Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
SENATE COMMITTEE ON TRANSPORTATION

Thursday, February 11, 2021
3:00 P.M.
Senate conference room 224

Comments in consideration of
SB 768
RELATING TO ZERO-EMISSION VEHICLES.

Chair Lee, Vice Chair Inouye, and Members of the Committee, the Hawaii State Energy Office (HSEO) offers comments on SB 768, which requires lessors of rental motor vehicles to incorporate zero-emissions vehicles into their rental motor vehicle fleets at minimum levels according to a prescribed schedule.

SB 768 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 tonnes of carbon dioxide equivalents, accounting for 51 percent of total energy sector emissions. Ground transportation accounted for 47 percent of the 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,” programs that support the adoption of cleaner transportation options are necessary and important.
The adoption and widespread deployment of electric vehicles is essential to reduce Hawaii’s dependence on fossil fuels. Rental car efficiency is one of the recommended petroleum reduction tactics identified on page 9 of the Hawaii Clean Energy Initiative Transportation Energy Analysis, prepared for HSEO by the International Council on Clean Transportation. Incorporating electric vehicles into vehicle rental fleets will markedly increase exposure to electric vehicles, which can boost acceptance and adoption of electric vehicles by familiarizing residents and travelers with the technology and operating characteristics of the vehicles.

HSEO has concerns regarding the installation and operation of electric vehicle charging equipment at the facilities used by lessors of rental motor vehicles in the State to support the levels of zero-emission vehicles scheduled in the bill. In 2020, it was reported that Kahului airport’s rental car facilities managed an inventory of more than 20,000 vehicles. The recently completed Kahului Airport Consolidated Rent-A-Car (CONRAC) facility has the following parking stalls: 1,817 for ready-return vehicles, 1,926 for staging/storage, and 693 for airport employee parking, along with quick-turn-around areas accommodating 12 car wash bays, 11 mechanic stations, and 72 fuel positions. An understanding the cost and logistics required to upgrade the newly constructed facility to allow for the rapid charging of zero-emission vehicles is critically important to ensuring the success of this bill’s objectives. A new CONRAC facility is also under construction at the Daniel K. Inouye International Airport in Honolulu. These facilities, along with all rental facilities, should be assessed to fully understand their ability to install and operate the necessary charging infrastructure to support zero-emission vehicles. It is likely that significant electric system upgrades would be required to support level 3 DC fast charging infrastructure in many of the facility locations.

Also, HSEO recommends the measure be amended such that the zero-emission vehicle requirements limit the percentage of plug-in hybrid electric vehicles that can be counted towards the minimum levels of zero-emission vehicles outlined in the bill. Alternatively, plug-in hybrid electric vehicles could be credited towards the zero-
emission vehicle total based on the all-electric miles range capability of the vehicles. Vehicles with an all-electric miles range capability of less than 10 miles would not be counted as zero-emission vehicles, 80 or more miles would be counted in full as 1, while vehicles in-between would be counted at a rate of 0.0125 per all-electric miles range capability. (i.e. a vehicle with a 25-mile all-electric miles range capability would be counted as: 25 x 0.0125 = 0.3125)

As the State develops plans to achieve a decarbonized ground transportation sector, it is important to ensure the necessary infrastructure is in place to enable all market participants to address the effects of climate change to support the State’s economy, environment, health, and way of life. Finally, HSEO recommends consultation with the Attorney General’s Office to ensure the requirements of the bill comply with the Clean Air Act.

Thank you for the opportunity to testify.
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

February 11, 2021
3:00 p.m.
State Capitol, Room 224
Via Videoconference

S.B. 768
RELATING TO ZERO EMISSION VEHICLES

Senate Committee on Transportation

The Department of Transportation (DOT) – Airports Division opposes S.B. 768 which proposes to assist with the transition to clean zero-emissions rental motor vehicle fleets.

Although we support environmental and sustainable initiatives that sets goals to incorporate zero-emission vehicles in this proposed bill, the Consolidated Rental Car Facility under construction at the Daniel K. Inouye International Airport was not designed to accommodate the mandated fleet conversion proposed in this measure. At most, the new facility will support a few charging stations per rental car company and not entire fleets. Implementing the required electric vehicle supply equipment will be a significant cost to the State Airport system.

