

DAVID Y. IGE  
GOVERNOR OF HAWAII



**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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**Testimony of  
SUZANNE D. CASE  
Chairperson**

**Before the House Committee on  
ENERGY AND ENVIRONMENTAL PROTECTION**

**Thursday, January 31, 2019  
8:30AM  
State Capitol, Conference Room 325**

**In consideration of  
HOUSE BILL 1584  
RELATING TO CARBON EMISSIONS**

**SUZANNE D. CASE**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

**LATE**

House Bill 1584 proposes to appropriate funds for a comprehensive study of a carbon tax to help policymakers better understand the opportunities, impacts, and options that a carbon price policy could bring to Hawaii. **The Department of Land and Natural Resources (Department) supports this measure and offers comments provided that its passage does not replace or adversely impact priorities indicted in the Executive Supplemental Budget request.**

The Department chairs the Hawaii Climate Change Mitigation and Adaptation Commission, which issued support for a carbon fee (in its November 2018 statement, [attached](#)), but did not define the exact mechanism of such a fee. A study that would inform such a mechanism for Hawaii would, if scoped properly, be very useful. However, the Department asks that legislation:

1. Consider the role of and explicitly involve the Commission in providing input into the study, at a minimum into its scope and interim report in particular; and
2. Reconsider the deadline for the final report to be June 30, 2020 in order to inform the law making process in time for the legislative session beginning in 2021.

Thank you for the opportunity to comment on this measure.



## DEPARTMENT OF LAND AND NATURAL RESOURCES

DAVID Y. IGE  
GOVERNOR

SUZANNE D. CASE  
CHAIRPERSON

### NEWS RELEASE

FOR IMMEDIATE RELEASE

Nov. 28, 2018

#### STATE CLIMATE COMMISSION ENCOURAGES URGENT ACTIONS TO COMBAT EMISSIONS

##### *Supports Legislation to Establish A Carbon Fee Program*

(Honolulu) - Hawaii's Climate Change Mitigation and Adaptation Commission, meeting yesterday in Honolulu recognized that ground transportation contributes significantly to Hawaii's share of greenhouse gas emissions. The Commission supports mechanisms to reduce overall vehicle miles traveled as well as converting all remaining vehicle-based ground transportation to renewable, zero-emission fuels and technologies

The Commission believes that putting a price on carbon is the most effective single action that will achieve Hawaii's ambitious and necessary emissions reduction goals. This view is also supported by expert global and local institutions:

- The Intergovernmental Panel on Climate Change reports that a price on carbon is central to prompt mitigation, and global emissions of CO<sub>2</sub> need to fall by 45% by 2030 and to zero by 2050.
- The International Monetary Fund finds that "carbon pricing is crucial in reducing emissions, and carbon taxes are more effective than other mitigation instruments."
- State of Hawaii's *Report of the 2015-2017 Tax Review Commission* recommends consideration of a carbon fee in its review of the state tax structure.
- State of Hawaii's *Transportation Energy Analysis, August 2015*, supports an increase in the barrel tax "to fund government actions to support clean energy, specifically in regards to the bunker taxes in the marine sector and the inclusion of aviation fuel in the barrel tax.

- The Rhodium Group’s report *Transcending Oil Hawai‘i’s Path to a Clean Energy Economy*, April 2018, recommends a carbon tax to achieve clean transportation goals in Hawai‘i.

While the specific mechanisms behind a carbon fee program are not yet outlined, the Commission emphasized the urgent need for such a program, and supports legislation that endeavors to establish one, but also recognizes that any carbon pricing mechanism:

- Must be equitable, and appropriate for the people of Hawaii.
- Must demonstrate how this is a critical policy tool to protect the future—of Hawaii’s keiki and ‘āina.
- Must be adequate to change behavior.

The Commission recommends carbon pricing mechanisms that minimize regressivity, which can be pursued through structures such as equity-based tax credits or carbon fee and dividend.

In order to facilitate a carbon pricing program to address carbon pollution, the Commission urges the State to adequately resource the following actions through legislation or executive action:

- Partner with counties and local organizations to develop and undertake a multi-year educational/public service announcement (PSA) campaign to address the link between the need for a price on carbon and highlighting the importance of clean transportation in Hawaii—which will increase quality of life, and address climate change impacts by decreasing congestion, commute time and costs, and emissions.
- Explore and develop statewide policies and partner with counties to modernize parking policies and parking management, which will reduce overall emissions, congestion and vehicle miles travelled (VMT) from driving, and increase biking, walking, and transit use, to achieve State goals.
- Transform State and county fleets to address VMT reduction, congestion, and emissions—especially through electrification, renewable fuels, carshare, and supporting infrastructure development and deployment.
- Amend laws, such as the state procurement laws, to better align them with clean transportation priorities.

# # #

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**LATE**

**HB-1584**

Submitted on: 1/30/2019 8:31:04 AM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Sylvia Yuen	RCUH	Support	Yes

Comments:

Support intent of HB 1584; we have recommended revisions.



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

**LATE**

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Testimony Presented Before the  
House Committee on Energy & Environmental Protection  
Thursday, January 31, 2019 at 8:30 a.m.

By  
Vassilis L. Syrmos, Vice President for Research and Innovation  
University of Hawai'i System

### HB 1584 – RELATING TO CARBON EMISSIONS

Chair Lowen, Vice Chair Wildberger and members of the committee:

The University of Hawai'i (UH) supports the intent of this measure that calls for a comprehensive study of a statewide carbon tax as a possible means of weaning the state off its dependency on fossil fuels and transitioning it toward clean energy sources.

Currently, the proposed measure calls for the Research Corporation of the University of Hawai'i (RCUH) to conduct the study. The primary purpose of RCUH is to provide UH with professional and financial services that are required by extramurally funded projects. With its cadre of researchers and specialists knowledgeable in the areas that need to be explored under this proposed tax, the University of Hawai'i respectfully recommends that the measure be amended to have the designed funds appropriated to the UH to conduct the study, with RCUH providing the necessary personnel and fiscal support.

Thank you for the opportunity to testify on this measure.



# SIERRA CLUB OF HAWAII

## MĀLAMA I KA HONUA. *Cherish the Earth.*

### HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

January, 31 2019 8:30 AM Room 325

In **SUPPORT** of **HB 1584**: Relating to Carbon Emissions

**LATE**

Aloha Chair Lowen, Vice Chair Wildberger, and members of the committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **strongly supports HB 1584- Relating to Carbon Emissions**. This bill appropriates funds to the University of Hawaii for the Research Corporation of the University of Hawaii to conduct a comprehensive study of a statewide carbon tax and is one of our organization's top priorities this session.

