DAVID Y. IGE



doh.testimony@doh.hawaii.gov

ELIZABETH A. CHAR, M.D. DIRECTOR OF HEALTH

WRITTEN
TESTIMONY ONLY

Testimony in SUPPORT of H.B. 1800, HD 2, SD 1 RELATING TO CLIMATE MITIGATION

SENATOR DONOVAN M. DELA CRUZ, CHAIR SENATE COMMITTEE ON WAYS AND MEANS

Hearing Date: 4/5/2022 Room Number: 211 &

Videoconference

- 1 **Fiscal Implications:** The fiscal implications of this measure are unknown at this time.
- 2 **Department Testimony:** The Department of Health (Department) supports this measure that
- 3 requires and funds a decarbonization study to help ensure that the State can meet its 2045 zero
- 4 emissions clean economy target.

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- Having a detailed and comprehensive plan for decarbonization will be critical as the proverbial "low hanging fruit" are already being picked, leaving us to find new, breakthrough alternatives. Identifying the next pathways to reduce and sequester carbon is difficult; striking the balance among environmental benefits, costs to businesses and consumers, and issues such as environmental justice will be essential.
- 2030 emissions projections from the 2017 Greenhouse Gas (GHG) Emissions Inventory Report indicate that the focus area for large scale reductions must come from the Energy Sector, which makes up approximately 86% of the statewide GHG emissions, primarily from the Transportation subsector. However, reductions are not easily made in key Transportation subsectors such as domestic aviation, which would impact our tourism-based island economy, or military transportation, which could threaten national security. In addition, the largest share of Transportation emissions can be found in ground transportation but federal preemptions prevent Hawaii, and other states that are in attainment of the National Ambient Air Quality Standards, from following California's lead in prohibiting fossil fuel motor vehicles based on emissions.

- These considerations point to a need for a detailed, extensive, and integrated decarbonization plan that can help us identify how we can address the key issues listed in
- 3 Section 2(b) of the bill. To achieve Hawaii's decarbonization goals will require reductions to
- 4 come from a variety of economic sectors with multiple state agencies, counties, and other
- 5 stakeholders/organizations working together. The proposed study is essential in providing us
- 6 with clear and coordinated guidance that is needed to accomplish these goals.
- 7 **Offered Amendments:** None.
- 8 Thank you for the opportunity to testify on this measure.



STATE OF HAWAII HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION COMMISSION

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

Testimony of Leah Laramee

Coordinator, Hawaii Climate Change Mitigation and Adaptation Commission (Temporality Assigned)

Before the Senate Committee on WAYS AND MEANS

Tuesday, April 5, 2022 10:15 AM State Capitol, Via Videoconference, Conference Room 211

In support of House Bill 1800 House Draft 2 Senate Draft 1 RELATING TO CLIMATE MITIGATION

House Bill 1800, House Draft 2, Senate Draft 1 Requires the Hawaii Natural Energy Institute to conduct a study to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals. Appropriates funds out of the Energy Security Special Fund for the study. On behalf of the Hawaii Climate Change Mitigation and Adaptation Commission (Commission) I support this measure and offer comments.

The Hawaii Climate Change Mitigation and Adaptation Commission "recognizes the urgency of climate threats and the need to act quickly. It promotes ambitious, climate-neutral, culturally responsible strategies for climate change adaptation and mitigation in a manner that is clean, equitable and resilient." The Commission, established by Act 32 SLH 2017 to uphold the United States' pledges Agreement, is the coordinating under the **Paris** policies on climate change mitigation and adaptation for the state. It is a high-level multijurisdictional body that guides the priorities of the state's climate response. Co-chaired by DLNR and Office of Planning, it consists of 20 members—chairs of four legislative committees, and executive department heads at the county and state levels.

Identifying pathways to decarbonization in an important step for Hawaii to achieve its goal of a net-negative carbon economy no later than 2045. This measure is in alignment with the Commission's 2021 Final Statement on Decision Making & Investment Guidance to Address the Climate Emergency in Hawaii specifically Climate Ready Priority A: The ambitious mitigation of greenhouse gases through elimination and reduction of emissions and Climate Ready Priority C: The accelerated sequestration of carbon, production of local foods and protection of public health and ecosystems.

Co-Chairs: Chair, DLNR

Director, OPSD

Chair, Senate AEN Chair, Senate WAL Chair, House EEP Chair House WTH Chairperson, HTA Chairperson, DOA CEO, OHA Chairperson, DHHL Director, DBEDT Director, DOT Director, DOH Chairperson, DOE Director, C+C DPP Director, Maui DP Director, Hawai'i DP

Director, Kaua'i DP The Adjutant General

Manager, CZM

However, the state of Hawaii made history last year by declaring a climate emergency. By removing the interim targets from this bill it allows for delayed action and pushing responsibility in to the future. Interim targets ensure the State is on the right path and allow for course correction. The Commission feels that the House Draft 2 version of this bill sets the State up for success and the bill should revert to that version. The Commission defers to the appropriate agencies for comment on matters specific to them.

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

Testimony Presented Before the
Senate Committee on Ways and Means
Tuesday, April 5, 2022 at 10:15 a.m.
By
Richard Rocheleau, Director
Hawai'i Natural Energy Institute
And
Michael Bruno, PhD
Provost
University of Hawai'i at Mānoa

HB 1800 HD2 SD1 - RELATING TO CLIMATE MITIGATION

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee:

HB 1800 HD2 SD1 directs the Hawai'i Natural Energy Institute (HNEI) to conduct a study to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals. It further appropriates funding from the energy security special fund for the study.

HNEI **supports** this bill, and is prepared if requested, to thoroughly analyze the electricity, transportation and agriculture sectors to chart a pathway to a cost-effective, just, decarbonized economy for Hawai'i.

Such a pathway would be informed by recent analyses on renewable and enabling technologies conducted by HNEI and a growing body of research and best practices on decarbonization strategies throughout the world. Given the broad mandate contemplated by this measure, HNEI recognizes the importance of consulting and collaborating with key stakeholders and will fully engage with other state agencies, such as the Hawai'i State Energy Office (HSEO) and the Public Utilities Commission, and the counties, and relevant stakeholders and organizations as specified in the bill.

If the committee selects HNEI rather than HSEO to conduct this study, it would be appropriate for HNEI to use funding from its Energy System Development Special Fund, rather than the Energy Security Special Fund noted in the current version of this bill.

Thank you for the opportunity to provide this testimony on HB 1800 HD2 SD1.

TESTIMONY OF JAMES P. GRIFFIN, Ph.D. CHAIR, PUBLIC UTILITIES COMMISSION STATE OF HAWAII

TO THE SENATE COMMITTEE ON WAYS AND MEANS

April 5, 2022 10:15 a.m.

Chair Dela Cruz and Members of the Committee:

MEASURE: H.B. No. 1800, HD2, SD1

TITLE: RELATING TO CLIMATE MITIGATION.

DESCRIPTION: Requires the Hawaii Natural Energy Institute to conduct a study to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals. Appropriates funds out of the Energy Security Special Fund for the study. Effective 7/1/2100. (SD1)

POSITION:

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

COMMENTS:

The Commission supports the intent of this measure to study Hawaii's pathway to decarbonization. Should this measure pass, the Commission is willing to assist the Hawaii Natural Energy Institute on items involving the state's utilities.

Thank you for the opportunity to testify on this measure.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE GOVERNOR

SCOTT J. GLENN CHIEF ENERGY OFFICER

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: Web: (808) 587-3807 energy.hawaii.gov

Testimony of SCOTT J. GLENN, Chief Energy Officer

before the SENATE COMMITTEE ON WAYS AND MEANS

Tuesday, April 5, 2022 10:15 AM State Capitol, Conference Room 211 & Videoconference

COMMENT HB 1800, HD2, SD1 RELATING TO CLIMATE MITIGATION.

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments supporting the intent and requests amendments to HB 1800, HD2, SD1, which requires the Hawai'i Natural Energy Institute (HNEI) to conduct a study to determine Hawai'i's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals; and appropriates funds out of the Energy Security Special Fund (ESSF) for the study.

HSEO has three requests for the Senate Committee on Ways and Means (WAM) consideration to amend HB 1800, HD2, SD1: 1) require HSEO to undertake the analysis, 2) restore the greenhouse gas (GHG) reduction target removed in SD1, and 3) amend the means of funding should WAM prefer HNEI to conduct the analysis.

First, HB 1800, HD2, SD1 proposes for HNEI to undertake the decarbonization pathways analysis. HSEO requests that the responsibility for this analysis be reassigned to HSEO, as it is more consistent with HSEO's duties to achieve a resilient clean energy economy, including planning and analysis, as set forth in Sections 196-10.5, 196-71, and 196-72, Hawai'i Revised Statutes (HRS), among other statutes, rather than HNEI's statutory function to develop renewable sources of energy for power generation and transportation fuels, conduct research and development of renewable

sources of energy, and demonstrate and deploy efficient energy end-use technologies (HRS §304A-1891). Given the relative statutory responsibilities and coordination needed to ensure government, stakeholder, and community buy-in to implement, this is best achieved by the executive branch agency responsible for achieving a clean energy economy and led by an appointee reporting to the Governor and the Legislature.

Second, HSEO requests WAM's consideration to restore the target of 50 percent GHG reduction by 2030 compared to 2005 levels. This target is consistent with President Biden's commitment for the United States to the Paris Agreement¹ and the Legislature's commitment pursuant to Act 32, SLH 2017², which is for Hawai'i to address its share of national emissions in the United States' commitment to the Paris Agreement. Removing the target language as proposed in SD1 does not mean the state would no longer have a target for 50 percent GHG reduction by 2030 compared to 2005 levels; it would make it less clear to policymakers and the public that this is the target the State has already committed to because of Act 32, SLH 2017, and President Biden's Nationally Determined Contribution under the Paris Agreement.

Third, should WAM believe HNEI is better suited to undertake the analysis, then HSEO requests an amendment to the bill to change the appropriation from the ESSF to the Energy Systems Development Special Fund, which is the special fund administered by HNEI.

Thank you for the opportunity to testify.

¹ National commitments to the Paris Agreement are called "Nationally Determined Contributions" or "NDCs". From the <u>United States NDC</u>, in relevant part:

[&]quot;After a careful process involving analysis and consultation across the United States federal government and with leaders in state, local, and tribal governments, **the United States is setting an economy-wide target of reducing its net greenhouse gas emissions by 50-52 percent below 2005 levels in 2030**. The National Climate Advisor developed this NDC in consultation with the Special Presidential Envoy for Climate, and it was approved by President Joseph R. Biden Jr.." [Emphasis in the original.]

² Act 32, Session Laws of Hawai'i 2017: "SECTION 2. (a) The State shall expand strategies and mechanisms to reduce the greenhouse gas emissions statewide through the reduction of energy use, adoption of renewable energy, and control of air pollution among all agencies, departments, industries, and sectors, including transportation. Such strategies and mechanisms shall utilize the best available science, technologies, and policies to reduce greenhouse gas emissions and shall be closely aligned with the climate change principles and goals adopted in the Paris Agreement and Hawaii's share of obligations within the expectations apportioned to the United States in the Paris Agreement, regardless of federal action." [Emphasis added.]

REBECCA VILLEGAS Council Member District 7, Central Kona



PHONE: (808) 323-4267 FAX: (808) 323-4786 EMAIL: Rebecca.villegas@hawaiicounty.gov

HAWAI'I COUNTY COUNCIL

West Hawai'i Civic Center, Bldg. A 74-5044 Ane Keohokalole Hwy. Kailua-Kona, Hawai'i 96740

April 4, 2022
TESTIMONY OF REBECCA VILLEGAS
COUNCIL MEMBER, HAWAI'I COUNTY COUNCIL
ON HB 1800 HD2 SD1, RELATING TO CLIMATE MITIGATION
Committee on Ways and Means
Tuesday, April 4, 2022 10:15 a.m.

Aloha Chair Dela Cruz and Members of the Committee:

I thank you for the opportunity to testify in SUPPORT of HB 1800 HD2 SD1. The purpose of this Act is to require and appropriate funds for the Hawaii natural energy institute to conduct a study to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals.

The Hawaii natural energy institute shall analyze pathways and develop recommendations for achieving the State's economy-wide decarbonization goals, including the statewide greenhouse gas emissions limit and goal to sequester more atmospheric carbon and greenhouse gases than emitted by no later than 2045 pursuant to section 225P-5, Hawaii Revised Statutes. As part of its analysis and development of recommendations, the Hawaii natural energy institute shall:

- (1) Recommend regulatory or other state actions that will ensure the attainment of the State's decarbonization goals;
- (2) Include measures to reduce emissions from electricity, including accelerating the adoption of clean energy and improving energy efficiency for residential, commercial, and government users, dispatching renewable energy as a consideration of priority on the grid, eliminating curtailment, eliminating fossil fuel imports and fossil fuel generation utilizing firm renewable energy sources;
- (3) Include land use and transportation planning measures aimed at reducing emissions from the electricity and transportation sector;
- (4) Recommend state actions to address emissions associated with air travel and shipping, including how to encourage adoption of alternative fuels;
 - (5) Recommend best management practices in the agricultural sector;
 - (6) Include long-term carbon sequestration and carbon capture and utilization opportunities;
- (7) Make recommendations to aid in the transition of the state workforce to meet the needs of a decarbonized economy;
- (8) Consider impacts to environmental justice, frontline, and low-income communities and make recommendations for how to mitigate any impacts to these communities and to facilitate a just transition to a decarbonized economy;

- (9) Determine the most cost-effective and reliable pathway to decarbonization;
- (10) Rank recommendations based on level of impact, cost, and ease of implementation;
- (11) Examine contributions of different carbon sources, how each source can be reduced, what entities are responsible for the reduction of each source, and how each source factors into the determination of statewide greenhouse gas reduction goals; and
 - (12) Include other relevant considerations as deemed appropriate and necessary.

For the reasons stated above I urge the Committee on Ways and Means to SUPPORT this measure. Should you have any questions, please feel free to contact me at (808) 323-4267.

Mahalo for your consideration.

Rebecca Villegas

MA

Council Member, Hawai'i County Council

Submitted on: 4/4/2022 8:25:25 AM

Testimony for WAM on 4/5/2022 10:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Testifying for Climate Protectors Hawai'i	Comments	Written Testimony Only

Comments:

To: The Honorable Donovan Dela Cruz, Chair, The Honorable Gilbert Keith-Agaran, Vice Chair, and Members of the Senate Committee on Ways and Means

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing HB1800 HD2 SD1 RELATING TO CLIMATE MITIGATION

Hearing: Tuesday, April 5, 2022, 10:15 a.m., CR 211 and by videoconference

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee on Ways and Means!

The Climate Protectors Hawai'i is a group focused on reversing the climate crisis and encouraging Hawai'i to lead the world towards a safe and sustainable climate and future. The Climate Protectors Hawai'i **COMMENTS that HB1800 HD2 SD1 is insufficient.**

The SD1 would provide for only a study "to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals." While a study of decarbonization pathways is not a bad idea, it is a weak substitute for the goals of 70% and 50% reductions in greenhouse gas emissions statewide from the 2005 baseline that were proposed in prior versions of the bill.

The Climate Protectors Hawai'i urge that the bill be amended to restore the language from HD2 with a 50% GHG reduction goal, along with the study proposed in SD1.

Hawai'i especially needs the 2030 goal of a 50% reduction goal below the 2005 baseline because it currently has no milestone decarbonization targets until 2045. The latest science, including frightening feedback loop data, indicates that 2045 will be too late! Hawai'i must decarbonize IN THIS DECADE in order to lead and help mitigate the climate emergency! Statewide greenhouse gas reductions are urgently needed now!

Today the United Nations Intergovernmental Panel on Climate Change issued a report stating that: "At this point, only severe emissions cuts in this decade across all sectors, from agriculture and transport to energy and buildings, can turn things around." "It's now or

never, if we want to limit global warming to 1.5°C (2.7°F)," IPCC Working Group III co-chair Jim Skea said in a statement.

The **50% reduction** target is feasible through greenhouse gas emission reductions in all aspects of our life, e.g., buildings, transportation, agriculture and food, and waste. We need to **set this goal and implement requirements soon in order to meet it**, or we and our progeny will face a darker future!

As a tropical island State, Hawai'i will be among the first places harmed by the global climate crisis, with more intense storms, food insecurity, floods and droughts, fires, loss of protective coral reefs, and rising sea levels destroying our shorelines. We must do all we can to reduce our carbon footprint and become carbon negative as soon as possible. Hawai'i can and should be a leader in showing the world the way forward towards a safe and sustainable climate and future. The sooner we inspire others to take action and lead by example, the better off the future will be for ourselves, our keiki and succeeding generations.

Please don't let inaction today doom our future! Please pass this bill with the amendments restoring the 50% reduction goal from the HD2!

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)

Hawaii Electric Vehicle Association

hawaiiev.org info@hawaiieva.com



April 4, 2022

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Ways and Means Committee,

Hawaii Electric Vehicle Association (Hawaii EV) supports the original intent of HB1800. We support the decarbonization pathway study but ask that the more consequential GHG Emission Goal be restored.

HB1800 "Establishes a goal for the statewide greenhouse gas emissions limit to be at least seventy percent below 2005 levels by 2030. Requires the Hawaii state energy office to conduct a study to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals."

The pathway analysis will help us further hone our efforts to reduce emissions across all sectors. It will help us prioritize and support initiatives that will help us cut and draw down greenhouse gas (GHG) emissions. We recommend that the target completion of this analysis and the submission of recommendations be completed before the convening of the 2023 legislative session. (The current bill indicates completion by the start of the 2024 session.)

The GHG emission goal (removed in SD1) will help to accelerate our transition away from fossil fuels. The goal will increase the tension for action towards efforts to reduce emissions and our dependence on fossil fuel imports. HB1800 also called for enforcement mechanisms to ensure that required tracking and enforcement are introduced.

A decisive State goal will help all sectors mobilize around the actions required to accelerate our decarbonization efforts. Please restore the GHG emission reduction goal component of HB1800.

Thank you for this opportunity to testify.

Sincerely,

Noel Morin President

Hawaii EV Association



2 of 2

Hawaii EV Association is a grassroots non-profit group representing electric vehicle owners in Hawaii. Our mission is to accelerate the electrification of transportation through consumer education, policy advocacy, and electric vehicle charging infrastructure expansion. For more information, please visit hawaiiev.org.

Hawaii EV Board

Noel Morin, President
Nanette Vinton, Secretary, and Treasurer
Bill Bugbee – Director
Tam Hunt - Director
Sonja Kass – Director
Rob Weltman – Director

Hawaii EV Clubs

Big Island EV Association Kauai EV Maui Nui EV Tesla Hawaii Club

Submitted on: 4/4/2022 10:14:06 AM

Testimony for WAM on 4/5/2022 10:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Noel Morin	Testifying for Big Island Electric Vehicle Association	Support	Written Testimony Only

Comments:

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Ways and Means Committee members.

Big Island Electric Vehicle Association (BIEVA) supports the intention of HB1800 HD2 SD1.

The pathway analysis will help us better define the actions required to draw down carbon across all relevant sectors of our economy. The GHG emission goal of "50% below 2005 levels by 2030" will create the tension needed for all segments of our society to address the emission reductions required.

Unfortunately, SD1 excludes the GHG emission goal. This removes a critical component of the bill, one that will help Hawaii achieve its emissions reduction goal.

BIEVA recommends that the measure be reverted to the original version of the bill or amended to restore the enforcement mechanism suggested in HB1800. Additionally, we recommend that the target completion of the decarbonization pathway analysis and the submission of recommendations be completed before the 2023 legislative session.

Sincerely,

Noel Morin

President - Big Island EV Association

bigislandev.org





To: The Senate Committee on Ways and Means From: Sherry Pollack, Co-Founder, 350Hawaii.org

Date: Tuesday, April 5, 2022, 10:15am

COMMENTS for HB1800 in original form

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee members of Ways and Means,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. HB1800 HD2 SD1 would provide for **only a study** "to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals." 350Hawaii.org provides **comments.**

350Hawaii supports and encourages the efforts of the legislature to move towards a fully decarbonized economy. We applaud the inclusion of emissions associated with air travel and shipping in the analysis and development of recommendations to be made from the Hawaii State Energy Office. These industries, and the associated greenhouse gas emissions, must be addressed for Hawaii to achieve its goal to sequester more atmospheric carbon and greenhouse gases than emitted.

Drastically cutting our carbon emissions is a necessary part of addressing the climate crisis, the effects of which are already here. However, Hawaii must take specific, measurable and *enforceable* actions if we are to reach our 100% clean energy goals and do our part to help avert the worst of climate breakdown. To successfully accomplish this, we need to establish accountability, as was done in HB1800. The original bill provided for binding, enforceable emissions reductions, directing the Department of Health to develop rules to achieve the target. The bill also set an emissions reduction target of at least 70% below 2005 levels by 2030, which better matches the scale of the response we need if we are serious about tackling climate breakdown. For these reasons, we strongly urge the committee to amend HB1800 HD2 SD1 back to its original form.

Let's be clear. Climate change is happening now, we are causing it, and the longer we wait to act, the more we lose. Children living today will live to see a 1.5°C warmer world because of the failure of adults to take real action when there still was time to do so. Scientists have made clear that we are part of the last generation that can stop or at least mitigate the devastating impacts of climate change.

In the words of a young climate activist who was nominated for the Nobel Peace Prize, Greta Thunberg:

"Blah, blah, blah. This is all we hear from our so-called leaders. Words that sound great but so far have led to no action. Our hopes and dreams drown in their empty words and promises."

Let Hawaii show Greta, her generation, and the world what true leadership means as we forge the way forward towards a safe and sustainable climate and future. The sooner we inspire others to take action and lead by example, the better off the future will be for our children. We need efforts like those described in the original form of HB1800, and we need them in earnest.

Mahalo for the opportunity to testify.

Sherry Pollack Co-Founder, 350Hawaii.org





TESTIMONY BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

H.B. 1800 SD1

Relating to Climate Mitigation

Tuesday, April 5, 2022 10:15 am, Agenda Item #16 State Capitol, Conference Room 211 & Videoconference

Marc Asano
Director, Integrated Grid Planning
Hawaiian Electric

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee:

My name is Marc Asano and I am testifying on behalf of Hawaiian Electric Company in support of H.B. 1800 H.D. 2, S.D. 1, Relating to Climate Mitigation.

H.B. 1800 S.D. 1 requires the Hawaii Natural Energy Institute to conduct a study to determine Hawaii's pathway to decarbonization.

Hawaiian Electric is committed to reducing carbon emissions in 2030 by as much as 70 percent below 2005 levels within the electric sector. Our ambitious Climate Change Action Plan for the next eight years anticipates a steady pace of cost-effective renewable energy resources coming online to reduce the use of fossil fuels to generate electricity. Key elements of the Company's 2030 plan include:

- Shutting down the state's last coal plant in 2022;
- Adding nearly 50,000 rooftop solar systems to the 90,000 now online;
- Retiring at least 6 fossil-fueled generating units and significantly reducing the use of others as new renewable resources come online;

- Adding renewable energy projects capable of generating a total of at least 1 gigawatt, including shared solar (community-based renewable energy);
- Using more grid-scale and customer-owned energy storage;
- Expanding geothermal resources; and
- Creating innovative programs that provide customers incentives for using clean,
 lower-cost energy at certain times of the day and using less fossil-fueled energy at night.

By 2030, Hawaiian Electric's renewable portfolio standard is targeted to exceed 70%, with renewable resources available to provide close to 100% of the electricity generated on Hawaii Island and in Maui County.

Achieving the state's goal of net negative carbon emissions statewide is an ambitious endeavor. But Hawaiian Electric is committed, as described above, to supporting the State in ensuring that we collectively achieve this goal. Hawaiian Electric supports a pathways analysis that can help to identify strategies, plans, interim targets, and agencies responsible for decarbonizing certain parts of the economy, among others.

The transportation sector will be particularly challenging to decarbonize by 2045. For example, the transportation sector represents a large portion of the current emissions in the State and will require significantly more investment and resources in this sector. Even with an aggressive adoption of electric vehicles, the long lifetime of vehicles (i.e., average 15 years) means that the stock share of electric vehicles will grow at a relatively slow rate. Hawaiian Electric's Electrification of Transportation Strategic Roadmap forecasts, 55 percent of personal light-duty vehicles on Oahu roads will be fully electric in 2045, supported by approximately 2,200 public charging ports.

The aviation sector will also need to overcome barriers due to the lack of commercially available zero emissions fuel and technologies for air transportation. We are also concerned with the economic impacts aggressive policies might have on underserved communities. These issues should be comprehensively examined as part of any pathway analysis to ensure a just, equitable, technically feasible, and cost-effective transition pathway.

Hawaiian Electric looks forward to further discussions on this very important topic as it will truly take a statewide effort of collaboration.

Accordingly, Hawaiian Electric supports H.B. 1800 S.D. 1. Thank you for this opportunity to testify.

<u>HB-1800-SD-1</u> Submitted on: 4/2/2022 10:56:24 AM

Testimony for WAM on 4/5/2022 10:15:00 AM

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

Comments:

This analysis is long overdue. Better late than never!

Submitted on: 4/3/2022 5:10:21 PM

Testimony for WAM on 4/5/2022 10:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Paul Bernstein	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the WAM committee:

I'm testifying in support HB1800. Because of the climate crisis, I'm in strong support of Hawaii conducting a study to find the most efficient, effective, and equitable path to reducing its emissions.

I have one requested change to the bill. Given the short amount of time until 2030, the **completion date of the study** or at least the date for a significant draft laying out best pathways to be completed needs to occur by **12/31/2022** so that new policies can be enacted as soon as possible. To allow enough time to complete the study, the work needs to be contracted no later than June 30 2022.

Respectfully,

Paul Bernstein

Submitted on: 4/3/2022 9:00:23 PM

Testimony for WAM on 4/5/2022 10:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Gerard Silva	Individual	Oppose	Written Testimony Only

Comments:

There is no Climet or Envoimental problems in Hawaii only Corrked Politicians that have bin feeding this Bull shit to the Public for Decades and have all bin proven Lyers . Stop the Bull Shit we are sick of it.!!!

Submitted on: 4/4/2022 8:19:42 AM

Testimony for WAM on 4/5/2022 10:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Diane Ware	Individual	Support	Written Testimony Only

Comments:

Dear Chair and WAM Committee Members,

• This bill introduces a decarbonization pathway study and GHG emissions reduction goal. The latest version, **unfortunately**, excludes the emissions reduction goal. Support this bill with a recommendation that the original version (HB1800) be restored. Emmissions are central to reducing climate crisis and health effects we all pay for due to particulates in these emissions.

Mahalo for taking positive action on climate mitigation,

Sincerely,

Diane Ware, 99-7815 Kapoha Pl, Volcano Hi 96785

Submitted on: 4/4/2022 11:04:39 AM

Testimony for WAM on 4/5/2022 10:15:00 AM



Submitted By	Organization	Testifier Position	Testify
Matthew Geyer	Individual	Oppose	Written Testimony Only

Comments:

We don't need another study, we need action.

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee on Ways and Means.

Please amend this bill, restoring the 50% reduction goal from the HD2.

We need to take bold steps now to not screw up the world for future generations. We don't have time for yet another study, the climate crisis is an emergency, and leaders like you need to take decisive action to protect the people.

If you want to study something, study the costs of waiting a few more years to take serious steps toward mitigating climate change.



HB 1800 HD 2 SD 1 TESTIMONY

To: Senate Committee on Ways and Means

Hearing on April 5, 2022 at 10:15 a.m.

From: John Kawamoto

Position: Support with amendments

We are in a climate emergency, as the Legislature declared last year by adopting SCR 44. Emergencies require immediate action. Studies that delay action means that climate change will hit harder, making the planet less livable for future generations.

The study called for in the bill is unnecessary because the State already has the "Hawaii 2050 Sustainability Plan," which includes the following: (1) A reduction in the reliance on fossil fuels; (2) Increasing recycling, reuse, and waste reduction strategies; (3) Developing a more diverse and resilient economy; (4) Creating a sustainability ethic, (5) Increasing production and consumption of local foods.

Unfortunately, however, the Hawaii 2050 Sustainability Plan is advisory and lacks an implementation mechanism. The plan recommends the creation of a Sustainability Council as the implementation mechanism, but that recommendation has never been executed.

This bill should be amended to create the Sustainability Council, which would include representatives of State and county agencies that can have a substantial effect on mitigating climate change. The Sustainability Council would be responsible for creating a framework for determining specific actions to mitigate climate change and creating accountability mechanisms to ensure that those actions are taken.

This bill should also be amended to take action on climate change by re-inserting the goal of reducing greenhouse gas emissions in 2030 by at least 70% below the statewide emissions level in 2005, as contained in the bill as introduced.