

OFFICE OF PLANNING STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

DIRECTOR
OFFICE OF PLANNING

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

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

Statement of
LEO R. ASUNCION
Planning Program Administrator, Office of Planning
before the
HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE
Wednesday, February 13, 2019
2:00 PM
State Capitol, Conference Room 329

in consideration of
HB 1584, HD 1
RELATING TO CARBON EMISSIONS.

Chair Takumi, Vice Chair Ichiyama, and Members of the House Committee on Consumer Protection and Commerce:

The Office of Planning offers comments on House Bill 1584, HD 1, to appropriate funds to the University of Hawaii to conduct a comprehensive study of a statewide carbon tax.

The Office of Planning notes that the United Nations Framework Convention on Climate Change (UNFCCC) defines “carbon pricing” as pricing mechanisms taking on multiple forms aimed to create a price signal on greenhouse gas (GHG) emissions. Carbon pricing curbs GHG emissions by placing a fee on and/or offering an incentive to emit less GHGs. This is achieved by the following carbon pricing mechanisms:

- 1) Emission Trading System (ETS):
 - a. Through a Compliance Carbon Offset Market: Also known as “cap and trade,” a market-based and regulatory hybrid approach to controlling pollution reductions in the emissions of greenhouse gases (GHGs). This sets a limit (the cap) on the GHG emissions that can be emitted. Entities covered by the ETS will be able to trade permits (allowances) to emit GHGs and purchase carbon credits to offset GHG emissions.
 - b. Through a Voluntary Carbon Offset Market: These voluntary carbon offset markets enable businesses, governments, NGOs, and individuals to offset their emissions by purchasing carbon credits through the carbon markets. The credits are validated by independent third-parties. Compared to the compliance market, trading volumes in the voluntary market are much smaller because demand is created only by voluntary buyers (corporations, institutions

and individuals) to buy carbon credits whereas in a compliance market, demand is created by a regulatory instrument.

- 2) Emission Reduction Funds: Taxpayer funded programs in which a government buys carbon credits created by emission reduction projects; and
- 3) Carbon Tax: A tax on fossil fuel usage to create a price signal felt across an entire economy, thereby incentivizing a move away from carbon-intensive production.

The Office of Planning is currently investigating and establishing a State-administered Carbon Offset Program in partnership with the Greenhouse Gas Sequestration Task Force, pursuant to Hawaii Revised Statutes (HRS) § 225P-6, (Act 16, Session Laws of Hawaii 2018).

The Office of Planning is tasked by HRS § 225P-6 to provide expertise in carbon offsetting to public agencies and private entities and assists in coordinating carbon offset projects of public agencies, including but not limited to the generation, certification, and marketing of carbon credits. HRS § 225P-6 further requires that the proceeds and revenues generated by State departments from sales of carbon offset credits to be deposited into suitable funds particularly for reinvestment to generate further carbon offset credits; provided that the funds are used in accordance with the purposes of the fund; or allows for proceeds and revenues generated by State agencies from sales of carbon credits other than as described in the abovementioned requirement to be invested in projects enhancing the State's efforts to mitigate or adapt to climate change and are consistent with the State's sustainability goals and policies.

In accordance with HRS § 225P-6, the Office of Planning will be providing a report of its findings and recommendations, including any proposed legislation, to the Legislature and the Climate Change Mitigation and Adaptation Commission no later than twenty days prior to the convening of the Regular Session of 2020.

Thank you for the opportunity to offer comments on HB 1584, HD 1.

DAVID Y. IGE
GOVERNOR OF HAWAII



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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the House Committee on
CONSUMER PROTECTION AND COMMERCE**

Wednesday, February 13, 2019

2:00 PM

State Capitol, House Conference Room 329

**In consideration of
HOUSE BILL 1584, HOUSE DRAFT 1
RELATING TO CARBON EMISSIONS**

House Bill 1584, House Draft 1 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 indicated in the Executive Supplemental Budget request.**

The Department appreciates the introduction of this measure which 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, in support of the Hawaii Climate Change Mitigation and Adaptation Commission's statement endorsing a price on carbon, issued on November 27, 2018.

