<u>HB-552</u> Submitted on: 2/8/2021 3:54:07 PM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Azelski	Individual	Support	No

Comments:

Please support.

Hawaii Electric Vehicle Association

PO BOX 6310 Hilo, HI 96720 hawaiidriveelectric@gmail.com



February 9, 2021

Dear Chair Lowen, Vice-Chair Maren, and EEP Committee members,

The Hawaii EV Association strongly SUPPORTS **HB552** and its statewide "clean transportation goal."

This bill sets the goal of employing one hundred percent clean ground transportation for the public and private transportation sectors by December 31, 2030; requires all light duty motor vehicles procured pursuant to the Hawaii Public Procurement Code to be powered by renewable sources by January 1, 2030; accelerates the State's goal of becoming one hundred percent reliant on clean energy and reaching its zero emissions clean energy target by 2030; increases the goal for electricity use reductions achieved under the State's energy-efficiency portfolio standards; and prohibits the sale of new motor vehicles powered solely by fossil fuels by January 1, 2030.

These are all goals that our organization strongly supports. This is a timely and necessary bill as the U.S. and the world seriously ramps up efforts to mitigate climate change.

We do recommend that we employ a more aggressive transition goal, e.g., requiring that purchases of new state-owned vehicles be zero-emission if available (zero-emission) inventory is fit-for-intended purpose.

Thank you for your support of HB552.

Sincerely,

Noel Morin - President

REVISED TESTIMONY BY:

JADE T. BUTAY DIRECTOR

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



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

February 11, 2021 11:00 A.M. State Capitol, Teleconference

H.B. 552 RELATING TO THE ENVIRONMENT

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION HOUSE COMMITTEE ON TRANSPORTATION

The Department of Transportation (DOT) **supports** this bill that requires State owned transportation fleets to transition to one hundred percent clean ground transportation by establishing a goal for the reduction and ultimate elimination of the use of fossil fuels for ground transportation by 2045, and to transition all light duty vehicles powered by renewable energy source by 2035.

The bill also requires the procurement policy for all agencies purchasing or leasing medium and heavy-duty motor vehicles to seek vehicles that reduce dependence on petroleum-based fuels that meet the needs of the agency, where feasible and cost-effective.

It also requires the DOT, in collaboration with the state energy office, to develop strategies to transition all light-duty motor vehicles, both public and private, in the State to attain a goal of one hundred per cent of light duty vehicles powered by renewable energy sources by 2045.

Moreover, the bill requires state and county agencies to purchase building materials that reduce the carbon footprint of the project for use on the construction of new roads, where feasible and cost effective.

The State Department of Transportation, Highways Division is currently in the process of converting light duty vehicle to electric through a lease agreement that has recently been executed with an electric vehicle provider who will also be providing supporting electrical charging equipment. The agreement is available for all State agencies, Counties, and University of Hawaii to utilize for their electric vehicle conversion needs. Highways Division has taken steps to reduce its carbon footprint by converting all highway and building lighting to energy efficient devices, installing photovoltaic systems at all baseyard facilities, utilizing higher quality AC with longer life, requiring that all concrete on our system be CO2 entrained, using cementitious epoxy coatings to extend the life of our structures, moving away from building new roads and using technology to improve the system we have, and piloting new technologies like plastics in pavements.

Thank you for the opportunity to provide testimony.



TESTIMONY BEFORE THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION AND COMMITTEE ON TRANSPORTATION

HB 552

Relating to the Environment

February 11, 2021 11:00 AM, Agenda Item # 1 State Capitol, Conference Room 325 / VIDEO CONFERENCE

> June Chee Program Manager, Electrification of Transportation Hawaiian Electric Company, Inc.

Aloha Chairs Lowen and Aquino, Vice Chairs Marten and Ilagan, and Committee Members,

My name is June Chee and I am testifying on behalf of Hawaiian Electric Company

in support of and providing suggested amendments for HB552, Relating to the Environment. Hawaiian Electric Company supports this measure because it will strengthen Hawaii's commitment to clean ground transportation and help drive investment resulting in quantifiable emissions reductions. The Company supports the legislature's broad vision and substantial commitment to decarbonizing the ground transportation sector and applauds the legislature's intent to have the State develop strategies to transition all light-duty motor vehicles by 2045.

Facilitating the electrification of transportation is one of the Company's top priorities established in our *Electrification of Transportation Strategic Roadmap*. The Company has focused its planning for the coming influx of electric vehicles through electrification of transportation programs such as EV-specific rates to encourage daytime <u>charging; an electric bus make ready infrastructure pilot; our proposed Charge</u> Ready Hawaiian Electric PO BOX 2750 / HONOLULU, HI 96840-0001 Hawai'i pilot to provide make ready infrastructure support to commercial properties and multi-unit dwellings; and a request to expand our public charging network.

The Company provides suggestions on Page 8, line 21 to include, "Promote efficient operation of vehicles <u>including efficient planning of charging station locations</u> <u>and day-time charging for electric vehicles</u>;" and on Page 9, sections 8 and 9 to also include the data collection of "<u>Electric vehicle charger use</u>".

Thank you for this opportunity to testify.

<u>HB-552</u> Submitted on: 2/9/2021 4:15:20 PM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanette Vinton	Individual	Support	No

Comments:

Dear Chair Lowen, Vice Chair Marten and Committee Members,

I am writing in support of HB552 which establishes clean ground transportation goals for state agency fleets and all light-duty motor vehicles in the State.

Transitioning from fossil fuel vehicles to electric vehicles is one of the biggest things we can do to reduce our dependence on oil and lessen the damaging effects of air pollution.

As a long-time EV owner, I am happy to see the significant EV growth in our state over the past few years. But even with that growth, electric vehicles only amount to about 1.0% of the total vehicle population. We need to do better.

