify a plan to make progress toward the goal of achieving one hundred per cent renewable ground transportation statewide by 2045;, including at least a twenty five per cent reduction by December 31, 2025, and at least a fifty per cent reduction by December 31, 2035.

Mahalo,

Henry Curtis Executive Director

SanHi Government Strategies

Gary M. Slovin Mihoko E. Ito R. Brian Tsujimura a limited liability law partnership c/o Ashford & Wriston • 999 Bishop Street, Suite 1400 Honolulu, Hawaii 96813 (808) 539-0400 governmentaffairs@awlaw.com

gslovin@awlaw.com mito@awlaw.com rtsujimura@awlaw.com

DATE: February 1, 2017

TO: Representative Chris Lee Chair, Committee on Energy and Environmental Protection Submitted Via <u>EEPTestimony@capitol.hawaii.gov</u>

RE: H.B. 1580 – Relating to Energy Hearing Date: Thursday, February 2, 2017 at 8:30 a.m. Conference Room: 325

Dear Chair Lee and Members of the Committee on Energy and Environmental Protection:

On behalf of the Alliance of Automobile Manufacturers ("Alliance"), we submit these **comments** on H.B. 1580. 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.

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. The Alliance supports efforts to increase the penetration of alternative fuel vehicles, but is concerned that this measure places unrealistic goals in statute. There will still be gasoline-fueled vehicles driven in 2045, since any plug-in hybrid electric vehicle sold beyond 2045 would still require petroleum to run. Given that the national fleet average age of vehicles is currently 12 years, in order to meet the 2045 goal, it would require that by 2033, at a minimum, all vehicles sold in Hawaii would have to be gasoline-free alternative fuel vehicles. California, which has the most rigorous standards in the country, does not contemplate that scenario occurring until 2050. In Hawaii, many people keep their cars and trucks much longer than 12 years.

Gary M. Slovin Mihoko E. Ito R. Brian Tsujimura C. Mike Kido Tiffany N. Yajima Matthew W. Tsujimura In 2015, the Department of Business, Economic Development and Tourism commissioned the International Council on Clean Transportation ("ICCT") to analyze Hawaii's transportation sector and work with stakeholders to develop actionable tactics to reduce petroleum consumption. The culmination of those efforts resulted in the Hawaii Clean Energy Initiative Transportation Energy Analysis report which recommended reasonable tactics to reduce fuel consumption in the ground transportation sector. As a participant to the working group meetings, the Alliance believes there should be more thorough consideration of the issues raised and the recommendations provided in the ICCT's report before establishing such ambitious fuel reduction goals in statute.

Thank you for the opportunity to submit these comments.



Headquarters and Refining

91-480 Malakole St. Kapolei, HI 96707 DATE: Thursday, February 2, 2017 TIME: 8:30am PLACE: Conference Room 325 State Capitol 415 South Beretania Street

House Bill 1580, Relating to Energy

Chair Lee, Vice Chair Lowen and Members of the House Energy and Environmental Protection Committee,

Island Energy Services, LLC (IES) purchased the assets formerly owned and operated by Chevron on November 1, 2016 and continues to operate as a key supplier of petroleum products to the Hawaii market and economy. Therefore, IES respectfully requests any opportunity to represent its views and work collaboratively with the proposed working group.

Mahalo,

albert chee

Al Chee Vice President Island Energy Retail Marketing & Community Relations

Testimony before the House Energy and Environmental Protection Committee

By Michael Colón Director, New Customer Initiatives Hawaiian Electric Company, Inc.

House Bill 1580 – Relating to Energy

Chair Lee, Vice Chair Lowen and Members of the Committee:

My name is Michael Colón and I am testifying on behalf of Hawaiian Electric Company and its subsidiary utilities, Maui Electric Company and Hawai'i Electric Light Company (collectively, the "Hawaiian Electric Companies").

Senate Bill 1580 seeks to establish a working group to plan and develop recommendations to achieve 100% renewable ground transportation statewide by 2045.

The Hawaiian Electric Companies strongly support the intent of this bill with the stated goal to eliminate the importation of fossil fuels and support a local clean energy economy. The Hawaiian Electric Companies have been involved in the electric vehicle space for many years and have various pilots and programs to support their proliferation. For example, the Hawaiian Electric Companies currently have eleven DC fast chargers deployed across its service territory, providing fast, reliable vehicle charging at speeds several times faster than standard level-two charging stations. The Companies have been awarded both locally and nationally for its fast charger program and the continued efforts to increase electric vehicle charging infrastructure in Hawai'i.

