DAVID Y. IGE GOVERNOR





DR. CHRISTINA M. KISHIMOTO SUPERINTENDENT

STATE OF HAWAI'I DEPARTMENT OF EDUCATION P.O. BOX 2360 HONOLULU, HAWAI'I 96804

> Date: 02/17/2021 Time: 03:05 PM Location: CR 229 & Videoconference Committee: Senate Education Senate Agriculture and Environment

Department:	Education
Person Testifying:	Dr. Christina M. Kishimoto, Superintendent of Education
Title of Bill:	SB 1311 RELATING TO SUSTAINABLE SCHOOLS.
Purpose of Bill:	Requires the department of education to establish food waste and zero-emission vehicle goals as part of the sustainable schools initiative. Requires annual reports to the legislature.

#### **Department's Position:**

The Department of Education (Department) offers comments on SB 1311.

While the Department supports setting more comprehensive goals to achieving the aims of the Sustainable Schools Initiative, significant financing will be required for successful implementation of the program. This is especially true to achieve the proposed targets related to net-zero energy consumption, zero-emission vehicles, and food waste outlined in this measure.

Currently, the Department receives no funding from the legislature for the Sustainable Schools Initiative pursuant to Hawaii Revised Statutes, Section 302A-1510 and \$300,000 for the Resource Recovery Program pursuant to Act 207, SLH 2018. The important pursuits in these statutes are vital to effectively meeting the goal of creating more sustainable environments at Department campuses and the Department appreciates the legislature's commitment to further expanding sustainability efforts.

The Department urges the legislature to consider the provision of funding for the Department in ensuring the successful implementation of the important goals in existing law and those proposed in this measure.

Thank you for the opportunity to testify on this measure.

The Hawai'i State Department of Education is committed to delivering on our promises to students, providing an equitable, excellent, and innovative learning environment in every school to engage and elevate our communities. This is achieved through targeted work around three impact strategies: school design, student voice, and teacher collaboration. Detailed information is available at www.hawaiipublicschools.org.



### 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 EDUCATION AND HOUSE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Wednesday, February 17, 2021 3:05 P.M. House conference room via videoconference

### Comments in consideration of SB 1311 RELATING TO SUSTAINABLE SCHOOLS.

Chairs Kidani and Gabbard, Vice Chairs Kim and Nishihara, and Members of the Committees, the Hawaii State Energy Office (HSEO) offers comments on SB 1311, which requires the department of education to establish food waste and zero-emission vehicle goals as part of the sustainable schools initiative including annual reports to the legislature.

SB 1311 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 accounting for over 4 million metric tonnes of carbon dioxide equivalents per the 2016 Greenhouse Gas Inventory. 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.

In 2020 the State of Hawaii along with 14 other states and the District of Columbia were signatories of the Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding (MDHD ZEV MOU). The signatories who Hawaii State Energy Office Testimony SB 1311 - Relating to Sustainable Schools - Comment February 17, 2021

represent 50% of the U.S. economy agreed to strive to make sales of all new mediumand heavy-duty vehicles in their jurisdictions zero emission vehicles (ZEVs) by no later than 2050. In order to ensure adequate progress toward the 2050 goal, the Signatory States strive to make at least 30 percent of all new medium- and heavy-duty vehicle sales in their jurisdictions ZEVs by no later than 2030.

SB1311 addresses an important action within the State's power that will advance the goals of the MDHD ZEV MOU. Converting school buses to ZEVs sends a clear signal to the market on Hawaii's commitment to the decarbonization of the ground transportation sector. Per the ICCT October 2020 report "RACE TO ZERO: How manufacturers are positioned for zero emission commercial trucks and buses in North America"<sup>1</sup> battery electric school busses are now available in the market to support a transition of that ground transportation sector. In 2018 Blue Bird was the first legacy OEM to offer a fully electric school bus in the market. Since then Thomas Built Buses (Daimler) and IC Bus (Navistar) have introduced battery-electric busses. Zero-emission vehicle manufacturers GreenPower offers the Synapse 72 School Bus and Lion Electric has three models (LionA, LionC, LionD) covering the various types of school buses.

Thank you for the opportunity to testify.