Setting specific clean ground transportation goals for the state agencies sets a clearer path to achieve a zero-emmision fleet by 2035. My only comment would be to only have 100% electric vehicles (BEVs) as the preferred vehicle type to meet these goals. This should be achievable considering the growing number of EV models available or coming soon to the marketplace.

Respectfully submitted,

Nanette Vinton

Mililani, HI



Email: communications@ulupono.com

HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION AND TRANSPORTATION Thursday, February 11, 2021 — 11:00 a.m.

Ulupono Initiative <u>supports</u> HB 552, Relating to the Environment.

Dear Chair Lowen, Chair Aquino, and Members of the Committees:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve quality of life throughout the islands by helping our communities become more resilient and selfsufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

Ulupono <u>supports</u> HB 552, which establishes clean ground transportation goals for State agencies on a staggered basis until achieving a 100% light-duty motor vehicle clean fleet by 12/31/2035, and all light-duty motor vehicles in the State by 12/31/2045; requires the procurement policy for all agencies purchasing or leasing medium- and heavy-duty motor vehicles to seek vehicles that reduce dependence on petroleum-based fuels that meet the needs of the agency, where feasible and cost-effective; and, requires State and county agencies to purchase building materials that reduce the carbon footprint of the project for use on the construction of new roads, where feasible and cost-effective.

Ulupono supports Hawai'i's reduction of fossil fuel use as we strive to meet the State's 100% renewable goal by 2045. This measure seeks to make a large impact on the renewable energy goal by phasing in light-duty motor vehicles powered by renewable energy sources. Ulupono support the State leading by example to meet this goal by 2035.

Hawai'i Should Be Doing More

Ulupono finds that electric vehicles (EVs) are an important avenue to address Hawai'i's pressing climate issues and align with the State's energy and environmental goals. EVs currently offer an effective option to advance clean, renewable ground transportation and provide immediate benefits to Hawai'i. Though EVs currently only represent about one percent of all passenger vehicles in the state, EV sales grew by more than 40% in 2020. Simply put, zero-emission vehicles are the future and setting clear goals by the State will



align with similar commitments around the globe.

In fact, the Governor of California recently signed an executive order to eliminate the sale of new gas cars and trucks by 2035. California joins a multitude of countries and cities across Europe, as well as China and British Columbia, who have taken similar measures to eliminate the sale of new fossil fuel vehicles.

Most recently, Nissan committed to having every new vehicle in major markets (including the US) be electrified by the early 2030s. Last week, General Motors (GM) committed to stop making gasoline and diesel cars, vans and SUVs by 2035.

The future of transportation does not depend on fossil fuels and the State of Hawai'i should continue to lead by example and further show the world that Hawai'i is serious about the sustainability and resiliency of our community by encouraging EVs as this bill proposes.

EVs Provide Immediate Energy and Environmental Impact

Ground transportation alone utilizes more than a quarter of the state's imported petroleum. Electrifying ground transportation will reduce our demand for imported fossil fuels, keeping millions of dollars in the state and cutting harmful pollution.



Source: Hawai'i State Energy Office – Hawai'i Energy Facts & Figures

Converting from petroleum-based vehicles to EVs immediately reduces greenhouse gas (GHG) emissions, helping combat climate change and its impacts on our islands. EVs produce zero-emissions at the tailpipe, and even when full lifecycle emissions (from manufacturing through disposal) are considered, EV emissions are approximately 50 percent lower than internal combustion engine (ICE) vehicles.

EVs can also support the integration of more renewables on the electric grid with smart charging technology and rate structures. Thus, proliferating EVs throughout Hawai'i can



help accelerate progress towards the State's 100 percent RPS goal, as well as contribute to the State's Paris Agreement commitments and carbon neutral goal.

This bill is an important measure for the State to push for the decarbonization of our economy, while continuing to show the world that Hawai'i is a clean energy leader.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata Director of Government Affairs

<u>HB-552</u> Submitted on: 2/9/2021 8:16:15 PM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
GORAN RAD	Individual	Support	No

Comments:

February 9, 2021

Dear Chair Lowen, Vice Chair Marten, and EEP Committee members, Dear Chair Henry J.C. Aquino, Vice Chair Greggor Ilagan and TRN Committee members,

On behalf of KauaiEV, a grassroots organization with over 100 members on Kauai, I write **in strong support of HB552**. Our members are electric vehicle drivers, we believe that EVs are the personal transportation of the future, and they significantly reduce greenhouse gas emissions as well as our dependence on imported fossil fuels.

To reach Hawaii's climate goals and in order to combat climate change and sea level rise we need to move away from burning fossil fuels as soon as possible. If the state sets a good example counties, businesses and citizens will follow. Every year more models come to market, including SUVs and soon to include pickup trucks, it should be easy or state agencies to purchase electric vehicles that fir their needs.

EVs are very efficient and Hawaii's warm weather is ideal for them. Several of our members get 170 - 180 miles per gallon equivalent, so EVs are far less polluting and cheaper over their lifetime. As our island grids are powered by more and more renewables EVs get even cleaner! A recent consumer report also found EV maintenance costs are half as much as a gas car's.

We also commend the other component of the bill, reducing the carbon foot print of road construction is another great way to mitigate climate change. Los Angeles, the UK, India, and the Netherlands are experimenting with plastic roads, maybe this could be done in Hawaii as well. Plastic-bitumen composite roads have better wear resistance than standard asphalt concrete roads (see for example <u>https://en.wikipedia.org/wiki/Plastic_road</u>).

Please support HB552!

<u>HB-552</u> Submitted on: 2/9/2021 8:36:58 PM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sharon Geiken Westerberg	Individual	Support	No

Comments:

"Dear leaders,

I am a constituent and an electric vehicle owner on Kauai. I strongly support Bill HB552.

