

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of MIKE MCCARTNEY Director

Department of Business, Economic Development, and Tourism before the

SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM AND SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH

Wednesday, March 27, 2019 2:45 PM State Capitol, Conference Room #414

In consideration of HB 307
RELATING TO RENEWABLE ENERGY.

Chairs Wakai and Baker, Vice Chairs Taniguchi and Chang, and members of the Committees. The Department of Business, Economic Development, and Tourism (DBEDT) offers comments on HB 307, which broadens the definition of "renewable energy" to include other self-replenishing non-fossil fuel resources.

DBEDT is committed to achieving Hawaii's statutory goal of 100% Renewable Portfolio Standard by 2045 as a means of decarbonizing our economy from fossil fuels, amongst other environmental and economic benefits, and also is supportive of emerging renewable energy technologies that have the potential of helping our state achieve this ambitious renewable energy goal. We are not aware of pre-commercial renewable energy technologies that would not already fall under the current definition of renewable energy under Hawaii Revised Statutes Section 269-91. Hence, we are unclear if broadening the definition of renewable energy as proposed by this measure is warranted.

Thank you for the opportunity to testify.



DAVID Y. IGE GOVERNOR

JOSH GREEN

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

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CATHERINE P. AWAKUNI COLÓN DIRECTOR

JO ANN M. UCHIDA TAKEUCHI

Testimony of the Department of Commerce and Consumer Affairs

Before the
Senate Committee on Energy, Economic Development, and Tourism and
Senate Committee on Commerce, Consumer Protection, and Health
Wednesday, March 27, 2019
2:45 p.m.
State Capitol, Conference Room 414

On the following measure: H.B. 307, RELATING TO RENEWABLE ENERGY

WRITTEN TESTIMONY ONLY

Chairs Wakai and Baker and Members of the Committees:

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 broaden the definition of "renewable energy" to include other self-replenishing non-fossil fuel resources.

The pace of technological change and advancement is accelerating in the field of energy generation, and so the Department appreciates how this bill apparently attempts to anticipate new technologies that could fit into the current statutory list of sources of "renewable energy" for the purposes of Hawaii Revised Statutes chapter 269, Part V (Renewable Portfolio Standards). The proposed change could obviate the need for

Testimony of DCCA H.B. 307 Page 2 of 2

repeated legislative amendments in the future as new generation technologies emerge. However, consistent with comments submitted by the Public Utilities Commission (Commission) on a similar measure in 2016, H.B. 1751, the Department is concerned that the proposed expanded definition for sources of "renewable energy" could create uncertainty in utility planning to meet the State's Renewable Energy Portfolio Standards (RPS). If passed, interested stakeholders would be uncertain of whether the Commission would agree that a given emerging energy generation technology will fit the proposed definition and count towards the RPS. Furthermore, the Commission faces uncertainty whenever a given emerging energy generation technology is put before it, because the extra process of evaluating that technology against the proposed definition could open any Commission ruling to legal challenges by any party with an interest for or against that emerging technology. Thus, rather than facilitating a more expeditious transition, the proposed language might cause unintended delays in the State's energy transition.

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
SENATE COMMITTEES ON
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM
AND
COMMERCE, CONSUMER PROTECTION, AND HEALTH

March 27, 2019 2:45 p.m.

Chairs Wakai, Baker, and Members of the Committees:

MEASURE: H.B. No. 307

TITLE: RELATING TO RENEWABLE ENERGY.

DESCRIPTION: Broadens the definition of "renewable energy" to include other self-replenishing non-fossil fuel resources.

POSITION:

The Public Utilities Commission offers the following comments for consideration.

COMMENTS:

The Public Utilities Commission ("Commission") does not oppose modifying the definition of "renewable energy" to include emerging technologies that may not explicitly fall within the existing definition as set forth in Hawaii Revised Statutes § 269-91.

