



**STATE OF HAWAII
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION
COMMISSION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809**

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Director, Kauai DP
The Adjutant General
Manager, CZM

**Testimony of
LEAH LARAMEE
Climate Change Coordinator on behalf of
Climate Change Mitigation and Adaptation Commission Co-Chair Mary Alice Evans and
Co-Chair Dawn N.S. Chang**

**Before the Senate Committees on
TRANSPORTATION CULTURE AND THE ARTS
AGRICULTURE AND ENVIRONMENT**

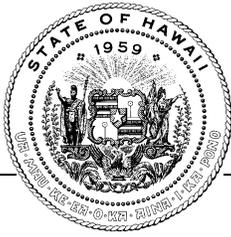
**Wednesday, February 5, 2025
1:01 PM
State Capitol, Conference Room 224 & Videoconference**

**In consideration of
SENATE BILL 586
RELATING TO CLIMATE CHANGE**

Senate Bill 586 requires the state and counties to upgrade to zero emission buses by 2045. **The Hawaii'i Climate Change Mitigation and Adaptation Commission (Commission) supports this bill provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget request.**

The Commission consists of a multi-jurisdictional effort between 20 different departments, committees, and counties. Decarbonizing our transportation system as quickly as possible is key for us to reach our mandated 2045 carbon emission goals. Policies are needed to support zero emission vehicle (ZEV) deployment on our roadways. This includes leveraging investments through the National Electric Vehicle Infrastructure program to expand public charging availability; working with utilities to expand investments in ZEV infrastructure and otherwise prepare for vehicle electrification; and establishing fleet transition requirements for the state and counties. The State and Counties have already taken advantage of national electric bus programs. This bill will encourage the continued replacement of existing fleets with zero-emission buses over a 20-year period ultimately supporting state decarbonization goals.

Mahalo for the opportunity to provide testimony in support of this measure.



**STATE OF HAWAII
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT**

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARY ALICE EVANS
DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawai'i 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawai'i 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: <https://planning.hawaii.gov/>

Statement of
MARY ALICE EVANS, Director

before the
**SENATE COMMITTEES ON TRANSPORTATION AND CULTURE AND THE ARTS
AND AGRICULTURE AND ENVIRONMENT**

Wednesday, February 5, 2025, 1:01 PM
State Capitol, Conference Room 224

in consideration of
SB 586
RELATING TO CLIMATE CHANGE.

Chairs Lee and Gabbard, Vice Chairs Inouye and Richards, and Members of the Committees,

The Office of Planning and Sustainable Development (OPSD) **offers comments** on SB 586, which mandates the transition of all state and county buses to zero-emission vehicles (ZEVs) by 2045.

This measure aligns with the State of Hawai'i's statutory climate and sustainability mandates, including:

- **Statewide Greenhouse Gas Emissions Limit** (Act 238, SLH 2022, HRS 225P-5):
Requires a 50% reduction in greenhouse gas emissions from 2005 levels by 2030.
- **State Fleet ZEV Transition** (Act 74, SLH 2021, HRS §§ 225P-7, 264-20.7, 196-9(c)(11)):
Mandates 100% ZEV use for all state passenger vehicles in the state fleet by 2030.
- **Department of Education Net-Zero Energy** (HRS §302A-1510):
Requires all DOE campuses to achieve net-zero energy use by 2035.
- **University of Hawai'i Net-Zero Energy** (HRS §304A-119):
Requires all UH System campuses to achieve net-zero energy use by 2035.
- **State Fleet ZEV Transition** (Act 74, SLH 2021, HRS §§ 225P-7, 264-20.7, 196-9(c)(11)):
Mandates 100% ZEV use for all light-duty vehicles in the state fleet by 2035.
- **Zero Emissions Clean Economy** (HRS §225P-5):
Mandates statewide carbon neutrality by 2045.

The OPSD recommends that this bill also includes provisions for necessary financing to support the conversion costs associated with transitioning to zero-emission buses (ZEVs). This includes funding for vehicle procurement as well as electric charging infrastructure for state and county facilities to ensure compliance with the bill's requirements. Adequate financing will be essential to facilitating a cost-effective and efficient transition while minimizing financial burdens on state and county agencies.