<sup>&</sup>lt;sup>1</sup> <u>https://theicct.org/sites/default/files/publications/Canada-race-to-zero-EN-oct2020.pdf</u>



Email: <a href="mailto:communications@ulupono.com">communications@ulupono.com</a>

#### SENATE COMMITTEES ON EDUCATION AND AGRICULTURE & ENVIRONMENT Wednesday, February 17, 2021 — 3:05 p.m.

#### Ulupono Initiative <u>supports</u> SB 1311, Relating to Sustainable Schools

Dear Chair Kidani, Chair Gabbard, 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> **SB 1311**, which requires the Department of Education (DOE) to establish food waste and zero-emission vehicle goals as part of the Sustainable Schools Initiative.

Ulupono supports the State's efforts to increase energy efficiencies, clean transportation, and local food procurement. The State currently maintains goals for 100% clean energy by 2045 and doubling local food production by 2030. Each state department and agency should find ways to lead by example in meeting these sustainable goals. The DOE can make a strong impact for the State by making these statements and policies a reality through the Sustainable Schools Initiative. The DOE can also benefit from teaching our keiki about the importance of clean energy and transportation and local food production, creating a more resilient future for all.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata Director of Government Affairs

#### Investing in a Sustainable Hawai'i



#### February 11, 2021

#### TO: Chairs Gabbard & Kidani and members of AEN/EDU Committees

RE: SB 1311 Relating to Sustainable Schools

Support for hearing on Feb. 17

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 1311 as it would require the Department of Education to establish food waste and zero-emission vehicle goals as part of the sustainable schools initiative.

Both sustainable food programs and reduction of the carbon footprint are the responsible thing to do to leave the next generation a livable planet.

Thank you for your favorable consideration.

Sincerely, John Bickel, President



#### TESTIMONY OF TAKE FLIGHT ENVIRONMENTAL MARKETING AGENCY IN REGARD TO SB1311, RELATING TO SUSTAINABLE SCHOOLS TO BE HEARD BY SENATE COMMITTEE ON EDUCATION AND COMMITTEE ON AGRICULTURE AND ENVIRONMENT WEDNESDAY, FEBRUARY 17, 2021 3:05PM

Dear Chair Gabbard, Vice Chair Nishihara, Chair Kidani, Vice Chair Kim, and Members of the Committee,

My name is Daniela Torres, and I am an account manager for Take Flight, an environmental marketing agency located in Honolulu, Hawai'i. We work with businesses that are sustainable but need help with content and messaging as well as businesses which would like to become sustainable. Many of our clients are local businesses with keiki in school, and while they are working hard to change the way businesses operate, there is a major roadblock in education when it comes to an individual's environmental impact- and that needs to start at a young age in school. It is crucial to support the sustainable school's initiative outlined in SB1311 for the future of our keiki, the environment, and the resiliency of our islands. We need to provide the keiki with every possibility opportunity, but maintain the deep roots that come from āina-based knowledge and respect.

The elements of the Sustainable Schools initiative are not only feasible, but already underway. While COVID-19 has provided a major set back due to regulation from the DOH and state funding, this is a temporary set back and we will recover, here and everywhere else. It is also important to set metrics in place for the DOE so that they have goals and a clear path that will not falter with the changing of staff. Working alongside HIDOE, I have seen their push towards decreasing waste, increasing local food use, and incorporating more environmental elements, such as school gardens and outdoor learning spaces. Take Flight **supports** SB1311.

## Setting 60 percent local food goals can increase food security, create local jobs, support the growth of local agriculture, and decrease Hawai'i's carbon footprint.

Prior to COVID-19, HIDOE was on track for 40 percent local food by 2024 and upon discussion with Dexter Kisha, the previous HIDOE Farm to School Coordinator whose position has still not been filled, a goal of 60 percent local produce and 60 percent local animal proteins is entirely achievable. As an island, we are currently importing roughly 90%<sup>1</sup> of the foods we consume as a whole at a cost of approximately \$3 billion, leaving our islands and schools vulnerable, should

 $<sup>^{1}\</sup> http://files.hawaii.gov/dbedt/op/spb/INCREASED_FOOD\_SECURITY\_AND\_FOOD\_SELF\_SUFFICIENCY\_STRATEGY.pdf$ 

an unpredictable shipping problem occur. HIDOE, however, had already been incorporating 30 percent local ingredients into school meals and working with farmers statewide to supply more food items based upon FDA food requirements, increasing both jobs and food security. If they could do it previously, they will be able to do it again.