However, the Commission is concerned that this measure may introduce unnecessary ambiguity to the existing definition of "renewable energy". The language proposed by this measure appears to expand the current definition of "renewable energy" by introducing a broad new "catch-all" to the list of technologies that are eligible to be counted as part of the Renewable Portfolio Standard ("RPS").

In addition, the proposed language is subject to interpretation which may cause difficulty with respect to the State's ability to hold electric utilities accountable for driving towards the State's RPS and clean energy goals. To avoid such unintended consequences, the

H.B. No. 307 Page 2

Commission recommends that any amendments to expand the definition should specifically name the contemplated emerging renewable energy technologies to allow for a more certain impact to utility planning.

Thank you for the opportunity to testify on this measure.



To: The Senate Committees on Energy, Economic Development, And Tourism;

and Commerce, Consumer Protection, And Health

From: Brodie Lockard, Hawaii State Climate Lead, Organizing for Action

Date: Wednesday, March 27, 2019, 2:45 pm

Comments HB 307

Dear Chair Baker, Vice Chairs Chang and Committee Members—

Organizing for Action offers comments on HB 307.

This bill claims that the State's definition of "renewable energy" is too narrow to account for "some technological innovations that produce renewable energy resources." It broadens the definition of "renewable energy" to include "other self-replenishing non-fossil fuel resources."

The bill gives no examples of such innovations. Only one self-replenishing non-fossil fuel resource comes to mind: trees. Hu Honua's power plant on the Hamakua coast of the Big Island plans to

- * Cut 5 acres of eucalyptus trees per day in Ka'ū, Hilo, and Hāmākua, adding up to thousands of acres of trees across the island and losing the carbon sequestration they currently perform;
- * Drive 5-6 logging trucks per hour (on "light" days) to the power plant in Pepe'ekeo (the County struggles to maintain these roads and bridges with current traffic as is);
- * Burn these trees, releasing about 300,000 tons per year of carbon dioxide, as well as additional pollutants affecting air quality along the coast;
- * Draw 21.6 million gallons of water per day from the Hakalau aquifer to cool the turbines (the entire district of North Kona consumes only half that);
- * Add over 2 dozen hazardous chemicals to the heated water;
- * Inject the hot contaminated water back into the aquifer via 3 injection wells that are less than 100 feet from the edge of geologically unstable cliffs;
- * Allow the hot, contaminated water to rise up in the ocean seabed to directly impact coral reefs and critically endangered Hawksbill turtles;
- * And then overcharge for electricity—double the current cost of solar power, which is dropping exponentially worldwide.

Disasters like Hu Honua must be prevented, not encouraged. If other "self-replenishing non-fossil fuel resources" are contemplated, the bill should mention them.

This entire issue could be obviated be using the term "zero emissions" when discussing "renewable energy" projects.

Thank you for the opportunity to testify.

Brodie Lockard Hawaii State Climate Lead, Organizing for Action

HB 307

Life of the Land

Challenges All Legislators

What does "<u>other self-replenishing non-</u> <u>fossil fuel resources</u>" mean?

Is it coal, nuclear, cow belching?

<u>HB-307</u> Submitted on: 3/25/2019 9:48:00 AM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
donald erway	Individual	Oppose	No

Comments:



To: The Senate Committee on Energy, Economic Development, and Tourism

and

The Senate Committee on Commerce, Consumer Protection, and Health

From: Sherry Pollack, 350Hawaii.org

Date: Wednesday, 3/27/19

In strong opposition to HB307

Aloha Chairs Wakai and Baker, Vice Chairs Taniguchi and Chang, and members of the EET and CPH committees,

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 **strongly opposes HB307** which broadens the definition of "renewable energy" to include other self-replenishing non-fossil fuel resources.

HB307 is unacceptably vague, allowing for other self-replenishing non-fossil fuel resources to be included in the definition for renewable energy. This language potentially allows the advancement of poor options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk. Nuclear power is unsafe, dangerous, and would take Hawaii in the wrong direction for our energy needs.

In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability. The UN IPCC report says we have 10 years to drastically reduce greenhouse gas emissions to avoid Climate Hell. We need to ensure we are rapidly transitioning to emissions-free clean energy options only. Period.