As you may know, the Hawaii Climate Change Mitigation and Adaptation Commission is a multi-jurisdictional body created by statute to guide the priorities of the state's climate response. As some legislators are also members of the Climate Commission, we hope they will agree the Commission's closer involvement in the study recommended in HB 1584 would make the study's outcomes more relevant to the overall mission of the State to develop a sustainable and equitable way to reduce our greenhouse gas emissions.

The Department co-chairs the State's Climate Change Commission and is grateful for including the Commission in expanded consultation regarding the scoping of the study. However, the Department asks that this Committee consider adding the following language to subsection (b), on page 7, line 4:

(b) The university of Hawaii shall submit an interim report to the legislature of its progress, findings, and recommendations,

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

including any proposed legislation, no later than December 31, 2019[-] and a status report at the Hawaii Climate Change Mitigation and Adaptation Commission's quarterly meetings, until a final report is submitted to the legislature. Feedback is to be solicited from the Commission, its permitted interaction group/working groups and incorporated into the study, where appropriate, relevant and within the scope of the report.

Thank you very much for considering the addition of this language, as it will undoubtedly make Hawaii's response to climate change more robust, and the process and outcomes of the study more transparent.

Thank you for the opportunity to comment on this measure.



Environmental Caucus

The Democratic Party of Hawai'i

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

February 13, 2019 2:00 p.m. Room 329

In **SUPPORT** of **HB1584 HD1**: Relating to Carbon Emissions

Aloha Chair Takumi, Vice Chair Ichiyama, and Committee Members,

On behalf of the Environmental Caucus of the Democratic Party of Hawai'i (ECDPH), we **strongly support HB1584 HD1**, relating to carbon emissions and offer one amendment.

Climate change and efforts to mitigate its effects is the single most pressing issue of our time. The ECDPH has listed a carbon “tax”, in the form of a carbon fee and dividend, as one of our top legislative priorities this session. This bill would yield 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. 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.

Proposed amendment: considering that carbon pricing is one of the most studied carbon mitigation policies, there is ample data to complete this study in an accelerated time frame. We propose that UH submit their final report to the Legislature no later than



Environmental Caucus

The Democratic Party of Hawai'i

December 31, 2019. In doing so, appropriate carbon pricing legislation may be enacted in during the 2020 session.

Mahalo for the opportunity to testify in **strong support of HB1584 HD1** and your attention to our amendment.

Kimiko LaHaela Walter

Interim Chair, Energy and Climate Change Subject Committee, Environmental Caucus of the Democratic Party of Hawai'i

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

Testimony of The Nature Conservancy of Hawai'i
Supporting HB 1584 HD1 Relating to Carbon Emissions
House Committee on Consumer Protection and Commerce
Wednesday, February 13, 2019, 2:00PM, Room 329

The Nature Conservancy of Hawai'i is a non-profit conservation organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 preserves and work in over 30 coastal communities to help protect the near-shore reefs, waters and fisheries of the main Hawaiian Islands. We forge partnership with government, private parties and communities to protect forests and coral reefs for their ecological values and the many benefits they provide to people.

The Nature Conservancy supports HB 1584 HD1 directing the University of Hawai'i to undertake a comprehensive examination of carbon pricing and options and effects from a statewide carbon tax.

Climate change caused by burning fossil fuels is an unprecedented threat to every person in Hawai'i. It is our responsibility to do what we can and what is necessary reduce our own carbon emissions, however small on a global scale, to contribute to the worldwide effort needed to mitigate the growing effects of climate change. Many economists agree that a carbon fee, increasing steadily over time, is an efficient and effective way to reduce carbon emissions. It sends a powerful signal to businesses and consumers, while generating revenue.