I am passionate about doing all I can do in my life to keep from contributing to climate change. Since transportation is 28% of the total greenhouse admissions, for me it was a moral decision to buy an electric vehicle. I believe our state and county government has same moral imperative to reduce dependence of petroleum based fuels as evidenced by the signing of the 100% renewable transportation by 2045 commitment.

Thank you for your support.

Sharon Geiken Westerberg

5102 Kahana St Kapaa, HI 96746"



HB 552, RELATING TO THE ENVIRONMENT

FEBRUARY 11, 2021 · HOUSE ENERGY AND ENVIRONMENTAL PROTECTION AND TRANSPORTATION COMMITTEES · CHAIRS REP. NICOLE E. LOWEN AND REP. HENRY J.C. AQUINO

POSITION: Support.

RATIONALE: Imua Alliance supports HB 552, relating to the environment, which establishes clean ground transportation goals for state agencies on a staggered basis until achieving a 100 per cent light-duty motor vehicle clean fleet by 12/31/2035, and all light-duty motor vehicles in the State by 12/31/2045; requires the procurement policy for all agencies purchasing or leasing medium- and heavy-duty motor vehicles to seek vehicles that reduce dependence on petroleum-based fuels that meet the needs of the agency, where feasible and cost-effective; and requires state and county agencies to purchase building materials that reduce the carbon footprint of the project for use on the construction of new roads, where feasible and cost-effective.

According to a report produced by the Hawai'i Climate Change Mitigation and Adaptation Commission, global sea levels could rise more than three feet by 2100, with more recent projections showing this occurring as early as 2060. In turn, over the next 30 to 70 years, approximately 6,500 structures and 19,800 people statewide will be exposed to chronic flooding.

Additionally, an estimated \$19 billion in economic loss would result from chronic flooding of land and structures located in exposure areas. Finally, approximately 38 miles of coastal roads and 550 cultural sites would be chronically flooded, on top of the 13 miles of beaches that have already been lost on Kaua'i, O'ahu, and Maui to erosion fronting shoreline armoring, like seawalls.

Furthermore, according to research conducted by Michael B. Gerrard from Colombia Law School, modern-day slavery tends to increase after natural disasters or conflicts where large numbers of people are displaced from their homes. In the decades to come, says Gerrard, <u>climate change</u> <u>will very likely lead to a significant increase in the number of people who are displaced</u> <u>and, thus vulnerable, to human trafficking.</u> While the Paris Climate Agreement of 2015 established objectives to limit global temperature increases and several international agreements are aimed at combating modern-day slavery, it is highly uncertain whether they will be adequate to cope with the scale of the problem that is likely to occur as a result of climate change.

As we work to reduce carbon emissions and stave off the worst consequences of climate change, we must begin preparing for the adverse impact of sea level rise on our shores. We are now quantifying the speed at which we must act. We cannot continue to develop the 25,800-acre statewide sea level rise exposure area–one-third of which is designated for urban use–without risking massive structural damage and, potentially, great loss of life.

Therefore, we should take steps to accelerate Hawai'i's efforts to address climate change and develop a clean economy, **including by reducing combustion-engine powered vehicles in our state's vehicle fleets.** Norway will end the sale of new cars that use fossil fuels in 2025. The Netherlands will enact a similar plan, but by 2030. France and the UK have called for total internal-combustion vehicle bans by 2040. Hawai'i should at least do the same with regard to taxpayer-funded vehicles to advance our state's goal of mitigating climate change. For the sake of our keiki, we cannot afford to wait to solidify strategies to preserve our island home for generations to come.

Kris Coffield · Executive Director, Imua Alliance · (808) 679-7454 · kris@imuaalliance.org



KauaiEV.org 302 Makani Rd. Kapaa, HI 96746 808-652-0591



February 9, 2021

Dear Chair Lowen, Vice Chair Marten, and EEP Committee members, Dear Chair Henry J.C. Aquino, Vice Chair Greggor Ilagan and TRN Committee members,

On behalf of KauaiEV, a grassroots organization with over 100 members on Kauai, I write **in strong support of HB552**. Our members are electric vehicle drivers, we believe that EVs are the personal transportation of the future, and they significantly reduce greenhouse gas emissions as well as our dependence on imported fossil fuels.

To reach Hawaii's climate goals and in order to combat climate change and sea level rise we need to move away from burning fossil fuels as soon as possible. If the state sets a good example counties, businesses and citizens will follow. Every year more models come to market, including SUVs and soon to include pickup trucks, it should be easy or state agencies to purchase electric vehicles that fir their needs.

EVs are very efficient and Hawaii's warm weather is ideal for them. Several of our members get 170 - 180 miles per gallon equivalent, so EVs are far less polluting and cheaper over their lifetime. As our island grids are powered by more and more renewables EVs get even cleaner! A recent consumer report also found EV maintenance costs are half as much as a gas car's.

We also commend the other component of the bill, reducing the carbon foot print of road construction is another great way to mitigate climate change. Los Angeles, the UK, India, and the Netherlands are experimenting with plastic roads, maybe this could be done in Hawaii as well. Plastic-bitumen composite roads have better wear resistance than standard asphalt concrete roads (see for example https://en.wikipedia.org/wiki/Plastic_road).

Please support HB552!

Souja Kan

Sonja Kass, President KauaiEV

FB @KauaiEV



HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION HOUSE COMMITTEE ON TRANSPORTATION

February 11, 2021, 11:00 A.M. Video Conference

TESTIMONY IN SUPPORT OF HB 552

Aloha Chair Lowen, Chair Aquino, Vice Chair Marten, Vice Chair Ilagan, and members of the Committees:

Blue Planet Foundation **supports HB 552**, which sets a planning goal for 100% renewable ground transportation by 2045 for all light-duty vehicles in the state and by 2035 for state-owned light-duty fleets. This measure is a needed and important first step to ensure that Hawai'i is taking meaningful action to reduce greenhouse gas emissions in the ground transportation sector. 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.

