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COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Lisa Marten, Vice Chair

DATE: Thursday, February 4, 2021

TIME: 8:30 am

HB 327 RELATING TO GHG EMISSIONS Support with Amendment

Aloha Chair Lowen, Vice Chair Marten, and Members of the Committee

Life of the Land is Hawai'i's own energy, environmental and community action group advocating for the people and `aina for 51 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

Proposed Amendment: Task Force meetings shall be noticed and shall open to the public.

The Hawai`i greenhouse gas footprint involves several different silos: electricity, ground transportation, shipping, airlines, vegetation, and non-fuel imports.

HB 327 addresses one neglected issue: airline emissions. Airlines account for 2% of U.S. emissions but a much larger share of Hawai`i emissions.

The actual number is masked, because if Hawai`i induces a passenger to fly to Hawai`i, their emissions for the flight over is excluded even if aviation emissions are included, because only emissions from Hawai`i fuel depots is counted.

Solving the aviation issue takes research. Hawai`i can and should play a role in that.

Mahalo
Henry Curtis
Executive Director

HB-327

Submitted on: 2/2/2021 1:12:02 PM

Testimony for EEP on 2/4/2021 9:00:00 AM

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

Comments:

Dear Honorable Committee Members:

Please support HB327.

Thank you,

Andrea Quinn



HB 327, RELATING TO GREENHOUSE GAS EMISSIONS

FEBRUARY 4, 2021 · HOUSE ENERGY AND
ENVIRONMENTAL PROTECTION COMMITTEE ·
CHAIR REP. NICOLE E. LOWEN

POSITION: Support.

RATIONALE: Imua Alliance supports HB 327, relating to greenhouse gas emissions, which convenes a Sustainable Aviation Fuel Task Force within the Hawaii State Energy Office to develop a state action plan to reduce the greenhouse gas intensity of international air transportation from Hawaii.

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 Columbia 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 working to reduce greenhouse gas emissions from air transportation related to our tourist industry. **In 2019, Civil Beat reported that flights to and from Hawai'i from all over the world produced approximately 6.3 million tons of carbon, which is the equivalent of the CO2 produced by generating electricity for almost 1.1 million homes in a year.** 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

HB-327

Submitted on: 2/2/2021 10:16:59 PM

Testimony for EEP on 2/4/2021 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Climate Protectors Coalition	Support	No

Comments:

To: The House Committee on Energy and Environmental Protection (EEP)

From: Climate Protectors Coalition

Hearing Date: Thursday, February 2, 2021, 9:00 am

In support of HB327 RELATING TO GREENHOUSE GAS EMISSIONS

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

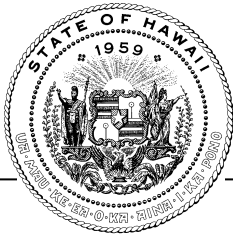
The Climate Protectors Coalition **supports HB327.**

The Climate Protectors Coalition is a group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, food insecurity, and rising sea levels destroying our shorelines. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible.

This bill would convene a Sustainable Aviation Fuel Task Force within the State Energy Office to develop a state action plan to reduce the greenhouse gas emissions generated by international air transportation from Hawaii.

The Climate Protectors ask that you pass this bill. Mahalo!

Climate Protectors Coalition (by Ted Bohlen)



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

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Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 4, 2021
9:00 AM
State Capitol, Conference Room 325

Comments in consideration of
HB 327
RELATING TO GREENHOUSE GAS EMISSIONS.

Chair Lowen, Vice Chair Marten, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on HB 327, which would establish a sustainable aviation fuel task force in the Hawai'i State Energy Office. HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, energy resiliency, and clean transportation to help achieve a decarbonized economy.

While HSEO fully supports the intent of the bill, the envisioned twenty-member task force would take on an ambitious, wide-ranging, and complex array of tasks in a relatively short time period with at least two public meetings per year, an interim report to the legislature at the end of 2021, and a final report to the legislature at the end of 2022, ceasing to exist at the end of June, 2023.

Aviation fuel is a very important area for innovation, and Hawai'i is uniquely positioned to develop solutions and to continue to be a leader in this area, building upon the success of the federal initiative, headquartered in Hawai'i, known as the Green Initiative For Fuels Transition – Pacific (GIFTPAC) from 2009-2019, and the 2019 Hawai'i Aviation and Climate Action Summit, which convened national and international leaders in the field of sustainable aviation fuels here. Also, greenhouse gas emissions

from air travel are a particularly significant area to address, since jet fuel has historically been one of the largest sources of Hawai'i's greenhouse gas emissions.

However, the scope and scale of the effort envisioned would not be possible for HSEO to accomplish unless significant funding and staffing could be found and a longer timeframe made available to accomplish this very important work.

Nevertheless, we look forward to identifying partnerships or pursuing grant funding opportunities if available, and to supporting successful developments in this emerging area.

Thank you for the opportunity to testify.

HB-327

Submitted on: 2/3/2021 8:28:58 AM

Testimony for EEP on 2/4/2021 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Tawn Keeney	Individual	Support	No

Comments:

Testimony: HB327 Convene Task Force for Study of Sustainable Aviation Fuels for Hawaii

Of course, I would like to express my support for any effort to reduce Hawaii's immense carbon footprint from air travel. However, I would also like to inject a note of caution, again. Projecting in our minds that air travel may become sustainable is like 'dancing with the vampire'. The following is from an interview by a European Sustainable Aviation Fuel company of one of their ex-employees who had just completed his PhD thesis on SAF. (June, 2020)

"My thesis focused on the production costs, climate impact and future supply of sustainable aviation fuel (SAF). When I started four years ago, there was a need for a broad overview of the economic and environmental performance of renewable jet fuel technologies. We found that the production costs of renewable jet fuels are currently 2-3 times higher than fossil jet fuel. New technologies, more experience and optimized supply chains can cut costs by almost 50% in the coming decade, thereby bringing price parity within reach. We used these analyses to make quantitative projections of the future supply of SAF. Based on the proposed EU legislation for 2021-2030 (RED II), we found SAF supply could increase to 4-6 million metric tonnes in 2030, which would cover 6-9% of EU jet fuel demand and reduce roughly three-quarters of the projected emission growth. Prerequisites for this transition include stable policy incentives, strong support for technology development and solid sustainability criteria."

This is probably sound research and conclusions. If we are substituting at most 9% of our jet fuel with SAF by 2030 and emissions will still grow at a quarter of what they might otherwise have grown, we should not paint the picture in the public mind that we can continue to court tourism as our economic base because it is about to become 'sustainable'. The 'hype' regarding Hydrogen powered flight is also, with our current understanding of production technologies of Hydrogen as fuel, lending an illusion of 'sustainable flight'. The amount of electricity needed to produce Hydrogen for fueling air travel at the equivalent of air traffic of one metropolitan airport is astronomical. Not conceivable in any realistic mid-term future.

Tawn Keeney MD

LATE

HB-327

Submitted on: 2/3/2021 5:39:36 PM

Testimony for EEP on 2/4/2021 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Alexia Akbay	Individual	Support	No

Comments:

Aloha e Energy & Environmental Protection Chair Representative Nicole Lowen,

My name is Alexia Akbay, I am a resident of Kailua-Kona, Hawai'i within your District 6. I am writing to express my support for HB327.

Given the profound dependence on air travel in and out of the state, it is critical for Hawai'i to begin assessing emerging technologies and publicize that Hawai'i could serve as demonstration geography for short-haul electrified aviation. Other countries, most recently Norway, have set priorities for utilizing exclusively electric planes for short-haul transportation in the coming decade. A similar strategy could be suitable for interisland travel. Additionally, reductions in usage of petrol-powered aviation could decrease noise pollution that stems from airports and the resulting environmental justice burden among communities in close proximity.

Mahalo nui loa for taking the time to consider this bill. I hope the state can begin researching this important topic.

With gratitude,

Alexia