Mahalo for the opportunity to testify on this measure.

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR



STATE OF HAWAII
PUBLIC UTILITIES COMMISSION
465 S. KING STREET, #103
HONOLULU, HAWAII 96813

LEODOLOFF R. ASUNCION, JR.
CHAIR

NAOMI U. KUWAYE
COMMISSIONER

COLIN A. YOST
COMMISSIONER

Telephone: (808) 586-2020
Facsimile: (808) 586-2066

Website: puc.hawaii.gov
E-mail: puc@hawaii.gov

Testimony of the Public Utilities Commission

To the
Senate Committees on
Transportation & Culture and the Arts
and
Agriculture & Environment

February 5, 2025
1:01 p.m.

Chairs Lee and Gabbard, Vice Chairs Inouye and Richards, and Members of the Committees:

Measure: S.B. No. 586
Title: RELATING TO CLIMATE CHANGE.

Position:

The Public Utilities Commission ("Commission") offers the following comments for consideration.

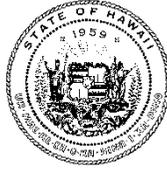
Comments:

The Commission supports the intent of this measure to facilitate adoption of zero emission buses.

The Commission believes that transitioning toward zero-emission public transportation is an important component of the State's energy, transportation, and greenhouse gas reduction goals.

Should this measure be adopted, the Commission will work with the Department of Transportation to ensure regulated motor carriers comply with the amended administrative rules. Rate design and charging infrastructure further support the transition and are currently being addressed in the Hawaiian Electric's Charge Up eBus make-ready pilot (Docket No. 2020-0098) and Schedules E-BUS-J and E-BUS-P (Transmittal No. 18-06 and Docket No. 2023-0457).

Thank you for the opportunity to testify on this measure.



STATE OF HAWAI'I | KA MOKU'ĀINA O HAWAI'I
STATE PROCUREMENT OFFICE

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

TESTIMONY
OF
BONNIE KAHAKUI, ADMINISTRATOR
STATE PROCUREMENT OFFICE

TO THE SENATE COMMITTEE
ON
TRANSPORTATION AND CULTURE AND THE ARTS
AND
AGRICULTURE AND ENVIRONMENT
FEBRUARY 5, 2025, 1:01 PM

SENATE BILL 586
RELATING TO CLIMATE CHANGE

Chair Lee, Chair Gabbard, Vice Chair Inouye, Vice Chair Richards, and members of the committees, thank you for the opportunity to submit testimony on Senate Bill 586. The State Procurement Office (SPO) appreciates the intent of the bill, but objects to the proposed language added to Section 103D-211, Hawaii Revised Statutes (HRS).

Comments: Specifications for motor vehicles **should not** be in Section 103D-211, HRS. The Procurement Policy Board (PPB) is responsible for adopting **ALL** rules to implement the purposes of procurement statutes under Chapter 103D, Hawaii Procurement Code (Code), HRS, and not for specific goods or services. The Hawaii Procurement Code's purpose is to provide overall, high-level guidance on procurement methods; it **is not** meant to be a receptacle for industry-specific specifications. If the Code is used as a repository, it may increasingly become complex, disorganized, and difficult to navigate. Over time, agencies would struggle to locate relevant information.

Recommendations: The SPO recommends the following:

- Chapter 103D-211, HRS, is reverted to its original language by deleting Section 3, page 4, line 8-21. The bill should read as follows:

"§103D-211 Procurement rules. (a) The procurement policy board shall adopt all rules necessary to carry out the purposes of this chapter and to implement its provisions in accordance with chapter 91. The policy board shall not delegate its power to adopt rules.

~~[(b) Regarding the procurement of motor vehicles capable of Transporting more than fifteen passengers, the procurement policy board shall promptly adopt all rules necessary to transition to one hundred per cent zero emission buses as quickly as possible, but no later than January 1, 2045.~~

~~As used in this subsection:~~

~~"Pollutant" means hydrocarbons, carbon monoxide, carbon dioxide, nitrogen oxides, and lead.~~

~~"Zero emission bus" means a motor vehicle capable of transporting more than fifteen passengers that produces zero exhaust emissions of any pollutant and includes battery-electric powered buses and hydrogen fuel cell electric powered buses, but does not include any vehicle, locomotive, or car operated exclusively on a rail or rails.]~~

(b) No rule shall change any commitment, right, or obligation of the State or of a contractor under a contract in existence on the effective date of such rule."