Existing policies and initiatives have failed to reduce carbon emissions from Hawai'i's cars and trucks

While Hawai'i has made substantial progress on policies, programs, and actions to reduce burning fossil fuels in the electricity sector, **we are falling short on decarbonizing our ground transportation sector**. Greenhouse gas emissions from transportation have been climbing steadily for years prior to the coronavirus pandemic.



info@blueplanetfoundation.org 55 Merchant Street 17th Floor • Honolulu, Hawai'i 96813 • 808-954-6161 • blueplanetfoundation.org In 2019, more gasoline was sold in the islands than in 2018.¹ Without deliberate and forwardthinking leadership, we risk accelerating this trend of increased transportation emissions as Hawai'i residents go back to school and the office and as tourists return, especially with lower than usual oil prices. In addition, the quicker we turn our private and public fleets over to electric, the faster we turn the spigot off that leaks billions out of our economy annually to buy gasoline. Mobility should be powered by homegrown power, not imported carbon.

Even today, over one million gasoline-powered vehicles are on the roads in Hawai'i—and from them comes nearly five million metric tons of climate-changing carbon pollution. Although we now have over 13,000 electric vehicles (EVs) on the state's roads, they still only make up a mere 1% of all registered vehicles in the state.² Hawai'i drivers are increasingly choosing larger, heavier vehicles, which are often less fuel efficient. According to the Hawaii Auto Dealers Association, pickup trucks and sport utility vehicles—still largely powered solely by fossil fuels—accounted for 69.2% of Hawai'i vehicle sales in 2019, a sharp increase from 48.7 per cent in 2012.³

Clean transportation is part of a brighter, resilient future

House Bill 552 can help Hawai'i shift this trajectory by setting planning targets for transitioning to renewable energy sources to "fuel" 100% of light-duty vehicles in the state. In addition to climate benefits, zero-emission vehicles—like EVs that will be powered by Hawai'i's future 100% renewable electricity grid—have myriad community benefits including quieter roads, less air pollution, and lower vehicle maintenance costs for residents and fleet operators. EVs will also play an integral role in Hawai'i's 100% clean energy transition in the interim. While EVs that use the existing electricity grid to charge still use mostly fossil fuel, they use that fuel more effectively than burning fuel directly in a typical gasoline engine. This is why EVs are much less expensive to "fuel" per mile than their gasoline counterparts.

Further, by using stored electrical energy, EVs can take advantage of intermittent solar, wind, and other clean energy resources. Most vehicles sit idle over 22 hours of the day, so they can become *de facto* energy storage devices if their batteries are plugged into the grid when they are not in use. With smart grid infrastructure in place, EVs become an essential component to electricity load and clean energy resource balancing—in addition to providing clean mobility solutions for Hawai'i residents.

Others have already committed to a clean transportation future

In September 2020, California made headlines when Governor Gavin Newsom signed an executive order directing the state to require **all new cars and passenger trucks sold in**

¹ "Monthly Energy Trends," DBEDT, accessed June 9, 2020, http://dbedt.hawaii.gov/economic/energy-trends-2. ² Ibid.

³ Hawaii Dealer," Hawaii Auto Dealers Association, 2020 Spring Edition, https://issuu.com/travelermedia/docs/hawaiidealer_2020_spring_edition.

California to be zero-emission vehicles by 2035, after a summer of devastating wildfires fueled by climate-change-induced extreme weather. California joined the ranks of several countries who have also recognized that fossil fuel-powered ground transportation needs to end. France plans to phase out gas-powered car sales by 2040. **Britain announced in November that it will ban the sale of new gasoline and diesel cars by 2030**, a decade earlier than its previous commitment of 2040. **India**, **Netherlands**, **Israel**, and **Denmark** have set a similar goal for 2030. And **Norway** plans to have all new cars, buses, and light commercial vehicles be zero emission vehicles by 2025.

Auto manufacturers are similarly making bold commitments to phase out fossil-fuel-powered vehicles. **General Motors**—**one of the world's largest automakers**—announced in January 2021 that it would phase out petroleum-powered cars and trucks and **sell only vehicles that have zero tailpipe emissions by 2035**. As a mere sampling of other examples, Ford is launching all-electric versions of its popular Mustang (launching 2021) and F-150 (expected in 2022), and Volkswagen is targeting electric options for all of its vehicle models by 2030.

Conclusion

Through HB 552 and setting its own goal for 100% renewable ground transportation, Hawai'i can take decisive action to rise to the challenge of climate change. Fossil fuel-powered internal combustion engines are simply incompatible with a stable climate. Not only can this bill draw a line in the sand on continuing to rely on imported fossil fuel to power our passenger vehicles, it can spur markets; encourage auto-dealers to bring diverse zero-emission models to Hawai'i; and spark innovation, collaboration, and alignment in ongoing and future planning efforts for Hawai'i's transportation and clean energy network as a whole.

Thank you for the opportunity to provide testimony.

HB-552 Submitted on: 2/9/2021 10:22:18 PM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Climate Protectors Hawaii	Climate Protectors Hawaii	Support	No

Comments:

To: The Honorable Nicole Lowen, Chair,

The Honorable Lisa Marten, Vice Chair, and Members of the

House Committee on Energy and Environmental Protection, and

The Honorable Henry Aquino, Chair,

The Honorable Greggor Ilagan, Vice Chair, and Members of the

House Committee on Transportation

From: Climate Protectors Hawaii (by Ted Bohlen)

Re: Hearing HB552- RELATING TO THE ENVIRONMENT

Thursday February 11, 2021, 11:00 a.m., by videoconference

Position: STRONG SUPPORT of HB552!