Moreover, the way this bill was pushed through the House was not pono. This type of practice is very concerning and goes against basic democratic principles and fair process.

We urge you to strongly oppose this bill.

Thank you for the opportunity to testify. Sherry Pollack Co-Founder, 350Hawaii.org



SENATE COMMITTEE ON ENERGY AND ECONOMIC DEVELOPMENT SENATE COMMITTEE ON CONSUMER PROTECTION AND HEALTH

March 27, 2019

2:45 PM

Room 414

In OPPOSITION of HB 307: Relating to Renewable Energy

Aloha Chair Wakai, Chair Baker, and members of the committees,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **opposes HB 307**, which broadens the definition of "renewable energy" to include other self-replenishing non-fossil fuel resources. Because it is unclear what type of energy this would be, it should not be assumed to meet our renewable portfolio standards.

The preamble of HB 307 does not mention any specific future technology that should be included in the definition of renewable energy and the bill lacks any definition of "self-replenishing non-fossil fuel resources." This makes it difficult to understand what types of resources are being considered. Planning for some unknown future renewable resource by inserting vague and ambiguous language into statute does not improve this law. Statutes should be altered to fit the new proposed technology, not the other way around.

The lack of clarity around "self-replenishing non-fossil fuel resources" may also lead to unintended consequences. If HB 307 is passed, it could be interpreted to allow nuclear energy to be considered a source of renewable energy. The Sierra Club remains opposed to dangerous nuclear power and the construction of any new commercial nuclear fission power plants.¹ Furthermore, enabling the potential for nuclear power via HB 307 is counter to our state constitution, which states:

NUCLEAR ENERGY **Section 8.** No nuclear fission power plant shall be constructed or radioactive material disposed of in the State without the prior approval by a two-thirds vote in each house of the legislature. [Add Const Con 1978 and election Nov 7, 1978]²

¹ https://www.sierraclub.org/policy/energy/nuclear-power

² http://lrbhawaii.org/con/conart11.html

The current 9 separate renewable technologies outlined in HRS 269-91 represent a thorough list of actual renewable technologies currently in use. If the legislature wishes to expand this definition for future technologies, "self-replenishing non-fossil fuels" needs to be clearly defined and vetted through the legislative process. Due to the re-referral and 48-hour waiver to pass HB 307 through the House, this joint Senate committee hearing will be the first and only opportunity for public testimony. We ask the Senate EET and CPH committees hold HB 307 to allow for

adequate consideration and discussion of how HB 307 will -- not could -- advance the state's

clean energy goals.

Thank you for this opportunity to provide testimony in **opposition of HB 307**.

Mahalo,

godi Inalinoski

Jodi Malinoski, Policy Advocate



Written Statement of Elemental Excelerator before the Senate Committees on Energy, Economic Development, and Tourism and Commerce, Consumer Protection & Health

Wednesday, March 27, 2019

In consideration of <u>HB 307</u> RELATING TO RENEWABLE ENERGY

Aloha Chair Wakai, Chair Baker and Members of the Senate Committees on Energy, Economic Development, and Tourism and Commerce Consumer Protection & Health:

Elemental Excelerator respectfully <u>submits opposition with comments to HB 307</u>, which broadens the definition of "renewable energy" to include other self-replenishing non-fossil fuel resources.

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.

We respectfully oppose HB 307 with the following comments.