Even if we drastically reduce CO₂ emissions now, however, we will still feel certain effects of climate change. In Hawai'i, science indicates that this will likely include:

- More frequent and more severe storms that can increase runoff and siltation;
- Overall, less rainfall and therefore less fresh water;
- Higher temperatures that affect watershed and agricultural health, while being beneficial to invasive species;
- Sea level rise and high waves that will harm coastal areas and groundwater systems;
- Ocean acidification and warming that will inhibit the growth of protective coral reefs.

In response, we must plan and implement mitigative and adaptive measures to ensure the resilience of our natural and human systems.

In addition to reducing emissions, investing in nature is proving to be an effective response to climate change. For example, two recent studies by The Nature Conservancy and partners found that **natural climate solutions (i.e., conservation, restoration, and improved land management on natural and agricultural lands) can provide carbon storage and avoid greenhouse gas emissions equivalent to 21% of current U.S. annual emissions and 37% of cost-effective mitigation needed through 2030 toward holding global warming below 2°C.**^{1, 2}

And, a team from The Nature Conservancy, University of California at Santa Cruz, Stanford University, and the US Geological Survey has developed biophysical models showing that **healthy coral reefs can absorb up to 97% of wave energy**, protecting coastal properties from the power of the sea. Conversely, the loss of just one meter of reef could result in a doubling of the cost of damage.³

Thank you for the opportunity to testify in support of this measure.

¹ Fargione, Joseph E., Steven Basset, et al. "Natural Climate Solutions for the United States.", *Science Advances* 2018, **4**: eaat1869, November 14, 2018. <http://advances.sciencemag.org/content/4/11/eaat1869>

² Griscom, Bronson W., Justin Adams, et al. "Natural Climate Solutions." *Proceedings of the National Academy of Sciences*. October 31, 2017 114 (44) 11645-11650. www.pnas.org/content/114/44/11645

³ Ferrario, Filippo, Michael W. Beck, et al. "The effectiveness of coral reefs for coastal hazard risk reduction and adaptation." *Nature Communications* volume5, Article number: 3794 (2014). www.nature.com/articles/ncomms4794



HAWAII APPLESEED

CENTER FOR LAW & ECONOMIC JUSTICE

Testimony of Hawai'i Appleseed Center for Law and Economic Justice
In Support of HB 1584, HD1 – Relating to Carbon Emissions
House Committee on Consumer Protection & Commerce
Wednesday, February 13, 2019, 2:00 PM, conference room 329

Dear Chair Takumi, Vice Chair Ichiyama, and members of the Committee:

Mahalo for the chance to submit testimony in SUPPORT of HB 1584 HD1, 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 also 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. That's why we support a study to look at the feasibility and potential effects of a statewide carbon tax.

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.

We emphasize that it is crucial for the study to explore mechanisms to mitigate the regressivity that could result from carbon pricing. Some potential avenues to look at include tax credits that are targeted to help low to moderate income families and already exist in this state, such as the Earned Income Tax Credit, Low Income Household Renters' Credit, and Food/Excise Tax Credit.

Thank you for your attention to this important issue.

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.



Progressive Democrats of Hawai'i

<http://pd-hawaii.com>

PO Box 51 Honolulu HI 96810

email: info@pd-hawaii.com

February 10, 2019

To: **HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE**
Representative Roy M. Takumi, Chair
Representative Linda Ichiyama, Vice Chair

Re: **HB 1584, HD 1 – Carbon-Pricing Study**

Hearing: Wednesday, February 13, 2019, 2:00 p.m., Room 329

Position: **Support**

Aloha!, Chair Takumi, Vice Chair Ichiyama, and Members of the Committee,

Progressive Democrats of Hawai'i **support** this bill. We recognize that it is long past time for us to take serious, and probably very uncomfortable action, to address climate change. We cannot say that “the other guy” needs to change his or her activities while we continue to do what we have been doing in the past.

