

DAVID Y. IGE

JOSH GREEN LT. GOVERNOR

#### STATE OF HAWAII OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

335 MERCHANT STREET, ROOM 310 P.O. BOX 541 HONOLULU, HAWAII 96809 Phone Number: 586-2850 Fax Number: 586-2856 cca.hawaii.gov CATHERINE P. AWAKUNI COLÓN DIRECTOR

JO ANN M. UCHIDA TAKEUCHI DEPUTY DIRECTOR

## **Testimony of the Department of Commerce and Consumer Affairs**

Before the House Committee on Consumer Protection & Commerce Wednesday, February 10, 2021 2:00 p.m. Via Videoconference

#### On the following measure: H.B. 111, H.D. 1, RELATING TO RENEWABLE ENERGY

Chair Johanson and Members of the Committee:

My name is Dean Nishina, and I am the Executive Director of the Department of Commerce and Consumer Affairs' (Department) Division of Consumer Advocacy. The Department offers comments on this bill.

The purpose of this bill is to prohibit the use of fossil fuels for electricity generation or grid-tied battery energy storage after December 31, 2045.

The Department has concerns about the unintended consequences that may result from section 2 of H.D. 1. Section 2 creates an exception where the Public Utilities Commission (Commission) can approve the utility cost recovery of a generating or storage unit that uses fossil fuels, at any time, as long as the utility also requests the establishment of a stranded cost recovery mechanism that encourages the accelerated retirement of the fossil fuel generation plant. The Department is concerned that section 2 will allow the Commission to consider fossil fueled solutions in 2040, for example, as long as accelerated cost recovery occurs within five years to allow for early retirement. The Department believes that the renewable portfolio standards, once corrected to

Testimony of DCCA H.B. 111, H.D. 1 Page 2 of 2

eliminate the sales-versus-generation loophole, will set clear guidelines for the Commission to ensure that reliance on fossil fuels is eliminated by 2045.

The Department appreciates section 3's amendments to Hawaii Revised Statutes section 269-6, as they clarify that the Commission does not need to conduct greenhouse gas emissions analyses when a utility seeks approval for such matters as financing authority, as well as when other utilities, such as a water or wastewater company, file an application with the Commission. Further, section 3 also provides further clarity related to future energy storage projects beyond the scope of battery storage systems.

Thank you for the opportunity to testify on this bill.

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

# TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 10, 2021 2:00 p.m.

Chair Johanson and Members of the Committee:

MEASURE:H.B. No. 111 HD1TITLE:RELATING TO RENEWABLE ENERGY.

**DESCRIPTION:** Prohibits after December 31, 2045, the use of fossil fuels for electricity generation or grid-tied battery energy storage. Effective 7/1/2050. (HD1)

#### POSITION:

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

## COMMENTS:

The Commission is supportive of this measure's intent to ensure that the state's electricity system is powered by renewable energy, as is consistent with the state's clean energy goals.

The Hawaiian Electric Companies' ("Companies") most recent power supply improvement plan (PSIP) update projects that the 100% renewable portfolio standard (RPS) will be reached in 2040. The Commission is currently overseeing the creation and implementation of an Integrated Grid Planning (IGP) Report, which proposes to merge three historically separate planning processes (generation, transmission, and distribution), while integrating competitive procurement into a comprehensive grid planning approach. The IGP Report succeeds the PSIP, which was designed to identity and meet each island's unique grid needs. Through its IGP efforts, the Commission and the electric utilities will attain a more holistic understanding of each island's grid and the steps required to meet existing and future needs. H.B. No. 111 HD1 Page 2

Thank you for the opportunity to testify on this measure.



# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Telephone: Fax: Web: (808) 587-3807 (808) 586-2536 energy.hawaii.gov

# Testimony of SCOTT J. GLENN, Chief Energy Officer

## before the HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Tuesday, February 10, 2021 2:00 PM State Capitol, Conference Room 329

Comments in consideration of HB 111, HD1 RELATING TO RENEWABLE ENERGY.

Chair Johanson, Vice Chair Kitagawa, and Members of the Committee, the Hawaii State Energy Office (HSEO) offers comments on HB 111, HD1, which eliminates the use of fossil fuels for electricity generation by public utilities after December 31, 2045.