The goals of HIDOE are in line with an overall growing trend in the federal DOE that shares a push towards local foods. According to the USDA, they already "encourage a push for school districts to use locally-produced foods in school meals and to use "farm-to-school" activities to spark students' interest in trying new foods." They even established an official Farm to School Grant Program<sup>2</sup> as well as a grant program to help schools purchase kitchen equipment to help them provide healthier school meals. Hawai'i is one of the only states that has a growing season of 365 days/year and having this advantage truly allows for HIDOE to focus on local food production.

Setting local food production goals for proteins and produce means that both local farmers and fisherman can benefit. Currently, HIDOE offers no seafood options, but in their quest for local foods and the knowledge that seafood is more readily available than any other protein source, they are already testing seafood dishes. Additionally, 100% of HIDOE's had always been (prior to COVID-19 restrictions) fresh beef products, which are already locally produced, so a shift from proteins like chicken to seafood could allow HIDOE to easily hit a 60 percent target.

There is a large environmental impact attached to food imports, and low prices provided through massive companies abroad undercut the prices of local farmers. By making these shifts to more local foods through HIDOE, we are paving the path for increased local food production and support overall for the entire state. Additionally, by adding this requirement we are creating an increased demand for local produce which will further stimulate the local farming economy, and with economies of scale, should drive down prices.

# There is a direct correlation between local ingredients, fresh food, and local recipes, and overall waste reduction.

In 2018, Mililani Schools launched a pilot program that analyzed the effects of changing ingredients and recipes on waste reduction. Traditionally, DOE schools serve prepackaged meals with minimal prep, but with food waste rates so high, Mililani wanted to test "scratch cook," or, cooking with fresh ingredients, in the schools to see how the change would impact waste. After a food waste audit was conducted, the research showed that Mililani high school students wasted 19 percent of their meal daily, while students at Mililani Uka elementary schools wasted 35 percent, and Mililani Waena Elementary School wasted 32 percent. When the scratch cooking program was tested, the percentages of food changed from 60 percent processed to 60 percent scratch cooking, with an increase from 20 percent to 40 percent local ingredients. These menu

<sup>&</sup>lt;sup>2</sup> https://www.fns.usda.gov/cfs/farm-school-grant-program

changes reflected in a 40 percent waste reduction overall. To measure scratch cooking meals directly against processed meals within the same time period, styles of food were interspersed throughout the week. The audit during this time revealed that students threw away 9–21 percent less food on days they were served freshly prepared meals.

Making shifts to local ingredients and fresh foods additionally provides an opportunity for schools to teach students about nutrition, local agriculture, Hawaiian culture, food waste, plant life cycles, and more.

# A zero emissions goal for all school transportation is feasible and essential to decrease our dependency on oil and move towards a net zero carbon state.

As a state, we have some of the highest fuel costs in the country. These costs are due to the distance oil must travel to Hawaii, a state that produces NO fossil fuels, but endless renewable energy sources- sun, wind, hydro, and geothermal. It only makes sense as a community to use the energy sources we have been provided with, which happen to also cause little to no harm in comparison to fossil fuels. School buses only last so long, so requiring that any new school buses purchased are electric, will not lead to any wasted vehicles, and will not be an extraordinary ask. Ultimately, these buses will save the schools money, which is something essential for a state operating at a \$5 billion deficit. Additionally, buses emit a lot more hazardous fumes that cars due to their size and the amount of fuel used. Eliminating gasoline-powered buses will also provide cleaner air for us to breathe.

It is only fitting that the school transportation move to zero emissions when the buildings have already set the target of net zero energy, and that happened six years ago.

#### Integration of sustainability into curriculum allows for more creative freedom for teachers, Hawaiian place-based learning, project-based learning, increased environmental awareness, and increased student engagement.

In 2010, the Hawai'i Farm to School Hui was formed and in 2017 it became a part of Hawai'i

Public Health Institute. <sup>3</sup> This hui provides resources to HIDOE schools including garden safety, foodservice tips, curriculum ideas, Āina Pono, and the Garden to Cafeteria Program. While this Hui is already there, it is underutilized as a whole and requires more support from a state level to reach its full potential and provide what it can for all HIDOE schools.

This bill will give that further support and resources for the hui, students and teachers, and provides aid to those looking for a way to start these changes.

<sup>&</sup>lt;sup>3</sup> https://www.hiphi.org/farmtoschool/

According to the Green Schools Alliance,<sup>4</sup> "students spend the majority of their day in a school building during their most crucial developmental years. [...] The journey to that goal begins with educating students in a healthy and sustainable environment." The underlying goal for this bill is to make all DOE schools Net Zero Energy Green Schools by 2035, a first attempt of its kind in the nation. As defined by USGBC Center for Green Schools, "All green schools share three common goals: reduced environmental impact, increased health and well-being, increased

environmental and sustainability literacy for all graduates."<sup>5</sup> Our children are already more environmentally aware than many adults and it is a topic amongst the youth thanks to global youth leaders such as Greta Thunberg and local leaders such as Hawaii Youth Climate Coalition. Students around the world are demanding sustainability education in schools and working with their schools and student body to find ways to decrease their school's environmental footprint.

Take Flight **supports** SB1311 and we urge these committees to pass this measure. Thank you for the opportunity to testify.

Sincerely, Daniela Torres Take Flight

<sup>&</sup>lt;sup>4</sup> https://www.greenschoolsalliance.org/home

<sup>&</sup>lt;sup>5</sup> https://www.centerforgreenschools.org/what-green-school

### <u>SB-1311</u> Submitted on: 2/15/2021 12:43:49 PM Testimony for EDU on 2/17/2021 3:05:00 PM

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

#### Comments:

Support reducing food waste and zero emission vehicle goals for Department of Education to reduce greenhouse gas emissions.

#### <u>SB-1311</u> Submitted on: 2/15/2021 7:47:11 AM Testimony for EDU on 2/17/2021 3:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
cheyenne tilford	Individual	Support	No

#### Comments:

I am an elementary school teacher in Waianae, and for many of my students, breakfast and lunch provided at school are their only meals of the day. The families rely on these meals to give their children the nutrients they need to grow and be healthy. Unfortunately, what breaks my heart, is that these meals often end up in the trash can. As a second grade teacher, I see most of my students throw cartons of milk in the trash that are unopened or barely touched, they often ask "what is this?, "this looks weird., I don't want to eat this," about most of the items on their plates, and most, if not all, of their whole breakfast or lunch ends up in the trash. Then, because the children are still hungry, I see them eating bags of Takis, Cheetohs, or candy that they found at home and bring to school with them. Thus, in a whole school day, and for some even in a whole day, children are consuming bits of food from their lunches and are getting most of their calories from candy and chips. Why is it that our children are given the same menu as schools on the mainland? These students don't want or have a desire to eat most of the food they are provided? Why, then, can we not provide them with LOCAL, HEALTHY food that looks FAMILIAR to them, food that they will actually eat, not throw away, food that will give them the energy they need to learn, grow, and stay focused the rest of the school day, not make them crash and feel sluggish. These kids RELY on this food, so let's give them food that they will actually eat, and will actually make them feel good and be healthy, because for some, these meals are their only meals of the whole day. We owe this to our keiki.

#### <u>SB-1311</u> Submitted on: 2/10/2021 3:34:46 PM Testimony for EDU on 2/17/2021 3:05:00 PM

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

Comments:

Both reduction of food waste and using zero emission vehicles are good goals for our schools. Please support.

#### <u>SB-1311</u> Submitted on: 2/11/2021 8:22:11 PM Testimony for EDU on 2/17/2021 3:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Tristan S Bassingthwaighte	Individual	Support	No

#### Comments:

I believe it is vital for both environmental and economic reasons that food production begin moving towards localized sources. On a global scale the impact of shipping creates enormously more pollution than is necessary, and more locally also contributes to the degredation of the island environment. Six million pounds of food per day being imported is a shocking number, and we can do better.