One critical aspect of changing our lifestyles will unavoidably be radically reducing the carbon consumption of each of us. One effective way of doing this is by carbon-pricing. We cannot do this by legislative fiat right now. Members of PDH recognize this. So, let's get a Hawaii-focused study started now. Let's see what we need to do, to do our fair share, and not let the burden fall disproportionately one sector of our population or another.

Thank you for the opportunity to testify on this important bill.

Alan B. Burdick, Co-Chair
Progressive Democrats of Hawai'i
Burdick808@gmail.com/ 486-1018

February 12, 2019

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the committee,

Thank you for the opportunity to testify in strong support of HB 1584 HD1 - Relating to Carbon Emissions. This bill appropriates funds to the University of Hawai'i to conduct a comprehensive study of a statewide carbon tax by October 31, 2020. This will provide strong policy guidance for which type of carbon pricing mechanism Hawai'i should pursue during the 2021 legislative session.

To ensure the effectiveness of the study, the Hawai'i Health & Harm Reduction Center would also like to propose the following amendments:

- Requiring quarterly progress updates to the Hawaii Climate Change Mitigation and Adaptation Commission
- Incorporating public engagement, as a carbon tax will impact all Hawai'i residents like me, I'd like the opportunity to be involved in the process

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.

Together, 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.

As a nonprofit agency that serves those disproportionately affected by social determinants of health such as homelessness, our organization and the people we serve feel the urgency of climate change and will be among the first to feel its worst impacts in our islands. However, we 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 HD1 - a bill that is dedicated to studying the feasibility and impacts of carbon pricing in Hawai'i.

Thank you for the opportunity to testify in support of HB 1584 HD1.

Mahalo,

Heather Lusk, Executive Director

HB-1584-HD-1

Submitted on: 2/12/2019 11:23:38 AM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lisa Bishop	HAWAII REEF AND OCEAN COALITION (HIROC)	Support	No

Comments:

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

Wednesday, February 13, 2019 at 2 pm in House Conference Room 329

In SUPPORT OF HB1584 RELATING TO CARBON EMISSIONS

Aloha Chair Takumi, Vice Chair Ichiyama, and Committee Members:

The HAWAI'I REEF AND OCEAN COALITION – HIROC– was formed in 2017 by coral reef scientists, educators, local Hawai'i environmental organizations, elected officials, and others to address a crisis facing Hawaii's coral reefs and ocean, including harms from carbon emissions.

We strongly support this bill. Carbon emissions, ocean warming and acidification are three of the greatest threats to coral reefs, so carbon reductions are essential. Therefore, it makes sense to study carbon tax options to find the most effective and equitable approaches.

HIROC thanks you for the opportunity to support his bill.

Please pass HB1584. Mahalo!

Lisa Bishop on behalf of the Hawaii Reef and Ocean Coalition



Chair Takumi
Vice Chair Ichiyama
House Committee on Consumer Protection & Commerce

Wednesday, February 13, 2019
2:00 PM

**TESTIMONY IN SUPPORT WITH AMENDMENTS OF HB1584 HD1 RELATING TO
CARBON EMISSIONS**

Aloha Chair Takumi, Vice Chair Ichiyama, Members of the House Committee on Consumer Protection & Commerce,

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 HD1 with amendments, 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 (CO₂) 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 carbon tax is potentially the best way to mitigate climate emissions. Since a tax on carbon can have unintended implications if not done right, 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 pricing, that we keep economic, social, and environmental justice in mind, so we can reduce our carbon emissions while ensuring in the process of crafting policy that Hawai'i's workers and their families are kept in mind.