Thank you for the opportunity to provide testimony.
February 10, 2021

TESTIMONY OF REBECCA VILLEGAS
COUNCIL MEMBER, HAWAI‘I COUNTY COUNCIL
ON SB 768, RELATING TO ZERO EMISSION VEHICLES
Committee on Transportation
Committee on Commerce and Consumer Protection

Thursday, February 11, 2021
3:00 p.m.
Conference Room 224

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

I thank you for the opportunity to testify in support of SB 768, relating to zero emission vehicles for rental fleets. My testimony is submitted in my individual capacity as a member of the Hawai‘i County Council and Chair of the Hawai‘i County Council Climate Resilience and Natural Resources Committee.

The purpose of this measure is to require lessors of rental motor vehicles to incorporate zero-emission vehicles into their rental motor vehicle fleets. Pollution from most forms of transportation is harming public health as methane pollution exacerbates the health impacts of climate change. Data from the Intergovernmental Panel on Climate Change suggests that more than half of the warming we experience over the next two decades due to current emissions will be from the continued release of methane and other short-lived pollutants in the atmosphere.

Our Kona winds are known for bringing warmth to other areas. Unfortunately, for our residents the Kona winds bring us the vog from Kilauea. During the 2018 lower Puna eruption, you could not see our beautiful Hualalai mountain because the air was so thick with smoke and the air quality reached dangerous levels. You could literally see the cloud of vog like rain in the distance. Once the volcano stopped, we enjoyed months of clear skies, however, with the recent return of the volcanic activity at Kilauea we are back to hazy skies and blood shot eyes.

For the reasons stated above I urge the Committee on Transportation and the Committee on Commerce and Consumer Protection to support this measure as well. Should you have any questions, please feel free to contact me at (808) 323-4267.

Mahalo for your consideration

Hawai‘i County is an Equal Opportunity Provider and Employer.
Rebecca Villegas
Council Member, Hawai‘i County Council
February 9, 2021

TO: Chair Lee and Members of TRS Committee

RE: SB 768 RELATING TO ZERO EMISSION VEHICLES.

Support for hearing on Feb. 11

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 SB 798 as it would require rental companies to incorporate zero-emissions vehicles into their fleets.

Carbon-emissions are causing climate change. We are pleased President Biden has restored the United States into the Paris Agreement within the U.N. Framework Convention on Climate Change. Yet Hawaii must do its part. This bill is a part of us doing our part.

Thank you for your favorable consideration.

Sincerely,
John Bickel, President
Aloha Chair Lee, Vice Chair Inouye, and committee members,

My name is June Chee and I am testifying on behalf of Hawaiian Electric Company in support of SB768, relating zero emission vehicles. Hawaiian Electric Company supports this measure as it aligns with and will help to bolster many of the Company’s electrification of transportation initiatives.

Hawaiian Electric’s public charging program and upcoming proposed expansion is designed to support the needs of resident and rental electric vehicle drivers. If passed, this bill would create positive momentum in developing much needed charging infrastructure throughout the State. It would encourage program participation from rental car facilities, airports, hotels, state facilities, and commercial sites throughout our service territory as additional charging infrastructure and charging stations would be needed at these locations to support electric vehicle rentals.

Hawaiian Electric supports the proliferation of zero-emission vehicles and recognizes the importance and positive impact this bill can play. As the largest provider of electric vehicle fast charging in the state, Hawaiian Electric Company remains
committed to an EV strategies that are sustainable and helps create a bridge to a cleaner future. Thank you for this opportunity to testify.
Kauai Climate Action Coalition strongly supports SB768. Zero-emission vehicles are better for the environment and the economy, and can help Hawaii’s electric utilities achieve 100% renewable electricity. The rental car industry operates the state’s largest vehicle fleets and the frequent turnover of the vehicles would translate into far more ZEVs entering the secondary market, allowing many more Hawaii residents to participate in the benefits of ZEVs. These are the types of actions that we must begin to take in earnest if we are to avert climate catastrophe.

We strongly recommend that the definition in this bill for "Hydrogen fuel cell vehicle" should specify hydrogen made from renewable sources. Hydrogen can be produced in many ways, including by burning fossil fuels.

We urge the targets for implementation be accelerated to achieve 100% by 2030 rather than 2035 to be more in sync with what scientists say is necessary to achieve the needed reductions in greenhouse gas emissions.

Mahalo for hearing our testimony.
Ulupono Initiative supports the intent of SB 768, Relating to Zero-Emission Vehicles.