Aloha Chair Lowen, Vice Chair Marten, and Energy and Environmental Protection Committee members, and Chair Aquino, Vice Chair Ilagan, and Transportation Committee members:

The Climate Protectors Coalition is a group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, food insecurity, and rising sea levels destroying our shorelines. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible. The planet faces an existential climate crisis and we must act now! The IPCC (Intergovernmental Panel on Climate Change) says we have less than 10 years for worldwide climate action to avoid climate catastrophe. If we are to solve the climate crisis, it will require **all of us** working together. Hawaii can and should be a leader in showing the world the way forward towards a safe and sustainable

climate and future. The sooner we inspire others to take action and lead by example, the better off the future will be for our children.

One of the areas where Hawaii can make the most progress in reducing greenhouse gas emissions is in decarbonizing ground transportation, as the transportation sector accounts for over two-thirds of the oil imported into the State. Electric vehicles provide a viable cost-effective alternative to vehicles burning fossil fuels such as gasoline and diesel. Electric vehicles in the State's fleets can save the State substantial funds in fuel and maintence, funds so needed at this time. The Climate Protectors Hawaii support this bill's transition to 100% clean ground transportation, leading by example with the State's light duty vehicles, 30% by 2025, 60% by 2030 and 100% by 2035, plus 100% electric for all vehicles in the State by 2045. This plan will help substantially in reducing greenhouse gases and addressing our existential climate crisis. Please pass this bill!

Mahalo!

Climate Protectors Hawaii (by Ted Bohlen)

<u>HB-552</u> Submitted on: 2/9/2021 11:48:15 PM Testimony for EEP on 2/11/2021 11:00:00 AM

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

Comments:

Dear Chair Lowen, Vice Chair Marten, and EEP Committee members and Chair Henry J.C. Aquino, Vice Chair Greggor Ilagan and TRN Committee members,

As a concerned citizen, environmentalist and EV driver I write in strong support of HB552!

We need to reduce our carbon footprint, and transition away from fossil fuels.

Please support the bill.

Mahalo

Andrew R. Kass 302 Makani Rd, Kapaa, HI 96746 Hawaii resident since 2003 and EV driver since 2014 Hawaii Electric Vehicle Association

PO BOX 6310 Hilo, HI 96720 hawaiidriveelectric@gmail.com



February 9, 2021

Dear Chair Lowen, Vice Chair Marten, and EEP Committee members, and Chair Henry J.C. Aquino, Vice Chair Greggor Ilagan and TRN Committee members,

On behalf of Hawaii EV, I write **in strong support of HB552**. We realized too late that we inadvertently submitted testimony for HB463 as HB552, so I would like to send in correct testimony for our organisation instead.

In order to reach Hawaii's sustainable transportation and climate goals, we have to electrify ground transportation on our islands as soon as possible. Thankfully, automakers are heeding the demand for zero-emission vehicles and are providing choice and affordability. It should be easy for state agencies to purchase electric vehicles that fit their needs. The state must take the initiative to lead the effort to decarbonize and set an example for citizens, counties and business fleets.

EVs are very efficient and Hawaii's warm weather is ideal for them. Only 16% - 25% of the energy from the fuel in a conventional vehicle gets to the wheels and 70% or more of the energy is wasted (https://www.fueleconomy.gov/feg/atv.shtml). EVs get 86% - 90% of the energy to the wheels. (https://www.fueleconomy.gov/feg/atv-ev.shtml), thus far less polluting and cheaper over their lifetime. As our island grids are powered by more and more renewables over time EVs get even cleaner! A recent consumer report also found EV maintenance costs are half as much as a gas car's.

We also commend the other component of the bill, reducing the carbon footprint of road construction is another great way to mitigate climate change.

Sincerely,

Sour Kan

Sonja Kass - Director



HADA Testimony with COMMENTS on HB552 RELATING TO THE ENVIRONMENT

Presented to the House Committee on Energy and the Environment and the House Committee on Transportation

at the Public Hearing 11 a.m. Thursday, February 11, 2021 in Room 325

VIA VIDEO CONFERENCE Hawaii State Capitol by David H. Rolf for the members of the Hawaii Automobile Dealers Association

Chairs Lowen and Aquino, Vice Chairs Marten and Ilagan and members of the committee:

HADA dealers offer comments on this bill to provide insights on setting an attainable clean energy goal for light-duty vehicles in Hawaii.

This bill seeks to establishe clean ground transportation goals for state agencies on a staggered basis until achieving a 100 per cent light-duty motor vehicle clean fleet by 12/31/2035, and all light-duty motor vehicles in the State by 12/31/2045, and requires the procurement policy for all agencies purchasing or leasing medium- and heavy-duty motor vehicles to seek vehicles that reduce dependence on petroleum-based fuels that meet the needs of the agency, where feasible and cost-effective, and requires state and county agencies to purchase building materials that reduce the carbon footprint of the project for use on the construction of new roads, where feasible and cost-effective.

The goal for state agencies achieving a light-duty vehicle clean fleet by 12/31/2035 continues to follow the purchasing priorities set for state agencies through the Hawaii Clean Energy Initiative in 2010.

The goal for seeing all light-duty vehicles in the state operating on clean energy by 2045, however, would require a customer EV purchase jump of 20-fold (20x) in just four years.

The Hawaii new vehicle purchase rate over the past forty years has averaged 50,000 new vehicles per year—a rate that sees the replacement of the 1 million private vehicles in Hawaii over a 20-year period—which the approximate life of a motor vehicle.

HADA testimony with COMMENTS on HB552 page 2 of 2



New Car & Truck Projections Thru 2045

Source: Hawaii Automobile Dealers Association. Note: Hydrogen fuel cell electric Vehicles are included in EV numbers

A graphic illustrating the magnitude of the jump required by 2025 is shown below.