Discussions of how, and when, the complete replacement of fossil fuels in the electricity (and other) sectors, including unregulated sectors, can take place is occurring in many venues, including in the Integrated Grid Planning docket before the Public Utilities Commission. The results of the Integrated Grid Planning work, which involves a broad cross-section of organizations, will be beneficial to establishing retirement dates for various power plants. The potential re-purposing existing equipment such as engine generators to other uses, such as synchronous condensers to provide inertia on the system, should be considered, as the benefits, roles, and changing forms of energy generation and storage are developed. It is clear that it is important to plan for flexibility and resilience in our electrical systems during the transition, which will be accelerated with the retirement of the coal plant on Oahu in 2022, Kahului Power Plant in 2024, and other units as new renewable generators come on-line.

Thank you for the opportunity to testify.

DAVID Y. IGE GOVERNOR

SCOTT J. GLENN

CHIEF ENERGY OFFICER

DEPARTMENT OF DESIGN AND CONSTRUCTION CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11<sup>TH</sup> FLOOR HONOLULU, HAWAII 96813 Phone: (808) 768-8480 • Fax: (808) 768-4567 Web site: <u>www.honolulu.gov</u>

RICK BLANGIARDI MAYOR



ALEX KOZLOV, P.E. DIRECTOR DESIGNATE

HAKU MILLES, P.E. DEPUTY DIRECTOR

February 9, 2021

The Honorable Aaron Ling Johanson, Chair The Honorable Lisa Kitagawa, Vice-Chair and Members of the Committee on Consumer Protection & Commerce The House State Capitol, Room 329 415 South Beretania Street Honolulu, Hawaii 96813

Dear Chair Johanson, Vice-Chair Kitagawa, and Members:

SUBJECT: House Bill No. 111 HD1 Relating to Renewable Energy

The Department of Design and Construction (DDC) respectfully supports the intent of House Bill No. 111 HD1. However, DDC requests the bill be amended to exempt emergency generators from the proposed prohibition against the use of fossil fuels for electricity generation.

The purpose of emergency generators is to provide electrical power to critical facilities when the primary power supply is not available. The City and County of Honolulu has fossil-fuel powered emergency generators installed at many essential facilities, including fire stations, police stations, ambulance stations, and many other critical facilities that provide services essential to the health and safety of the public. These emergency generators must be able to provide electricity to the facilities they are designed for in the event of a disaster, such as a hurricane. There is currently no plan to replace the City's many emergency generators with renewable energy sources, as the technology to provide the level of reliability needed in the event of a disaster is not well established.

Based on the above consideration, DDC respectfully requests House Bill No. 111 HD1 be amended to exempt emergency generators from the proposed prohibition against the use of fossil fuels for electricity generation.

Thank you for the opportunity to express our request for amendment of this bill.

Sincerely,

> HE M.

Alex Kozlov, P.E. Director



## TESTIMONY BEFORE THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

# H.B. 111 H.D. 1

#### **Relating to Renewable Energy**

Wednesday, February 10, 2021 2:00 pm, Agenda Item #12 State Capitol, Conference Room 329

Marc Asano Director, Transmission and Distribution Planning Hawaiian Electric

Chair Johanson, Vice Chair Kitagawa, and Members of the Committee:

My name is Marc Asano and I am testifying on behalf of Hawaiian Electric

Company in opposition to H.B. 111, H.D. 1, Relating to Renewable Energy.

H.B. 111, H.D. 1 bans the use of fossil fuels for electric generation production

after December 31, 2045 and does not allow the Public Utilities Commission to approve

cost recovery of any proposal for generation or storage facilities that use fossil fuels.

Hawaiian Electric supports breaking the State's dependence on fossil fuels; however, it should be done in a cost-effective, reliable, and resilient manner. Through its recent energy procurements, the Company will bring online approximately 666 MW of renewable energy that will significantly reduce fossil fuel usage in the next 2-4 years, reaching renewable energy percentages well ahead of the current RPS statute. However, the Company offers the following comments for consideration:

> H.R.S. §269-92 Renewable portfolio standards already requires the Company to substantially reduce fossil fuel usage by 2045; however, to ensure proper alignment between H.B. 111, H.D. 1 and §269-92, H.B.