SPO further recommends, that the language pertaining to "mass transit" and "mass transportation" be added to HRS 103D-412 as follows:

§103D-412 Motor vehicle requirements. (a) The procurement policy for all agencies purchasing or leasing a bus, light-, 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. Priority for selecting vehicles shall be as follows:

- (1) Zero-emission vehicles;
 - (2) Plug-in hybrid electric vehicles;
 - (3) Alternative fuel vehicles; and
 - (4) Hybrid electric vehicles.
- (b) Vehicles shall not be larger than necessary for their intended functions.
- (c) For the purposes of this section:

"Agency" means a state agency, office, or department.

"Alternative fuel" shall have the same meaning as contained in title 10 Code of Federal Regulations part 490; provided that "alternative fuel" includes liquid or gaseous fuels produced from renewable feedstocks, such as organic wastes, or from water using electricity from renewable energy sources.

"Alternative fuel vehicle" shall have the same meaning as contained in title 10 Code of Federal Regulations part 490.

"Bus" shall have the same meaning as contained in title 40 Code of Federal Regulations section 1037.801.

"Covered fleet" shall have the same meaning as contained in title 10 Code of Federal Regulations part 490 subpart C.

"Excluded vehicles" shall have the same meaning as contained in title 10 Code of Federal Regulations section 490.3.

"Fuel cell electric vehicle" shall have the same meaning as contained in title 10 Code of Federal Regulations section 490.501.

"Hybrid electric vehicle" shall have the same meaning as contained in title 40 Code of Federal Regulations section 86.1803-01.

"Light-duty motor vehicle" shall have the same meaning as contained in title 10 Code of Federal Regulations part 490.

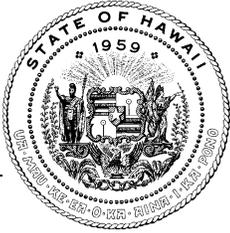
"Plug-in hybrid electric vehicle" shall have the same meaning as contained in title 40 Code of Federal Regulations part 86.1803-01.

"Zero-emission vehicle" shall have the same meaning as contained in title 40 Code of Federal Regulations section 88.102-94.

(d) Agencies may apply to the chief procurement officer for exemptions from the requirements of this section to the extent that the vehicles required by this section are not available or do not meet the specific needs of the agency; provided that life cycle vehicle and fuel costs may be included in the determination of whether a particular vehicle meets the needs of the agency. Estimates of future fuel costs shall be based on projections from the United States Energy Information Administration.

(e) Vehicles acquired from another state agency and excluded vehicles are exempt from the requirements of this section but shall be included in the calculation of the clean ground transportation goals established under section 196-9(c)(10).

Thank you for the opportunity to submit testimony on this measure.



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:
Web:

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

(808) 451-6648
energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
**SENATE COMMITTEES ON
TRANSPORTATION AND CULTURE AND THE ARTS
&
AGRICULTURE AND ENVIRONMENT**

Wednesday, February 5, 2025
1:01 PM
State Capitol, Conference Room 224 and Videoconference

In Support of
SB 586

RELATING TO CLIMATE CHANGE.

Chairs Lee and Gabbard, Vice Chairs Inouye and Richards, and Members of the Committees, the Hawai'i State Energy Office (HSEO) supports SB 586, which requires the state and counties to upgrade to zero-emission buses by 2045.

Emissions from transportation account for more than half of energy-related emissions, with 36% of those emissions coming from ground transportation, as reported in the Greenhouse Gas Emissions Report for 2021.¹ For Hawai'i to meet its statutory target "to sequester more greenhouse gases than emitted as soon as practicable but no later than 2045," significant reductions in emissions from ground transportation will need to be made in the near to medium term. HSEO's Hawai'i Pathways to Decarbonization report, submitted to the Legislature in December 2023 pursuant to Act 238 (2022),

¹ State of Hawaii, Department of Health. Greenhouse Gas Inventory: [Hawaii Greenhouse Gas Emissions Report for 2020 and 2021 \(hawaii.gov\)](#)

emphasizes the transition to Zero Emission Vehicles (ZEVs) as a key strategy to reducing emissions in ground transportation.²