In their most recent report, the Intergovernmental Panel on Climate Change outlines the catastrophic effects climate change will have on our planet if we do not quickly ramp-down greenhouse gas emissions by 45% by 2030 and zero by 2050. The Panel reported that carbon pricing mechanisms are critical to reach these goals, but did not specify a one-size-fits-all policy and instead outlined a range of prices that could be implemented.<sup>1</sup>

The World Bank and International Monetary Fund has also urged countries to impose a price on carbon emissions, stating that there is an "obvious consensus that putting a price on carbon pollution is by far the most powerful and efficient way to reduce emissions."<sup>2</sup> Likewise, our state's Climate Change Mitigation and Adaptation Commission stated that putting a price on carbon is the most effective single action that will achieve Hawai'i's ambitions and necessary reduction goals, but noted that a carbon pricing mechanism must be equitable and appropriate for Hawai'i, must demonstrate how this is a critical policy tool to protect our future, and must be adequate to change behavior.<sup>3</sup>

The Sierra Club's view on carbon pricing is that effectiveness and equity are essential, design and implementation details matter a lot, and there are many different carbon pricing policy options that can potentially work. We feel the urgency of climate change, but must ensure that whatever carbon tax is implemented it will be the right fit for Hawai'i. Any proposal must

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<sup>1</sup> <https://www.bloomberg.com/news/articles/2018-10-10/how-much-does-carbon-need-to-cost-somewhere-from-20-to-27-000>

<sup>2</sup> <https://www.nytimes.com/2016/04/24/us/politics/carbon-pricing-becomes-a-cause-for-the-world-bank-and-imf.html>

<sup>3</sup>

<http://governor.hawaii.gov/newsroom/latest-news/dlnr-news-release-state-climate-commission-encourages-urgent-actions-to-combat-emissions/>

integrate environmental and economic justice principles while achieving measurable carbon emissions reductions.

Ideally, revenues obtained from carbon pricing programs should be used to: (1) expand clean energy and energy efficiency to further reduce carbon emissions, and to invest in climate adaptation; (2) finance targeted investments in frontline communities affected by conventional air pollution from polluting sources; (3) provide financial assistance to workers affected by the transition away from fossil fuels, and for new economy job training and clean energy investments in frontline communities; and (4) offset the regressive effects of increased taxes in low-income households.<sup>4</sup>

The Sierra Club of Hawai'i recognizes that while we have existing carbon markets like California's cap-and-trade system and the Regional Greenhouse Gas Initiative in the Eastern United States, a "carbon tax" has yet to be implemented in any other state. We also know that Hawai'i has the highest cost of living in the United States, that our tax system is generally regressive, and there is potential for a new tax to disproportionately affect low and moderate income communities.

We therefore believe that the logical first step to implement an equitable and effective carbon tax in Hawai'i is passage of HB 1584- a bill that is dedicated to studying the feasibility and impacts of carbon pricing in Hawai'i. The study is to be completed by the University of Hawai'i by the end of 2020 and will provide strong policy guidance for which type of carbon pricing mechanism Hawai'i should pursue.

Hawai'i is already leading the nation with our goal of becoming carbon neutral by 2045, but we must do more to ensure the transition to clean energy is accelerated and equitable. HB 1584 is a necessary tool that can be used to engage and educate the public on carbon pricing, direct the legislature on what pricing mechanism we should prioritize, and help us actualize our ambitious carbon neutrality and clean energy goals.

Thank you very much for this opportunity to provide testimony in **support of HB 1584**.

Mahalo,



Jodi Malinoski, Policy Advocate

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<sup>4</sup> <https://www.sierraclub.org/sites/www.sierraclub.org/files/CarbonPricingGuidance.pdf>



# HAWAII APPLESEED

## CENTER FOR LAW & ECONOMIC JUSTICE

Testimony of Hawai'i Appleseed Center for Law and Economic Justice  
Comments on HB 1584 – Relating to Carbon Emissions  
House Committee on Energy & Environmental Protection  
Thursday, January 31, 2019, 8:30 AM, conference room 325

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Dear Chair Lowen, Vice Chair Wildberger, and members of the Committee:

Mahalo for the chance to submit testimony in support of HB 1584, which would appropriate funds to the University of Hawaii to conduct a comprehensive study of a statewide carbon tax.

We recognize the need to address climate change, especially in Hawai'i, and understand that carbon pricing is potentially the most effective method of reducing carbon emissions. However, we are concerned that many proposed carbon tax measures are regressive – meaning that they place the heaviest tax burden on those of who can least afford it.

Hawai'i's low-income families already face the second-highest tax rate in the nation, with households in the bottom fifth of our income spectrum paying almost twice as much of their income in taxes as those in the top fifth. A main reason for this disparity is the General Excise Tax (GET), which is applied to nearly all goods and services in Hawai'i. It hits our low-income and working-class neighbors harder because they spend almost all of their earnings on items and services that are taxed by the GET.

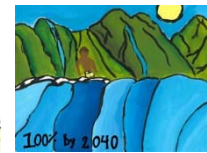
Similarly, a carbon tax could impact Hawai'i's low-income and working-class families the hardest because they spend proportionately more of their earnings on items like gas and utilities. That's why we support a study to look at the feasibility and potential effects of a statewide carbon tax. We emphasize that it is crucial for the study to explore mechanisms to mitigate the regressivity that could result from carbon pricing.

Thank you for your attention to this important issue. Please pass HB 1584.

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*The Hawai'i Appleseed Center for Law and Economic Justice is committed to a more socially just Hawai'i, where everyone has genuine opportunities to achieve economic security and fulfill their potential. We change systems that perpetuate inequality and injustice through policy development, advocacy, and coalition building.*





**HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION**

January 31, 2019, 8:30 A.M.