111, H.D. 1 should include events or circumstances that are outside the electric utility's control as described in §269-92.(d), where in the event of a natural disaster, the Company may only have access to fossil fuel generation to replace renewable generation from damaged facilities and have an emergent need to ensure energy security and resilience. The Company may also be unable to acquire renewable energy because of community, land use or other policy circumstances that may inhibit its development.

- It is unclear whether part (b) of this bill related to Public Utilities
  Commission approval of generation that uses fossil fuel would be effective
  December 31, 2045. The Company recommends that December 31, 2045
  also apply to part (b) of this bill.
- There should be an allowance for the Public Utilities Commission to approve new generation or modification to existing generation that may use biofuels in the future or burn a blend of fossil fuel and biofuels prior to 2045.

The Company notes that switching from fossil fuel to biofuel in its existing generator fleet or for future generation, will likely increase costs to customers as biofuels are currently forecasted to be more expensive than fossil fuels.

Accordingly, Hawaiian Electric opposes H.B. 111, H.D.1. Thank you for this opportunity to testify.



To:The House Committee on Consumer Protection & Commerce CommitteeFrom:Sherry Pollack, 350Hawaii.org

Date: Wednesday, February 10, 2021, 2pm

## **Comments for HB111 HD1**

Aloha Chair Johanson, Vice Chair Kitigawa, and Consumer Protection & Commerce Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. On behalf of our 6,000 members and supporters, 350Hawaii.org offers the following comments on this bill.

We are in strong support of HB111 that proposed a deadline for the use of fossil fuels by electric utilities. However, we have serious concerns and are in **strong opposition** to the date which was inserted for prohibition, December 31, 2045 in the HB111 HD1 version of this measure.

The planet faces an existential climate crisis and we must act now. As an island state, Hawaii is ground zero for climate devastation, from more intense storms, to food insecurity, to rising seas and shoreline destruction. 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. If we are to solve the climate crisis, it will require **all of us** working together. Hawaii 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 our children.

Emissions from fossil fuel power plants are a leading cause of global warming. The Legislature in recent years has taken several prudent steps toward a safe and sustainable climate and future. Last year, the Legislature wisely eliminated future coal plant operation in Hawaii in Act 23, Session Laws of Hawaii 2020. But eliminating coal-fired generation is not enough; oil and natural gas plants are also very large sources of carbon emissions, collectively larger than the coal plants in Hawaii. This bill could take a major step in reducing these harmful emissions, but a target date of 2045 is woefully too late.

**Fossil fuel use needs to be phased out by 2030**. We request the committee revise that date noted in HB111 HD1 from 2045 to 2030 – a target date which aligns to what scientists are strongly urging. The Climate Crisis is here now. Scientists have made clear that we must swiftly phase out fossil fuel use or face untold suffering. We no longer have the luxury to wait to take the necessary actions to drastically reduce our greenhouse gas emissions.

In closing, I wish to share the words of a young climate activist who was nominated for the Nobel Peace Prize, Greta Thunberg.

"Adults keep saying we owe it to the young people, to give them hope, but I don't want your hope. I don't want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. I want you to act. I want you to act as you would in a crisis. I want you to act as if the house is on fire, because it is."

It is time to act now, not after our house has burned to the ground.

Mahalo for the opportunity to testify.

Sherry Pollack Co-Founder, 350Hawaii.org

## <u>HB-111-HD-1</u>

Submitted on: 2/9/2021 1:56:58 PM Testimony for CPC on 2/10/2021 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Climate Protectors Hawaii	Climate Protectors Hawaii	Comments	No

#### Comments:

To: The Honorable Aaron Ling Johanson, Chair,

The Honorable Lisa Kitagawa, Vice Chair, and Members of the

House Committee on Consumer Protection and Commerce

From: Climate Protectors Coalition (by Ted Bohlen)

## Re: Hearing HB111 HD1- RELATING TO RENEWABLE ENERGY

Wednesday February 10, 2021, 2:00 p.m., by videoconference

Aloha Chair Johanson, Vice Chair Kitagawa, Consumer Protection and Commerce Committee members:

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

Emissions from fossil fuel power plants are a leading cause of the climate crisis. Bill HB111 HD1 has a totally unacceptable date of 2045 for prohibiting any new extensions, improvements, overhauling or refurbishing of any fossil fuel electricity generation. The planet faces an existential climate crisis and we must act now! 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. Hawaii should not continue using fossil fuels any longer than necessary! Fossil fuel unit retirement dates will vary, but fossil fuel electric

generation in Hawaii should end no later than 2035. Please revise the 2045 date in the HD1 to 2035.

Thank you for the opportunity to testify.

Climate Protectors Coalition (by Ted Bohlen)



#### Testimony to the Committee on Consumer Protection and Commerce Wednesday, February 10, 2021 2:00 PM VIA Video Conference Conference Room 329, Hawaii State Capitol HB 111

Chair Johanson, Vice Chair Kitagawa, and members of the committee,

Hawaii Clean Power Alliance (HCPA) <u>supports</u> HB 111, which eliminates fossil fuels in Hawaii for electricity generation and storage.

The Hawaii Clean Power Alliance is a nonprofit alliance organized to advance and sustain the development of clean energy in Hawaii. Our goal is to support the state's policy goal of 100 percent renewable energy by 2045. We advocate for utility-scale renewable energy, which is critical to meeting the state's clean energy and carbon reduction goals.

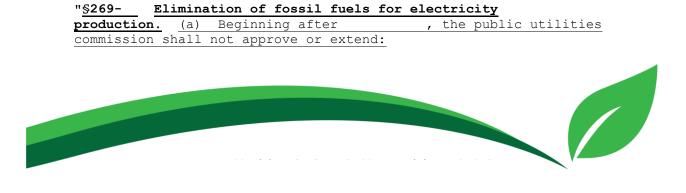
We offer these comments in support of HB 111.

This bill reinforces the intent of the state's 2045 policy – eliminating fossil fuel powered electricity generation and storage, which will steadily increase renewable generation while providing the electric utility enough runway to not negatively impact its current achievement of RPS.

With the 2045 goal of 100% RPS just over two decades away, we should avoid allowing further investment into fossil generation as doing so no longer aligns with the need to steadily accelerate our renewable energy future. We cannot wait until just prior to 2045 to retire fossil generation all at once, as doing so would unnecessarily prolong and encourage the continued use of legacy fossil generation. Rather, legacy fossil generation should gradually be retired in lock step with new additions of sufficient renewable generation such that ratepayers do not have to pay for both assets. Liken it to keeping your old, worn-out car and maintaining it after you have purchased your new replacement car. Reliability of the grid does not have to be compromised, because this bill will provide enough runway for the utility to keep grid reliability and costs in check.

The previous committee deleted a key amendment that would require the public utilities commission to not approve or extend new generators that could only be powered by fossil fuels. It would also disallow any material improvements for only fossil fuel powered existing generators to be overhauled. This would align the utilities with the consumer by not burdening the ratepayer to pay for assets beyond 2045 that would be obsolete because of the 2045 mandate. This would also incent the utilities to responsibly convert these facilities to dual-powered renewable fuels, while allowing them to continue their fossil fuels until 2045.

Therefore, we respectfully request the committee consider re-inserting the following amendment with the date of 2025.



(1) Any electricity generation facility that applies or proposes to use fossil fuels to generate electricity or to store electricity into a public utility grid-tied battery energy storage system resource; or

(2) Any material improvements, overhauling, or refurbishing of any existing electricity generation facilities that extend the life of fossil fuel-powered electricity generation facilities or storage facilities that use fossil fuel-powered electricity.

Utility-scale storage was not yet commonly available in the market during the passage of previous renewable energy focused statutes. With improvements in technology and lower pricing making utility-scale storage a viable option for the state, our laws need to address potential mis-alignment in achieving the state's 2045 renewable energy goals. Just as the federal income tax credit (ITC) is not allowed for stand-alone storage filled with fossil fuel energy, we must prohibit the use of fossil fuels to fill stand-alone storage, even if such storage was procured through a renewable energy competitive bid. Prohibiting the use of fossil fuels to fill stand-alone storage will encourage the reduction of fossil fuels and carbon emissions in alignment with state goals.

Allowing storage to be powered by fossil fuels, negating many benefits that would be available through renewable storage, is a step backwards and promotes more fossil fuel use at an even higher cost than the coal plant that is scheduled to be retired in September 2022. HCPA believes strongly that today's grid and storage investments should move us collectively towards the interim RPS targets and 2045 goal. The original statute's intent was to gradually eliminate fossil fuels plain and simple. It never contemplated that storage would be filled with fossil fuels. With this bill, the state will close the loophole that potentially allows filling energy storage with fossil fuel electricity pretending this is renewable energy. Filling a grid-connected storage system with fossil fuel electricity only adds inefficiency (power losses) and increases costs to ratepayers, as well as increases carbon emissions. This cuts against the state's goal of reducing fossil fuel generation and should not be allowed.

We ask the committee to pass this bill.

Thank you for the opportunity to testify.

Sincerely,

Frederick Redell, P

Executive Director (949) 701-8249 www.hawaiicleanpoweralliance.org

## <u>HB-111-HD-1</u>

Submitted on: 2/8/2021 8:44:08 PM Testimony for CPC on 2/10/2021 2:00:00 PM

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

Comments:

Testimony on HB111 HD1 before the House Consumer Protection and Commerce Committee

Chair Aaron Ling Johanson

Dear Representative Johanson,

As you are aware this House Bill 111 HD1 began its consideration in the EEP Committee where it was transformed from having a blank space for a date for termination of fossil fuel use in electricity production, into HB111 HD1 with a date of 2045. I wish to emphasize to you that subsequently in the EET committee of the Senate the companion bill SB931, identical to this HB111, was unanimously passed with a date placed of 2035. My testimony before that Senate Committee was as follows. It begins with excerpts from the testimony which was earlier submitted to Representative Lowen's Energy and Environmental Protection Committee. I ask that you concur with Senator Wakai and the Senate EET Committee in judging that completion of the transition from fossil fuels to renewable energy for electricity production by 2035 is not only well within our capability, but also underlines our commitment to do all within our power to avert the most cataclysmic consequences of climate change.

Excerpts from Testimony submitted to the Energy and Environmental Protection Committee

James Griffin PhD, Chair Public Utilities Commission

"The Hawaiian Electric Companies'most recent Power Supply Improvement Plan (PSIP) update projects that the 100% Renewable Portfolio Standard (RPS) will be reached in 2040."

Comment: This statement lays the groundwork for the rest of my comments on the various testimonies. Though I am not an energy expert I believe any reader would discern that, with business as usual, the date of 2040 is within reach as achieving transformation of electrical generation to 100% renewable sources of energy. It is not stated that it 'could be reached', it is stated that 'it will be reached'. What is needed at this point is legislation which mobilizes us toward treating Climate Change as an emergency - a crisis. We need a bill pushing us to renewable transition by 2030.

#### Scott Glenn, Chief Energy Officer

"This straightforward and profound bill...."

Comment: Scott is telling us that this could be a profound bill. And I believe that I read into this that he would very much wish it to be a profound bill. However, it will not be a profound bill if it produces no change in the status quo, if it is merely a reflection and restatement of the objectives that are already built into the current policy and dates of the RPS. The House EEP Committee placed a date of 2045 on this bill. This is a failure. Of course, this Senate committee cannot, by itself, legislate the date that this major component of the Green Revolution will be complete. However, if this committee places a date of 2045, the conversation is over, Legislature will simply solidify the already inadequate and arbitrarily selected goal of 2045. However, the opportunity which Scott sees, and calls 'profound' is that a new date could be posited by your committee, and the conversation which is critically needed, can continue. Legislature and this Bill could become the medium for thorough, thoughtful, informed and timely discussion of what the correct date to complete our Green Transformation should be. Please insert the date 2030.

Dean Nishina, Executive Director, Department of Commerce and Consumer Affairs, Division of Consumer Advocacy

"Given the Renewable Portfolio Standard that requires 100% renewable energy by 2045 the Department appreciates the Bill's intent to have statutory language that comports with the renewable Portfolio Standards. The Department has concerns, however, that the unspecified dates may not properly align with the RPS. This inconsistency could cause unintended consequences, such as a degradation of the reliability of Hawaii's electric grids."

Comment: As testified above by Dr. Griffin, already the RPS goals will be reached by 2040. And that is without injecting a sense of urgency that could come by setting an even earlier date for the achievement of 100% electricity generation by renewables. The comments by the representative from Tesla in their testimony give me confidence that the necessary reliability and stability for designating an even earlier date could be achieved, particularly if it is designated that the 100% generation goal date would apply to the primary generation source and would allow for unforeseen or emergency circumstances to allow hydrocarbon utilization to power battery supply.

#### Henry Curtis, Life of the Land

"Fossil fuel needs to be phased out by 2030. Needed state legislation should apply to all fossil fuel producers and consumers."

Comment: Remember Greta Thunberg's address to the United Nations General Assembly. "I don't want your hopefulness. I want you to panic! I want you to act like your house is on fire. Because it is."

Marc Asano, Director, Transmission and Distribution Planning, Hawaiian Electric Company

"To be clear, Hawaiian Electric supports breaking the state's dependence on Fossil fuels, however, it should be done in a cost-effective and reliable manner."

Comment: I am somewhat dismayed that this testimony emphasizes the conclusions that first priority should be grid reliability, second cost and only then renewable transition. Haven't we matured to the point that we realize that our environment, which sustains all that we do, is first priority - always. Don't we yet recognize that climate change is an emergency, that we are in a crisis. For 40 or 50 years we have known about this but our societies have put other things first.

Tawn Keeney MD (This is my testimony to EEP)

"Though I participate with 350Hawaii's steering committee and am a member of the State Democratic Party climate committee of the environmental caucus, I am writing and submitting this as an individual because group consciousness must transcend emotional appeal in favor of the rational, perhaps measured, response demanded by consensus.

What I would ask of you when you are called on to assign a terminal date to the transition away from burning hydrocarbons for energy, to harvesting the abundant energy sources surrounding us, which is consistent with survival of our civilization and species, is the following: Understanding - Courage - Strength - Determination. But it is remembered that understanding is nothing without the latter attributes. We have had understanding of the danger of continuing the use of hydrocarbons to power our civilization for at least 40 years and still the byproducts of these fuels are increasing in our atmosphere yearly. It is courage, strength and determination which continue to be lacking.

The climate scientists and climate leaders are saying, "This is coming much faster than we thought possible." But then, they were saying that 10 years ago also. We recognize that the natural desire to make an 'evolution' without hardship, without giving up many of our luxuries is what has brought us dangerously close to irreversible ecocide, which will only begin with societal collapse. The talk of human extinction is no longer coming from the shadows. Just a few years ago we were fearful for our grandchildren. Now we are fearful for our children. You who are younger than I, as a septagenerian, will see the transition from a society with aspiration toward fulfillment of our limitless potential, to a society with the aspiration of survival.

We have all seen the logarithmic curve of the concentration of CO2 in our atmosphere. We have seen the reports that 9 out of the last 10 years were the warmest years ever recorded for our planet. Now, in the last two years our summers are incessant with reports of unprecedented fires. Twice in the past year we have had reports of temperatures above 100 degrees above the arctic circle. Ferocious storms, like never before, are battering our shorelines. The oceans seem to be dying and our oceans provide the foundations for our terrestrial life. The scientists tell us we are in the process of the fifth great extinction. We are warned of immanent positive feedback loops precipitating a greenhouse gas storm.

So we know all this - understanding is nothing. Our greenhouse gas emissions keep going up. Courage, strength and determination will soon yield to desparation. Please remember that as you are called on to submit a date when our transformation is to be completed.

For me and the leadership at 350Hawaii, that date should be 2030."

Tawn Keeney MD

#### HB-111-HD-1

Submitted on: 2/9/2021 11:13:37 AM Testimony for CPC on 2/10/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mark A. Koppel	Individual	Oppose	No

Comments:

TESTIMONY ON HB111 ASKING FOR ENERGY CONVERSION DATE OF 2030

Mark Koppel

Umauma, HI

James Griffin PhD, Chair Public Utilities Commission

"The Hawaiian Electric Companies'most recent Power Supply Improvement Plan (PSIP) update projects that the 100% Renewable Portfolio Standard (RPS) will be reached in 2040."

Comment: This statement lays the groundwork for the rest of my comments on the various testimonies. Though I am not an energy expert I believe any reader would discern that, with business as usual, the date of 2040 is within reach as achieving transformation of electrical generation to 100% renewable sources of energy. It is not stated that it 'could be reached', it is stated that 'it will be reached'. What is needed at this point is legislation which mobilizes us toward treating Climate Change as an emergency - a crisis. We need a bill pushing us to renewable transition by 2030.

Scott Glenn, Chief Energy Officer

"This straightforward and profound bill...."

Comment: Scott is telling us that this could be a profound bill. And I believe that I read into this that he would very much wish it to be a profound bill. However, it will not be a profound bill if it produces no change in the status quo, if it is merely a reflection and restatement of the objectives that are already built into the current policy and dates of the

RPS. The House EEP Committee placed a date of 2045 on this bill. This is a failure. Of course, this Senate committee cannot, by itself, legislate the date that this major component of the Green Revolution will be complete. However, if this committee places a date of 2045, the conversation is over, Legislature will simply solidify the already inadequate and arbitrarily selected goal of 2045. However, the opportunity which Scott sees, and calls 'profound' is that a new date could be posited by your committee, and the conversation which is critically needed, can continue. Legislature and this Bill could become the medium for thorough, thoughtful, informed and timely discussion of what the correct date to complete our Green Transformation should be. Please insert the date 2030.

#### HB-111-HD-1 Submitted on: 2/9/2021 12:49:42 PM Testimony for CPC on 2/10/2021 2:00:00 PM

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

Comments:

Aloha Committee,

On behalf of Our Revolution Hawaii's 7,000 members and supporters statewide, we hesitantly support this bill with the following essential amendment.

The target date for prohibiton for the bill is currently set at 2045. This date is woefully way too late. Scientists have warned us that we are already in a Climate Emergency, and that we must end the use of fossil fuels by 2030 or risk ever increasing perpetual Climate Chaos.

Setting a date of 2045 is like deciding to call the fire department to report a house fire, fifteen years after the house has burned down.

2030 is a date set by scientists. 2045 has no basis in science, and as such has no value.

Please amend 2045 to 2030 based on science not on the wants of special interests.

Climate Change is a growing crisis, and it does not care if we are ready or not. It is up to us to get ready. And now is the time to do it.

Mahalo Nui Loa for your kind attention,

Dave Mulinix

Statewide Community Organizer

Our Revolution Hawaii

#### HB-111-HD-1

Submitted on: 2/10/2021 9:20:36 AM Testimony for CPC on 2/10/2021 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Phaethon Keeney	Individual	Comments	No

#### Comments:

Here we have 2 conflicting bills setting a date for the elimination of fossil fuel for electricity production. This is of special importance because Lowen, chair of House energy, set the date of 2045 which is in HD1 but in the companion bill SB931 Wakai, chair of Senate energy, set a date of 2035, which was unanimously passed.

James Griffin, Chair of Public Utilities Commission says "The Hawaiian Electric Companies'most recent Power Supply Improvement Plan (PSIP) update projects that the 100% Renewable Portfolio Standard (RPS) will be reached in 2040." If we do not set our ambition higher we will be simply shooting ourselves in the foot.

AIM for 2030, or 2035 at least. 2045 is simply unacceptable. The IPCC in it's 2018 Special Report on 1.5C made it clear that we must transition to zero emission energy production in 10 years to have any hope to acheive the 1.5C Paris targets this century. This pathway includes reliance on negative emissions technologies which have yet to be proven or built to scale. Latest 2020 CMIP6 climate models are showing higher Climate sensitivity than previously anticipated by many, therefore the range of worst case SSP5-8.5 sencarios are from 3.8-7.4C, with a mean of 5C by the end of the century (final IPCC CMIP6 report due April 2021). This is worst case scenario is proving time and again to be the pathway we are on. Holding our current energy policies as close to livable planetary boundaries as possible becomes more urgent than ever, please aim for 2030 as advised by the IPCC.

At the very least, I ask that you concur with Senator Wakai in judging that completion of the transition from fossil fuels to renewable energy for electricity production by 2035 is not only well within our capability, but also underlines our commitment to do all within our power to avert the most cataclysmic consequences of climate change.

Thank you,

**Phaethon Keeney** 

Honokaa Hawaii 96727