With regards to money, it would be far better for the local economy to have such resources be locally sourced. As opposed to having 3 billion dollars annually leave the island and go into the bank accounts of shipping companies, we could see more of these finances be spread among local who would then spend locally as well. There's no valid reason to continue suffering the environmental degredation of shipping, with the monetary loss of importing so much that could be created here.

We need laws to help push Hawai'i to transition towards a sustainable future, and I believe this bill is one step in that direction.

<u>SB-1311</u> Submitted on: 2/11/2021 10:25:02 AM Testimony for EDU on 2/17/2021 3:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Alec Marentic	Individual	Support	No

Comments:

I support this bill.

#### <u>SB-1311</u> Submitted on: 2/12/2021 11:41:29 PM Testimony for EDU on 2/17/2021 3:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Nandoskar	Individual	Support	No

Comments:

Please support this bill! Mahalo for your consideration.

#### <u>SB-1311</u> Submitted on: 2/16/2021 1:30:50 PM Testimony for EDU on 2/17/2021 3:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Pappas	Individual	Support	No

Comments:

Dear EDU and AEN Committee Members,

I strongly support Bill SB1311. Establishing food waste and zero-emission goals will make school operations less expensive, benefitting all of us.

Thank you.

Jan Pappas

Aiea, Hawaii



Re:





#### February 16, 2021 Date: To: Senator Michelle Kidani, Chair Senator Donna Mercado Kim, Vice Chair Members of the Senate Committee on Education

Senator Mike Gabbard, Chair Senator Clarence Nishihara, Vice Chair Members of the Senate Committee on Agriculture and Environment From: Lydi Bernal, Hawai'i Farm to School Hui Coordinator SUPPORT for SB1311, Relating to Sustainable Schools Hearing: February 17, 2021 at 3:05pm in Conference Room 229

Aloha and thank you for the opportunity to testify in **support of SB1311**, which requires the department of education to source 60% of the animal protein and produce for school meals locally by 2035, to establish zeroemission vehicle goals as part of the sustainable schools initiative, and to report annually to the legislature.

Hawai'i Public Health Institute (HIPHI) works to advance policy and systems change to reduce disparities and improve the health of Hawai'i residents. HIPHI is home to and testifies here on behalf of the Obesity Prevention Task Force<sup>i</sup> and the Hawai'i Farm to School Hui<sup>ii</sup>, which collectively represent over 60 organizations from across the islands.

Increased procurement of locally-grown foods for consumption by Hawaii's students will have a positive impact on the health of children and youth and the development of sustainable food systems in Hawai'i. We appreciate the addition of food as part of the vision and plan for sustainable schools.

We also affirm the **critical importance of curricular integration** of sustainability concepts and practices, as a foundation for Hawaii's social, economic, and environmental recovery and resiliency.

Thank you for your strong support of sustainable schools through farm to school!

Me Ke Aloha.

Lvdi Bernal Hawai'i Farm to School Hui Coordinator

(continued on next page)

Kilikina Mahi, MBA Chair **KM** Consulting LLC

**HIPHI Board** 

Michael Robinson, MBA, MA Immediate Past Chair Hawai'i Pacific Health

JoAnn Tsark, MPH Secretary John A. Burns School of Medicine, Native Hawaiian **Research Office** 

**Debbie Erskine** Treasurer Kamehameha Schools

Keshia Adolpho, LCSW Molokai Community Health Center

Keawe'aimoku Kaholokula, PhD John A. Burns School of Medicine, Department of Native Hawaiian Health

Mark Levin, JD William S. Richardson School of Law

Rachel Novotny, PhD, RDN, ID

University of Hawai'i at Mānoa, College of Tropical Agriculture and Human Resources

May Okihiro, MD, MS John A. Burns School of Medicine, Department of **Pediatrics** 

Misty Pacheco, DrPH University of Hawai'i at Hilo, Department of Kinesiology and Exercise Sciences

Garret Sugai Kaiser Permanente

Catherine Taschner. JD McCorriston Miller Mukai MacKinnon LLP

<sup>ii</sup> Founded in 2010, the **Hawai'i Farm to School Hui** is a statewide network comprising five islandlevel networks, community organizations, schools, state agencies, and other food systems stakeholders with a collective mission to strengthen Hawaii's farm to school movement. The three pillars of successful farm to school programs are: 1) school gardens and on-campus farms, 2) education, and 3) school food improvements through local procurement.