Dear Chair Lee and Members of the Committee:

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 self-sufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

Ulupono supports the intent of SB 768, which requires lessors of rental motor vehicles to incorporate zero-emission vehicles into their rental motor vehicle fleets.

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 significantly impact the renewable energy goal by phasing in zero-emission vehicles as rental motor vehicle fleets.

First, we believe the proposed transition in this bill is very reasonable. We would like to see rental fleets convert to zero-emission vehicles as soon as possible. However, we prefer the State to influence the rental market via additional surcharges on fossil fuel vehicles (similar to HB 1141) that increase over time, eventually ensuring that renting a fossil fuel vehicle by 2035 is cost prohibitive. Funds from this surcharge could then be utilized to support retrofitting the airport rental facilities with adequate charging/fueling infrastructure to support the rental fleets’ conversion to zero-emission vehicles.

Overall, 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.

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.

![Hawaii's Petroleum Use By Sector 2016](image)

*Source: Hawai‘i State Energy Office – Hawai‘i Energy Facts & Figures*

Converting from petroleum-based vehicles to EVs reduces greenhouse gas (GHG) emissions immediately, 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 integrating 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
RE: SB 768 - Relating to Zero-Emission Vehicles - In Opposition

Aloha Chair Lee, Vice Chair Inouye and members of the committee:

My name is Robert Muhs, Vice President Government Affairs for Avis Budget Group. Avis Budget appreciates this opportunity to offer testimony in opposition to SB 768, which would require lessors of rental motor vehicles to incorporate zero-emission vehicles into their rental motor vehicle fleets.

This bill would require rental motor vehicle companies to incorporate at least 10 percent zero-emission vehicles into their fleet by January 1, 2025, 30 percent by January 1, 2030, and 100 percent by January 1, 2035. We believe that this is a manufacturers issue. If not enough zero-emission vehicles are produced, it would be impossible to achieve these benchmarks.

Additionally, the selection of cars Avis Budget offers is based on customer preference. Avis Budget always looks at the possibility of EVs but without a well-defined universal charging station infrastructure and a keen consumer awareness about how to use them and how long they can drive between charges, there is little to no demand.

For these reasons, we ask that the committee defer this measure. Thank you.
SB 768, RELATING TO ZERO-EMISSION VEHICLES

FEBRUARY 11, 2021 · SENATE TRANSPORTATION COMMITTEE · CHAIR SEN. CHRIS LEE

POSITION: Support.

RATIONALE: Imua Alliance supports SB 768, relating to zero-emission vehicles, which requires lessors of rental motor vehicles to incorporate zero-emissions vehicles into their rental motor vehicle fleets.

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, climate change will very likely lead to a significant increase in the number of people who are displaced and, thus vulnerable, to human trafficking. 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 on our state’s streets. 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 do the same and compel transportation companies affiliated with our visitor industry to follow suit, since these nations prove that we can transition our transportation sector to EV technology without damaging our economy. 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
To: The Senate Committee on Transportation  
From: Sherry Pollack, 350Hawaii.org  
Date: Thursday, February 11, 2021, 3pm

In support of SB768

Aloha Chair Lee, Vice Chair Inouye, and Transportation Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org supports SB768 with some suggested amendments.

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

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

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

Zero-emission vehicles are better for the environment and the economy. They are the future for Hawaii and rental car fleets are the most logical place to accelerate progress on EV adoption statewide.

Thank you for the opportunity to testify. 
Sherry Pollack  
Co-Founder, 350Hawaii.org
To the Leaders of Hawaii,

On behalf of Mission Zero Hawaii, Hawaii's largest electric car rental business based out of Kauai, I write in strong support of SB768.

Justin Carvalho
February 10, 2021

Senator Chris Lee
Chair, Committee on Transportation

Matthew Tsujimura

S.B. 768, Relating to Zero Emission Vehicles
Hearing Date: Thursday, February 11, 2021 at 3:00 p.m.
Conference Room 224

Dear Chair Lee, Vice Chair Inouye, and Members of the Committee on Transportation:

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

Enterprise Holdings opposes S.B. 768, which would require rental car companies to incorporate zero-emission vehicles, including electric, hybrid, or fuel cell vehicles, in their fleet and to meet a 10 percent requirement by 2025, 30 percent by 2030, and 100 percent by 2035.