In addition to the HD1 we would also like to support the following **amendments** to ensure the effectiveness of the study:

- Requiring quarterly progress updates to the Hawaii Climate Change Mitigation and Adaptation Commission

- Incorporating public engagement, as a carbon tax will impact all Hawai'i residents, we would like the opportunity for the public to be involved in the process

With the continued emphasis on the lack of time and need for action, we would also like to request the study to be done by October 1st, 2020 to be ready in time for the 2020 Legislative Session. While a study is going to be very important, YPDA encourages the legislature to also hear other carbon pricing measures (e.g. HB1287) to insure that we can continue to have this very important discussion. Please **pass HB1584 HD1 with amendments through your committee**, for the future of Hawai'i and it's 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/>



SIERRA CLUB OF HAWAII

MĀLAMA I KA HONUA. *Cherish the Earth.*

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

February 13, 2019 2:00 PM Room 329

In **SUPPORT of HB 1584 HD 1: Relating to Carbon Emissions**

Aloha Chair Takumi, Vice Chair Ichiyama, and members of the committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **strongly supports HB 1584 HD 1- 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.

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.¹

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.”² Likewise, our state’s Climate Change Mitigation and Adaptation Commission (The 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. Additionally, the Commission urged the State to adequately resource through legislative action a partnership with counties and local organizations to develop and undertake a multi-year educational/public service announcement campaign around carbon pricing.³

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

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

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

³

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

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.

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.⁴

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 are 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 October 31, 2020 and will provide strong policy guidance for which type of carbon pricing mechanism Hawai'i should pursue during the 2021 legislative session.

We support the HD 1 and ask that the committee consider these additional amendments:

- Adding language in Section 2, part a (page 6, lines 12-21) to encourage public outreach and education around carbon pricing, to be consistent with the Commission's recommendations:
 - The university of Hawaii shall engage with stakeholders, such as any relevant state agencies, including the department of taxation, business and industry groups, non-governmental organizations with an interest in energy and climate issues, non-governmental organizations with an interest in economic justice issues, researchers at the university of Hawaii, legislators, the Hawaii climate change mitigation and adaptation commission, and any other relevant parties, to develop the appropriate scope of the study and begin a multi-year educational and public outreach campaign regarding carbon pricing and the findings of this study.
- Adding a part d to Section 2 (page 7, line 9) that states:

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

- (d) The university of Hawaii shall submit a status report at the Hawaii Climate Change Mitigation and Adaptation Commission's quarterly meetings, until a final report is submitted to the legislature. Feedback is to be solicited from the Commission, its permitted interaction group/working groups and incorporated, where appropriate, relevant and within the scope of the report.

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 HD 1**.

Mahalo,



Jodi Malinoski, Policy Advocate

HB-1584-HD-1

Submitted on: 2/12/2019 1:27:57 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

February 12, 2019

Submitted electronically

Dear Chairperson Lowen and Members of the Committee on Energy & Environmental Protection:

As a member of Citizens' Climate Lobby (CCL), I am writing in strong support of HB 1584. As detailed in the recently released "Fourth National Climate Assessment" (see <https://www.globalchange.gov/nca4>), the impacts of climate change will have dire consequences globally, nationally, and to Hawaii.

On behalf of CCL's Honolulu chapter, I would like to make two additions to the bill and offer CCL's support. First, given the issues posed by climate change already facing the state, we urge the bill to request the final study be completed no later than mid-December 2019 so that recommendations from the study can be incorporated in the 2020 legislative session. Second, given the push for a national carbon tax, we recommend that the study include analysis of the impacts of a national carbon tax on Hawaii and its citizenry.

CCL has done an extensive amount of work analyzing the economic impacts of policies that address carbon emissions, and CCL would be happy to share this analysis with the state and whomever the state awards the work.

Last, because of the serious impacts our nation and world face from climate change, CCL strongly supports a carbon tax as the most effective and efficient policy to reduce our carbon emissions.

Sincerely,

Paul Bernstein
Citizens' Climate Lobby Member



ELEMENTAL
EXCELERATOR

Written Statement of Elemental Excelerator

before the **House Committee on Consumer Protection and Commerce**

Wednesday, February 13, 2019

**In consideration of [HB 1584 HD 1](#)
RELATING TO CARBON EMISSIONS**

Aloha Chair Takumi, Vice Chair Ichiyama, and Members of the House Committee on Consumer Protection and Commerce:

Elemental Excelerator respectfully **submits support and comments for HB 1584 HD 1**, which appropriates funds to the Research Corporation of the University of Hawaii to conduct a comprehensive study of a statewide carbon tax.