- The term "self-replenishing non fossil fuel resource" is imprecise. At Elemental Excelerator, we evaluate over 500 cleantech startups each year and have not seen this term used to describe any of these new technologies. We recommend a precise definition of this term if it is used in legislation.
- The expanded category is not necessary. Using the existing renewable energy
 definition, there are multiple studies, including Transcending Oil: Hawai'i's to a
 Clean Energy Economy and the Hawaiian Electric Companies Power Supply
 Improvement Plan, which identify pathways to 100% renewable energy and meet
 the requirements of Act 97 under the current definition of renewable energy.
- We recommend fact checking some of the information included in the proposed bill:

- It states that "33 percent of electricity in the state is generated from rooftop solar." The Hawai'i State Energy Office cites that in 2017, 8 percent of total energy sales was from distributed photovoltaics (rooftop solar).
- It states that there are "sixty utility-scale renewable energy projects feeding into the state's powergrid". The State of Hawaii Public Utilities Commission Report to the 2019 Legislature on Hawaii's Renewable Portfolio Standards identifies 25 Hawaiian Electric Company projects and 13 Kauai Island Utility Cooperative projects, for a total of 38 projects.

Mahalo for the opportunity to provide testimony on this legislation.

Sincerely,

Aki Marceau

Calden

Managing Director, Policy & Community-Hawai'i

¹ Hawaii State Energy Office 2018 Energy Facts & Figures https://energy.hawaii.gov/wp-content/uploads/2018/06/HSEO_2018_EnergyFactsFigures.pdf. Retrieved March 25, 2019.

² State of Hawaii Public Utilities Commission, Report to the 2019 Legislature on Hawaii's Renewable Portfolio Standards, p 15-18. https://puc.hawaii.gov/wp-content/uploads/2018/12/RPS-2018-Legislative-Report FINAL.pdf. Retrieved March 25, 2019.









SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH

March 27, 2019, 2:45 P.M. Room 414 (Testimony is 1 page long)

TESTIMONY IN OPPOSITION TO HB 307

Aloha Chair Wakai, Chair Baker, and members of the Committees:

Blue Planet Foundation **opposes** HB 307, which inexplicably seeks to broaden the definition of "renewable energy" under Hawaii Revised Statutes (HRS) § 269-91 to include "self-replenishing non-fossil fuel resources."

The origins of this bill are mysterious. Although the preamble for HB 307 describes Hawaii's renewable energy definition as being "too narrow to account for some technological innovations," there is no explanation of particular technologies that are excluded or inhibited by the current definition. There is also no mention of why adding a "catch-all" provision to Hawaii's definition of renewable energy is timely or necessary.

Broadening the definition of "renewable energy" without explanation or reason could lead to unintended consequences. Without knowing more about the technologies or resources captured under the proposed "catch-all" provision, we risk crafting an overly broad policy that includes energy sources with unknown carbon impacts, toxicity, and public health implications.

Thought and deliberation went into enumerating the technologies and resources included under Hawaii's current definition of renewable energy in HRS § 269-91. Without further explanation, broadening the definition is at best unnecessary and premature, and at worst, an attempt to circumvent Hawaii's renewable energy and climate goals.

We respectfully request that the Committees hold HB 307.

Thank you for the opportunity to testify.

Submitted on: 3/26/2019 10:26:36 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Sylvia Dolena	Testifying for Pele Lani Farm LLC	Oppose	No	•

Comments:

Broadening the language to be more vague? This is not good for the environment.

We are all held to a higher moral and ethical standard when it comes to the Public Trust of our environmental resources.

Please oppose HB307.

Mahalo!

Submitted on: 3/24/2019 8:20:02 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Graham	Individual	Oppose	No

Comments:

Thank you for the opportunity to explain my opposition to HB307.

It is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy. This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk. Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability. Moreover, the way this bill was pushed through the House was not pono. I urge you to strongly oppose this bill.

Mahalo nui for considering this testimony,

Janet

Submitted on: 3/24/2019 8:49:29 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kanani Kai	Individual	Oppose	No

Comments:

HB307 is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy. This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk. Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability. Moreover, the way this bill was pushed through the House was not pono. I urge you to strongly oppose this bill.

Submitted on: 3/24/2019 9:01:08 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Linda Gusman	Individual	Oppose	No	

Comments:

I want to go on record as strongly opposed to HB307. It is much too vaguely worded. If it is meant to open a door for nuclear energy, this should not go forward - nuclear energy is not good for Hawaii.

Submitted on: 3/24/2019 9:09:01 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Eric Micha'el Leventhal	Individual	Oppose	No

Comments:

HB307 is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy. This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk. Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability. Moreover, the way this bill was pushed through the House was not pono. I urge you to strongly oppose this bill.

<u>HB-307</u> Submitted on: 3/24/2019 9:41:04 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Glenn Metzler	Individual	Oppose	No	

Comments:

Submitted on: 3/24/2019 9:49:55 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Cory Harden	Individual	Oppose	No

Comments:

Aloha legislators,

The vagueness in this bill may allow nuclear power (nobody wants the nuclear waste) and fuels that generate greenhouse gases.

And the way this bill was rammed through was not right.

mahalo,

Cory Harden

Submitted on: 3/24/2019 10:04:37 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
janice palma-glennie	Individual	Oppose	No	ĺ

Comments:

Aloha,

it's hard to beileve this is a state ruled by Democrats. if it was, you wouldn't think they'd be fighting against clean energy, transparency and sustainability for our island state.

HB307 extends the definition of "renewable energy" to include other self-replenishing non-fossil fuel resources. Why?

HB307 is a strike against the democratic process. The bill was referred to the finance committee with only 20 minutes notice for public input. why?

HB307 seems purposely vague. why?

finally, this bill was pushed through the House was not pono.

I urge you to strongly oppose this bill as i do.

mahalo and sincerely,

janice palma-glennie

kailua-kona

<u>HB-307</u> Submitted on: 3/24/2019 10:13:21 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Joy Silver	Individual	Oppose	No

Comments:

I urge you to strongly oppose this bill

Submitted on: 3/25/2019 1:42:47 AM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Janet Pappas	Individual	Oppose	No	

Comments:

Dear Representatives,

HB307 is a very vague bill due to the tenth form of energy listed in the bill: "self-replenishing non-fossil fuel resources." I have only heard this term, "self-replenishing non-fossil fuel", used with nuclear energy. But surely—for clarity and transparency-this bill would have used the term "nuclear" if that is what is implied.

If indeed nuclear energy is implied, then the term "nuclear fuel" should be explicitly listed. And, due to the controversial nature of the use of nuclear fuel worldwide—particularly its issues with storage, disposal and nuclear "accidents"—this bill should be thoroughly vetted through public testimony and discussion before any vote is taken.

If nuclear is not what is meant, then other known form(s) of "self-replenishing non-fossil fuel" should be explicitly listed in the bill.

Please reject HB307 until the exact meaning of "self-replenishing non-fossil fuel" is clarified.

Thank you for this opportunity to voice my opinion.

Sincerely,

Jan Pappas

Aiea, Hawaii 96701

Submitted on: 3/25/2019 10:07:24 AM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Jonathan Boyne	Individual	Oppose	No	

Comments:

HB307 is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy.

This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk.

Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability.

Moreover, the way this bill was pushed through the House was not pono. I urge you to strongly oppose this bill.

Submitted on: 3/25/2019 10:51:21 AM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Laura Gray	Individual	Oppose	No	

Comments:

This bill is by and for nuclear/natural fracked gas industry. We do not want it. We are better than this. People in Hawaii are smart, educated and formulate their opinions based on facts proven by using the scientific method. We see right through these types of efforts. We need to get off of all polluting, climate destroying, health wrecking energy and get with the rest of the world and get going with the GREEN NEW DEAL and stop trying to delay and confuse people. Mahalo, Laura J.Gray R.N.

Submitted on: 3/25/2019 3:07:19 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Francine Roby	Individual	Oppose	No

Comments:

Please do not pass HB307. It attempts to undo what past attempts denied in 2016 and 2019-- change the definition of "renewable energy" under the guise of helping Hawaii meet our renewable energy goals, when in actuality, it is a disguised attempt for a non-green and outright dangerous industry to get a foothold in Hawaii.

The current definition includes many technologies that have not been fully developed, incentivized, nor improved. Why are we adding another vague definition in category "(10) Other self-replenishing non-fossil fuel resources?" Is it that an industry has approached our Legislators and made significant campaign donations and promised jobs that will never materialize? Pardon my cynicism from having paid attention to how things have happened in the recent past.

News media indicate that nuclear energy or micro-reactors may be the "other" under consideration by this measure. Here we are, still trying to clean up energy projects in Hawaii that were irrevocably damaged by our frequent earthquakes and infrequent but devastating lava flows! Here we are, facing increasing climate changes with scientific warnings for more frequent, more serious tropical storms and hurricanes that could leave Hawaii suffering like Fukushima, Chernobyl, and Three Mile Island! Trying to meet renewable energy goals by adding a loophole for a technology that is more dangerous, in a vulnerable landscape, with hazardous, centuries-surviving waste, without safe disposal technology in existence, seems so out of whack with the State's goals for renewable energy in the first place! We are not yet trying to use, perfect, nor expand all of the other listed renewable energy technologies, so why move the goal posts and rewrite the rules to allow a new, dangerous player?

I have previously lived in States with nuclear energy plants and have seen them age, leak, melt-down, close, and watched the news of other nations worldwide struggling to contain radiation currently and for future generations from failed plants, whether by human error, technology failures, or catastrophic weather. And based on this experience in the real world, I would say no to nuclear energy production here in Hawaii. I would join many other Hawaii citizens to oppose the introduction of nuclear energy in our State. I could not bear to see this land inoculated with the toxins of the nuclear power industry, especially under the disguise of creating renewable energy and moving closer to our State's laudable goals.

I urge you not to pass HB307 and do not vote to allow this change to the already adequate 9-item definition in HRS 269-91, of renewable energy, and please oppose any attempts to bring the nuclear power industry here. Let's work on the other options and meet our renewable energy goals without this dangerous leap.

Mahalo for your work on the behalf of our land and residents, Francine Roby PO Box 1787 Honokaa HI 96727

<u>HB-307</u> Submitted on: 3/25/2019 3:24:45 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jessica Fernandez	Individual	Support	No

Comments:

Submitted on: 3/25/2019 3:35:38 PM

Testimony for EET on 3/27/2019 2:45:00 PM

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

Comments:

The way our current system is structured, the definition of "renewable energy" is key to protecting and promoting our natural resources and should not be expanded without careful and clear deliberation. Sneaking in this change to broaden the definition without clear public scrutiny is against the public's best interest, with resultant tax benefits and incentives up for exploit by industries that could cause harm to the natural cycles of life and a healthy ecosystem. If other forms of energy want to be included for those tax benefits, let them be clearly named and allow for discourse among an informed public on the extent and relationship of the term "renewable" in respect to climate change and a healthy, functioning ecosystem, which we can no longer take for granted.

HB307 is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy. This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk. Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability. Moreover, the way this bill was pushed through the House was not pono. I urge you to strongly oppose this bill.

Thank you.

<u>HB-307</u> Submitted on: 3/25/2019 4:22:56 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Rene Umberger	Individual	Oppose	No

Comments:

<u>HB-307</u> Submitted on: 3/25/2019 5:59:46 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lois Crozer	Individual	Support	No

Comments:

Submitted on: 3/25/2019 8:44:48 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Judith Michaels	Individual	Oppose	No	

Comments:

I stongly oppose this bill.

I find the language in this bill to be very vague.

HB307 is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy. **This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk.** Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability.

More discussion is needed. I urge you to strongly oppose this bill.

Submitted on: 3/25/2019 10:02:06 PM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Caroline Kunitake	Individual	Oppose	No	

Comments:

Aloha,

HB307 is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy. This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk. Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability. I urge you to oppose this bill in order to further specify the acceptable renewable energy sources and related technologies. We already have large nuclear submarines docked at Pearl Harbor, weapons of war that make Hawaii a more strategic wartime target. We don't need a nuclear reactor that creates radioactive wastes that we would have no where to store.

Hawaii is ideal for solar, wind, geothermal, hydroelectric, biomass, wave/tidal power and OTEC. I believe that Hawaii is ripe for research and development for renewable energy technologies. NextEra recognized this potential and aggressively sought to buy out the utilities. I hope that our state government seeks creative and aggressive initiatives to explore Hawaii's renewable energy potential.

Mahalo,

Caroline Kunitake

Submitted on: 3/26/2019 6:18:53 AM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Noel Morin	Individual	Oppose	No	

Comments:

Dear Senators.

Please oppose HB307. This proposal attempts the change the definition of "renewable energy sources" and will have undesired consequences. It introduces vague language that will distract us from efforts to implement renewable energy solutions that are truly environment-friendly. At its worst, it can enable the introduction of nuclear energy production in our state. As we've seen in the post-tsunami nuclear plant meltdown in Japan not too many years back, there are tremendous humanity risks associated with this technology, especially for a location like Hawaii.

We, instead, have the opportunity to focus our time and investment on other forms of renewable energy production that are already available to us, e.g., wind, solar, ocean thermal conversion, and geothermal. (The current definition lists 9 sources!) Several of these are still nascent in their development and adoption in our state and deserve our focus.

I also would like to raise concern about how this passed through the House with very little public notice of the hearing.

Thank you for your vigilance and care for our people and environment.

Sincerely,

Noel Morin

PO Box 6310

HILO, HI 96720

Submitted on: 3/26/2019 9:37:20 AM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Taurie Kinoshita	Individual	Oppose	No

Comments:

HB307 is unacceptably vague, allowing for *other self-replenishing non-fossil fuel resources* to be included in the definition for renewable energy. This language potentially allows the advancement of options such as nuclear energy, an energy source that is not a climate solution and comes with a great deal of risk. Nuclear is an unsafe technology, and absolutely the wrong direction to go. In addition, the language in this bill could potentially include non-fossil fuel energy sources that still produce harmful amounts of greenhouse gases, further disrupting climate stability. Moreover, the way this bill was pushed through the House was not pono. I urge you to strongly oppose this bill.

Submitted on: 3/26/2019 11:32:34 AM

Testimony for EET on 3/27/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dyson Chee	Individual	Oppose	No

Comments:

My name is Dyson Chee and as a 17 year old high schooler I stand in opposition to HB307. The issue of climate change is already becoming more and more severe, with nations and peoples all around the world suffering from it-and its impacts will only get worse as we continue to be addicted to fossil fuels. We cannot contine to use power sources that are reealistically not-renewable and just lable them as "renuable." Plus, this bill was shoved through House with no respect as to what the community would think of it. This bill is the very embodyment of the opposite of sustainability-corporate greed and a willingness to take an easier, slower route in the face of climate chaos that will impact future generations greater than current ones-though it is already affecting the later. Please do NOT pass HB307, for the sake of your children and others.

From: <u>mak221@aol.com</u>

To: <u>EETTestimony</u>; <u>CPH Testimony</u>

Subject: STRONG STRONG OPPOSITION TO HB307

Date: Monday, March 25, 2019 3:10:28 PM

Aloha Esteemed Committee Members,

My name is Mark Koppel. I live at 31-392 Lepoloa Rd, Ninole.

I am writing in EXTREME OPPOSITION TO HB307, regarding twisting the definition of "non-fossil" fuels.

The main reason for climate change is increased CO2, which the doomed Hu Honoa tree-BURNING plant proposed to do. As any child can tell you, C+O2 = CO2. Plus, the diesel exhaust from trucks needed to bring trees to BURN, producing EVEN MORE CO2.

What to do then? Hey, how about FREE ENERGY FROM THE SUN? No burning; no pollution; less climate change.

Non-fossil fuel must not include BURNING trees, garbage, etc. etc.

Let's get to work and create lots of JOBS in Solar Energy, not in doomed power plants that BURN things and create CO2.

The people of Hawaii are watching this issue very carefully, and keeping score on how everyone

votes.

Mahalo,

Mark A. Koppel