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February 28 , 2017

TO: Honorable Chair Luke and Members of Finance Committee

RE: HB 1580 HD1 Relating to Energy Support for hearing on March 1

Americans for Democratic Action is an organization founded in the 1950s by leading supporters of the New Deal and led by Patsy Mink in the 1970s. We are devoted to the promotion of progressive public policies.

We support HB 1580 HD1 as it would set 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. While others may question or even fail to admit that climate change is really a dangerous problem, this would put Hawai'i at the forefront in actively addressing it.

Thank you for your consideration.

Sincerely,

John Bickel President





HOUSE COMMITTEE ON FINANCE

Mar. 1, 2017, 2:30 P.M. Room 308 (Testimony is 8 pages long, including attachment)

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen, and Committee Members:

Blue Planet Foundation **strongly supports** HB 1580 HD1, which sets the state on a path to establishing a planning vision for using clean energy in ground transportation. This bill can help to promote alignment and collaboration in ongoing and future planning efforts for multiple aspects of the state's energy sectors—particularly if the bill is amended to align the electricity and ground transportation targets by setting a planning target of 100% clean energy by 2045.

In the current national political climate, the important of a vision cannot be understated. Recent news reports indicate that a fossil fuel lobby, including **the infamous Koch brothers, are launching an anti-clean transportation initiative targeted at "changing the energy narrative.**" It is imperative that Hawai'i define its own narrative and vision on energy.

We provide suggested amendments on the bill to accomplish the following:

- **utilize existing planning efforts**, such as the Department of Transportation's Sustainable Transportation Forum, rather than creating a new working group;
- **establish a planning target of 2045** to transition the state's transportation systems to 100% clean energy; and
- **clarify that this is a planning bill, not a mandate**, and thus that the concept is to make 100% clean transportation the norm for transportation infrastructure decisions, rather than to require any individual to stop using fossil gasoline.

Answers to several *Frequently Asked Questions* are attached to this testimony. Topics include:

- The need for a planning target date for 100% clean transportation;
- The economic benefits of clean transportation;
- The achievability of a 2045 planning target, with trends such as electrified vehicles, biofuels, and multi-modal transportation options.

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, 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, the state must act. The benefits of establishing a planning vision are important, to:

- spur alignment and collaboration on planning and infrastructure efforts, thus leading to more effective solutions;
- set market expectations, opening the door to innovation;
- 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

Because of the natural ties between renewable electricity and renewable transportation, we suggest that the bill be amended to align the current 100% renewable target for electricity, with the target for ground transportation (currently undated).

We also suggest eliminating the need to create a new working group, and to instead unlock power of this alignment to utilize existing planning efforts (such as the Sustainable Transportation Forum).

New text compared to HD1 is shown in red underlining. For readability, individual text deletions are not marked. We are happy to provide a full markup if desired by the Committee.

Section 1.

•••

The purpose of this Act is to begin the transition to 100 per cent clean ground transportation in Hawaii by:

(1) Establishing a clean ground transportation <u>planning target</u> of 2045, supporting Hawaii's goal for the reduction and ultimate elimination of the use of imported fuels for ground transportation <u>and</u> <u>electricity generation</u>; and

(2) Utilizing existing planning efforts, including by the department of transportation, the state energy office, electric utilities, and other entities and stakeholders, to identify benchmarks and recommendations to support the achievement of benchmarks leading to the ultimate elimination of imported fuels for ground transportation.

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

SECTION 2. [deleted]

SECTION 3. [deleted]

SECTION 4. Section 226-17, Hawaii Revised Statutes, is amended by amending subsection (a) to read as follows:

(a) Planning for the State's facility systems with regard to transportation shall be directed towards the achievement of the following objectives:

(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods;

(2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State; and

(3) Increased energy security and self-sufficiency through the reduction and ultimate elimination of imported fuels for ground transportation, by 2045.

SECTION 5. Section 226-18, Hawaii Revised Statutes, is amended by amending subsection (a) to read as follows:

(a) Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:

(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;

(2) 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 by 2045;

(3) Greater diversification of energy generation in the face of threats to Hawaii's energy supplies and systems;

(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use; and

(5) Utility models that make the social and financial interests of Hawaii's utility customers a priority.

Thank you for the opportunity to testify.

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.¹

The state has long utilized planning targets as a way to set a course for reducing fossil fuel consumption in the electricity sector.² 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.³

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

¹ See Paris Agreement, U.N. Framework Convention on Climate Change (2016).

² See H.R.S. § 269-91.

³ Chart data is from Monthly Energy Trends reported by DBEDT. Note that the electricity oil consumption is for utility generation only. Information from third-party generating facilities is not reported. However, the divergent trend would be apparent even if recent third-party oil-fired generation were included in the chart.

money with more walking, biking, and public transit). Other opportunities arise from fuel-cost savings.

For example, the transition to clean energy is sure to include more electric passenger vehicles, buses, and fleet vehicles ("EVs"). 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**.⁴

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 Infrastructure Possible by 2045?

Yes. A variety of states, countries, and cities have targeted similar goals between 2025 and 2050. For Hawai'i, 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, Coupled with 100% Renewable Electrity.

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

⁴ See M. Fripp, Effect of Electric Vehicles on Design, Operation and Cost of a 100% Renewable Power System (Apr. 2016).

energy landscape. This is especially true given recent utility planning efforts concluding that 100% renewable electricity is achievable and affordable.

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 long-term solutions for transportation fuels. A recent poll of auto executives by KPMG identified EVs as the top trend for automobile manufacturers between now and 2025.



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.

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
	1012 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.

Testimony before the House Finance Committee

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

Wednesday, March 1, 2017 2:30 pm

House Bill 1580 HD1 – Relating to Energy

Chair Luke, Vice Chair Cullen 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").

House Bill 1580 HD1 requires the Department of Transportation to develop a plan to achieve 100% renewable ground transportation statewide, and to convene stakeholders for input.

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 to achieve 100% clean ground transportation. These recommendations may ultimately have tremendous impact on the Companies' future energy planning from both a generation and grid investment perspective. Therefore the Companies respectfully request that they be included as an integral stakeholder to provide input into the plan.

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.



Testimony in support of HB1580 RELATING TO ENERGY

HOUSE COMMITTEE ON FINANCE

Hearing Wednesday, March 1, 2017 2:30pm

Dear Chair Luke, Vice Chair Cullen and members of the Committee on Finance:

Healthy Climate Communities is a Hawaii-based non-profit seeking to empower communities to slow and adapt to climate change. We strongly support the intent of HB1580 and ask that you restore the original goal of 100% renewable energy by 2045.

Two years ago you had the vision and commitment to our children's futures to pass a law setting a goal for 100% renewable power by 2045. Now it is time to address ground transportation.

The technology to replace fossil fuel based transportation is improving and becoming cheaper at an astonishing rate. The automobile industry has embraced the change. Our State government can make the transition smoother and faster by setting a clear target date. It will inform infrastructure investments in both the public and the private sector.

Having 100% renewable ground transportation is the perfect complement to 100% renewable power. Energy stored in the fleet of automobiles will stabilize the grid from fluctuations in intermittent energy sources such as solar and wind. Being able to power our transportation from local, renewable energy sources means we will export fewer dollars to buy oil, we will have a more secure supply without volatile price fluctuations, we will breathe cleaner air, and we will be pulling our weight to slow climate change.

Mahalo,

Dr. Lisa Marten Executive Director Healthy Climate Communities



Email: communications@ulupono.com

HOUSE COMMITTEE ON FINANCE Wednesday, March 1, 2017 — 2:30 p.m. — Room 308

Ulupono Initiative Strongly Supports HB 1580 HD 1, Relating to Energy

Dear Chair Luke, Vice Chair Cullen, and Members of the Committee:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'ibased 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 reduce waste. Ulupono believes that selfsufficiency 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 1580 HD 1, which establishes a clean transportation benchmark framework, because it aligns with our goal of increasing the production of clean, renewable energy in Hawai'i.