Room 325

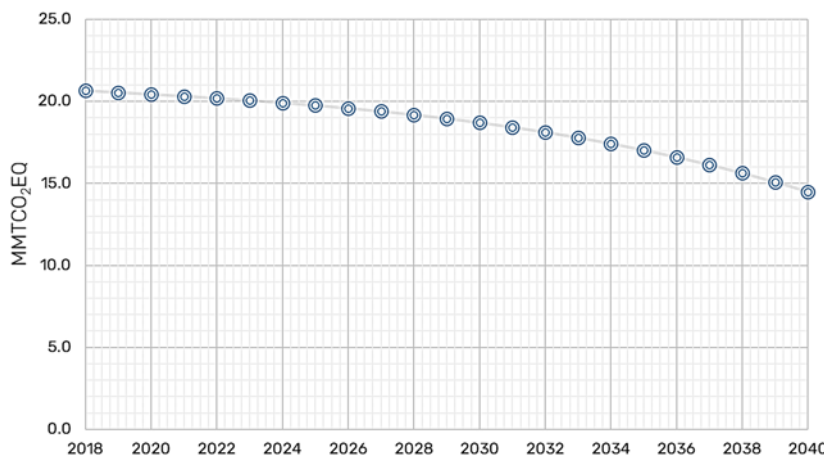
(Testimony is 2 pages long)

**TESTIMONY IN STRONG SUPPORT OF HB 1584**

Aloha Chair Lowen, Vice Chair Wildberger, and Committee members:

Blue Planet Foundation **strongly supports** HB 1584, a measure that dedicates funding for a comprehensive study of a carbon tax to help policymakers better understand the opportunities, impacts, and options that such a policy could offer Hawaii.

Climate change will have devastating, long-term consequences on Hawaii's environment, economy, and quality of life. For these reasons and others, the State of Hawaii has committed to a decisive and irreversible transition away from fossil fuels, and a swift transition to a clean energy economy powered by 100% renewable energy. The legislature has passed aggressive carbon reduction goals, including the goal to be net carbon neutral by 2045 (Act 15 of 2018) and



*Figure 1. Best-case Hawaii greenhouse gas emissions trend with current state policies*

strive to achieve the objectives of the Paris Climate Agreement (Act 32 of 2017). Setting these bold targets is important, but alone it is insufficient. Despite a growing portfolio of standards, incentives, and targets, Hawaii's current policies will not succeed in significantly reducing Hawaii's current overall carbon emissions over the next few decades.

Pricing carbon emissions via a tax on fossil fuels has emerged as a broadly supported, economically efficient, and effective policy tool to reduce climate-changing carbon emissions. Economists and leaders from across the political spectrum—including Nobel-prize winning economists, four former chairs of the U.S. Federal Reserve, and 15 former chairs of the U.S. Council of Economic Advisers—have endorsed a carbon tax as a necessary market-based solution to our climate challenge.

Currently, the prices of electricity, gasoline, and other fuels reflect little or none of the long-term costs from climate change or even the near-term health costs of burning fossil fuels. This immense “market failure” suppresses incentives to develop and deploy carbon-reducing measures such as energy efficiency, renewable energy, low-carbon fuels, and conservation-based behavior such as bicycling, recycling, and overall mindfulness toward energy consumption. Taxing fuels according to their carbon content will infuse these incentives at every link in the chain of decision and action—from individuals’ choices and uses of vehicles, appliances, and housing, to businesses’ choices of product design, capital investment, and facilities.

A carbon tax—if not designed correctly—could disproportionately impact low- to moderate-income residents. Most low- to moderate-income households spend a larger percentage of their income on gasoline, other fuels, and electricity than do higher-income households. For example, in 2014, the wealthiest 20% of U.S. households spent just 2.7% of their after-tax income on gasoline; the percentage for the lowest quintile, 10.8%, was four times as high. When viewed in absolute dollar terms, however, the bulk of carbon taxes will be paid, directly or indirectly, by households and visitors of above-average means. Researchers at the University of Hawaii at Manoa have found that the carbon intensity of visitor activities is much higher than those of residents. Regardless, a variety of mechanisms exist to reduce the regressive nature of a carbon tax, including increasing the state-level match of the Earned Income Tax Credit and making the match refundable, reducing existing taxes—particularly those that are disproportionately paid by lower income residents (such as the General Excise Tax on food and medicine), or providing a direct dividend to residents. These are critical issues that warrant thorough examination.

Blue Planet Foundation supports HB 1584 to better understand if and how pricing carbon can accelerate Hawaii's cost-effective transformation to a 100% clean energy future while ensuring that the transition is fair, equitable, and beneficial for all.

Thank you for the opportunity to testify.



# ELEMENTAL EXCELERATOR

## Written Statement of Elemental Excelsior

before the House Committee on Energy and Environmental Protection

Thursday, January 31, 2019

8:30 AM

### In consideration of HB 1584

Aloha Chair Lowen, Vice Chair Wildberger, and Members of the House Committee on Energy and Environmental Protection:

Elemental Excelsior respectfully submits **support and comments for HB 1584** which appropriates funds to the Research Corporation of the University of Hawaii to conduct a comprehensive study of a statewide carbon tax.

Elemental Excelsior is a Honolulu-based growth accelerator program founded and operating in Hawai'i. We have awarded over \$30 million to 82 companies resulting in 35 demonstration projects in Hawaii & Asia Pacific. Each year, we select 15-20 companies that best fit our mission and fund each company up to \$1 million. We recruit innovative entrepreneurs from around the world to come to Hawai'i and find transformative solutions to help us achieve our 100% clean energy goals.

In April 2018, Elemental Excelsior commissioned a study entitled [\*Transcending Oil: Hawai'i's Path to a Clean Energy Economy\*](#). The study found that in Hawai'i, transitioning to renewable energy is cheaper than sticking with oil. The faster we go, the cheaper it will be. The study also identified putting a price on carbon as a policy recommendation to realign incentives.

**We support HB 1584** because a comprehensive study of a carbon tax to understand the opportunities, impacts, and options that a carbon price policy could bring to Hawai'i can illuminate the most reasonable structure for Hawaii's emissions mix.

*Transcending Oil states that, "a reasonably high carbon price functions similarly to high oil prices and would encourage faster renewable energy deployment in the electric power sector. An appropriate tax rate could also reduce [vehicle miles traveled] VMT and speed up sales of [electric vehicles] EVs if coupled with other land use and transportation policies. Unlike renewable deployment growth driven by oil prices, which*

*transfers money from Hawai'i ratepayers to non-Hawaii oil producers, a carbon tax generates revenue that stays in Hawaii. These funds can be used to further accelerate clean energy deployment through biofuel development, EV incentives, and other activities to help meet Hawaii's Paris commitments. They can also be returned directly to the people of Hawaii to help offset the state's high living costs or to fund education and transition assistance for displaced workers." A comprehensive study can determine what is the best structure for a carbon tax given the State's priorities.*

**We want to add two comments on the funds appropriated for this study:**

1. We request specificity on the amount of funding appropriated for this study and recommend that the funds are adequate for the breadth, depth, and timeframe of the study proposed, which includes stakeholder engagement.
2. Given the rapid need for carbon reduction, the timeline as written with the interim report due no later than December 31, 2019, and the final report due no later than December 31, 2020, is generous. We respectfully recommend an accelerated timeframe for the report with completion no later than 12 months after it commences.

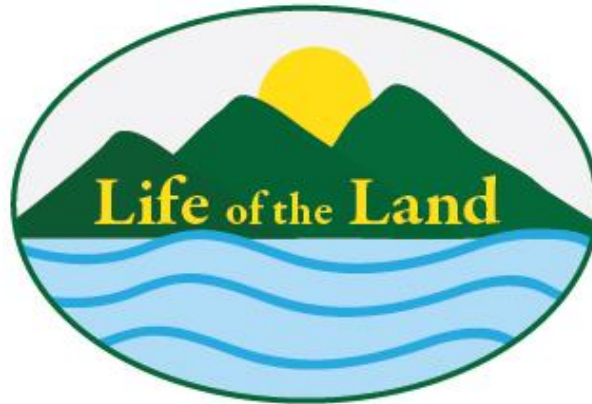
Mahalo for the opportunity to provide testimony on this legislation.

Sincerely,



Aki Marceau  
Managing Director, Policy & Community

**LATE**



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COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Tina Wildberger, Vice Chair

DATE: Thursday, January 31, 2019

TIME: 8:30 AM

PLACE: Conference Room 325

HB 1584 Carbon Tax

**SKEPTICAL**

Aloha Chair Lowen, Vice Chair Wildberger 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 47 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.

**World Bank (2016): "While the production based emissions of the early industrialized countries has begun to decrease, their consumption based emissions have continued to grow, with the gap between the two becoming increasingly significant."<sup>1</sup>**

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<sup>1</sup> Pursuing an Innovative Development Pathway: Understanding China's NDC [nationally determined contribution]. The World Bank team working on this report was led by Xueman Wang, with contributions from Grzegorz Peszko, Carter Brandon, Garo Batmanian and Maja Murisic. <http://documents.worldbank.org/curated/en/312771480392483509/pdf/110555-WP-FINAL-PMR-China-Country-Paper-Digital-v1-PUBLIC-ABSTRACT-SENT.pdf>

International Monetary Fund (2017): “Most advanced economies have become net importers of emissions since they tend to emit less in producing the goods and services they export than what their trading partners emit in producing the goods and services they import. In recent years, efforts have been made to develop a consumption-based accounting of emissions to incorporate emission transfers via international trade.”<sup>2</sup>

Yale University: 2018 Environmental Performance Index (EPI) Report. “Climate change must be understood as an inescapable international problem.” The problem is that “consumer goods produced in one country are often exported to another, raising the question of whether responsibility for emissions should rest on the producing or consuming country.”<sup>3</sup>

Production-based GHGE accounting evades the cost-causer principle. Embedded emissions are separated into smaller pieces and attached to numerous global accounts. Several scientific studies have found that developed countries have effectively reduced their emissions by outsourcing to less developed nations.

The Kyoto targets were completely offset by net emission transfers, also known as leakage. Individual developed countries include net exporters (Australia and Canada) and net importers (US, Japan, most of the European Union). American investors poured money into China to manufacture goods for the U.S., and China gets blamed for the increased emissions. Global GHG emissions continue to increase.

Trade now accounts for more than a quarter of all GHGE, resulting in a growing gap between production emissions and consumption emissions. Rich countries are outsourcing their emissions.

**Consumers may think that their policies are reducing emissions**, but without knowing the embedded emissions in their consumption, they may be off target.

“For years now, carbon dioxide emissions in the United States and Europe have been steadily falling — an encouraging sign of progress in the fight against global warming. But on the flip side, emissions in developing countries like China and India have been growing at a very rapid clip. So, one natural question to ask is just how closely these two things are related. That is, are rich countries just “outsourcing” their climate pollution to poorer countries, by shifting their factories overseas? The answer is basically yes.”<sup>4</sup>

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<sup>2</sup> Emissions and Growth: Trends and Cycles in a Globalized World (2017) by Gail Cohen, Joao Jalles, Prakash Loungani, and Ricardo Marto. International Monetary Fund WP/17/191

<https://www.imf.org/~media/Files/Publications/WP/2017/wp17191.ashx>

<sup>3</sup> <https://epi.envirocenter.yale.edu/2018-epi-report/climate-and-energy>

<sup>4</sup> A closer look at how rich countries “outsource” their CO2 emissions to poorer ones (April 2017) by Brad Plumer, Former Senior Editor, Vox. <https://www.vox.com/energy-and-environment/2017/4/18/15331040/emissions-outsourcing-carbon-leakage>

**Climate Injustice.** “Despite having achieved an unprecedented decrease of Greenhouse Gas (GHG) emissions within its territory, lowering them by 13 percent from 1990 to 2010, the European Union’s carbon footprint has increased by 8 percent during the same period. This paradoxical phenomenon is the result of our increasing demand for goods and services, which is mainly satisfied by importing products from developing countries that typically have more carbon-intensive industries.”<sup>5</sup>

The Hawai`i State Legislature was akamai to this issue with the passage of Act 234 SLH 2007 (HB 226 SD2 HD2 CD1). “There is established the greenhouse gas emissions reduction task force [] shall prepare a work plan [] The work plan shall include but is not limited to the following objectives [] Recommendations to minimize "leakage" or a reduction in emissions of greenhouse gases within the State that is offset by an increase in emissions of greenhouse gases outside the State.”

The Consumption-Based GHG Accounting System (CAS) is being used in the City of Oakland, City of Emeryville, Sonoma County, the State of California, Oregon, Minnesota (assisted by Synapse), New York City, and numerous other places like the United Kingdom.

“Carbon neutrality plans tend to ignore the indirect (embodied) emissions in goods and services demanded by the society. Global consumption-based analyses have clearly demonstrated the importance of accounting for emissions embodied in products, particularly those traded internationally [] Such assessments also depict how far away the carbon neutrality target is for many regions. As a result consumption-based emissions accounts are becoming increasingly relevant for policy and decision making.”<sup>6</sup>

Consumption-Based Accounting fits snugly in with several environmental, justice, and equity concepts: polluter-pays principle, cost causer principle, and the precautionary principle; as well as economic efficiency and transparency. Those responsible for consuming embedded GHGE should be responsible for their carbon footprint contribution to global climate change.