From 2010 to 2020--for the last 10 years—the vehicle uptake has closely followed the HADA predictions. Auto industry researchers predict that EV sales nationwide will be 9.5% of sales in 2025 and 19% in 2030. Uncertainty around the EV adoption rate is due to a confluence of confounding factors:

- --some automakers are losing Federal EV credits
- --customers are concerned about rapid depreciation and battery replacement
- --the wide access to inexpensive gasoline

Tourism/Conventions + Military

- --an EV price difference still remains on many vehicles
- --and many more factors relating to range, HOV lane use, and more.

What is needed is a Roadmap to EV adoption. Customers purchase vehicles to meet individual, family and business needs. HADA dealers have spent millions and millions of dollars in EV investments. We look forward to working together with all in the transition to clean energy in Hawaii.

Respectfully submitted, David H. Rolf for the Hawaii Automobile Dealers Association

68 new car dealerships, 4,383 direct jobs, \$5.8 billion total sales, \$269 million State Gross Excise Taxes paid

•



То:	The House Committee on Energy and Environmental Protection (EEP)
	and
	The House Committee on Transportation (TRN)
From:	Sherry Pollack, 350Hawaii.org
Date:	Thursday, February 11, 2021, 11am

Comments for HB552

Aloha Chairs Lowen and Aquino, Vice Chairs Marten and Ilagan, and members of the EEP and TRN committees,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org offers comments on HB552 with some suggested amendments.

We support the intent of HB552 that establishes clean ground transportation goals which would significantly reduce carbon emissions and increase the number of zero-emission vehicles entering the secondary market, making them more affordable to more Hawaii residents. However the target date of 2045 is woefully too late. **Fossil fuel use needs to be phased out by 2030**. The Climate Crisis is here now. Scientists have made clear that we must swiftly phase out fossil fuel use or face untold suffering. We no longer have the luxury to wait to take the necessary actions to drastically reduce our greenhouse gas emissions.

The planet faces an existential climate crisis and we must act now. As an island state, Hawaii is ground zero for climate devastation, from more intense storms, to food insecurity, to rising seas and shoreline destruction. Scientists have made clear that we are part of the last generation that can stop or at least mitigate the devastating impacts of climate change. If we are to solve the climate crisis, it will require **all of us** working together. Hawaii can and should be a leader in showing the world the way forward towards a safe and sustainable climate and future. The sooner we inspire others to take action and lead by example, the better off the future will be for our children.

Secondly, the definition of "zero-emission vehicle" should not include plug-in hybrid electric vehicles. The legislature has the opportunity—and the power—to mandate very significant use of *real* zeroemission vehicles with this bill. Don't water it down by allowing sort-of-clean vehicles. Vehicles should be fully electric or hydrogen ones, not ones that will perpetuate our importation of fossil fuels.

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

Finally, we strongly urge this bill remove all fossil fuels, such as natural gas and liquefied petroleum gas, and list only nonclimate-harming fuels under the definition of 'alternative fuels'. Natural gas and liquified petroleum gas, for example, are dirty fossil fuels that contain methane which is actually a far

more potent greenhouse gas than carbon dioxide and have no place in our clean energy future. As previously stated, the legislature has the opportunity and the power to mandate very significant use of *real* zero-emission vehicles with this bill. These times require strong and decisive leadership.

Bottomline, zero-emission vehicles are better for the environment and the economy. They are the future for Hawaii, a future we need to begin now.

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

<u>HB-552</u> Submitted on: 2/10/2021 8:48:37 AM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Tam Hunt	Hawaii EV Association	Support	No

Comments:

The Hawaii EV Association strongly supports HB552 on state electrification goals. Hawaii EV has advocated for a statewide Clean Vehicle Standard (<u>https://www.civilbeat.org/2020/12/how-to-ramp-up-hawaiis-use-of-electric-cars/</u>) and this bill would be a key step in that direction.

This bill would establish clean ground transportation goals for state agencies on a staggered basis until achieving a 100 per cent light-duty motor vehicle clean fleet by 12/31/2035, and all light-duty motor vehicles in the State by 12/31/2045; require the procurement policy for all agencies purchasing or leasing medium- and heavy-duty motor vehicles to seek vehicles that reduce dependence on petroleum-based fuels that meet the needs of the agency, where feasible and cost-effective; and require state and county agencies to purchase building materials that reduce the carbon footprint of the project for use on the construction of new roads, where feasible and cost-effective.

These are all goals that our organization strongly supports. This is a timely and necessary bill as the US and the world seriously ramps up efforts to mitigate climate change.

We recommend a key addition to the bill language: where the bill states "where feasible and cost-effective," it should state "where feasible and cost-effective as determined on a lifecycle cost basis."

The bill should also define what it means to be powered by renewable energy since this is not currently defined.

We also worry that the ambitious goals for procurement policy by 2025, 2030 and 2035 are not enforceable. This language should be strengthened to make it clear that this is a requirement for all state and county agencies and not merely advisory.

Sincerely,

Tam Hunt, J.D.

Board member, Hawaii EV Association

HB-552 Submitted on: 2/10/2021 9:52:58 AM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
LYNN ARAKI-REGAN	DEPT OF TRANSPORTATION	Support	No

Comments:

I am with the DOT and available for comments.



DATE: February 8, 2021

Representative Nicole Lowen
Chair, Committee on Energy and Environmental Protection

Representative Henry Aquino Chair, Committee on Transportation

FROM: Tiffany Yajima / Curt Augustine

RE: H.B. 552 – Relating to the Environment Hearing Date: Thursday, February 11, 2021 at 11:00 a.m. Conference Room: 325

Dear Chair Lowen, Chair Aquino, and Members of the Joint Committees:

On behalf of the Alliance for Automotive Innovation ("Auto Innovators") we submit these comments **supporting the intent** of H.B. 552 **but expressing concerns with section 3 and section 4 of the bill** which establish a 2045 goal for all passenger cars in the state to be gasoline-free alternative fuel vehicles.