Enterprise has been a leader in sustainability in its industry and has invested in sustainable transportation by incorporating fuel efficient vehicles in its fleets, and launching car sharing and van pool services in Hawaii. When electric vehicles first came onto the market, Enterprise launched a new program in Hawaii to incorporate electric vehicles into its fleet. Despite the significant investment in these EVs, consumer-driven demand for these vehicles was unsuccessful. As a practical matter, the rental car industry is driven by market demand. Rental car companies can offer a selection of vehicles but cannot force customers to rent one type of vehicle. Due to their design and construction, electric vehicles provide small trunk space and are less desirable for tourists vacationing in the islands with multiple pieces of luggage.

Given that 85% of renters are tourists, it is unclear where tourists would charge these electric vehicles. Charging stations need to be conveniently available in numerous locations across the islands – airport facilities, hotels, attractions, restaurants, shopping malls and other tourist destinations. These locations may not have the capacity or financing available to support the necessary charging infrastructure required to sustain these vehicles. This lack of infrastructure will result in a negative vacation experience for tourists searching for charging stations and experiencing significant waits as their vehicles fully charge.
In addition, the mandated fleet conversion proposed in this measure does not address the current need for additional charging infrastructure at airport facilities. The new Consolidated Rental Car Facility under construction on Oahu was not designed to accommodate widespread EV charging infrastructure. At most, the new facility is only able to support a few charging stations per rental car company, and not entire fleets of rentals at a significant cost to the state. In contrast S.B. 768 requires rental car companies to change out their entire fleets of vehicles in just 15 years at a significant cost due to the higher cost of an electric vehicles compared to cost of traditional gasoline-powered vehicles.

Enterprise is also concerned that the stated purpose of this measure is to increase the number of zero-emission vehicles entering the secondary market, thereby making them more affordable Hawaii residents. This measure incorrectly assumes that rental motor vehicles are sold on the secondary market in Hawaii when in practice only a small number of rental vehicles are sold here locally.

Enterprise is supportive of the state’s efforts to move toward sustainable transportation and has participated in several working groups over the years that were tasked with increasing zero-emission vehicle charging infrastructure. We appreciate the opportunity to continue to engage in productive conversations about ways to increase the availability of charging infrastructure and the growth of the electric vehicles market in a sustainable way without mandating requirements on private business.

For the above reasons, we respectfully oppose this measure and ask that it be held. Thank you for the opportunity to submit this testimony.
February 10, 2021

Aloha Chair Chris Lee, Vice Chair Lorraine R. Inouye, and Committee on Transportation members, and Chair Rosalyn H. Baker, Vice Chair Stanley Chang, and Committee on Commerce and Consumer protection members,

On behalf of KauaiEV, a grassroots organization with over 100 members on Kauai, I write in strong support of SB768.

Our members are electric vehicle drivers, and we believe that EVs are the personal transportation of the future. EVs are very efficient, and 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.

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. Please vote to electrify Hawaii’s rental car fleet!

Mahalo for your consideration!

Sonja Kass, President KauaiEV
February 10, 2021

Aloha Chair Chris Lee, Vice-Chair Lorraine R. Inouye, and Committee on Transportation members,

**Hawaii Electric Vehicle Association is in strong support of SB768.**

The call to accelerate the decarbonization of our transportation sector is increasing every day and is impossible to ignore. Transportation accounts for a significant part of the globe’s greenhouse gas emissions. In the U.S., the transportation sector contributes roughly 30%. Fossil fuel-powered vehicles contribute to a significant portion of Hawaii’s emissions, pollute the air that we breathe, and perpetuates our dependence on oil imports. The electrification of transportation is helping to reduce emissions and heal our environment.

Electric vehicles (EVs) will provide our tourists the opportunity to contribute personally to improving air quality and to climate action. Our Hawaii EV Association directors have been in contact with the owners of local EV rental businesses across the islands to understand consumer sentiment. Based on their feedback and customer reviews on rental EVs, it seems most of the tourists really like renting EVs and appreciate their performance and ride. They also appreciate the opportunity to have clean transportation during their visit. **SB768** will help us expand our rental EV fleet and provide renters with more clean transportation options.

EVs are the personal transportation of the future. They are very efficient and cheaper to operate over their lifetime when compared to gas-powered cars. Nationally, in 2018 the average EV’s indirect emissions were equivalent to a gasoline car that gets 88 mpg ([https://www.ucsusa.org/sites/default/files/2020-05/evs-cleaner-than-gasoline.pdf](https://www.ucsusa.org/sites/default/files/2020-05/evs-cleaner-than-gasoline.pdf)) and improving every year. Kauai easily beats this number as we now have more renewable energy on our grid than California, and the other islands are catching up fast with efforts to decarbonize the grid. As our grid gets cleaner, so do our EVs!

To reach Hawaii’s climate goals and to more aggressively combat climate change and sea-level rise, we need to move away from burning fossil fuels as soon as possible. **SB768** will help in this regard. Please support **SB768**.

Mahalo for your consideration!

Sincerely,

Noel Morin - President

**Hawaii EV Association** is a grassroots non-profit group representing electric vehicle owners in Hawaii. Our mission is to accelerate the electrification of transportation through consumer education, policy advocacy, and electric vehicle charging infrastructure expansion. For more information, please visit hawaiiev.org
SENATE COMMITTEE ON TRANSPORTATION  
February 11, 2021, 3:00 P.M.  
Video Conference

TESTIMONY IN SUPPORT OF SB 768

Aloha Chair Lee, Vice Chair Inouye, and members of the Committee:

Blue Planet Foundation supports SB 768, which requires that an increasing percentage of rental cars used in Hawai‘i be zero-emission vehicles (ZEVs) until the rental fleet is entirely comprised of ZEVs. The rental car industry operates the state’s largest vehicle fleets, and the frequent turnover of the vehicles (estimated to be about 13 months) means far more ZEVs entering the secondary market at a discounted cost, allowing many more Hawai‘i residents to experience the benefits of ZEVs and help Hawai‘i reach its clean energy goals faster.

Hawai‘i’s visitor industry must embrace a clean energy future

As Hawai‘i seeks to recover from the coronavirus pandemic, we are offered an unparalleled opportunity to build back better and press the reset button on tourism. Senate Bill 768 is an important measure to align the visitor industry with Hawai‘i clean energy future.

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

The volume and model types of battery electric vehicles coming onto the market are expected to dramatically increase in the next three to five years due to falling battery costs and EV-incentivizing policies from places around the world. Last fall, California Governor Gavin Newsom signed an executive order directing the state to require all new cars and passenger trucks sold in California to be zero-emission vehicles by 2035, 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. 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.

The longer driving ranges, lower costs, and larger selection of models will make it possible for many of Hawai‘i’s residents and visitors to lower their carbon footprints and take advantage of the economic benefits that EVs offer. However, there are two challenges to efficient EV adoption that SB 768 attempts to address: (1) additional funding is needed to accelerate Hawai‘i’s clean energy transition and build out an accessible, convenient, and equitable; and (2) only a small percentage of the state’s population has the financial resources to purchase new cars—i.e. it could take a number of years for the influx of quality, affordable EVs to trickle down to the secondary market and become available to most people in the state.

**Expanding resources for Hawai‘i’s clean energy transition**

The surcharge imposed by this bill would be deposited into the energy security special fund and could be used for the funds authorized purposes that can help accelerate Hawai‘i’s transition to a decarbonized future. This can include the building out of Hawai‘i’s public charging network.

The International Energy Agency has found that “the availability of chargers emerged as one of the key factors for contributing to the market penetration of EVs.”¹ The development of public charging facilities necessary to enable a high penetration of battery EVs in the rental market would be more than adequate to meet the charging needs of the state’s population simultaneously. Those public chargers are integral to EV adoption, as they serve as primary charging for those living in multi-family properties and as backup charging for those who are able to charge their vehicles at home. Moreover, the optimal time to charge an EV is during the day when renewable energy is abundant. Yet, there is a notable lack of charging options at workplaces and at publicly accessible locations. Senate Bill 768 can help ensure that the visitor industry is also committed to building out this charging network for the public good.

**Stimulating a secondary market of quality, affordable EVs**

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

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Additionally, due to proprietary nature of the rental car business, there is no publicly available data on the average turnover rate for rental car fleets in Hawai‘i; some national estimates put the average turnover time at around 13 months.\(^2\)

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

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

**Conclusion**

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

This bill can help to dramatically expedite the uptake of ZEVs in Hawai‘i and help to develop a public charging network necessary to accommodate those vehicles.

Thank you for the opportunity to provide testimony.

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I strongly support SB768. Zero-emission vehicles are better for the environment and the economy, and can help Hawaii’s electric utilities achieve 100% renewable electricity. The rental car industry operates the state’s largest vehicle fleets and the frequent turnover of the vehicles would translate into far more ZEVs entering the secondary market, allowing many more Hawaii residents to participate in the benefits of ZEVs. These are the types of actions that we must begin to take in earnest if we are to avert climate catastrophe.

I strongly recommend this the definition in this bill for "Hydrogen fuel cell vehicle" should specify hydrogen made from renewable sources. Hydrogen can be produced in many ways, including by burning fossil fuels.

I urge that the targets for implementation be accelerated to achieve 100% by 2030 rather than 2035 to be more in sync with what scientists say is necessary to achieve the needed reductions in greenhouse gas emissions.

Sincerely,

Ava Fedorov
Aloha Kakou,

I am writing to support SB768. We need to rapidly transition to zero-emission vehicle as a way to combat global climate change and the accompanying sea-level rise that will drastically impact Hawaii. The rental car operates a huge number of cars in Hawaii and they need to participate in the radical transformations we need to save our planet. Hawaii is a state where the majority of people and the legislature recognize the science behind global climate change and we are making some progress in decarbonizing the economy. In general however, the legislature (based on their legislative priorities and bills) does not truly understand the speed and severity of the coming changes. We need to begin now to drastically alter our current trajectory, not just make minor tweaks. This should be accelerated so that implementation is by 2030 instead of 2035. I would also suggest legislation to encourage alternative and public transportation for tourists so they are less dependent on rental cars altogether.

Mahalo,

Christian Palmer
Aloha,

This is an excellent place along w/ converting local, state anf fed vehicles to NO emmissions.

It will also further solar and other alternative energy coversation along w/ the needed charging stations at resorts & condo hotels. It's the right thing to do!

JN
Dear Chair Lee, Vice Chair Inouye and Committee on Transportation.

Please support SB768. We need to promote modes of transportation that rely on renewable energy instead of fossil fuels to mitigate the climate crisis.

I strongly recommend this the definition in this bill for "Hydrogen fuel cell vehicle" should specify hydrogen made from renewable sources. Hydrogen can be produced in many ways, including by burning fossil fuels.

I urge that the targets for implementation be accelerated to achieve 100% by 2030 rather than 2035 to be more in sync with what scientists say is necessary to achieve the needed reductions in greenhouse gas emissions.

The longer we delay the transformation to renewable energy, the closer we come to the irreversible climatic tipping point.

Thank you so much for your time and attention to this matter. I'm grateful for the opportunity to testify in support of SB768.

Mahalo,

Caroline Kunitake
Please support SB 768. It’s the least we can do since tourists are already contributing to their carbon footprint by flying here and staying in hotels that consume a great deal of energy.
SB-768
Submitted on: 2/9/2021 12:43:24 PM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<th>Submitted By</th>
<th>Organization</th>
<th>Testifier Position</th>
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<tbody>
<tr>
<td>phyllis fong</td>
<td>Individual</td>
<td>Support</td>
<td>No</td>
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Comments:

We need as many cars in Hawaii to be at zero emissions and as there is a large rental car usage, this bill makes sense but it must be done in conjunction with installing and having more charge stations throughout the islands.
I am writing to express my support for this bill. It is imperative that the government move in the direction to do everything possible to combat climate change. I hope that the state eventually votes to require 0 emissions from ALL vehicles within the state by 2035, as California has done and General Motors has vowed to do.
Comments:

I support SB 768 because it will help to move us away from fossil fuels. It will help to introduce people to electric/no emmission cars, it will help reduce the cost of these cars, and it will be a win for electric car companies. We need to help move our economy in every way we can, away from such a destructive energy. This bill will get a lot of gas guzzlers off the road, since much of our traffic is made up of rental cars.

Mahalo, Laura Gray R.N.
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<th>Submitted By</th>
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<tbody>
<tr>
<td>Kelsey Amos</td>
<td>Individual</td>
<td>Support</td>
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Comments:

I support. As few emissions as possible from rental cars! We need to act boldly against climate change.
Comments: Dear Chair and Committee Members, I strongly support zero emission legislation to combat climate crisis and starting with rental vehicles is a great help. Visitor impacts to our carbon footprint are high as we have seen during covid and the subsequent relief from tourism. Our health is also negatively affected by higher emissions.

Thank you for supporting this bill.