The Hawaiian Electric Companies also have offered various time-of-use rate options to customers interested in owning an electric vehicle and charging it at their home, encouraging vehicle charging during times when renewable energy is produced on the grid or to minimize peak demand impacts. The Companies also provide an online calculator called the WattPlan for Electric Vehicles to help customers decide on buying an electric vehicle and determine the amount of money that can be saved on total energy needs.

In terms of policy, the Companies have recently collaborated with multiple key stakeholders on a memorandum of understanding (MOU), related to electric vehicles, which sets forth a shared vision of powering ground transportation using 100% renewable

energy in support of Hawaii's goal of 100% renewable electricity. The primary focus of the MOU group is to accelerate the electrification of transportation in all passenger vehicles, public transit vehicles, and fleet vehicles, which are not otherwise powered by renewable energy. The Companies support establishing a coordinated effort to develop recommendations to the legislature and recommends identifying the various stakeholders that are signatories to the MOU as the foundational members of the working group.

The Companies welcome the legislature's intent to build upon the momentum and progress already achieved in transforming Hawaii's transportation paradigm. For example, Hawai'i is the second largest electric vehicle market on a per capita basis and has over 5,000 registered electric vehicles on the road.

Thank you for the opportunity to testify.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, January 30, 2017 6:35 PM
То:	EEPtestimony
Cc:	mendezj@hawaii.edu
Subject:	*Submitted testimony for HB1580 on Feb 2, 2017 08:30AM*

Submitted on: 1/30/2017 Testimony for EEP on Feb 2, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, January 30, 2017 6:06 PM
То:	EEPtestimony
Cc:	kirakrend@gmail.com
Subject:	Submitted testimony for HB1580 on Feb 2, 2017 08:30AM

Submitted on: 1/30/2017 Testimony for EEP on Feb 2, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Kira Krend	Individual	Support	No

Comments: I support this measure completely. We have the chance to be the on right side of history when it comes to getting off fossil fuels. The future of our planet depends on it.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
Sent:	Wednesday, February 1, 2017 2:26 PM
То:	EEPtestimony
Cc:	cchaudron08@gmail.com
Subject:	Submitted testimony for HB1580 on Feb 2, 2017 08:30AM

Submitted on: 2/1/2017 Testimony for EEP on Feb 2, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Camila Chaudron	Individual	Support	No

Comments: Hi, my name is Camila Chaudron, and I live in the Manoa/Makiki area. I support this measure because climate change is real, it's happening, and we need to take drastic steps to counteract the dangerous effects that fossil fuels have on our environment. Hawaii does not have a viable economic or environmental path forward unless it invests heavily in sustainable practices now. For the sake of the health and future of our community, thank you for supporting this measure. Mahalo.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.



HADA testimony with COMMENTS on HB 1580 RELATING TO ENERGY

Presented to the House Committee on Energy & Environmental Protection at the public hearing to be held 8:30 Thursday, February 2, 2017 in Conference Room 325, Hawaii State Capitol

by the Members of the Hawaii Automobile Dealers Association Hawaii's franchised new car dealers

Chair Lee, Vice Chair Lowen, and Members of the Committee:

I am David Rolf, representing the members of the Hawaii Automobile Dealers Association, Hawaii's franchised new car dealers, who have remained strong in their support of the transition to renewable energy for use in vehicles in Hawaii. The association supports the measured and considered transition to electric vehicles and hydrogen fuel cell electric vehicles, proposed in House Bill 1580, and offers the following comments on setting a goal to achieve 100% use of renewable fuel for ground transportation by 2045.

HB 1580's 100% renewable fuel goal for 2045 represents an extension of the 40% goal for renewable fuel use by 2030, established in the Hawaii Clean Energy Initiative. See the HCEI graphic below.

+	30 %

In 2010, HADA created a projection of the adoption rate for renewable fuel vehicles—electric vehicles and hydrogen fuel cell electric vehicles-- that would be "needed" to hit the HCEI 40% renewable goal.



HADA's Golden Gate Graph, nicknamed because of its resemblance to the bridge, shows the projected annual sales of new cars and light trucks, including, the 400,000 electric and hydrogen fuel cell vehicles "needed" to meet the Hawaii Clean Energy Initiative's goals—40% of the light vehicles in operation. So far, HADA's projections have been surprisingly accurate. The red and blue bar levels are laudable goals but likely unattainable without a strong communications plan—starting with \$3 million needed from the Hawaii Energy fund. With gasoline prices remaining low for the foreseeable future, recent EV uptake numbers are not not currently hitting the projection.

What's just up the road?

New car dealers have enjoyed a thrilling, sometimes curvy, road up the hill, filled with great views, and exciting turns, for the past few years.

The same could be said for the Hawaii economy, which always seems to closely correspond to the bars on the graph showing the activity at new car dealerships.