The Alliance for Automotive Innovation is the singular, authoritative and respected voice of the automotive industry. Focused on creating a safe and transformative path for sustainable industry growth, the Alliance for Automotive Innovation represents the manufacturers producing nearly 99 percent of cars and light trucks sold in the U.S. Members include motor vehicle manufacturers, original equipment suppliers, technology, and other automotive-related companies and trade associations.

Automobile manufacturers are concerned that sections 3 and 4 of this measure establish a statutory timeline for the transition to alternative fuel vehicles based upon the unrealistic goal of achieving 100% gasoline-free passenger cars on Hawaii's roads by the end of 2045. This bill requires <u>all</u> passenger vehicles in the state to be fossil fuel-free by the end of 2045.

Many countries and states including Hawaii are contemplating bans on the sales of new internal combustion engine (ICE) vehicles at various dates in the future. However, no serious proposal has ever considered a complete ban on previously purchased ICE-powered vehicles. Even California with its new Zero Emission Vehicles-only sales goal date of 2035 does not consider a total prohibition of fossil fuel vehicles. In fact, under California's new plan, a third of all vehicles on the road will use either gasoline-only or a combination of gasoline and electricity in 2045. Additionally, California's plan allows the sale of new Plug-in Hybrid (PHEV) vehicles which use both gasoline and electricity after its 2035 ban date. Realistically, gasoline-powered vehicles will still be part of Hawaii's vehicle mix for years to come unless the state is prepared to take all used vehicles off Hawaii's roads and require consumers and businesses to purchase zero-emission vehicles. Establishing such an unrealistic goal for Hawaii and requiring state agencies to develop actionable strategies to meet this goal would have serious implications.

To meet the 100% by 2045 goal proposed in this measure, the state would have to require that by 2030, at a minimum, all passenger cars sold in the Hawaii would have to be alternative fuel vehicles because the average life of a vehicle is 12 years and can be much longer in Hawaii. This could have the unintended consequence of disrupting all segments of business that relies on light-duty vehicles as well as burdening low-income working people and families who cannot afford the higher prices of new or used electric vehicles.

In the 2020 legislative session, this same bill was introduced as H.B. 2699 and was ultimately amended to prioritize the transition of government vehicle fleets to allelectric vehicles. Automobile manufacturers support efforts to transition public fleets and public fleet procurement preferences in favor of zero emission vehicles and therefore suggest the following amendments to focus the intent of this measure on all-electric government fleets. The Alliance for Automotive Innovation would support H.B. 552 if the suggested amendments are made:

Page 4, lines 1-5 as follows:

(b) There is established a clean ground transportation target, across all business sectors of the State, to attain a goal of one hundred per cent of light duty vehicles powered by renewable energy sources by December 31, 2045, and for light-duty state-owned vehicles by December 31, 2035."

Page 4, line 11:

"<u>\$264-</u> <u>Clean ground transportation goal.</u> The department of transportation, in collaboration with the Hawaii state energy office, shall develop strategies to transition all light-duty motor vehicles, both public and <u>private</u>, in the State to meet the clean ground transportation target established pursuant to section 225P- (b)."

Thank you for the opportunity to submit this testimony.

DAVID Y. IGE GOVERNOR



BONNIE KAHAKUI ACTING ADMINISTRATOR

STATE OF HAWAII STATE PROCUREMENT OFFICE

P.O. Box 119 Honolulu, Hawaii 96810-0119 Tel: (808) 586-0554 email: <u>state.procurement.office@hawaii.gov</u> <u>http://spo.hawaii.gov</u>

TESTIMONY OF BONNIE KAHAKUI, ACTING ADMINISTRATOR STATE PROCUREMENT OFFICE

TO THE HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION AND TRANSPORTATION FEBRUARY 11, 2021, 11:00AM

HOUSE BILL 552 RELATING TO THE ENVIRONMENT

Chair Lowen, Chair Aquino, Vice-Chair Marten, Vice-Chair Ilagan, and members of the committees, thank you for the opportunity to submit testimony on HB552. The State Procurement Office (SPO) offers the following comments and recommendations:

COMMENTS: Chapter 103D, Hawaii Revised Statutes (HRS), Hawaii Public Procurement Code (Code), is meant for general procurement methods and high-level guidance. It should not be a receptacle for all industry-specific specifications or goals as this will, over time, create a vast, and complicated Code that will confuse buyers because they will not be able to trust that specifications are in the respective chapter and procurement specific requirements are lost within the sea of specifications or goals.

RECOMMENDATIONS:

The SPO proposes removing Section 2, page 2, lines 18-20; and page 3, lines 1-14:

<u>"§103D- Other motor vehicle requirements. (a) The</u> procurement policy for all agencies purchasing or leasing medium and heavy duty motor vehicles shall be to seek vehicles that reduce dependence on petroleum based fuels that meet the needs of the agency, where feasible and cost-effective. HB552 Committee on Energy & Environmental Protection Committee on Transportation February 11, 2021 Page 2

Pric	rities for selecting vehicles for leas or purchase
shall be	as follows:
(1)	Electric or plug in hybrid electric vehicles and fuel
	cell electric vehicles;
(2)	Other alternative fuel vehicles;
(3)	Hybrid electric vehicles; and
(4)	Vehicles that are identified by the United State
	Environmental Protection Agency in its annual "Fuel
	Economy Leaders" report as being among the top
	performers for fuel economy in their class.
(b)	Vehicles shall not be larger than necessary for their
	intended functions."