In Hawai'i, while ~ 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 ways 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 this committee's efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay Managing Partner

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 27, 2017 3:56 PM
То:	FINTestimony
Cc:	bbreis@me.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Brijit Reis	Individual	Support	No

Comments: Please support HB1580. Using local, renewable energy in Hawaii\'s transportation sector will clean our air, slow climate change, save money on imported fossil fuel, stimulate our economy, and make our energy supply more secure. We need to set a firm date so that decision makers will take it into account when making investment decisions. Thank you, Dr. Brijit Reis

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, February 27, 2017 3:54 PM
То:	FINTestimony
Cc:	vickieinkailua@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Vickie Fullard-Leo	Individual	Support	No

Comments: I request that you pass HB1580. Without a firm plan for infrastructure Hawaii residents will not be able to take advantage of the new transportation technologies such as electric and hydrogen vehicles. Residents who want to do the right thing for the planet and their pocketbooks deserve this opportunity. Renewable energy stored in our cars and buses will help balance renewable energy on the grid. This will allow more people to benefit from solar panels on their homes. Mahalo, Vickie

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, February 27, 2017 3:52 PM
То:	FINTestimony
Cc:	jlarson@lejardinacademy.org
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Julie Larson Hicks	Individual	Support	No

Comments: I request that you support HB1580. Using local, renewable energy in Hawaii\'s transportation sector will keep our air clean, slow climate change, save money on imported fossil fuel, stimulate our economy, and make our energy supply more secure. We need to set a firm date in order to guide decision makers when they are making investment decisions.

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, February 27, 2017 3:51 PM
То:	FINTestimony
Cc:	alohasteph@mac.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
stephanie frazier	Individual	Support	No

Comments: Aloha Chair and Board Members, I ask you to pass HB1580. Using local, renewable energy in Hawaii\'s transportation sector will clean our air, slow climate change, save money on imported fossil fuel, stimulate our economy, and make our energy supply more secure. We need to set a firm date so that decision makers will take it into account when making investment decisions. Thank you, Stephanie Frazier

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, February 27, 2017 3:49 PM
То:	FINTestimony
Cc:	mwahl17@punahou.edu
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mikaila Wahl	Individual	Support	No

Comments: My name is Mikaila, and I am a senior in high school. I strongly support and ask you to pass SB1186. Hawaii's energy policy already aims to eliminate the use of imported fossil fuels for electricity and ground transportation. Two years ago you enacted a deadline for 100% renewable energy in the electricity sector re-framed energy issues, fostered collaboration, and catalyzed progress in electricity regulation and planning. Now it is time to do the same for the transportation sector. Thank you for your time, and I look forward to our island\'s sustainable future!

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, February 27, 2017 4:02 PM
То:	FINTestimony
Cc:	donascot67@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Scott Sullivan	Individual	Support	No

Comments: I strongly support and urge you to facilitate the passage of HB1580. Given Hawaii's ample wind, sun, geothermal and other ways of generating clean renewable energy, weaning our transportation modes and systems away from fossil fuels should be a high priority for the State. Setting a firm date for a complete transition to renewable fuels will facilitate making this happen. Scott Sullivan, Kaneohe

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, February 27, 2017 4:00 PM
То:	FINTestimony
Cc:	laniquinns@yahoo.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Julie Quinn	Individual	Support	No

Comments: I support Hawaii's energy policy to eliminate the use of imported fossil fuels for electricity and ground transportation. Please strengthen it by including a firm target date. Please pass HB1580 with a target of 100% renewable energy by 2045. Sincerely, Julie Quinn

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, February 27, 2017 4:26 PM
То:	FINTestimony
Cc:	kittyc8571@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Catherine Courtney	Individual	Support	No

Comments: Dear Chair Luke and members of the Finance Committee. I strongly support and ask you to pass HB1580. Please restore the original commitment to 100% renewable energy in the transportation sector. We need to make Hawaii's energy policy comprehensive. Our policy already aims to eliminate the use of imported fossil fuels for electricity and ground transportation. Two years ago you enacted a deadline for 100% renewable energy in the electricity sector re-framed energy issues, fostered collaboration, and catalyzed progress in electricity regulation and planning. Now it is time to do the same for the transportation sector.

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, February 27, 2017 4:24 PM
То:	FINTestimony
Cc:	jean67@me.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
jean homsy	Individual	Support	No

Comments: Aloha Chair Luke and Finance Committee members. Without a firm plan for infrastructure Hawaii residents will not be able to take advantage of the new transportation technologies such as electric and hydrogen vehicles. Residents who want to do the right thing for the planet and their wallets deserve this opportunity. Please restore the language for 100% renewable transportation and pass this Bill. 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.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 27, 2017 4:20 PM
То:	FINTestimony
Cc:	rangood4@hotmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Erickson	Individual	Support	No

Comments: Aloha. Having a photo voltaic system attached to our home and a vehicle that charges off a normal 115 volt home outlet is a simple process and keeps on giving free energy and a feeling of independence. A plan for 100% renewable transportation should be implemented to include all of Hawaiis transportation needs. Please support HB1580. Mahalo, Randy Erickson

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, February 27, 2017 4:15 PM
То:	FINTestimony
Cc:	moonierjames@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
James Moonier	Individual	Support	No

Comments: For the good of Hawaii and the planet please restore the original language and pass HB1580. Hawaii's energy policy already aims to eliminate the use of imported fossil fuels for electricity and ground transportation. Two years ago you enacted a deadline for 100% renewable energy in the electricity sector re-framed energy issues, fostered collaboration, and catalyzed progress in electricity regulation and planning. Now it is time to do the same for the transportation sector. James Moonier

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, February 27, 2017 4:12 PM
То:	FINTestimony
Cc:	hkuo19@punahou.edu
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Hailey Kuo	Individual	Support	No

Comments: I am a High School student who needs your support so my future can be as bright as yours was. I strongly support that you pass HB1580. Hawaii's energy policy already aims to eliminate the use of imported fossil fuels for electricity and ground transportation. Two years ago you enacted a deadline for 100% renewable energy in the electricity sector re-framed energy issues, fostered collaboration, and catalyzed progress in electricity regulation and planning. Now it is time to do the same for the transportation sector. Please amend to the original version. Thank you.

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, February 27, 2017 4:09 PM
То:	FINTestimony
Cc:	annmarten@hawaii.rr.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Ann Marten	Individual	Support	No

Comments: I strongly support a version of HB1580 that calls for 100% renewable transportation. We can no longer stick our heads in the sand and pretend that it is the '70's and everyone 16 and over should have their own car. Many will want cars though so they need to be clean. Our population, both temporary and permanent, keeps growing and we must protect Hawaii from the exhaust from cars and trucks, etc. Fossil fuels come here on a boat, and we cannot take the chance that boats will not want to or be able to come to Hawaii. Hawaii's energy policy already aims to eliminate the use of imported fossil fuels for electricity and ground transportation. Two years ago you enacted a deadline for 100% renewable energy in the electricity sector re-framed energy issues, fostered collaboration, and catalyzed progress in electricity regulation and planning. Now it is time to do the same for the transportation sector.