Elemental Excelerator is a Honolulu-based growth accelerator program founded and operating in Hawai'i. We have awarded over \$30 million to 82 companies resulting in 56 demonstration projects in Hawai'i & Asia Pacific. Each year, we evaluate over 500 companies and look for innovative entrepreneurs from around the world to come to Hawai'i and find transformative solutions to help us achieve our 100% clean energy goals and solve our most pressing environmental problems. We select 15-20 companies annually that best fit our mission and fund each company up to \$1 million.

In April 2018, Elemental Excelerator 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. As a policy recommendation, the study identified pricing carbon to realign incentives to reach Hawai'i's clean energy goals.

We support HB 1584 because we believe in data-driven solutions. A comprehensive study of carbon tax options will help our State and its legislators understand the opportunities, impacts, and options that a carbon pricing policy could bring to Hawai'i and 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 VMT [vehicle miles traveled] and speed up sales of EVs [electric vehicles] 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 Hawai'i. 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."*¹

We respectfully submit the following comment on this legislation:

We recommend that the study provide quarterly presentations of interim milestones to the State Climate Change Commission. These quarterly presentations will show that this is a high priority for the State as well as allow for public input and timely completion.

Mahalo for the opportunity to provide testimony on this legislation.

Sincerely,



Aki Marceau
Managing Director, Policy & Community-Hawai'i

¹ Larsen, J., Mohan, S., Herndon, W., Marsters, P., & Pitt, H. (2018, May 01). Transcending Oil: Hawaii's Path to a Clean Energy Economy, p.38, Retrieved from <https://rhg.com/research/transcending-oil-hawaiis-path-to-a-clean-energy-economy/>



ADA

HAWAII

AMERICANS FOR DEMOCRATIC ACTION

OFFICERS

John Bickel, President
Alan Burdick, Vice President
Marsha Schweitzer, Treasurer
96823
Dylan Armstrong, Secretary

DIRECTORS

Melodie Aduja
Guy Archer
Juliet Begley
Gloria Borland
Chuck Huxel
Jan Lubin
Jenny Nomura

MAILING ADDRESS

P.O. Box 23404
Honolulu
Hawaii

Feb. 12 , 2019

TO: Honorable Chair Takumi & CPC Committee Members

RE: HB 1584 HD1 Relating to Carbon Emissions

Support for hearing on Feb. 13

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.

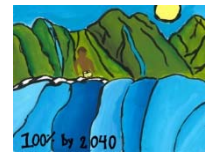
We support HB 1584 HD1 to conduct a comprehensive study of a statewide carbon tax. The logical first step to implement an equitable and effective carbon tax in Hawai'i is passage of this bill that is dedicated to studying the feasibility and impacts of carbon pricing in Hawai'i. The study is to be completed 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.

Thank you for your favorable consideration.

Sincerely,

John Bickel President





HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 13, 2019, 2:00 P.M.

Room 329

(Testimony is 2 pages long)

TESTIMONY IN STRONG SUPPORT OF HB 1584 HD1

Aloha Chair Takumi, Vice Chair Ichiyama, and Committee members:

Blue Planet Foundation **strongly supports** HB 1584 HD1, 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