<sup>&</sup>lt;sup>i</sup> Created by the legislature in 2012, the **Obesity Prevention Task Force** comprises of over 40 statewide organizations, and works to make recommendations to reshape Hawaii's school, work, community, and health care environments, making healthier lifestyles obtainable for all Hawai'i residents.



#### <u>SB-1311</u> Submitted on: 2/17/2021 10:44:24 AM Testimony for EDU on 2/17/2021 3:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Milholen	Individual	Support	No

#### Comments:

Aloha, Senators of the AEN/EDU committees. I apologize for this late testimony, but I would like to submit my support for this important bill. I work as a Waste Reduction Coordinator for KÅ• kua Hawai'i Foundation, and we have conducted the largest assessment of school food and lunch waste to date and found compelling results to support food waste reduction goals, in particular. Though many schools across the state have agreements with local piggeries and farmers to divert the wasted school food, the fact there there is an average 57% (by weight) of served food wasted in elementary schools, and 25% (by weight) in middle and high schools, is a clear indicator that more efforts are needed to increase consumption prior to disposal and rescue any food scraps from the dumpsters for on or off-site composting. That degree of wasted food represents a moral as well as fiscal obligation for the state to act, as tens of millions of dollars are spent on daily school dumpster hauling specifically because of the putrescible food and milk waste thrown in. Mahalo for the opportunity to provide testimony. I am available for questions, if desired.

Jennifer Milholen



Hawaii Electric Vehicle Association PO BOX 6310 Hilo, HI 96720 hawaiidriveelectric@gmail.com



February 17, 2021

Dear Chair Gabbard, Chair Kidani, Vice Chair Nishihara, and Vice-Chair Mercado, and members of the Education and Agriculture and Environment committees.

#### Hawaii Electric Vehicle Association is in SUPPORT of SB1311.

The electrification of our school buses will not only enable our state to achieve its decarbonization goals more aggressively, but it will also allow our keiki to not be exposed to unhealthy exhaust associated with internal combustion engine vehicles.

It is well-established that diesel exhaust is filled with particles and gases that are toxic and carcinogenic<sup>1</sup> and that air pollution associated with the burning of fossil fuel contributes to significant death across the globe<sup>2</sup>. Today's fleet of school transportation exposes our kids to these dangerous exhaust fumes as they wait for, board, ride, and unboard these buses. It behooves us to stop exposing our young bus riders and bus drivers to this air pollution and to do so with urgency.

Electric buses will also allow for a lower total-cost-of-ownership for bus fleet operators. These buses have moving parts and is easier to maintain, compared to internal combustion engine buses. In the long-run, electric buses are more economical to operate, compared to their diesel counterparts<sup>3</sup>. There are other counties in the nation that have already transitioned their school bus fleet or are in the process of doing so<sup>4</sup> - we will be in good company as we make our transition.

The electrification of our school buses is inevitable – it will ultimately happen. However, there is much to gain by accelerating the transformation of our fleet, particularly by our school children.

Thank you for the opportunity to testify.

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.

<sup>&</sup>lt;sup>1</sup> Diesel Exhaust and Cancer - cancer.org/cancer/cancer-causes/diesel-exhaust-and-cancer.html

<sup>&</sup>lt;sup>2</sup> Fossil Fuels Kill Nearly 9 Million Annually, More Than Twice Previous Estimate, Study Finds

 $<sup>-</sup> ecowatch.com/fossil-fuels-air-pollution-deaths-2650416201.html?rebelltitem \verb+1++rebelltitem+1++ rebelltitem+1++ rebelltite$ 

<sup>&</sup>lt;sup>3</sup> Electric buses for mass transit seen as cost effective - publicpower.org//periodical/article/electric-buses-mass-transit-seen-cost-effective

<sup>&</sup>lt;sup>4</sup> Miami-Dade Starts Transition to Electric School Bus Fleet - cleantechnica.com/2021/01/18/miami-dade-starts-transition-to-electric-schoolbus-fleet/