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, February 27, 2017 4:05 PM
То:	FINTestimony
Cc:	sksb@earthlink.net
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Karen Simmons	Individual	Support	No

Comments: I ask that you support and pass HB1580. Without a firm plan for infrastructure Hawaii residents will not be able to take advantage of the new transportation technologies such as electric and hydrogen vehicles. Residents who want to do the right thing for the planet and their pocketbooks deserve this opportunity. Thank you, Karen Simmons

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, February 27, 2017 4:03 PM
То:	FINTestimony
Cc:	cochrah@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Heather Cochran	Individual	Support	No

Comments: I, Heather Cochran, strongly ask you to pass HB1580. Hawaii's energy policy already aims to eliminate the use of imported fossil fuels for electricity and ground transportation. Two years ago you enacted a deadline for 100% renewable energy in the electricity sector re-framed energy issues, fostered collaboration, and catalyzed progress in electricity regulation and planning. Now it is time to do the same for the transportation sector. Sincerely, Heather Cochran, MA, M.Ed

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:	Tuesday, February 28, 2017 10:50 AM
То:	FINTestimony
Cc:	mendezj@hawaii.edu
Subject:	*Submitted testimony for HB1580 on Mar 1, 2017 14:30PM*

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

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

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 27, 2017 10:21 PM
То:	FINTestimony
Cc:	808nateyuen@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Nathan Yuen	Individual	Support	No

Comments: I support HB1580, which aims for 100% clean transportation by 2045. Moving towards renewable energy to power our transportation makes sense on multiple levels. Reducing carbon emissions will slow climate change and the rise in sea level. If will also improve Hawaii's balance of trade with less of our resources going to pay for the importation of energy. HB1580 will lead to many positive benefits for Hawaii. Please pass HB 1580.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 27, 2017 10:16 PM
То:	FINTestimony
Cc:	barrowk@hawaii.edu
Subject:	*Submitted testimony for HB1580 on Mar 1, 2017 14:30PM*

Submitted on: 2/27/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Kelsey Barrow	Individual	Support	No

Comments:

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Randolph G. Moore 2445-A Makiki Heights Drive Honolulu Hawaii 96822

Telephone (808) 778-8832

email rmoore@hawaii.rr.com

February 27, 2017

The Honorable Sylvia Luke, Chair and members of the Committee on Finance House of Representatives State Capitol Honolulu, HI

Dear Representative Luke and members of the Committee:

Subject: HB 1580 (relating to energy – transitioning to renewable ground transportation in Hawaii)

I encourage your support of this bill, but I observe that its interim goal of reducing fossil fuel for ground transportation by 5% by 2025 is fairly wimpy. Increased federal fuel economy standards required for new vehicles will contribute significantly to a reduction in fossil fuel consumption for ground transportation, without the state having to do anything. Hawaii should set a more aggressive interim goal than a 5% reduction by 2025.

Mahalo for your consideration.

Aloha Finance Committee,

My name is Dylan Lee Davis, a conservation field trchnician and resident of Makiki, and I am writing today to testify in support of HB1580. I am inspred by Hawaii's commitment to 100% renewable energy by 2045, and I believe we should take even further steps towards respecting our environment and leading the rest of America by adopting the goals set in HB1580 for 100% renewable energy powered gound transportation. Doing so will help keep us ahead of the ball and make the switch from fossil fueled vehicls easier, which will need to happen as gas prices continue to rise. Electric vehicle changing could save consumers over \$150 million per year. Over half of Hawaii's fuel consumption comes from cars and light trucks, and 66% of our carbon emissions are from transportation, meaning we would dramatically reduce our carbon footprint by making the switch. I believe the passing of HB1580 will help us plan a healthier, cleaner, and more economical future for our islands.

Mahalo,

Dylan

Representative Luke,

I would like to express my strong **support** for HB1580. As a resident of Hawaii, it is overwhelmingly clear to me that there needs to be changes to infrastructure (namely to accommodate renewable technologies) in order to make the state's 2045 goal a reality. Transitioning Hawaii away from fossil fuels is in the best interest of the island community for so many reasons. The two big ones for me are 1) over time, the elimination of fossil fuels will lower energy costs and protect consumers from volatile prices associated with fossil fuels (oil is a finite resource!) 2) eliminating fossil fuel usage will reduce emissions, which we know causes global warming, which we also know severely threatens our island home. This bill will help us get to where we need to be, and time is running out. Thank you for holding a hearing for the bill, and for your time.

Sincerely,

Alison Crabb
HB1580

Department of Transportation, Renewable Energy; Working Group

February 29, 2017, 2:00 p.m.

Energy and Environmental Protection

Aloha 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:	Tuesday, February 28, 2017 1:56 PM
То:	FINTestimony
Cc:	jmenina@hawaii.edu
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Justin L Menina	Individual	Support	No

Comments: Aloha, I stand in strong support for HB1580. We currently stand at an unprecedented crisis in Hawaii's history. Ignoring the obscene cost of living, stagnant infrastructure development, and continuing environmental degradation in Hawaii, excessive fossil fuel consumption has resulted in higher transportation costs that not only affects business, but also families such as my own struggling to make ends meet. Therefore, to ensure sustainable economic and social development, radically transforming Hawaii's infrastructure to support electric vehicles will allow us to continue to achieve our state's goals of becoming less dependent on imported fossil fuels.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Tuesday, February 28, 2017 1:49 PM
То:	FINTestimony
Cc:	begoniabarry@gmail.com
Subject:	*Submitted testimony for HB1580 on Mar 1, 2017 14:30PM*

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Barbara Barry	Individual	Support	No

Comments:

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TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Dwayne Munar Waianae

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I support 100% clean energy for Hawaii. I believe we can be a true model for sustainability and clean energy! Please give the future generations hope for their future. Give us an environment that will help Hawaii citizens play an active role in the use of clean energy, by establishing the types of systems that promote clean living.

Sincerely,

Paahana Kincaid Honolulu, 96815

Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I support HB 1580, which sets a target for 100% renewable transportation because this vision is essential to laying the foundation for a cleaner environment and stronger local economy. The solutions are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water. While I know that a goal, not a mandate, as this bill is, won't force anyone to stop using gasoline, it is still important for our leaders to set the vision.

Please pass this bill, and put the teeth back into it with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Nancy Devlantes Kaneohe

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, and the development of a multi-modal transportation system built primarily around rail, pedestrian and bicycling systems, with cleaner car technology supplementing the system. Unfortunately, because we subsidize transportation, most of the country is currently forced to rely on an automobile based system, which is incredibly expensive for taxpayers and government alike and ultimately results in a lower quality of life and reduced availability of land and real estate for other purposes.

Those towns and cities who have had the vision to go beyond this model, even without a user pay system in place to guide decisions on an economic basis, are now considered the most desirable places in the country to live, as everyone, in truth, loves to be able to walk, or catch rail, as part of their daily routine, and no-one relishes owning three cars in a family. A multi-modal transportation system is as integral to an affordable living strategy as affordable housing, or the development of energy-efficient town-homes and buildings.

From the State of Hawaii perspective, the City of Boulder did a study to show that, while the upfront capital costs of adding a rail line were the same cost as adding one additional lane to an existing four-way highway, the maintenance costs of the rail line dropped to 10% of that cost per year, while the cost of maintaining that one automobile lane remained as high every year thereafter as the original capital cost of construction. Investing in a multi-modal system not only will help shift Hawaii away from foreign fuel dependence, but also will reduce transportation expenditure drain on the state over time (as well as on family budgets) and help maintain the beauty of the state, leaving land and real estate which otherwise would have been needed for automobile use to be available for other purposes - parks, housing, outdoor cafes, and offices rather then parking lots and roadway system.

I hope that the leaders in this state will have the vision and foresight that those few exemplary places in this country, as well as in others, showed in the past, to be realized and enjoyed in those places today. I can tell you myself the joy of watching a bicycle, pedestrian or transit plan come to life and take shape in real form. It is a great feeling.

Thank you for your time and effort as always.