SB 586 supports this goal by requiring the transition to zero-emission buses by 2045, establishing clear targets for the adoption of these vehicles in state and county transportation systems, including school buses. By prioritizing clean transportation, this bill provides multiple benefits, including:

- **Lowering Greenhouse Gas Emissions:** Transitioning to zero-emission buses will significantly reduce carbon dioxide and other pollutants that contribute to climate change and poor air quality.
- **Reducing Long-Term Operating Costs:** Zero-emission buses generally have lower fuel and maintenance costs compared to diesel and gasoline-powered buses.
- **Enhancing Public Health:** Eliminating exhaust pollutants improves air quality and reduces respiratory issues associated with fossil fuel emissions.
- **Strengthening Energy Security:** By reducing dependence on imported petroleum, Hawai'i can enhance its energy independence and resilience.

HSEO recognizes the importance of ensuring a smooth transition to zero-emission buses. Achieving this will require strategic investments in charging and/or hydrogen refueling infrastructure, workforce development, and financial support for transit agencies. HSEO is committed to collaborating with state agencies, counties, and other stakeholders to support these efforts and help facilitate an effective and efficient transition. HSEO supports SB 586 as long as its passage does not replace or adversely impact priorities indicated in the Executive Budget.

Thank you for the opportunity to testify.

² Hawai'i State Energy Office (2023). [Hawai'i Pathways to Decarbonization, Act 238 Report to the 2024 Hawai'i State Legislature \(Act 238 Report\)](#)

RICHARD T. BISSEN, JR.
Mayor

JOSIAH K. NISHITA
Managing Director



OFFICE OF THE MAYOR
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.mauicounty.gov

TO: Senator Chris Lee, Chair
Senator Lorraine R. Inouye, Vice Chair
Committee on Transportation and Culture and the Arts

Senator Mike Gabbard, Chair
Senator Herbert M. "Tim" Richards, III, Vice Chair
Committee on Agriculture and Environment

FROM: Richard T. Bissen, Jr., Mayor
Marc Takamori, Director of Transportation

DATE: February 4, 2025

SUBJECT: **SUPPORT INTENT OF SB586, RELATING TO CLIMATE CHANGE**

LATE

Thank you for the opportunity to testify and provide comments of this important measure. The Act requires the state and counties to upgrade to zero emission buses by 2045.

While we are in support of the intent, we'd like to offer the following comments:

1. The County of Maui currently contracts for Maui Bus operations and maintenance utilizing the contractor's own base yard. The County is designing a new County-owned base yard and maintenance facility to accommodate zero-emission buses. This transition will require significant lead time for facility completion, specialized mechanic training, and operational adjustments.
2. Transitioning to zero-emission buses requires significant and costly infrastructure upgrades. Electric buses necessitate charging stations, potentially requiring electrical grid upgrades. Hydrogen fuel cell buses would require hydrogen fueling stations, which are currently unavailable on Maui and present unique infrastructure challenges. The buses themselves are only one piece of the puzzle; reliable operation depends on a robust support system.
3. As zero-emission bus technology is still evolving, a hard deadline risks locking us into a specific technology before it's fully proven or optimized. The significant costs associated with both the vehicles and the necessary infrastructure, without guaranteed funding or a clear understanding of long-term costs, could create substantial budgetary strain.

Therefore, we request that hybrid electric buses remain an option in providing a diversified fleet, ensuring operational flexibility and resilience especially when responding during emergency situations.

For these reasons, while we **SUPPORT** the intent of SB586, we respectfully request the committee consider amendments that address our concerns regarding the hard deadline, specifically relating to infrastructure readiness, operational transition, and technological/cost uncertainties. We believe a more flexible, phased approach will ensure a successful and sustainable transition to a zero-emission bus fleet for Maui County.



To: The Senate Committee on Transportation and Culture and the Arts (TCA)
and
The Senate Committee on Agriculture and Environment (AEN)
From: Sherry Pollack, 350Hawaii.org
Date: Wednesday, February 5, 2025, 1:01pm

In support of SB586

Aloha Chairs Lee and Gabbard, Vice Chairs Inouye and Richards, and 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 SB586 with a suggested amendment.**

This measure which requires the state and all counties upgrade to zero emission buses by 2045 is an important step forward to ensure that Hawaii is taking meaningful action to reduce greenhouse gas emissions in the ground transportation sector. However, we strongly urge that the definition of "hydrogen fuel cell" specify hydrogen not made from burning wood or fossil fuels. This stipulation is essential if we are to achieve the necessary goal of zero emissions.

The transportation sector contributes more to the climate crisis than any other sector in Hawaii. The 'Decade of Action' calls for accelerating sustainable solutions to confront the climate crisis. Transitioning to zero emission buses is an effective strategy for reducing emissions and working towards our emission reduction goals.

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 your kind consideration of the above amendment and for the opportunity to testify in support of this very important bill.

Sherry Pollack
Co-Founder, 350Hawaii.org



**SENATE COMMITTEE ON TRANSPORTATION AND CULTURE AND THE ARTS
and AGRICULTURE AND ENVIRONMENT**

FEBRUARY 5TH, 2025

SB 586, RELATING TO CLIMATE CHANGE

POSITION: SUPPORT

Coalition Earth **supports** SB 586, relating to climate change, which requires the state and counties to upgrade to zero emission buses by 2045.

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.

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.

Just two years ago, we witnessed the impact of the climate emergency on our shores. On August 8, 2023, wildfires swept across Maui and killed at least 100 people, making it one of the nation's deadliest natural disasters. The spread of the fires has been attributed to climate change conditions, such as unusually dry landscapes and the confluence of a strong high-pressure system to the north and Hurricane Dora to the south. The wildfires destroyed over 2,200 structures, including numerous residential buildings, historic landmarks, and school facilities. In September

2023, a report from the United States Department of Commerce estimated the total economic damage of the wildfires to be roughly \$5.5 billion. Investing in renewable energy generation could not be more urgent, given the growing threat of climate catastrophes to our island home.

Therefore, **our state should take steps to accelerate our transition to a clean energy economy and continue our fight against climate change, including by hastening our transition to a clean mass transportation network.** Transportation is our state's largest source of lifecycle greenhouse gas emissions, a fact that is exacerbated by our economic reliance on visitor-related travel. In 2023, The Federal Transit Administration awarded the City and County of Honolulu \$20 million for new electric buses and the expansion of charging capacity at bus depots.

TheBus, Honolulu's public bus system, has set a goal of transitioning its fleet to 100 percent electric buses by 2035. That transition began in 2020 and the fleet currently has 17 electric buses. In July of 2024, the Hawai'i Department of Transportation received \$5 million in federal funding to buy hybrid electric buses to replace older diesel models on Maui. At the state level, the Department of Education received a \$4.99 million grant from the Environmental Protection Agency to begin electrifying school bus fleets across the islands in 2022.

Nationally, the number of electric buses in the United States is growing. There were 12,241 electric school buses committed in the U.S. as of October of 2024, with 4,958 already in operation. As Environment America Research and Policy Center has stated, "Battery-powered electric buses can reduce the environmental and health threats posed by diesel buses, while also providing a reliable and cost-effective option for cities and school districts. Advances in electric bus technology and a rapid decline in battery costs over recent years have made electric buses an increasingly viable option for many transit agencies and school districts."

Coalition Earth is a nongovernmental organization that works to preserve the well-being of people and our planet. We champion policies that advance climate resilience, clean energy, public health, and economic fairness for working families. Contact us at info@coalitionearth.org.

SB-586

Submitted on: 2/1/2025 10:10:12 AM

Testimony for TCA on 2/5/2025 1:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

Hawaii, and the rest of the world, are already experiencing the devastating and deadly effects of climate change, as well as health problems, such as asthma, caused or exacerbated by hydrocarbon emissions. Twenty years is plenty of time to make the conversion we should have made twenty years ago, especially with regards to school buses which directly impact the health of our keiki. Please pass SB586

SB-586

Submitted on: 2/4/2025 1:29:24 PM

Testimony for TCA on 2/5/2025 1:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Victor K. Ramos	Individual	Oppose	Written Testimony Only

Comments:

I OPPOSE this bill. The scientific evidence does not support the "doom and gloom" of so called "climate change."