Respectfully,

Diane Ware

Box 698 Volcano HI 96785
I am very supportive of this legislation. I see no valid reason that we cannot have every rental car in Hawaii be an EV vehicle by 2035. This should give the current rental companies more than enough time to plan for and execute a smooth transition to the new EV Fleet. It would be a great step forward for our environment and toward harnessing climate change. Hawaii, with its great sunshine resource, should lead the nation on initiatives such as this.
Hello,

My name is Nanea Lo and I’m writing in Strong Support of SB768.

I strongly support SB768. Zero-emission vehicles are better for the environment and the economy, and can help Hawaii’s electric utilities achieve 100% renewable electricity. The rental car industry operates the state’s largest vehicle fleets and the frequent turnover of the vehicles would translate into far more ZEVs entering the secondary market, allowing many more Hawaii residents to participate in the benefits of ZEVs. These are the types of actions that we must begin to take in earnest if we are to avert climate catastrophe.

Please support this bill as well.

me ke aloha ‘Ā• ina,

Nanea Lo
**SB-768**
Submitted on: 2/9/2021 2:47:40 PM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>Christopher Boscole</td>
<td>Individual</td>
<td>Support</td>
<td>No</td>
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Comments:

Support SB768. This is a huge step in the right direction toward eliminating the use of carbon-based fuel in Hawaii.
STRONGLY SUPPORT!!!

This is a win-win: support tourist activities, but lead the way in reducing our dependency on the petroleum industry and in reducing toxic emissions and global warming.
SB-768  
Submitted on: 2/9/2021 3:47:44 PM  
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>Tony Radmilovich</td>
<td>Individual</td>
<td>Support</td>
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Comments:

The step in right direction. Please pass this bill.
This is a huge step in the right direction toward eliminating the use of carbon-based fuel in Hawaii.
**SB-768**
Submitted on: 2/9/2021 5:50:00 PM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>David Dinner</td>
<td>Individual</td>
<td>Support</td>
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Comments:

This will be a move of great value to the State and to the environment, and will be consistent with our national direction away from fossil fuel.
SB-768
Submitted on: 2/9/2021 6:54:25 PM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>Dyson Chee</td>
<td>Individual</td>
<td>Support</td>
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Comments:

Thank you for the opportunity to testify in support of SB768.
Submitted By | Organization | Testifier Position | Present at Hearing
---|---|---|---
Andrea Nandoskar | Individual | Support | No

Comments:

Please support this bill!

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

Mahalo for your consideration.
Comments:

I support SB768 because it would be a much needed step toward eliminating the use of carbon-based fuels in Hawai‘i. There is no reason rental car companies should not convert 100% of their fleets to zero-emission vehicles by 2035. This bill would give them plenty of time to prepare. If anything, I would recommend speeding up the process.

Thank you.
Please take care of our local air by making all rental cars electric by 2035. This will also help to make charging more available on the islands.
Comments:

I strongly support SB768 and the requirement for rental car companies to transition to zero-emissions ASAP. As someone who has long been aware of and deeply disturbed by the long-term impacts of fossil fuel extraction & emissions, I'd like to be able to envision a more survivable future. This type of bill makes that feel more real. Please pass SB768. Mahalo nui for your time.
I strongly support this effort to ensure zero emission rental cars. This would be an easy way to help lower emissions and help contribute to our Community's expressed interest in climate and sustainability goals. It would also allow more citizens to purchase used vehicles from the rental car market. Ensuring that renewable sources of hydrogen are used for hydrogen-fueled vehicles is also important. It would be nice if the State could better coordinate these types of efforts with the City and County of Honolulu's climate/sustainability goals and plan. Let's get legislation passed in the State that is better coordinated with the Counties and helps support County efforts that are already set in motion.
To the Leaders of Hawaii,

On behalf of myself a lifetime resident of Kauai, I write in strong support of SB768.

Justin Carvalho
SB-768
Submitted on: 2/10/2021 9:57:38 AM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>Gordon B. Lindsey</td>
<td>Individual</td>
<td>Support</td>
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Comments:

I strongly support SB 768, for many reasons
Aloha Committee members,

I STRONGLY support SB768, the BIGGEST REASON is an awesome unintended consequence of this, is that after a 1-3 years of being a rental, the Rental companies will sell these used EV’s to Hawaii residents ensuring a good supply of used EV’s to our people and thereby helping them to #SaveMoneySaveTheAinaDriveElectric. Not sure if the bill has a road map to get these Fleets to 100%, but a requirement to start at 5%/yr of their Fleet and then increase to 10%/yr, so by 2030 all Rental fleets will be 100% Zero Emission Vehicles! My prediction is once they start they will accelerate it on their own because they will save money. For example, Ford’s CEO recently explained how the All-Electric F-150, starting production next year, will save Fleet owners over 40%!!! Any fleet, Rentals, State, County, Police, Lifeguards, etc. In a budget shortfall? Here’s a 40% savings you can put into motion, today! https://cleantechnica.com/2020/09/17/electric-ford-f150-is-a-game-changer-for-fleets-with-a-40-lower-cost-of-ownership/ Everyone speaks Green, but you also understand there’s this mounting and COMPOUNDING Crisis called Climate Change that’s currently Kicking our Okole, BiG TIME and it’s just beginning!!! I’m angry about that and I want you to be to and ACT like our HOUSE/AINA IS ON FIRE AND OUR BEACHES, CORALS, FLORA & FAUNA ARE BEING DESTROYED TODAY, BECAUSE THEY ARE!!! Mahalo and much respect for all you are doing to fight climate change!!!

Imua>>>>Steve parsons, Kauai Resident, Wailua
aloha,

this bill will help lower the state’s carbon footprint and help slowly lower greenhouse gases and the climate change that's devastating our world, including our islands.

mahalo and sincerely,

janice palma-glennie
I strongly support SB 768. Zero-Mission vehicles are better for the environment and the economy. The rental car industry operates the state's largest vehicle fleets and the frequent turnover of vehicles would translate into far more Zev is entering the secondary Market allowing many more Hawaii residents to participate in the benefit of ZEVs. These are the types of actions we take if we are to avert climate catastrophe. I strongly recommend the definition in this bill for "hydrogen fuel cell vehicle" should specify hydrogen made by renewable sources. Hydrogen can be produced in many ways including burning fossil fuels. Also, I urge that the targets for implementation be moved to 2030 rather than 2035 to be in sync with what scientists say is necessary to meet greenhouse gas emissions to avert the worst of the climate crisis.
Aloha Chair Chris Lee, Vice Chair Lorraine R. Inouye, and Committee on Transportation members, and Chair Rosalyn H. Baker, Vice Chair Stanley Chang, and Committee on Commerce and Consumer protection members,

As an environmentalist and EV driver, I am writing in strong support of SB768.

Tourism drives Hawai‘i’s economy (or will again after Covid-19), but the industry must change to align with Hawai‘i’s priorities of using renewable energy for a clean environment. This ramp up to electric vehicle (EV) rental fleets will force the industry to convert earlier than it would if left alone, helping reduce pollution and dependence on imported fuels. I also believe that as more visitors drive EVs at home, they will embrace EVs in Hawaii and see it as a differentiator in visitor destinations.

As you all know, EV adoption is a chicken-and-egg problem between availability of EVs, chargers, and customer demand. So I thank you for supporting this bill to push the industry towards a better and more efficient solution.

Mahalo,

Andrew Kass
302 Makani Rd
Kapa‘a, HI 96746

Kaua‘i resident since 2003
EV driver since 2014
SB-768
Submitted on: 2/10/2021 3:30:45 PM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>Ruta Jordans</td>
<td>Individual</td>
<td>Support</td>
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Comments:

The more zero emission cars and less internal combustion cars rental companies have, the better. Please support.
Aloha,

This is a wonderful bill... a total win-win scenario that fits in beautifully with our goal of eliminating the use of carbon based fuels in Hawaii.

Please pass this bill.

Mahalo,

Lorraine Newman
SB-768
Submitted on: 2/11/2021 8:31:26 AM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>Judith Perino</td>
<td>Individual</td>
<td>Support</td>
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Comments:

I support this bill.
SB-768
Submitted on: 2/11/2021 9:38:32 AM
Testimony for TRS on 2/11/2021 3:00:00 PM

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<tr>
<td>Henri Etta Schmitz</td>
<td>Individual</td>
<td>Support</td>
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Comments:

This would be a significant move towards ousting fossil fuel dependency.
If we raise the minimum wage to $17 or $18 dollars an hour, it would sustain a family with one person working and one person taking care of raising children in the HAWAIIAN CULTURE. The economy and businesses will adjust to the raise and we will cut down on expenses for child care. With emphasis on raising children with good values, we will cut down on crime in the future and make life more livable in the present.