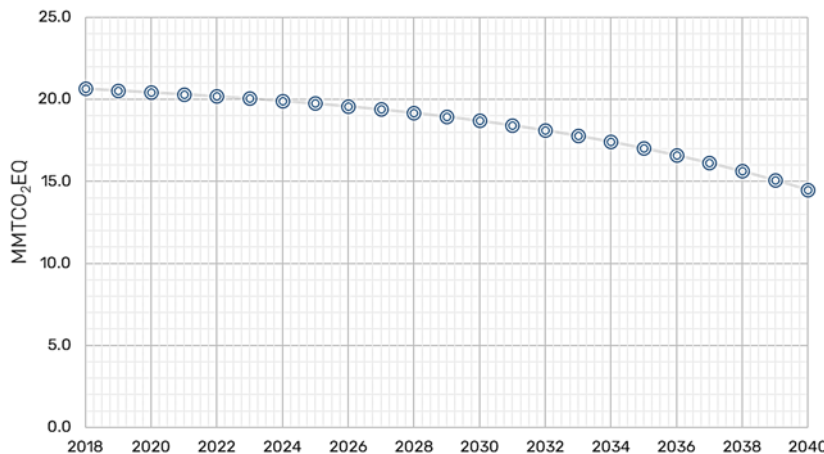


Figure 1. Best-case Hawaii greenhouse gas emissions trend with current state policies

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 HD1 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.



Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 13, 2019 — 2:00 p.m. — Room 329

Ulupono Initiative Supports HB 1584 HD 1, Relating to Carbon Emissions

Dear Chair Takumi, Vice Chair Ichiyama, and Members of the Committee:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and better manage waste and fresh water resources. Ulupono believes that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

Ulupono supports HB 1584 HD 1, which conducts a study of a statewide carbon tax, because it aligns with our goal of reducing fuel use in Hawai'i.

A carbon tax would provide a major financial incentive for businesses and residents to keep their carbon emissions to a minimum. An October 2018 United Nations report estimated that governments would need to impose effective carbon prices of \$135 to \$5,500 per ton of carbon dioxide pollution by 2030 to keep overall global warming below 1.5-degrees Celsius or 2.7-degrees Fahrenheit.

If global warming continues at its current rate, Hawai'i can expect an increase in the frequency and intensity of hurricanes that could devastate our islands. The Hawai'i Climate Change Mitigation and Adaptation Commissions' report on sea-level rise estimated \$19 billion in economic loss from chronic flooding, affecting more than 25,800 acres and 19,800 people.¹

A carbon tax may also provide the State with financial resources to enact further environmental initiatives or could provide tax relief to taxpayers. Such approaches can reduce or avoid net tax increases to the taxpayer while still providing strong incentives to switch to less carbon intensive electricity and transportation options. The Commissions' commitment to an equitable and contextually appropriate solution for Hawai'i while also changing behavior is critically important.

¹ <http://www.hawaiinewsnow.com/2018/09/20/hawaii-study-impacts-sea-level-rise-already-being-felt-it-will-only-get-worse/>



This proposed study is a good first step toward identifying the best carbon tax design in Hawai'i to meet these important goals. Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner

HB-1584-HD-1

Submitted on: 2/12/2019 3:43:20 AM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Individual	Support	No

Comments:

As an island state, Hawaii is especially vulnerable to climate change. Hawaii should focus now on the most effective and equitable ways to control carbon emissions, including possibly carbon taxes and dividends. A study now would be timely and prudent. Please support and fund such a study. Mahalo.

HB-1584-HD-1

Submitted on: 2/12/2019 4:12:28 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

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

Comments:

Dear Honorable Committee Members:

Please support HB1584. Coral reefs are dying in large part to warming oceans, and valuable coastline is eroding due to sea level rise. Climate change is already occurring.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei

HB-1584-HD-1

Submitted on: 2/11/2019 4:45:04 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mio Chee	Individual	Support	No

Comments:

HB-1584-HD-1

Submitted on: 2/12/2019 6:28:47 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jade Spallina	Individual	Support	No

Comments:

Jade Spallina

2723 Booth Road Honolulu, HI 96816

February 12, 2019

Feb 13, 2019 3:00pm

Aloha Chair Takumi, Vice Chair Ichiyama and members of the Consumer Protection and Commerce Committee,

My name is Jade Spallina and I am a student at the University of Hawaii at Manoa. I am 18-years -old and I support HB 1584.