Sonoma County, California: “Better understanding of consumption helps individuals reduce our contribution to climate change.”<sup>7</sup>

Oakland, California: “The consumption emissions approach provides a more thorough portrayal of the emissions for which the community is responsible and holds the potential to inspire

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<sup>5</sup> EU’s environmental policy is blatantly incomplete. The consumption side is missing. Politheor: European Policy Network. <http://politheor.net/eus-environmental-policy-is-blattantly-incomplete-the-consumption-side-is-missing/>

<sup>6</sup> <http://esee2017budapest.org/wp-content/uploads/2016/06/ESEE-2017-Proceedings.pdf>

<sup>7</sup> Sonoma County, California Regional Climate Action Plan: Climate Action 2020 and Beyond <http://rcpa.ca.gov/wp-content/uploads/2016/10/CA2020-Booklet-English-online.pdf>

deeper emissions reductions. For these reasons, the City also conducts a consumption-based analysis.”<sup>8</sup>

Emeryville, California: “The consumer has the opportunity to consume more sustainably and the producer has the opportunity to produce more efficiently. [] Strategies to reduce consumption-based emissions also have the potential to benefit the local economy. Whereas traditional inventories can appear to benefit from a GHG reduction when production is outsourced, a consumption-based lens supports strategies for localizing and cleaning production, which creates local jobs and stimulates economic activity.”<sup>9</sup>

San Francisco, California: “San Francisco, with Green Cities California, publishes one of the first consumption-based greenhouse gas inventories in the nation. Unlike the traditional GHG emissions inventory which only accounts for carbon emissions associated with energy use in buildings and fuel burned in local vehicles, the consumption-based inventory looks at carbon impacts of the full lifecycle of goods and services.”<sup>10</sup>

Oregon: “The consumption-based emissions inventory supplements the in-boundary inventory by estimating the emissions – both in-state and elsewhere - associated with consumption by Oregon residents, businesses and governments. More than half of these consumption-based emissions occur in other states or nations and are not included in the in-boundary inventory. Together these inventories tell a more complete story of how Oregon contributes to climate change and, by extension, opportunities to reduce emissions.”<sup>11</sup>

New York City: “Like other large cities, NYC’s vibrant economy drives significant GHG emissions beyond its boundaries. Consumption-based emissions accounting captures the direct and life cycle GHG emissions from products and services that residents consume. [] A consumption-based GHG emissions assessment therefore cuts across [] emissions categories, bringing together direct and indirect emissions sources. It reflects complex international supply chains, lifecycle emissions, and is defined by the boundary in which consumption occurs. The City will evaluate consumption-based emissions accounting methodologies and their ability to complement the insight provided by the City’s sector-based Global Protocol for Community-scale GHG emissions inventory (GPC). Using both approaches may encourage more holistic GHG

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<sup>8</sup> City of Oakland, California, 2013 Greenhouse Gas Emissions Inventory Report (2016): <http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak059097.pdf>

<sup>9</sup> City of Emeryville, California Climate Action Plan 2.0 (2016) Both consumption-based and production-based methodologies are valid <http://www.ci.emeryville.ca.us/DocumentCenter/View/9327>

<sup>10</sup> San Francisco, California Climate Action Strategy Milestones found in “2011: Consumption-Based Greenhouse Gas Inventory”. <https://sfenvironment.org/cas/milestones>

<sup>11</sup> Consumption-based Greenhouse Gas Emissions Inventory for Oregon. Department of Environmental Quality. <http://www.oregon.gov/deq/mm/Pages/Consumption-based-GHG.aspx>



emissions assessments, provide additional perspective through which to understand NYC's contribution to climate change, and identify additional opportunities for action."<sup>12</sup>

Maryland: "The consumption-based approach can better reflect the emissions (and emissions reductions) associated with activities occurring in Maryland, particularly with respect to electricity use (and efficiency improvements) and is particularly useful for policy-making."<sup>13</sup>

Global Cities: "The C40 Cities Climate Leadership Group (C40) connects 90 of the world's greatest cities, representing 650+ million people and one quarter of the global economy"<sup>14</sup>  
Consumption based GHG emissions of C40 cities (March 2018) "[C]ities that have high consumption-based GHG emissions, are recommended to use consumption-based GHG inventories alongside their sector-based GHG inventories or incorporate key supply chains into the latter. This would encourage more holistic GHG emissions assessments; enable decision-makers to consider a wider range of opportunities to reduce global GHG emissions; and provide an additional perspective with which to engage other stakeholders in climate action."<sup>15</sup>

The **United Nations Sustainable Development Goal** ("SDG") number 12 ("SDG 12") is titled, "Ensure sustainable consumption and production patterns." Target 12.8 states, "By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature."<sup>16</sup> One can't target what one doesn't measure. Sustainable consumption can't occur if consumption involves products without metrics.

HRS §342B-72 calls for "real, permanent, quantifiable, verifiable, and enforceable" reductions. Increasing emissions by exporting emissions harms everyone.

The bill **identifies specific entities** (State Govt, Chamber of Commerce, Aloha United Way, Blue Planet, and Legislators) to be consulted **BUT NOT THOSE** entities that have challenged climate change in the courts (Life of the Land, Sierra Club, Hui Aloha 'Aina O Ka Lei Maile Ali'i).

The climate crisis requires bold action not delays for studies that restrict participation.

Mahalo  
Henry Curtis  
Executive Director

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<sup>12</sup> New York City: 1.5C Aligning New York City with the Paris Climate Agreement. The City of New York, Mayor Bill de Blasio. <https://onenyc.cityofnewyork.us/wp-content/uploads/2017/10/1point5-AligningNYCwithParisAgrmtFORWEB.pdf>

<sup>13</sup> Maryland Greenhouse Gas Emissions Inventor Documentation (2011)

<http://mde.maryland.gov/programs/Air/ClimateChange/Documents/Documentation%20FINAL.pdf>

<sup>14</sup> [https://en.wikipedia.org/wiki/C40\\_Cities\\_Climate\\_Leadership\\_Group](https://en.wikipedia.org/wiki/C40_Cities_Climate_Leadership_Group)

<sup>15</sup> <http://www.c40.org/researches/consumption-based-emissions>

<sup>16</sup> <https://sustainabledevelopment.un.org/sdg12>



**LATE**

To: The House Committee on Energy & Environmental Protection  
From: Brodie Lockard, Hawaii State Climate Lead, Organizing for Action  
Date: Thursday, January 31, 2019, 8:30 am

**In strong support of HB 1584**

Dear EEP Chair Lowen, Vice Chair Wildberger and Committee Members—

Organizing for Action strongly supports HB 1584.

Numerous prominent economists from across the political spectrum agree that a carbon tax is the single most effective method for reducing carbon dioxide emissions, and thus climate change. Given the myriad negative effects of climate change that Hawaii has already been suffering under for years, the legislature should proceed with all speed to study and implement such a tax.

A carbon tax is complex, involving infrastructure, construction, transportation, investment, tourism, land use, energy, food, air travel, public perception and acceptance, timing, and many industries.

Any carbon tax should be planned carefully, considering all of these factors, to be effective, equitable and accepted by the general public, whom it will affect. A recent gas tax hike in France was widely seen as disproportionately affecting lower-income citizens, causing violent "yellow vest" riots.

UH is a logical organization for conducting a carbon tax study. Experts there in all the relevant fields can inform the legislature about the right way to implement an effective carbon tax in Hawaii. Please support HB 1584 for the future of the state and all who live here.

Thank you for the opportunity to testify.

Brodie Lockard  
Hawaii State Climate Lead, Organizing for Action



**Chair Lowen**  
**Vice Chair Wildberger**  
**House Committee on Energy & Environmental Protection**

**Thursday, January 31, 2019**  
**8:30 AM**

**TESTIMONY IN SUPPORT OF HB1584 RELATING TO CARBON EMISSIONS**

Aloha Chair Lowen, Vice Chair Wildberger, Members of the House Committee on Energy & Environmental Protection,

My name is Jun Shin. I am the Environmental Justice Action Committee Chair for the Young Progressives Demanding Action (YPDA). YPDA represents more than 1,000 Hawai'i residents, mostly of Honolulu who seek to build a Hawai'i that is just, equitable, and sustainable. YPDA is in **support of HB1584, Relating to Carbon Emissions.**

Climate change is not a far away issue, the United Nations Intergovernmental Panel on Climate Change (IPCC) said in a summary of their October 8th report that, "Global net human-caused emissions of carbon dioxide (CO<sub>2</sub>) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050"[1]. With climate change an imminent threat, we must support the most effective action for Hawai'i's future and since a tax on carbon can have unintended implications if not done right, YPDA is testifying in support of HB1584. As a study, we can ensure that we can find the right carbon pricing initiative to meet Hawaii's needs, while taking on climate change at the same time It is imperative when looking at carbon, that we keep economic, social, and environmental justice in mind, so we can reduce our carbon emissions as an island while ensuring in the process of crafting policy that Hawai'i's workers and their families don't suffer. Please **pass HB1584 through your committee**, for the future of Hawai'i residents.

Thank you for the opportunity to testify,

Jun Shin  
Environmental Justice Action Committee Chair  
Young Progressives Demanding Action (YPDA)

1561 Kanunu St.  
Cell: 808-255-6663  
Email: junshinbusiness729@gmail.com

[1] <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

**LATE**

## EEPttestimony

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**From:** Landon Li <landonli@hawaii.edu>  
**Sent:** Wednesday, January 30, 2019 2:11 PM  
**To:** EEPttestimony  
**Subject:** Testimony in Support of HB 1584- Relating to Carbon Emissions

Aloha Chair Lowen, Vice Chair Wildberger, and members of the committee,

I am writing in **strong support of HB 1584- Relating to Carbon Emissions**. This bill appropriates funds to the University of Hawaii for the Research Corporation of the University of Hawaii to conduct a comprehensive study of a statewide carbon tax.

Hawai'i is already leading the nation with our goal of becoming carbon neutral by 2045 but we must do more to ensure the transition to clean energy is accelerated and equitable.

Both the Intergovernmental Panel on Climate Change and the Hawai'i Climate Change Mitigation and Adaptation Commission support carbon pricing as the most effective action to reduce emissions. However, no state has adopted a carbon tax and Hawai'i's carbon tax could disproportionately affect low and moderate income communities if not implemented correctly.

I feel the urgency of climate change, but believe that whatever carbon tax is implemented needs to be the right fit for Hawai'i. Any proposal must integrate environmental and economic justice principles while achieving measurable carbon emissions reductions. I therefore strongly support HB 1584- a bill that is dedicated to studying the feasibility and impacts of carbon pricing in Hawai'i. The study is to be completed by the University of Hawai'i by 2020 and will provide strong policy guidance for which type of carbon pricing mechanism Hawai'i should pursue.

Thank you for the opportunity to testify in support of HB 1584.

Name: Landon Li

Email: [landonli@hawaii.edu](mailto:landonli@hawaii.edu)

### **Landon Li**

Senator-At-Large, ASUH 106th Senate

[Associated Students of the University of Hawai'i](#) (ASUH)

B.A. Candidate in Psychology

B.A. Candidate in Quantitative Economics

B.A. Candidate in Political Science

University of Hawai'i at Mānoa

**HB-1584**

Submitted on: 1/29/2019 9:05:09 PM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jennifer Kimiko LaHaela Walter	Individual	Support	No

Comments:

**Position: Support**

**Aloha Chair Lowen, Vice Chair Wildberger, and members of the Energy and Environmental Protection Committee,**

**I am in support of this long overdue bill, with an outcome that would provide strong policy guidance on what carbon pricing mechanism is best for Hawai'i. While it is important to carefully review the best options, there is no time to waste.**

**There is no question that we must address climate change posthaste. With the recent Intergovernmental Panel on Climate Change (IPCC) special report (2018) there is clear consensus among scientists globally that we must limit global warming to 1.5 degrees Celsius to avoid catastrophic and irreversible effects that would impact all of humankind. To reach this goal, we must cut global anthropogenic carbon emissions in half by 2030 and reach net zero emissions by mid-century. We have no time to waste as it is evident that "rapid and far-reaching transitions in energy, land, urban and infrastructure, and industrial systems (IPCC SR 2018)" are necessary. Both the IPCC and the Hawai'i Climate Change Commission support carbon pricing as the most effective action to reduce emissions.**

**While HB1584, a study, is important, I kindly encourage the Committee to hear other introduced carbon fee and dividend bills (e.g., HB1287), to keep this conversation at the forefront.**

**Mahalo for the opportunity to testify in support of HB1584 and your continued attention to this important issue!**

**E mā• lama pono,**

**Kimiko LaHaela Walter**

**State Central Committee Representative for the Environmental Caucus,  
Democratic Party of Hawai'i**

**Young Progressives Demanding Action, At-large board member**

**HB-1584**

Submitted on: 1/29/2019 9:24:28 PM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ted Bohlen	Individual	Support	No

Comments:

We must control and drawdown our carbon emissions as soon as possible or face dire consequences! Please pass this bill to obtain needed information on how best to drawdown carbon emissions! Mahalo!