Kind regards, Tania Howard Kamuela

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I support HB 1580 and ask you to put your full support behind this bill.

Removing fossil fuels from transportation use is doable today. It is clean and environmentally compatible.

At present the origination costs of this technology is steep but will level off as it does with all new technology.

HB 1580 opens the collective vision for working toward 100% renewable transportation. We state the goal and begin the movement toward the goal.

Thank you.

Margene Ayers Honolulu 96822

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Karen Hazzard Kailua Kona

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation, which is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership foster innovation and unleash the power of collaboration to focus on a single goal. And they assure our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, Mark Nokes

Honolulu 96815

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

Let us set a precedence and set Hawaii as a founding leading state for the rest of our nation, that we can and will achieve 100% clean renewable transportation by 2045. We must take action now for the future generations. Please set the vision and path to limit and one day stop our reliance on fossil fuels. Please think of our children and pass HB 1580, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045. I plea with you on behalf on my two children who are now 6 and 3, who will be 34 and 31 in 2045 and with the continued use of fossil fuels they may be struggling to survive. If we can commit to them a brighter future, they both may be fathers in 2045 that will be thanking you for their children's future due to your vote for HB 1580 today.

Sincerely, Kerry Wells Kamuela

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, Javier Mendez Honolulu, Oahu 96817

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

My name is Stuart Coleman, and I believe Hawaii can be a national leader in renewable energy. I strongly support HB 1580, which sets a target for 100% renewable energy transportation.

Sincerely, Stuart Coleman Honolulu 96815

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I am completely for Renewable Energy in our State for solar as well as transportation. We are all supposed to be moving away from fossil fuel anyway and what better way than going all renewable energy.

Sincerely,

Colleen Miyose-Wallis Kailua Kona

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Katie Kingsley Honolulu 96822

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I have been driving electric since 2006. It is a great way to save money and help reduce the use of fossil fuels. People with solar on their homes get a bigger bonus.

As a world we need to stop burning fossil fuels. We can move forward towards that goal with HB 1580. It will take time but now is the time to build on how far we have come. Sincerely,

۰,

Al Pugsley Koloa, 96756

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

Please pass the bill, HB 1580 with the language from the original draft that sets the target for 100% clean ground transportation by 2045. We, as an island state, need to lead the country (and the world) in basing our transportation system on cleaner energy solutions such as solar panels, biofuels made from local crops, and hydropower. This will not only help our struggling environment but also improve our local economy. Your leadership and vision is vital for our future and shows our children that we will take appropriate action and legislation to do the RIGHT thing. Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Aloha

Sharon Smart Honolulu 96825

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, John Maurer Honolulu, 96822

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Alan Ewell Honolulu, 96822

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

It's time for Hawaii to make a formal goal for 100% renewable energy in the transportation sector. Lots of people are already doing what they can - buying electric cars and plugging them in to their homes solar panels, driving hybrids, and riding bicycles short distances, especially when there is a dedicated bike lane available. Please help Hawaii's concerned citizens to stop importing fossil fuels (including natural gas) and make our island state an example for the world to follow.

•

Sincerely, Mary Spadaro Honolulu 96822

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

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Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Stacy Soderholm Kula, Maui, 96790

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Alicia Morrier Kealakekua, Hawaii, 96750

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

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Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Mark Branner Honolulu 96822

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Keari Shibuya Honolulu 96816

Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Gordon Rezentes Kapolei

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I urge you to LEAD among U.S. politicians and states as well as the world and SUPPORT HB 1580. 100% renewable transportation!

Sincerely, Barbara George Haleiwa, 96712

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

HB 1580 sets a target for 100% renewable transportation and I hope you will seriously consider passing this bill! It shows that you have vision and leadership and unleashes the power of collaboration to come to a single goal. Besides that, it shows our children that we care for their future.

Please pass this bill, with the language from the original draft that has a target for 100% clean ground transportation by 2045. You and I probably won't be alive then, and yet, it is very important to start this process.

Mahalo for your serious consideration,

Marjorie Erway Kailua-Kona, Hawai'i Island

Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, James McCay Honolulu, Oahu 96815

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I write in support of HB1580, which originally set as a goal that fuel used for transportation would be 100% renewable by 2045. This was amended in HD 1 to only 5% renewable fuels. That's way too low! With the advent of electric cars, and the possibility of charging them via a PhotoVoltaic system using the sun's energy at home, Hawaii is in a strong position to adopt an ambitious goal for our transportation system. Using renewable fuels for transportation would clean up our air (reducing the amount and harm of VOG, though of course not eliminating its volcanic contribution) and even more important would help stave off the worst effects of climate change, which is already threatening our environments and livelihoods.

Please pass HB1580 with an ambitious goal for 2045!

Thank you for the opportunity to submit this testimony.

Sincerely, Beppie Shapiro Honolulu, Oahu 96816



TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580 which sets a goal of gaining 100% renewable transportation. This goal is important to me and our state, opening the door to greater innovation and a cleaner environment.

We purchased an electric vehicle last year and have experienced first hand the amazing advantages of driving without using fossil fuels. No messy oil changes, a quiet ride, freedom from spending money on gas, and the knowledge that we are not polluting our air are just some of the benefits we have experienced by owning an electric car.

Please help Hawaii lead the charge, so to speak, and pass this bill which will be an important step in setting the vision for future clean energy innovations. Fossil fuels are dirty and our reliance on them is a vestige of the past. Let's step out into the bright new world of powering our lives using the sun as our energy source. Its time has come and your children will thank us for taking bold actions today.

Please pass this bill using the language from the original draft that set a target for 100% clean ground transportation by 2045.

7

Sincerely, Betty Gearen

Honolulu 96813

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580 in its original form and ask that you pass it with that wording. We can not continue to poison the environment we are leaving for our children and grandchildren. Clean transportation is important. Hawaii can set the example for the rest of the country and the world and show we care.

Mahalo,

Judy Mick Kailua

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

The vog/haze during the kona weather lately has reminded me that its our trade winds that help us avoid emissions standards for our vehicles. The haze is not entirely vog - it's also anthropogenic pollution emanating from HPower, from vehicles, etc. As climate change affects our trade winds, less pollution will be crucial to our island home not looking like Los Angeles during Kona weather days.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Julie Rivers Honolulu 96816

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, Yoko Shimoyoshi Honolulu, 96825

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I write in support of HB 1580, please pass bill HB 1580 to set a target of 2045 for clean transportation.

Switching to 100% clean and renewable energy is very important to all of us, people and planet. It will result in a cleaner environment and we will have to import a lot less fuels - we will produce them locally and strengthen our economy.

It is amazing how much better the air gets in cities once most car exhausts are gone, people's health gets better by breathing cleaner air.

Like most scientists I believe that global warming is caused by greenhouse gases, mainly methane and CO2 in the atmosphere. CO2 comes from burning fossil fuels that bound carbon for millions of years. Methane (LNG) gets accidentally released during fracking, LNG production, transport and gas storage. If we use less fossil fuels the oceans will rise less, the water will stay cooler which will result in fewer hurricanes and storms.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely

Sonja Kass 302 Makani Rd. Kapaa, HI 96746

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Peter Kirk Honolulu 96825

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Carolyn Bell-Tuttle Honolulu, 96821
March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I hope you will support HB 1580 and support our goal as a community for growing a transportation ecosystem that meets our needs and is not dependent of imported fuels. I think that a target of 100% clean ground transportation by 2045 is achievable and will benefit our health, environment and economy. Please ensure that this vision is included in the bill.

Sincerely,

Nicole Hori Honolulu, 96813

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

My name is Camila Chaudron and I am a constituent from the Manoa/Makiki area. I believe that nature is source, not resource. Without our environment, we have nothing. Therefore, creating a goal to make transportation energy friendly is important to me. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

Please pass this visionary bill that promises to make Hawaii a leader in clean ground transportation.

Mahalo!

Camila Chaudron Honolulu, 96822

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

My name is Emillia Noordhoek and I live on the island of Molokai. I run a small non profit that works on energy issues and have for the past 8 yrs addressed these including the move to 100% renewable transportation. Fossil fuel transportation is responsible for over 75% of the carbon on Molokai alone - imagine what it is on Oahu? although Molokai pays amonst the highest in the country and state for gasoline we are still waiting to have even ONE public EV charger installed on Island. We can do better than this. Hawaii is poised to be leaders in the clean energy revolution, we are already behind the curve globally let's not fall further behind in our nation. As an island state we know that we are vulnerable to climate change and rising seas, let's not wait until we have nothing left to drive to set an example and lead the nation in Clean Energy transportation!

Sincerely, Emillia Noordhoek Kaunakakai, Molokai

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

The state of Hawaii should lead the way in pushing forward with renewable transportation. We live on a small rock in the middle of a big ocean. The probable repercussions of not acting now, towards that goal, will be very apparent in the future. Better to be proactive & make the future better.

Sincerely, Cassie Senner Honolulu, Oahu 96816

March 1, 2017, 2:30 P.M.

Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

We can do it!

Sincerely,

Evan Weber Kailua, Oahu, 96734

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, Chama Cascade Holualoa, Hawaii 96725

HOUSE COMMITTEE ON FINANCE March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

Thank you for all you do to help make Hawaii a great place to live, and for your time and consideration as it relates to this important matter.

Sincerely,

Michael Howells Honolulu 96822

HOUSE COMMITTEE ON FINANCE Mar. 1, 2017, 2:30 P.M. Room 308 (Testimony is 1 page long) TESTIMONY IN SUPPORT OF HB 1580 HD1

Dear Legislators,

I currently have an electric car and a truck that I run on bio-diesel. This type of transportation is good for Hawaii and the local economy.

100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045

John Bendon

HOUSE COMMITTEE ON FINANCE March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I support HB1580, which sets a goal of 100% renewable ground transportation. I own an electric vehicle (Nissan Leaf). It does not emit any greenhouse gases. Also, electric cars have the potential to be a large part of power generation in the future. Each household could be its own power plant with an electric car supplying electrical storage.

Please pass HB1580 with language from the original bill that set a target of 100% clean ground transportation by 2045.

Sincerely,

.

Randy Ching Honolulu 96814

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Debara Zeller Honolulu, 96816

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

100% clean transportation is important to me as founder of Kalani, Hawaii's educational retreat center annually helping thousands of visitors and residents experience nature, culture, wellness and sustainable living. With this aloha 'āina 'ohana vision, we are supporting a cleaner environment and stronger local economy - a \$20 million annual stimulus. Please support HB 1580, which sets a target for 100% renewable transportation, which will be an economic and social boon for Hawaii as we stand strong in modeling for our keiki and the world our commitment to culture, wellness, and environment. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, Richard Koob Pahoa

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

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Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely, Donald Erway Kailua Kona

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

Please pass HB1580. Our transportation system will function more cleanly reducing emissions using renewable energy rather than fossil fuels. Especially on Oahu our roads are filled with vehicles producing tons of exhaust and polluting the air. This sends many people with asthma to the emergency rooms on "Kona weather" days. When tradewinds blow all this filth goes out to sea. Please make the new law targeting 100% clean ground transportation by 2045.

,

Sincerely, Ron Sanderson Honolulu 96825

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

Legislators who support Hawaii's previously enacted commitment to transition to 100% renewable energy for electric power generation should find it easy to support HB1580, committing the Aloha State to transition to 100% clean energy for ground transportation. Gasoline and diesel powered internal combustion engines used in cars, buses, and trucks are less efficient, more polluting, and more wasteful than generators used in electric power plants. Hawaii can never achieve energy independence if we continue to import massive amounts of fossil fuels for transportation purposes. Burning fuels that emit pollutants that threaten our climate, environment, and health is senseless when advanced technologies already exist to power our vehicles with clean energy. For the last 5.5 years I have personally been driving an electric vehicle, which is charged by clean solar energy. The contrast between my own clean, quiet vehicle, and the loud, smelly vehicles sharing the road with me is jarring, now that I now longer have to inhale those damaging fumes in my own driveway and garage. The need to eliminate additional sources of pollution is particularly pronounced in my own community of West Hawaii, where we are already affected by atmospheric pollutants from volcanic emmissions. The additional burden of auto exhaust pollutants could be the factor that pushes some of us over the line to contract lung cancer and other respiratory ailments. It is time for Hawaii to follow the lead of wise leaders such as Queen Liliuokalani and other ali'i, who drove electric cars in the early part of the 20th century. Please pass HB1580 with the language from the original draft, setting a target vision for 100% clean ground transportation by 2045.

Sincerely,

Douglas Perrine Kailua Kona

March , 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. I have spent \$1,000 to be able to buy a Tesla 3 all-electric car in 2018 or 2019. This will become a used car that I could sell at a cheaper price to someone who cannot afford a new electric car. Wouldn't it be fantastic if Hawaii set a target for 100% clean ground transportation by 2045? Our geographical isolation and abundant sources of renewable energy make our state the logical leader for the US. Please pass this bill with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Thank you for your service to the people of Hawaii.

Sincerely, Ruth Robison Hilo, Hawaii 96720

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

I know that this bill won't force anyone to stop using gasoline, because it is a goal, not a mandate. But it is still important for our leaders to set the vision. Vision and leadership fosters innovation. It unleashes the power of collaboration to focus on a single goal. And it assures our children that we care for their future.

Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Robert Soares Honolulu 96821

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

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Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Robert Woliver Kaneohe

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, to move towards 100% renewable transportation in Hawaii. I would LOVE to drive an electric vehicle but do not have access to a charging station at the public school at which I work nor my apartment complex. I would ride a bicycle to work but to date, we do not have safe bike routes in Central Oahu where I live. As an environmental science teacher, this is an issue about which my students are also passionate - we want a more sustainable future and we need legislative support.

Sincerely,

Sandra Webb Mililani

HOUSE COMMITTEE ON FINANCE March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

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Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Matt Lau Honolulu 96816

March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

I strongly support HB 1580, which sets a target for 100% renewable transportation. 100% clean transportation is important to me. With this vision, we can lay the foundation for a cleaner environment and stronger local economy. Our transportation system can be based on solutions that are already available today, like electricity from solar panels, biofuels made from local waste and crops, and hydrogen made from water.

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Please pass this bill, with the language from the original draft that set a target vision for 100% clean ground transportation by 2045.

Sincerely,

Roberts Leinau Haleiwa

HOUSE COMMITTEE ON FINANCE March 1, 2017, 2:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 1580 HD1

Aloha Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

Our children and grandchildren are entitled to clean air in our environment in order to thrive and evolve as conscious humans. Please enact meaningful legislation that requires 100% clean ground transportation by 2045 or, better, sooner. We need to commit ourselves to the highest possible environmental standards to protect those who follow us.

Mahalo nui loa for your assistance in protecting innocent children from further environmental harm by enacting HB 1580.

In peace,

Tom DiGrazia & Family Kailua

From:	mailinglist@capitol.hawaii.gov
Sent:	Wednesday, March 1, 2017 10:32 AM
To:	FINTestimony
Cc:	der1way@earthlink.net
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

HB1580

Submitted on: 3/1/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
donald erway	Individual	Support	No

Comments: I fully support renewable energy for transportation.

Please note that testimony submitted less than 24 hours prior to the hearing, 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.

finance8 - Joy

From: Sent: To: Subject: Patty-k ATT <Patty-k@att.net> Wednesday, March 1, 2017 10:10 AM FINTestimony HB1580 Renewable Ground Transportation



Please vote for this bill for our environment.

Patty Kaliher, Kapaa, HI 96746



This email has been checked for viruses by Avast antivirus software. www.avast.com





- TO: HOUSE COMMITTEE ON FINANCE Representative Sylvia Luke, Chair Representative Ty J.K. Cullen, Vice Chair
- FROM: Richard Parry President of Hawaii Petroleum Marketers Association

HEARING

DATE:	Wednesday, March 1, 2017
TIME:	2:30 p.m.
PLACE:	State Capitol, Conference Room 308
RE:	Testimony on H.B. No. 1580, HD1 Relating to Energy

Chair Luke, Vice Chair Cullen, and Members of the House Committee on Finance, I am Richard Parry, President of the Hawaii Petroleum Marketers Association ("HPMA"). HPMA is a non-profit trade association comprised of members who directly market liquid motor fuel products across the Hawaiian Islands. Our membership includes individuals and companies who operate as independent marketers, jobbers or distributors of petroleum products and who buy liquid motor fuel products at the wholesale level and sell or distribute products to retail customers, other wholesalers, and other bulk consumers. HPMA's primary purpose is to protect and advance its members' legislative and regulatory interests in the Hawaiian Islands and Washington, D.C.

HPMA would like to comment on H.B. No. 1580, HD1 which seeks to prepare the State for the transition to renewable ground transportation in Hawaii and establish a clean ground transportation benchmark framework to maximize consumer fuel savings, including a near term 2025 target encouraging electric vehicle infrastructure build out supporting Hawaii's goal for the reduction and ultimate elimination of the use of imported fuels for ground transportation.

Specifically, H.B. No. 1580, HD1:

(1) Requires the Department of Transportation, in collaboration with the Hawaii State Energy Office of the Department of Business, Economic Development, & Tourism, to identify a plan to make progress toward 100 per cent clean ground transportation and convene stakeholders to gather and use input for the plan, rather than convening a working group; Testimony of Hawaii Petroleum Marketers Association

H.B. No. 1580, HD1 Hearing Date: Wednesday, March 1, 2017 at 2:30 p.m.

(2) Requires the Hawaii Clean Energy Initiative program to design, implement, and administer a plan, to be implemented between 2017 and 2025, to achieve a reduction of 5 per cent in fossil fuel for ground transportation relative to 2016 levels, including metrics to measure the evaluation of progress towards the target fossil fuel reductions in ground transportation, to be established by the Hawaii State Energy Office; and

(3) Requires the planning for the State's facility systems with regard to transportation and energy to be directed to achieve increased energy security and self-sufficiency through the reduction and ultimate elimination of imported fuels for ground transportation in accordance with the Hawaii Clean Energy Initiative program's plan.

Notably, H.B. No. 1580, HD1 eliminates the Renewable Ground Transportation Working Group from the original bill. The purpose of the Renewable Ground Transportation Working Group was to create baseline metrics, identify a plan, and develop recommendations to achieve one hundred per cent renewable ground transportation. We believe the Working Group approach makes sense. At a minimum, we would highly recommend the state agencies seek the views and work collaboratively with all the stakeholders such as the local transportation industry, automobile dealers and petroleum marketers. HPMA stands ready and willing to assist and offer our input on developing the clean ground transportation benchmark framework for the State of Hawaii.

Thank you for the opportunity to testify and provide our concerns regarding H.B. No. 1580, HD1.

Michael Carter

Honolulu, Hawaii

Retail Worker



Greetings, my name is Michael Carter and I live in Honolulu, Hawaii and am aiming to work in animal conservation. I'm in strong support of HB 1580. Currently living with my parents while saving up to move out I have come to realize how much of an obstacle my fuel consumption is. While commuting to work, carpooling others, and just going around the island I use \$60-\$80 a month on fuel for my car. With the high cost of living in Hawaii this becomes a large hurdle for moving out. If I wish to cut back on my fuel consumption a place in town is needed. We need cleaner transportation to lessen the cost of living allowing the younger generations an easier time becoming independent and contributing more to our state's economy. With cleaner transportation we will be able to worry less on how our commute effects our wallets and environment allowing more people to live further from downtown. The 100% renewable energy by 2045 that was passed 8 months ago has already started to help in this way. With the addition of HB 1580 there will be an even greater impact on our way to becoming more sustainable as a state relying less on the continental US and Asia. Making our economy grow and a better standard of living for our people and the survival of all the natural beauty our great state has to offer.





<u>Hearing Date</u>: Wednesday, March 1, 2017 <u>Hearing Time</u>:8:30AM

<u>Place:</u> Conference Room 308 <u>Committee:</u> Energy & Environmental Protection (EEP), Financial Services Committee (FIN)

Lee and Members of the FIN Committee, My name is Polly Miller and I am a resident of O'ahu. I am writing in full support of HB1580.

I am undergraduate student studying Biology and Environmental Science. I work a minimum wage job and travel about 45 minutes in by bus in total every day. My coworkers also travel by bus mostly, or they walk. So if this bill were to be passed and renewable transportation could be implemented on the bus system, for instance through electric buses or from the monorail that is currently under construction, then it would be very convenient. It would be efficient for those who do not own a car.

Considering that Hawaii continues to have the highest gas prices in a country, because of high transportation costs, this bill would help alleviate the transportation costs of these non-renewable fossil fuels. In Hawaii, 65% of our carbon emissions are from transportation and cars and light trucks account for 53% of our fuel consumption. If we were to pass this bill we would set up an infrastructure that would eliminate at least half of our carbon dioxide emission by 2045 respectively.

On a final note, we need to consider that renewable energies are what our society is pushing for and desperately need. Fossil fuels are not a renewable resource, and at this point we use oil to actually produce solar paneling. Considering that solar is becoming a lot more efficient and widespread in Hawaii already, we need to seriously think about where we are using this finite resource. Will we burn oil until it is all gone or use it to create renewable forms of energy for the long term? With that, I thank you for your time and urge you to please pass HB1580.

H. B. 1580 HD1 : Relating to Energy



Testimony for EEP,FIN on March 1, 2017

I, Dean T. Uehara, support this bill for the following reasons:

First: the goal to reduce use of fossil fuels, to improve the air for all of Hawaii and it's future children

Second: As a 59 year old Ewa Beach resident I have to face long commutes whenever I need to do work in Honolulu. Mass transit including rail would reduce stress, unproductive time, pollution and wasted energy in traffic.

Third: Hawaii has consistently some of the highest gas prices in the United States. Electric would also address the high gas prices for all of us in Hawaii.

Thank you for your consideration of this testimony in support of HB1580.

LATE

From:	mailinglist@capitol.hawaii.gov
Sent:	Wednesday, March 1, 2017 2:05 PM
To:	FINTestimony
Cc:	rfurst808@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

<u>HB1580</u>

Submitted on: 3/1/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Furst	Individual	Support	No

Comments: As a resident of east Honolulu and an owner of an electric vehicle, I am a strong supporter of a renewable transportation plan for Hawaii. I would like to express my strong support for HB 1580, as having a long term plan for increasing the infrastructure required to maintain a brisk renewable transportation system for Hawaii. Thank you for your work on this important matter.

Please note that testimony submitted less than 24 hours prior to the hearing, 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, March 1, 2017 2:05 PM
То:	FINTestimony
Cc:	yappygrl1@aol.com
Subject:	*Submitted testimony for HB1580 on Mar 1, 2017 14:30PM*

<u>HB1580</u>

Submitted on: 3/1/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Sandra Fujita	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, 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, March 1, 2017 2:20 PM
То:	FINTestimony
Cc:	kbadten5@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

HB1580

Submitted on: 3/1/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Kyler Badten	Individual	Support	No

Comments: I fully support this green movement. This is a terrific way to ensure a more sustainable future for our children.

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Charessa Fryc Salt Lake, Hawaii Student, UH Manoa

HB 1580 Testimony

Greetings, my name is Charessa Fryc and I live in Salt Lake, Hawaii and I am a Student at UH Manoa. I am also an Environmental Activist and political activist locally. I support HB1580. As a student that lives in Salt lake, I commute to School every single day and commute to work on the weekends, and basically everywhere I go. Gas is so expensive, and buying a car is even more expensive, and with gas prices so high we need to stop depending on the mainland for fuel. Our people just can't afford it anymore. The bus keeps getting more expensive every year, and soon I won't be able to afford that either when I am no longer a student. Gas prices are getting more expensive because of how expensive it is to ship anything to our small islands and it's unsustainable, and affecting our local economy. Our residents and our students just can't afford to drive around and pay for gas. On top of the outrageous expense of gas/ fuel for our vehicles, it's unsustainable to keep up the amount of card we have on this island as well as how much gas we use daily which is all imported from the mainland. We need to become independent because of how far away we are from the rest of the US and Asia. We need to become self-sufficient with all forms of energy including transportation which is vital to gaining independence so we can thrive economically as a nation, through being green. In attempts to become green I highly suggest investing more in the bus, since everyone uses it and to divest in individual cars, which are the reason we have so much traffic. We need a sustainable number of cars on our island so that we can commute faster by bus, and invest more in the bus so that more people will take it and routes will come more often and work more efficiently. With the amount of dependence, we have on fossil fuels it is unsustainable and a huge contributor to climate change, which threatens our beautiful coral reefs which are full of life. Our corals are bleaching more and more as we speak and because of this our reef life is dying which is why we need to fight against climate change by resorting to more sustainable energy sources. In order to "complete the picture" for clean energy in Hawaii we need to pass this bill, HB1580. 8 months ago the 100% renewable energy by 2045 was passed. We need HB1580 to complete the picture so we can be all- around sustainable. So please, for the future and sustainability of our beloved islands we need to pass this bill. As a student, I don't want to inherit the environmental damages done by climate change from not passing this bill and attempting to reduce climate change.

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

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(808) 586-2355 (808) 586-2377

Statement of LUIS P. SALAVERIA Director Department of Business, Economic Development and Tourism before the HOUSE COMMITTEE ON FINANCE Wednesday, March 1, 2017 2:30 P.M. State Capitol, Conference Room 308

> in consideration of HB1580, HD1 **RELATING TO ENERGY.**

Chair Luke, Vice Chair Cullen and Members of the Committee.

The Department of Business, Economic Development and Tourism (DBEDT) supports HB1580, HD1, which establishes a clean transportation benchmark framework and near-term 2025 target supporting Hawaii's goal for the reduction and ultimate elimination of the use of imported fuels for ground transportation. This framework is consistent with Chapter 226-18, Hawaii Revised Statutes for the planning of State facility systems with regard to energy for increased energy security and selfsufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation. HB1580, HD1 sets an aggressive but achievable target of a 5% reduction in fossil fuel for ground transportation in 2025, roughly 27 million gallons a year reduction.

DBEDT supports setting a goal for the petroleum reduction in ground transportation and supports pursuing actions promoting petroleum reduction by implementing existing technologies and innovative programs. The near term target and benchmark framework identified in HB1580, HD1 will help to spur action while measuring progress to further inform goal setting towards the ultimate elimination of fossil fuel in ground transportation. DBEDT, through its Hawaii State Energy Office (HSEO), will continue to work with the Department of Transportation and other stakeholders with expertise in transportation to achieve clean transportation goals.

DBEDT's Hawaii Clean Energy Initiative Transportation Energy Analysis (HTEA) report, published in 2015, identified nearly 100 potential tactics that could contribute to reduce petroleum consumption in the transportation sector; analyzed 38 tactics; and recommended 22 tactics that could potentially provide 72 million gallons a year





reduction in fossil fuel consumption by 2030. The tactics focused on incremental reductions to petroleum relative to baseline consumer adoption of electric vehicles (EVs).

HB1580, HD1 also supports the process of determining how best to utilize Hawaii's allocation under the Volkswagen Settlement Environmental Mitigation Trust. The State of Hawaii is expected to participate as a Beneficiary of the Environmental Mitigation Trust established through the settlement of claims against Volkswagen alleging violations of the United States Clean Air Act. Hawaii has been initially allocated a total of \$8,125,000 from the Trust to fund eligible environmental mitigation projects in Hawaii. The purpose of the mitigation trust is to fund eligible mitigation actions (largely, medium and heavy duty vehicles and EV charging infrastructure) that replace diesel emission sources with cleaner technology to reduce excess emissions of oxides of nitrogen caused by the violating 2.0 liter cars. Up to 15% of Hawaii's allocation of the trust (\$1,218,750) is eligible to be spent on Light Duty Zero Emission Vehicle Supply Equipment (e.g. EV charging infrastructure) supporting the electrification of Hawaii's transportation sector, which is in accordance with Governor Ige's State of the State 2017 address.

Thank you for the opportunity to offer support on HB1580, HD1.





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

March 1, 2017 2:30 p.m. State Capitol, Room 308

H.B. 1580, H.D. 1 RELATING TO ENERGY

House Committee on Finance

The Department of Transportation (DOT) **supports** the intent to establish a clean ground transportation benchmark framework to maximize consumer fuel savings, including a near term 2025 target encouraging electric vehicle infrastructure buildout supporting Hawaii's goal for the reduction and ultimate elimination of the use of imported fuels for ground transportation.

The DOT will collaborate with the state energy office to develop recommendations to achieve these benchmarks.

Thank you for the opportunity to provide testimony.

From:	mailinglist@capitol.hawaii.gov
Sent:	Tuesday, February 28, 2017 5:15 PM
То:	FINTestimony
Cc:	redahi@hawaii.rr.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

HB1580

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
B.A. McClintock	Individual	Support	No

3

Comments: Please support this important bill. Mahalo

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LATE

From:	mailinglist@capitol.hawaii.gov	
Sent:	Tuesday, February 28, 2017 6:11 PM	
To:	FINTestimony	
Cc:	palmtree7@earthlink.net	
Subject:	*Submitted testimony for HB1580 on Mar 1, 2017 14	:30PM*

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing	
janice palma-glenie	Individual	Support	No	

Comments:

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HOUSE COMMITTEE ON FINANCE Wednesday, March 1, 2017 2:30 PM Conference Room 308



In SUPPORT of HB 1580 HD1 Relating to Energy

Aloha Chairwoman Luke and members of the Finance Committee,

The Sierra Club of Hawai'i strongly supports HB 1580 HD1, which seeks to reduce and ultimately eliminate carbon-based ground transportation statewide by 2045, including the amendments made by the Energy and Environmental Protection Committee.

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

mailinglist@capitol.hawaii.gov	LA
Tuesday, February 28, 2017 5:36 PM	
FINTestimony	
launahele@yahoo.com	
Submitted testimony for HB1580 on Mar 1, 201	7 14:30PM
	Tuesday, February 28, 2017 5:36 PM FINTestimony launahele@yahoo.com

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Benton	Individual	Support	No

1

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Tuesday, February 28, 2017 5:33 PM
To:	FINTestimony
Cc:	kshimata@hawaiiantel.net
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Kathy Shimata	Individual	Support	No

Comments: I support efforts in every aspect of our daily lives to decrease fossil fuels & increase use of renewable energy.

Please note that testimony submitted less than 24 hours prior to the hearing, 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.





HOUSE COMMITTEE ON FINANCE

March 1, 2017 2.30PM Room 308

IN SUPPORT: HB1580 RELATING TO ENERGY

Aloha Chair Luke, Vice Chair Cullen, and committee members,

On behalf of the Young Progressives Demanding Action of Hawaii, I strongly support House Bill 1580, a bill that sets a benchmark to reduce ground transportation fossil fuels by 5% by the year 2025. This bill ultimately sets a State goal to achieve a 100% renewable portfolio standard (RPS) for Hawaii's ground transportation sector by 2045.

HB1580 is a wonderful embellishment to the existing 100% electricity RPS in Hawaii. This act created a movement to functionally relinquish dependence on petroleum to create more reliable energy security, stimulate Hawaii's economy, and decrease harmful emissions from electricity production; however, the catch is that electricity is only part of the battle. In 2014, almost 30% of petroleum consumed in Hawaii was by ground transportation. Below, figure 1 depicts the overall end-use consumption by sector in Hawaii during 2014. Without intervention, the ratio for petroleum consumption in Hawaii's ground transportation sector will only continue to rise due to growing population coupled with an from a predicted increase in dependence on renewable electricity.



Figure 1. Source: Hawaii State Energy Office [https://energy.hawaii.gov/wp-content/uploads/2011/08/FF_Nov2016.pdf]

At a 24 MPG average, we are on track to meet our 30 MPG goal by 2030; however, our vehicle efficiency is not quite aligning with the targeted trend (figure 2). This is likely due to an increased demand for light trucks and SUVs in the state of Hawaii. According to DBEDT's 2015 State of Hawaii Data Book, total truck sales surpassed car sales in 2014 (table 1). Federal CAFÉ standards give more liberal restrictions to vehicles with a large footprint than smaller ones; this means that as the large trucks get larger, they experience less stringent efficiency standards. Due to the discrepancies in federal CAFÉ standards, implementing a State standard for transportation is crucial to increase vehicle efficiency moving forward. In the Blue Planet Foundation's 2016 Report Card, Hawaii's transportation sector scored a D+ (on an A-F scale). This score rests on the pinnacle that our vehicle efficiency rates are subpar and transportation is in large-part a contributor to our fossil fuel emissions in Hawaii.

VEHICLE EFFICIENCY



Statewide motor vehicle efficiency is derived from gasoline, highway diesel, and hir Taxation Annual Fuels Reports and the 2014 State of Hawai'i Data Book, Table 18.17, vehicle efficiency of 30 mpg for passenger cars, and 22 mpg for light trucks, by 202 2013 State of Hawai'i Data Book, Table 18.06. way LPG consumption, and from vehicle miles traveled, reported in State of Hawai'i Department of orget trend is based on the Hawai'i Clean Energy Initiative Road Map: 2011 Edition, targeting average and also on 2013 relative distributions of registered passenger cars and light trucks reported in the

Figure 2. Source: Blue Planet Foundation [https://blueplanetfoundation.org/wpcontent/uploads/2016/12/Blue Planet 2016 Energy Report Card.pdf]

Table 1. Source: DBEDT

Type and place of manufacture	2012 1/	2013	2014
Total	42,506	48,721	54,162
Car	21,925	24,761	26,504
ight truck	20,581	23,960	27,658
omestic Brands	8,105	9,860	10,658
uropean Brands	5,129	5,315	5,504
apanese Brands	26,063	30,255	34,187
Korean Brands	3,209	3,291	3,813

[http://files.hawaii.gov/dbedt/economic/databook/db2015/section18.pdf]

I do, however, believe that Hawaii is a true pioneer in renewable energy. Currently, it is the only state in the U.S. with the ambitious goal of harvesting 100% clean electricity. Why not push it further and mandate that all energy consumed by the ground transportation sector be in the form of clean energy too? There are current movements to further implement clean transportation in Hawaii such as the Hawaii Sustainable Initiative, a flexible gas tax (SB1187/HB1259), a biofuel pilot program (SB237/HB1476), and growing demand for more accessible charging stations. If executed properly, we could be thriving in a society where we can drive using sustainable biofuels and charge our zero-emissions vehicles on completely renewable electricity by the year 2045.

The overarching benefit of this bill is that it is not strictly mandating businesses, airlines, travel agencies, or civilians to switch to zero-emissions vehicles else there be consequences; rather, this bill is just the start of a momentous goal to get to a 100% renewable ground

transportation sector. It encompasses flexibility for amendments in the future yet is integrated with enough structure to begin piloting programs and partnerships to spearhead the clean transportation revolution here in Hawaii.

Relying on petroleum for electricity and transportation is not just unsustainable, but it is harmful to the environment and human health. Current and future generations look to you, our leaders, to protect our rights to clean air, clean water, and abundant resources. We can make a difference in the lives of our people and our wildlife inhabitants if we cut our emissions in both the electricity and transportation sectors. The Young Progressives Demanding Action Hawaii asks that you consider all of the potential benefits of passing this bill and take initiative for the health and well-being of Hawaii.

Thank you,

Jamee Allen Environmental Chair | Young Progressives Demanding Action Hawaii

LATE

From:	mailinglist@capitol.hawaii.gov	
Sent:	Tuesday, February 28, 2017 7:01 PM	
To:	FINTestimony	
Cc:	mendezj@hawaii.edu	
Subject:	*Submitted testimony for HB1580 on Mar 1, 2	017 14:30PM*

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

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

Comments:

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Rachel Schutz

1504 Uluhao St. Kailua, HI 96734

Feb. 28th, 2017

Aloha Finance Committee Members,

My name is Rachel Schutz and I am writing in support of House Bill 1580 which establishes the objective of eliminating all imported fossil fuels for ground transportation by 2045.

I live in Kailua but work in Honolulu, so spend a decent chunk of time and money commuting back and forth. This means that the price of gas affects my bottom line. Importing our gas naturally inflates the price, meaning that Hawai'i has some of the highest gas prices in the country. By switching to 100% renewable sources, we could, over time, reduce the price of my daily commute while improving our environment simultaneously.

Last year my husband and I made the switch over to solar power and are proud to be contributing to our state's commitment to 100% renewables by 2045. However, when it came to purchasing a new car last year, we didn't feel that we could easily go electric because the state's infrastructure for charging stations was not comprehensive enough.

This bill would renew our dedication to renewable energy and fill in the gaps that our 2015 bill left open when it pledged to achieve 100% renewable energy by 2045. I urge you to support the bill to protect our 'aina and our bottom lines.

Mahalo for your time.

Rachel Schutz



From:	mailinglist@capitol.hawaii.gov
Sent:	Tuesday, February 28, 2017 8:28 PM
To:	FINTestimony
Cc:	klahaela@gmail.com
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM
Subject:	Submitted testimony for HB1580 on Mar 1, 2017 14:30PM

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Kimiko LaHaela Walter	Individual	Support	No

Comments: Aloha Chair, Vice Chair, and members of the committee, I urge you to SUPPORT measure HB1580! It is time we invest in renewable energy in any and all sectors we can! Let's get going with ground transportation. Mahalo for the opportunity to testify, Sincerely, Kimiko LaHaela Walter

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From:	mailinglist@capitol.hawaii.gov
Sent:	Tuesday, February 28, 2017 9:16 PM
To:	FINTestimony
Cc:	rachelrounds@hotmail.com
Subject:	*Submitted testimony for HB1580 on Mar 1, 2017 14:30PM*

<u>HB1580</u>

Submitted on: 2/28/2017 Testimony for FIN on Mar 1, 2017 14:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing	
Rachel Rounds	Individual	Support	No	

Comments:

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