The SPO also proposes the revision of Section 5, page 4, lines 18-21; and page 5, lines 1-9, to read as follows:

"§103D-412 Light-duty motor vehicle requirements. (a) The procurement policy for all agencies purchasing leasing lightduty motor vehicles shall be to reduce dependence on petroleum for transportation energy[.] and meet the following clean ground transportation goals:

(1)	Thirty per cent of light duty motor vehicles of each
(=)	
	fleet shall be powered by renewable energy sources by
	December 31, 2025;
$\langle 0 \rangle$	Circles were gone of light duty meters uphigles of each

- (2) <u>Sixty per cent of light-duty motor vehicles of each</u> fleet shall be powered by renewable energy sources by <u>December 31, 2030; and</u>
- (3) One hundred per cent of light-duty motor vehicles of each fleet shall be powered by renewable energy sources by December 31, 3035."

SPO also proposes the deletion of Section 8, page 12, lines 5-11:

<u>"\$103D- Construction projects, roadway materials; carbon</u> footprint reduction. When purchasing building materials for the construction of new roads, state and county agencies shall purchase building materials that reduce the carbon footprint of the project for use on the project, where the purchase of the building materials is feasible and cost-effective."

Thank you.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Telephone: Fax: Web: (808) 587-3807 (808) 586-2536 energy.hawaii.gov

Testimony of SCOTT J. GLENN, Chief Energy Officer

before the HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION AND COMMITTEE ON TRANSPORTATION

Thursday, February 11, 2021 11:00 A.M. House conference room via videoconference

in Support of HB 552 RELATING TO THE ENVIRONMENT.

Chair Lowen and Aquino, Vice Chair Marten and Ilagan, and Members of the Committees, the Hawaii State Energy Office (HSEO) offers comments for HB 552, which establishes clean ground transportation goals for state agencies on a staggered basis until achieving a 100 per cent light-duty motor vehicle clean fleet by 12/31/2035, and all light-duty motor vehicles in the State by 12/31/2045, requires the procurement policy for all agencies purchasing or leasing medium- and heavy-duty motor vehicles to seek vehicles that reduce dependence on petroleum-based fuels and requires state and county agencies to purchase building materials that reduce the carbon footprint of the project.

HB 552 aligns with the State's efforts to expand strategies and mechanisms to reduce greenhouse gas emissions through the reduction of energy use, adoption of renewable energy, and control of air pollution among all agencies, departments, industries, and sectors, including transportation. Emissions from ground transportation account for the largest share of energy sector emissions in the state. As noted in the 2016 Greenhouse Gas Inventory, transportation emissions in Hawaii were at 8.69 million metric tons of carbon dioxide equivalents, accounting for 51 percent of total energy sector emissions. Ground transportation accounted for 47 percent of the

Hawaii State Energy Office Testimony HB 552 - Relating to the Environment - Support February 11, 2021

transportation emissions. For Hawaii to meet its statutory target "to sequester more greenhouse gases than emitted as soon as practicable but no later than 2045", policies that support the adoption of cleaner transportation options are necessary and tremendously important.

Accelerating the deployment of electric vehicles is an area of focus of the Hawaii Clean Energy Initiative Transportation Energy Analysis, prepared for HSEO by the International Council on Clean Transportation. It is important that the State take actions within its power to advance and align with the decarbonization policies of the State and the 2045 time frame identified in Chapter 225P, Hawaii Revised Statutes (HRS). Adopting targets for the conversion of the state fleet will be a material contribution to bolster the number of existing zero emission vehicles (ZEV) in Hawaii and sends a clear signal to the market on Hawaii's commitment to the decarbonization of the ground transportation sector. Depending on the definition of light duty passenger vehicles, converting the state fleet could increase the number of ZEVs by up to 10% from existing levels. HB 552 also appropriately aligns statutes for key agencies with a roll in transitioning State fleets. HSEO will continue to coordinate with agencies including but not limited to DOT, DAGS, and SPO to review statutory language to provide input on the combination of amendments that could efficiently transition the State's light duty vehicles. HSEO is also analyzing the state fleet data to support agencies identifying the segment of light duty vehicles that are ready for conversion in the near term.

Thank you for the opportunity to testify.

<u>HB-552</u>

Submitted on: 2/10/2021 3:08:57 PM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ruta Jordans	Individual	Support	No

Comments:

This is what we need: realistic movements to reduce our carbon footprint! Please support.

<u>HB-552</u>

Submitted on: 2/10/2021 11:27:32 PM Testimony for EEP on 2/11/2021 11:00:00 AM

Submitte	ed By	Organization	Testifier Position	Present at Hearing
Janet Pa	ippas	Individual	Support	No

Comments:

Dear EEP and TRN Committee Members,

We are in strong support of HB552 to transition the State's fleet of vehicles to clean energy fuels as soon as possible. Hawaii imports fossil fuel to the tune of \$5 billion per year and two thirds of that is for transportation. Decarbonizing Hawaii's transportation sector needs to be one of the State's major goals.

Having purchased solar panels in 2008 and owning a Nissan Leaf EV since 2011 (which we charge at home), our family realizes the savings available in energy costs and car maintenance for anyone who takes this path. There is just no reason to continue with fossil-fueled electricity and gas-guzzling cars--especially for entire fleets. Simultaneously, the infrastructure for EV charging stations (or for other alternate fuel vehicles) must be put in place.

Trucks, and other specialty vehicles are not yet available, but we should not hesitate once hybrid or fully electric vehicles are on the market. Shenzhen, China, has 16,000 (not a typo) electric buses in their fleet and are now transitioning their taxis (World Economic Forum, "Shenzhen just made all its buses electric, and taxis are next").

We also favor having state and county agencies purchase building materials that reduce the carbon footprint in the construction of new roads where feasible and costâ€'effective; also consider using pervious concrete in light duty areas such as parking lots.

We can do better for our climate AND save money doing it. Please give these new ideas strong consideration. Thank you for the opportunity to testify.

Jan Pappas/Ronald Yasuda

Aiea, Hawaii