New vehicle sales, after topping off, like old Pharaoh's dream, are in for some leaner years ahead. One can plan for just about anything ahead using these projected new car numbers.

There will remain about a million cars on the roads. The average of about 50,000 new cars and trucks imported each year, is offset by the 50,000 older vehicles coming off the roadways because the average lifespan of vehicles of about 20 years.

Hawaii's population will increase through 2030, but the number of vehicles on the roadways

will remain relatively constant at one million vehicles because alternative public transportation is being developed, and people nowadays are doing more walking and biking. Another positive factor is that electronic commuters--those employees working at home via computer—are becoming more prevalent.

It's not a time to be afraid of adding more highway lanes.

The 30-minute city is a great concept.

With more highway lanes, many of which should have embedded electric induction chargers for the future's thousands of electric cars and autonomous cars, then, some 8 of 10 of commutes to work would take less than 30 minutes.

Life can soon be a lot more enjoyable for all.

Part of the problem facing Hawaii in the recent past has been inaccurate estimates. This lack of a clear-eyed understanding of costs associated with public policy has resulted in public spending for ground transportation that has become uncontrollable.



HADA dealers have ardently pursued the state goals which were set by stakeholders through the legislative process.

The new car dealers association welcomes the opportunity to participate in this bill's goalsetting process, for 2045.

Members of the new car dealers association bring a great deal of experience to the table. That experience that has proven useful in predicting results from various public policy decisions.

In 1998, an accurate prediction of tax revenues was made. In that year, projected new car sales were wrapped into the calculation to determine anticipated tax revenues. The calculation also used the number of construction workers employed, and hotel room revenue numbers to accurately predict the future tax revenues, missing the mark by only tens of thousands of dollars. The Council on Revenues missed the mark by \$342 million.



HADA dealers welcome the opportunity to participate in the process of Hawaii's transition to renewable fuel vehicles. Respectfully submitted, David Rolf Executive Director, Hawaii Automobile Dealers Association





February 2, 2017

TESTIMONY PROVIDING COMMENTS ON HOUSE BILL 1580, RELATING TO ENERGY

House Committee on Energy and Environmental Protection The Honorable Chris Lee, Chair The Honorable Nicole Lowen, Vice Chair

> Thursday, February 2, 2017 – 8:30 a.m. State Capitol, Room 325

Chair Lee, Vice Chair Lowen and members of the Committee,

Thank you for providing Par Hawaii with this opportunity to submit written testimony on House Bill 1580, Relating to Energy. My name is Lance Tanaka, director of government and public affairs for Par Hawaii. Par Hawaii, Inc., formerly Mid Pac Petroleum, and Par Hawaii Refining, LLC, formerly Hawaii Independent Energy, are subsidiaries of Texas-based Par Pacific Holdings, Inc., formerly known as Par Petroleum Corporation. Collectively we are Par Hawaii, the leading supplier of transportation fuels in the Islands.

The purpose of this bill is to establish a goal to reduce and ultimately eliminate the use of fossil fuels for ground transportation by 2045. The bill creates a working group to create metrics, identify a plan, and develop recommendations to achieve 100% renewable ground transportation statewide by 2045.

Par Hawaii does have concerns and would like to present the following comments.

The year 2045 has become a clarion around which to rally support for taking Hawaii 100% renewable. We do not dispute that technology could be available in the future to enable commercial vehicles as well as personal forms of transportation to operate emissions free and on energy that is based on compounds other than hydrocarbons. Still, we fail to understand the rationale behind selecting a point in time – the year 2045, to be specific – as the date by which this goal will be achieved.

More prudent, we feel, is the bill's prescription for establishing a working group to create metrics, identify a plan and make recommendations by which Hawaii can rationally secede from using petroleum in ground transportation. Particularly with regard to air travel and marine use, liquid fuels are likely to remain a relevant energy source well into Hawaii's foreseeable future. The working group will be confronted with phasing

Testimony providing comments on H.B. 1580, Relating to Energy Lance N. Tanaka, Par Hawaii House Committee on Energy & Environmental Protection Hawaii State Capitol, Room 325 Thursday, February 2, 2017 – 8:30 a.m. Page 2

in Hawaii's transition away from the use of fossil fuels in ground transportation. To that end, the local petroleum industry would be a willing and fundamental partner to participate in that working group.

Thank you for allowing Par Hawaii to present these comments for the Committee's consideration.

Lance N. Tanaka Director, Government & Public Affairs Par Hawaii



SENATE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 2, 2017 8:30 AM Conference Room 325

In SUPPORT of HB 1580 Relating to Energy

Aloha Chairman Lee and members of the Energy and Environmental Protection Committee,

The Sierra Club of Hawai'i strongly supports HB 1580, which seeks to reduce and ultimately eliminate carbon-based ground transportation statewide by 2045.

We have 20,000 members and supporters throughout the Hawaiian Islands. Since 1968, the Sierra Club of Hawai'i has been working to protect the unique natural and cultural resources of our islands. The Club recognizes climate change as an imminent and existential threat to our environment that exacerbates every other environmental concern. The Club enthusiastically supports this measure that will reduce and eventually eliminate carbon-based ground transportation in favor of renewable energy alternatives.

Since adopting the 2045 renewable energy goal over two years ago, the state has made considerable progress in fostering collaborative efforts to reform electricity policy. It is time to adopt a clean transportation target to align with the broader clean energy target. Reducing ground transportation reliance on fossil fuels will reduce air and water pollution, increase our energy independence, and cut the carbon emissions that contribute to climate change.

Because the transportation sector accounts for approximately 66% of the state's fossil fuel consumption, more focus must be placed on ground transportation.[1] With the advent of effective public policy, the popularity of electric vehicles is steadily growing in Hawai'i, with over 5,000 units on the road as of 2016. Additionally, a 2015 survey polling all counties in the state of Hawai'i determined that 1 in 3 residents of Hawai'i are "thinking about buying an electric vehicle". Just this past January, Hawaiian Electric Company implemented a program offering a \$10,000 rebate on the fully electric Nissan LEAF sedan. Combined with a \$7,500 federal tax incentive for buying electric vehicles, the LEAF will only cost Hawaiian Electric customers \$13,680 for a model with standard features. With the average cost of a new car in the United States being \$25,449 in 2015, increasingly more people in Hawai'i will be encouraged to purchase electric vehicles than gasoline powered cars. Also, research from the University of Hawai'i concluded that electric vehicles can lower energy costs by \$200 million each year and will also be highly beneficial toward helping to balance our electric grid.

Setting a goal based on the model outlined in HB1580 implements the public's will and ensures a more just and equitable transition to a clean energy future. Setting this goal will help our state make make the most informed decisions in transitioning from fossil fuel based means of transportation to renewable ones in the most economically just and equitable manner possible. Overall, the formation of a working group on ground transportation will transform our ground transportation goals in line with our 2045 goals.

Mahalo,

Martha Townsend Director

[1] Kathryn Mykleseth, *Electric-Vehicle Swell Underway in Hawaii*, Honolulu Star-Advertiser. Dec. 27, 2016. http://www.govtech.com/fs/transportation/Electric-Vehicle-Swell-Underway-in-Hawaii.html



HB1580

Department of Transportation, Renewable Energy; Working Group

February 2. 2017, 8:30 A.M.

Energy and Environmental Protection

Aloha Chair Lee, Vice Chair Lowen, and members of the committee. My name is Maxim Poudrier-Tudan, I am a Student at the University of Hawaii at Manoa, and I am testifying in support of HB1580 for the Department of Transportation, Renewable Energy; Working Group.

This bill is so important to insure the well-being of the Hawaiian Islands, and the entire planet itself. As a twenty-year-old student, I am highly concerned with the state of the planet that I am succeeding from my predecessors, especially in the way in which transportation currently burns through fossil fuels, while emitting harmful gases into the air we breathe. By achieving this goal of total renewable ground transportation, this bill would drastically reduce the pollutants in the air in which I and my children in the future will be breathing. This state is one of the most beautiful places in the world, and it sickens me to see the smog level rising from an issue that is so easily fixed.

Another major issue is that of the planet. With global temperatures at an all-time high, and 2016 being the hottest year on record, it is apparent that there is a problem that needs to be fixed. Hawaii is seen as a leader in environmental progression for the entirety of the Nation, putting in place a bill that will help reduce air pollution state wide will set the stage for other states to follow in this direction, and push for more policies that will combat the deadly effects of climate change.



From:	mailinglist@capitol.hawaii.gov
Sent:	Wednesday, February 1, 2017 7:31 PM
То:	EEPtestimony
Cc:	Ccampa1@msn.com
Subject:	Submitted testimony for HB1580 on Feb 2, 2017 08:30AM

Submitted on: 2/1/2017 Testimony for EEP on Feb 2, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Carl Campagna	Individual	Support	No

Comments: Many thanks for the opportunity to provide testimony on this bill. I strongly support this bill and suggest that both air and marine transportation be added.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.



From:	mailinglist@capitol.hawaii.gov
Sent:	Wednesday, February 1, 2017 5:46 PM
То:	EEPtestimony
Cc:	edsel@garlowpetroleum.com
Subject:	*Submitted testimony for HB1580 on Feb 2, 2017 08:30AM*

Submitted on: 2/1/2017 Testimony for EEP on Feb 2, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Edsel Eshima	Individual	Oppose	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.