**LATE**

**HB-1584**

Submitted on: 1/30/2019 10:30:01 AM  
Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Nate Hix	Individual	Support	Yes

Comments:

Carbon pricing is the most effective measure to mitigate carbon emissions. It is widely implemented world wide amongst developed nations and has driven down emissions substantially. Hawaii has so far chosen not to participate in this climate saving mechanism and as a result is one of the world leaders in carbon emissions per capita and has carbon emissions that are rising.

With climate change threatening the future habitability of our planet and no way to reverse the damage we're doing today, it's necessary we act as fast as possible to stop our participation in the continual destruction of our planet.

Since carbon pricing is one of the most studied carbon mitigation policies, there is ample evidence for you to decide that this is the correct course of action. This is what Hawaii's commission on climate change has determined and in turn recommended that you adopt it as a policy. Given the immediate need of our situation, I also ask for you to follow the recommendation of our climate commission and pass an effective carbon pricing mechanism now.

If this committee refuses to pass legislation to implement an effective carbon price, I cannot overstate the need for this committee to pass legislation to help pave the way for you to do so next year. In order to ensure that any study that this committee needs is available by next legislative session, I ask you to please require the study to be completed before January 1, 2020.

**RECEIVED**  
**Date & Time**  
Jan 30, 2019, 11:17 am

**LATE**

**EEPttestimony**

**From:** Randy Ching <noreply@jotform.com>  
**Sent:** Wednesday, January 30, 2019 9:35 AM  
**To:** EEPtestimony  
**Subject:** Re: Support a progressive carbon tax study - Randy Ching



### Support a progressive carbon tax study

Name	Randy Ching
Email	makikirandy@yahoo.com
Subject	Testimony in SUPPORT of HB1584
Testimony	<p>Aloha Chair Lowen, Vice Chair Wildberger, members,</p> <p>Both the Intergovernmental Panel on Climate Change and the Hawai'i Climate Change Commission support carbon pricing as the most effective action to reduce emissions. However, no state has adopted a carbon tax, and Hawai'i's carbon tax could disproportionately affect low and moderate-income communities if not implemented correctly.</p> <p>I feel the urgency of climate change, but we must ensure that whatever carbon tax is implemented, it will be the right fit for Hawai'i. Any proposal must integrate environmental and economic justice principles while achieving measurable carbon emissions reductions.</p> <p>I therefore strongly support HB1584 - a bill that is dedicated to studying the feasibility and impacts of carbon pricing in Hawai'i. The study is to be completed by the University of Hawai'i by 2020 and will provide strong policy guidance for which type of carbon pricing mechanism Hawai'i should pursue.</p> <p>Mahalo,</p>

You can [edit this submission](#) and [view all your submissions](#) easily.

**LATE**

**HB-1584**

Submitted on: 1/30/2019 12:54:21 PM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Shannon	Individual	Support	No

Comments:

Please support reductions in carbon use and use carbon pricing and proposed taxes to help reduce greenhouse gas emissions. We want progressive tax options to help reduce green house emmissions without putting a greater burden on low-income families.

**HB-1584**

Submitted on: 1/29/2019 1:53:06 PM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lois Crozer	Individual	Support	No

Comments:

The time has come to be thinking about this.

**HB-1584**

Submitted on: 1/29/2019 3:02:28 PM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Erica Scott	Individual	Support	No

Comments:

**HB-1584**

Submitted on: 1/30/2019 8:25:32 AM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mary Lacques	Individual	Support	No

Comments:

**LATE**

**HB-1584**

Submitted on: 1/30/2019 10:42:11 AM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mio Chee	Individual	Support	No

Comments:

Aloha, I am in support of HB1584.

**LATE**

**HB-1584**

Submitted on: 1/30/2019 10:52:19 AM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Dyson Chee	Individual	Support	No

Comments:

I support HB1584.



**LATE**

## EEPttestimony

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**From:** Sheila Sarhangi <writetosheila@gmail.com>  
**Sent:** Wednesday, January 30, 2019 12:41 PM  
**To:** EEPtestimony  
**Subject:** Testimony: IN SUPPORT OF HB 1584, EEP hearing on Thursday 1/31 at 8:30 AM in Room 325

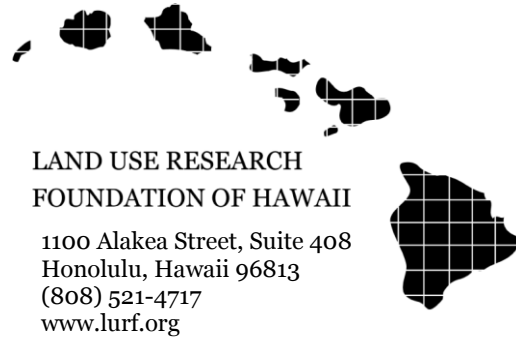
Aloha Chair Lowen, Vice Chair Wildberger, and members of the committee,

I am in STRONG support of HB 1584- Relating to Carbon Emissions. I have two young children, and we need to act now to protect our future, and those of our keiki. Let's not look back in 10 years and ponder about why we didn't do more to curb the effects of climate change.

The study is to be completed by the University of Hawai'i by 2020 and will provide strong policy guidance for which type of carbon pricing mechanism Hawai'i should pursue.

Thank you for the opportunity to testify in support of HB 1584.

Aloha,  
Sheila Sarhangi  
Palolo Valley, Oahu



January 31, 2019

**LATE**

Representative Nicole E. Lowen, Chair  
Representative Tina Wildberger, Vice Chair  
House Committee on Energy & Environmental Protection

**Comments and Concerns and Proposed Amendments to HB 1584, Relating to Carbon Emissions (Study of Carbon Tax by the Research Corporation of the University of Hawaii)**

**Thursday, January 31, 2019, 8:30 a.m., in Conference Room 325**

The Land Use Research Foundation of Hawaii (LURF) is a private, non-profit research and trade association whose members include major Hawaii landowners, developers and major utility companies. LURF's mission is to advocate for reasonable, rational and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources, and public health and safety.

LURF **supports the general intent** of HB 1584, however, we **respectfully recommend amendments** which will result in a more comprehensive study of both green fiscal incentives and a possible carbon tax (See attached Ramseyered revisions).

The current version of HB 1584 calls for the UH Research Corporation to conduct a "*comprehensive*" study of a statewide carbon tax, however, the measure actually limits the scope of the study to only carbon taxes, or other taxes, and does not specifically include green fiscal incentives, technologies and innovations, including, among other things, tax relief for reuse of materials, energy efficiency, renewable energy, renewable fuels (renewable natural gas) and low-carbon fuels. The RCUH study could be more comprehensive," if its **scope was broadened to address green fiscal incentives, technologies and innovations.**

**Proposed amendment (see attachment):** LURF respectfully requests that your Committee amend HB 1584, with respect to the following issues:

1. **Address Green Fiscal Incentives.** RCUH should also be directed to evaluate and provide recommendations relating to green fiscal incentives in the same manner and emphasis as the research on carbon taxes.
2. **RCUH should engage the major stakeholders who will be directly affected and those stakeholders who are able to reduce their carbon emissions and obtain green fiscal incentives.** The current measure does not require the RCUH to engage the major stakeholders that would be affected by a carbon tax, or to identify and engage any stakeholders who could develop and implement green technology and innovation. LURF respectfully submits that this bill should be amended to require RCUH to engage with key stakeholders who could also implement green innovation and technologies and take advantage of green fiscal incentives; and also require RCUH to engage with the major stakeholders who will be the most adversely affected by any proposed carbon tax.

We appreciate the opportunity to express our support for the general intent of this measure, and to share our concerns and proposed amendments.

If you have any questions, please feel free to contact David Arakawa, LURF Executive Director, via email [darakawa@lurf.org](mailto:darakawa@lurf.org) or via telephone (808) 521-4718,

## **LURF'S PROPOSED AMENDMENTS TO HB 1584**

LURF respectfully requests the following amendments:

### **SECTION 1.**

.....

The legislature further finds that, currently, the prices of electricity, gasoline, and other fuels do not accurately reflect the cost to society from the negative environmental and health impacts of burning fossil fuels. This market failure suppresses incentives for developing and deploying carbon-reducing measures, ~~[such as]~~ including, among other things, green fiscal incentives, technologies and innovations, tax relief for reuse of materials, energy efficiency, renewable energy, and low-carbon fuels. ~~[H]~~ Market failure also discourages individuals from engaging in behavior and making choices that reduce fuel and energy consumption. Providing opportunities for green fiscal incentives, technologies and innovations and possibly [T]taxing fuels according to their carbon content will align the market with desired policy outcomes, from an individual's choice of vehicles, appliances, and housing to a business' choices of product design, capital investment, and facilities.

.....

Recognizing the urgent need for an accelerated transition away from fossil fuels, the legislature seeks to better understand if and how a green incentive program and pricing carbon can accelerate Hawaii's cost-effective transformation to a one hundred per cent clean energy future, while ensuring that the transition is fair, equitable, and beneficial for all.

The purpose of this Act is to appropriate funds for a comprehensive study of green incentive program and carbon tax to help policymakers better understand the opportunities, impacts, and options that a green incentive program and a carbon price policy could bring to Hawaii.

**SECTION 2.** a) The research corporation of the university of Hawaii shall conduct a study regarding the implementation of a statewide green incentive program and a carbon tax; provided that the study shall include the following:

- (1) An examination of both green incentive programs and carbon pricing and procedures for adopting a statewide green incentive program and a carbon tax in Hawaii in a manner that is equitable, particularly for low- to moderate-income families and individuals;
- (2) The threshold at which green incentive programs or a carbon tax would result in behavior change;
- (3) Whether a green incentive program or a carbon tax should be implemented through a graduated increase over time;

- (4) Cost and [R]revenue projections for a recommended green incentive program, or carbon tax and the source of the projected incentives and carbon tax revenues, such as amounts paid to industry through incentives and amounts paid by industry, consumers generally, low-income consumers, and tourists;

.....

- (7) Considerations of how to include air travel in green incentive programs and in a carbon tax; and
- (8) Examples of other jurisdictions within or outside the United States that have implemented green incentive programs, or a carbon tax and any lessons that Hawaii may learn from those examples.

The research corporation of the university of Hawaii shall engage with stakeholders, such as the department of taxation, as well as those who could participate in a green incentive program and those who will be directly affected by a carbon tax, including but not limited to, [any] the chamber of commerce for each county in the State, and Hawaii's major industries, including representatives from fuel suppliers, electric and gas utilities, transportation and motor vehicle sales, the tourism industry, including the airlines, housing, commercial and industrial development, other land uses, the military, building and construction, agriculture, architecture and engineering professionals, non-profits, Aloha United Way, Blue Planet, researchers at the university of Hawaii, legislators, and other relevant parties, to provide information and develop the appropriate scope of the study.

**LATE**

**HB-1584**

Submitted on: 1/30/2019 10:23:50 PM

Testimony for EEP on 1/31/2019 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
laura Ramirez	Individual	Support	No

Comments:

Aloha,

Please support HB1584 requiring a study on carbon pricing options by 2020.

Mahalo,

Laura and the Bettencourt family

Kapa'a, Kauai

**HB-1584**

Submitted on: 1/30/2019 11:27:18 PM

Testimony for EEP on 1/31/2019 8:30:00 AM

**LATE**

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mary Smart	Individual	Oppose	No

Comments:

Vote NO. This is an unnecessary waste of taxpayer funds.

**From:** Jade Marie <muzique.notez@gmail.com>  
**Sent:** Wednesday, January 30, 2019 11:24 PM  
**To:** EEPtestimony  
**Subject:** Support for HB 1584

Jade Spallina  
2728 Booth Road Honolulu, Hawaii  
Support for HB 1584

Aloha Chair Lowen, Vice Chair Wildberger, and members of the EEP committee,

My name is Jade Spallina and I am a student at the University of Hawaii at Manoa and resident of Hawaii concerned about climate change. Climate change will have disastrous consequences on our islands and due to that fact, I am in Support of HB 1584

Due to the urgency of climate change, we must support the most effective action for Hawai'i, since carbon tax can have unintended implications if not done right. So, please support HB1584 because it is a study to ensure that we can find the right Carbon Pricing initiative to meet Hawaii's needs and fight climate change at the same time. It is imperative to find a Carbon tax that will ensure economic and environmental justice, so we can reduce our carbon emissions as an island while ensuring that Hawai'i residents don't suffer from poorly thought out policies. Please consider passing this bill, for the future of Hawai'i residents to fight climate change.

Thank you for helping the environment,  
Jade Spallina