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 help reduce carbon emissions while not putting the brunt of the tax on the lower and middle classes. That's why I support HB 1584 HD1 - a bill that is dedicated to studying how a carbon tax will impact Hawaii.

Thank you for the opportunity to testify in support of HB 1584 HD1.

Mahalo,

Jade Spallina

HB-1584-HD-1

Submitted on: 2/12/2019 1:08:21 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Destiny Brown	Individual	Support	No

Comments:

Aloha Committee Chair Takumi, Vice Chair Ichiyama, and committee members,

I am writing in support of HB1584 because I think it is important that we understand the impacts of carbon emmisions and the effects of a carbon tax on our community so that we can implement plans to combat climate change with the most relevant information.

Thank you for your time and careful consideration on this matter.

Mahalo,

Destiny Brown

Consituent Senate District 13 House District 25



Young Democrats of Hawaii
Democratic Party of Hawaii

Testimony presented before the Committee on Consumer Protection & Commerce
Wednesday, February 13, 2019 at 2:00 p.m.

Dear Chair Takumi, Vice Chair Ichiyama, and members of the Committee on Consumer Protection & Commerce:

House Bill 1584, House Draft 1 appropriates funds to the Research Corporation of the University of Hawaii to conduct a comprehensive study of a statewide carbon tax. In January 2019 the Young Democrats of Hawaii conducted a member survey to identify and prioritize important issues facing young people today. Taking action on climate change was identified as one of the top three issues. YDHI members recognize that the impacts of climate change are already being felt throughout the world and in the State of Hawaii, and that taking action now is a policy must to ensure a viable future for all of Hawaii residents. For these reasons, the Young Democrats of Hawaii **strongly supports** the passing of HB 1584, HD1.

Leading climate scientists warned in the latest report released by the Intergovernmental Panel on Climate Change that the world will risk experiencing catastrophic impacts of climate change if we fail to reduce greenhouse gas emissions by 45% by 2030 and net 0% by 2050. Even as Hawaii's renewable energy portfolio grow and diversify, over 70% of Hawaii's current energy demands is met by burning fossil fuels. A carbon tax policy is the fairest, single most effective and efficient method for reducing our reliance on imported oil. Carbon pricing has already been proposed or implemented across Canada, Europe, and Japan. The US, one of the biggest emitters of greenhouse gas emissions, still do not have a statewide carbon tax. If HB 1584, HD1 passes, Hawaii could potentially become the first state to impose a carbon tax.

Finally, YDHI believes that this study will help Hawaii create the most efficient and effective carbon mitigation policy, however, we caution that this policy must also be equitable for all communities, including low-income and vulnerable populations.

Thank you for the opportunity to testify.

Sincerely,

Executive Committee
Young Democrats of Hawaii

HB-1584-HD-1

Submitted on: 2/12/2019 7:55:29 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mariya Gold	Individual	Support	No

Comments:

HB-1584-HD-1

Submitted on: 2/13/2019 12:29:38 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

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

Comments:

We need climate solutions that are just and equitable and remove the burden from lower income and frontline communities, a carbon tax can be part of the solution if done in a responsible way as compared to cap and trade or other carbon pricing schemes. Let's have University of Hawaii study this and come up with suggestions that work for Hawaii and all of it's people, not just the wealthy. Thank you.

HB-1584-HD-1

Submitted on: 2/13/2019 1:52:15 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

HB-1584-HD-1

Submitted on: 2/13/2019 2:10:36 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
ChristopherMcCullough	Individual	Support	No

Comments:

HB-1584-HD-1

Submitted on: 2/13/2019 2:44:40 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Barbara Hershey	Individual	Support	No

Comments:

HB-1584-HD-1

Submitted on: 2/13/2019 4:23:45 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
David Hunt	Individual	Support	No

Comments:

HB-1584-HD-1

Submitted on: 2/13/2019 3:42:55 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Koohan Paik	Individual	Support	No

Comments: