



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 WAYS AND MEANS

Thursday, February 20, 2020 10:35 AM State Capitol, Conference Room 211

In consideration of SB2072, SD1
RELATING TO RENEWABLE ENERGY.

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

The Department of Business, Economic Development & Tourism (DBEDT) appreciates the intent and provides the following comments for SB2072, SD1, requiring the Hawaii State Energy Office (HSEO), the Governor's office and DBEDT, to develop a strategic plan to achieve Hawaii's energy objectives.

DBEDT looks forward to working with and supporting HSEO in the creation of a statewide strategy to reach Hawaii's energy goals by 2045. We see value in the development of the proposed strategy and with passage of this legislation that may take into account the new powers and duties of the HSEO and any updated policies and laws.

DBEDT supports this bill provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget.

Thank you for the opportunity to testify.

HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE GOVERNOR

(808) 587-3807

SCOTT J. GLENN CHIEF ENERGY OFFICER

235 South Beretania Street, 5TH Floor, Honolulu, HI 96813 | energy.hawaii.gov

Testimony of SCOTT J. GLENN, Chief Energy Officer



before the SENATE COMMITTEE ON WAYS AND MEANS

Thursday, February 20, 2020 10:35 AM State Capitol, Conference Room 211

In SUPPORT of SB 2072, SD1 RELATING TO RENEWABLE ENERGY

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee, the Hawaii State Energy Office (HSEO) supports SB 2072, SD1, requiring the development of a strategic plan that outlines benchmarks to achieve Hawaii's energy objectives, provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget. The HSEO also offers comments for your consideration.

We whole-heartedly agree that this type of strategy is needed, and look forward to working with the Legislature, the Office of the Governor, the Department of Business, Economic Development and Tourism, and our energy and community stakeholders to refine and achieve these important objectives. HSEO appreciates the need for a lead entity to synthesize, envision, explain, and hear from communities how renewable energy projects can be sited to minimize impacts and address community concerns, and to assess how Hawaii's several related statutes regarding renewable energy, energy efficiency, and zero emissions clean economy target will be achieved. We believe asking the HSEO to do this is consistent with Act 122, Session Laws of Hawaii 2019.

We have also discussed with the Office of Planning our willingness to take the lead on, and include in this study, a related effort from SB 2805, SD1, the purpose of which is "to create a renewable energy siting plan that identifies appropriate lands needed to achieve each benchmark of the Hawaii clean energy initiative." We concur with the Office of Planning that the lead responsibility for the study would be better assigned to the Hawaii State Energy Office and, to be consistent with the Renewable Portfolio Standard and zero emissions clean energy economy target contained in Sections 269-92 and 225-P of the Hawaii Revised Statutes, respectively, would refer to "Hawaii's statutory clean energy goals." This could be added to SB 2072, SD1, as a new section.

To ensure adequate implementation, we suggest that both the strategic plan and the siting study refer to statutory energy goals listed in Section 1 of SB 2072, SD1, and referenced above. Although many of the steps may be the same, there may be differences, especially in

the outer years, between a plan to reach the renewable portfolio standard goal currently in place (which applies to regulated electric utilities and compares generation to sales); any potential new electricity-sector renewable portfolio standards (currently under discussion); the zero emissions clean energy economy target contained in Section 225-P of the Hawaii Revised Statutes, which applies to all forms of energy (including those from gas utility services, unregulated energy service providers, and the transportation sector); or the goal of "one hundred percent energy self-sufficiency by 2045," which may be interpreted to exclude any imports and include transportation fuels.

With the addition of the Renewable Energy Facility siting study and the clarifications above, we recommend that the language of the bill be revised to read as shown in the attachment.

Thank you for the opportunity to testify.

Attachment to testimony Suggested language for SB 2072, SD2

SECTION 1. The legislature finds that section 269-92, Hawaii Revised Statutes, requires each utility company that sells electricity for consumption in this State to establish a renewable energy portfolio standard of one hundred per cent of its net electricity sales by December 31, 2045.

The Legislature further finds that section 225P-5, Hawaii Revised Statutes, establishes a zero emissions clean energy economy target to sequester more atmospheric carbon and greenhouse gases than emitted within the State as quickly as practicable, but no later than 2045.

The Legislature further finds that there is a need for a lead entity to synthesize, envision, explain, and hear from communities how renewable energy projects can be sited to minimize impacts and address community concerns.

The legislature further finds that no strategic plan currently exists for the attainment of these goals.

The legislature further finds that the Hawaii state energy office has stated its willingness to take on the task, working with the Legislature, the Office of the Governor, the Department of Business, Economic Development and Tourism, Hawaii's communities, energy, and broader stakeholders, to envision and explain how Hawaii's several related statutes regarding renewable energy, energy efficiency, and zero emissions clean economy target will be synthesized and achieved.

The purpose of this Act is to require the governor; the department of business, economic development, and tourism; and the Hawaii state energy office to develop a strategic plan; and, working with the office of planning, land use commission, planning departments of each county, electric utilities, and with public input, develop and incorporate a renewable energy siting study; and to develop an outline of benchmarks to meet Hawaii's statutory energy and zero emissions clean energy economy targets.

SECTION 2. (a) The Hawaii state energy office, through the department of business, economic development, and tourism, and in cooperation with the office of the governor, shall establish a strategic plan that identifies clear benchmarks to:

- (1) Attain the renewable portfolio standards goal and zero emissions clean energy economy target; and
- (2) Provide clarity for utilities, utility-scale developers, the public, and Hawaii's communities, energy, and broader stakeholders, in planning to

achieve the benchmarks determined under paragraph (1).

- (b) The strategic plan shall identify benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the goals.
- SECTION 3. (a) The Hawaii state energy office shall prepare a comprehensive renewable energy siting study, in consultation with the office of planning, land use commission, planning departments of each county, electric utilities, and with public input.
- (b) The study shall provide an inventory of suitable land for each of the renewable energy technologies on each of the islands, the estimated land requirements to produce various amounts of renewable energy, and shall solicit input from communities on how renewable energy projects can be sited to minimize impacts and address community concerns.
- (c) The study shall develop multiple scenarios of land requirements to provide renewable energy in amounts sufficient to meet the benchmarks of Hawaii's statutory clean energy goals.
- (d) For the purposes of this section, "renewable energy" has the same meaning as defined under section 269-91, Hawaii Revised Statutes.
- SECTION 4. The Hawaii state energy office shall submit the strategic plan, including proposed strategies, benchmarks, and metrics, the utility-scale renewable energy siting study, and any proposed legislation, to the legislature no later than twenty days prior to the convening of the regular session of 2022.
- SECTION 5. There is appropriated out of the energy security special fund the sum of \$450,000 or so much thereof as may be necessary for the development of the strategic plan and \$- for the siting study. The sum appropriated shall be expended by the Hawaii state energy office for the purposes of this Act.

SECTION 6. This Act shall take effect on July 1, 2020.



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The Senate Committee on Ways and Means From: Brodie Lockard, Founder, 350Hawaii.org Date: Thursday, February 20, 2020, 10:35 am

In support of SB 2072 SD1 with amendments

Dear Chair Dela Cruz and members:

350Hawaii's 6,000 members support SB 2072 SD1 if it is amended in several ways.

We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard. Five years passing before someone noticed that we have no plan demonstrates clearly how low a priority that RPS has been for the lege.

The plan needs to go into great detail in dozens of areas so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

The plan needs to NOT include any temporary use of alternative fuels that may be used as so-called "bridge fuels." Even considering such fuels only delays real progress toward our goal. They're a distraction and a waste of effort and time. And we are extremely short on time.

Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are a great idea. Realistic benchmarks that consider all of the issues will make it abundantly clear that 2045 is far, far too late to address the climate chaos that gets worse every day.

The benchmarks this plan sets need to steer Hawaii toward a goal of 100% clean energy by 2030, not 2045.

Unprecedented wildfires, floods, hurricanes, heat, rain bombs and other monthly catastrophes make it clear that every level of government, everywhere, needs to act like the climate is an emergency. Because it is. And we have a decade before it's too late.

Last year, for example, towns and cities in Hawaii set or tied 270 record hot days. 270 in one year.

We can still avoid some of the Climate Crisis's most cataclysmic effects. But only if we act immediately, and with enormous resolve.

Pass this. Watch the reports and disasters get worse. Then next year, pass laws that will get us to 100% by 2030. That will leave us eight years to take real action.

Brodie Lockard Founder, 350Hawaii.org

Big Island Community Coalition

421 Lama St. Hilo, HI 96720



February 18, 2020

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

On behalf of the Big Island Community Coalition, I'd like to offer testimony in **SUPPORT** of **SB 2072 SD1**, with an amendment.

Hawaii's 2045 RPS goal is commendable and has inspired other governments to follow. That said, we must have a strategic plan that outlines critical milestones and metrics needed for us to meet or exceed our 100% RPS. Measurable benchmarks and the metrics to track our progress must be incorporated into the plan. Without these, we will operate blindly and will fail.

Hawaii must be aggressive and focused on meeting our decarbonization goals. The planet is warming in an unprecedented manner and this has resulted in super storms, large fires, droughts, severe flooding, and mega rain events. Our local coastal communities are at risk of displacement by rising sea levels. Tropical disease spread is now more likely as vectors expand their geographic reach. The climate crisis is an existential threat and requires urgent action.

Needed Amendment

The bill refers to the use of 'temporary alternative fuels.' We feel that the bill must be amended to remove this. In order to focus efforts on true emission-free solutions, it's best that we not distract or dilute our efforts to rapidly arrive at our renewable energy solutions. The cost of emission-free renewables have made it unconscionable to propose alternatives that might extend our dependency on fossil fuels, or allow us to continue to contribute to greenhouse gas emissions. We must focus on efforts on abundant, locally available energy sources – solar, wind, geothermal, hydro, wave - in order to meet our goal. To include alternative fuels as a 'bridge fuel', will only delay our progress towards our 2045 100% RPS goal.

Please pass **SB 2072 SD1** this with our recommended amendment.

Sincerely,

Richard Ha President

Big Island Community Coalition

The Big Island Community Coalition is a grassroots organization dedicated to improving the quality of life of Hawaii Island residents.



Email: communications@ulupono.com

SENATE COMMITTEE ON WAYS & MEANS Thursday, February 20, 2020 — 10:35 a.m. — Room 211

Ulupono Initiative supports SB 2072 SD 1, Relating to Renewable Energy.

Dear Chair Dela Cruz and Members of the Committee:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs at Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by creating more locally produced food; increasing affordable clean renewable energy and transportation options; and better managing waste and fresh water resources.

Ulupono supports SB 2072 SD 1, which requires the Governor; Department of Business, Economic Development, and Tourism; and the Hawaii State Energy Office to develop a strategic plan that outlines benchmarks to achieve a 100% renewable energy portfolio standard.

Ulupono supports energy efficiency measures to lower consumption across the State. As Hawai'i's energy issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies that reduce the State's overall energy demand, which in return should save the State, and taxpayers, money. While the State's 100% renewable energy goal by 2045 is an important standard, achieving this will require everyone's commitment. It is important for the State to develop a plan with benchmarks and determine ways in which the State can facilitate the achievement of this critical goal.

Thank you for this opportunity to testify.

Respectfully,

Amy Hennessey, APR Senior Vice President, Communications & External Affairs



SB 2072, SD1, RELATING TO RENEWABLE ENERGY

FEBRUARY 20, 2020 · SENATE WAYS AND MEANS COMMITTEE · CHAIR SEN. DONOVAN DELA CRUZ

POSITION: Support.

RATIONALE: IMUAlliance supports SB 2072, SD1, relating to renewable energy, which requires the Governor; Department of Business, Economic Development, and Tourism; and the Hawai'i State Energy Office to develop a strategic plan that outlines benchmarks to achieve a 100 percent renewable energy portfolio standard, and requires the Department of Business, Economic Development, and Tourism to submit the strategic plan to the Legislature before the Regular Session of 2022.

According to a report produced by the Hawai'i Climate Change Mitigation and Adaptation Commission, global sea levels could rise more than three feet by 2100, with more recent projections showing this occurring as early as 2060. In turn, over the next 30 to 70 years, approximately 6,500 structures and 19,800 people statewide will be exposed to chronic flooding.

Additionally, an estimated \$19 billion in economic loss would result from chronic flooding of land and structures located in exposure areas. Finally, approximately 38 miles of coastal roads and 550 cultural sites would be chronically flooded, on top of the 13 miles of beaches that have already been lost on Kaua'i, O'ahu, and Maui to erosion fronting shoreline armoring, like seawalls.

Furthermore, according to research conducted by Michael B. Gerrard from Colombia Law School, modern-day slavery tends to increase after natural disasters or conflicts where large numbers of

will very likely lead to a significant increase in the number of people who are displaced and, thus vulnerable, to human trafficking. While the Paris Climate Agreement of 2015 established objectives to limit global temperature increases and several international agreements are aimed at combating modern-day slavery, it is highly uncertain whether they will be adequate to cope with the scale of the problem that is likely to occur as a result of climate change.

As we work to reduce carbon emissions and stave off the worst consequences of climate change, we must begin preparing for the adverse impact of sea level rise on our shores. We are now quantifying the speed at which we must act. We cannot continue to develop the 25,800-acre statewide sea level rise exposure area—one-third of which is designated for urban use—without risking massive structural damage and, potentially, great loss of life.

Therefore, our state must take steps to expand Hawai'i's renewable energy supply, including by developing a plan to swiftly increase jobs aligned with the state's transition to a clean energy economy. For the sake of our overheating planet, we cannot afford to wait to craft strategies to make renewable energy universal for our island home.

Submitted on: 2/18/2020 9:38:12 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
katherine kazlauskas	Testifying for 350Hawaii	Support	No

Comments:

To: The Senate Committee on Ways and Means

From: Katherine Kazlauskas

Date: Thursday, February 20, 2020, 10:35 am

In support of SB 2072 SD1 with amendments

Dear Chair Dela Cruz and members:

I support SB 2072 SD1 if it is amended in several ways.

We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard. Five years passing before someone noticed that we have no plan demonstrates clearly how low a priority that RPS has been for the legislature.

The plan needs to go into great detail in dozens of areas so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

The plan needs to NOT include any temporary use of alternative fuels that may be used as so-called "bridge fuels." Even considering such fuels only delays real progress toward our goal. They're a distraction and a waste of effort and time. And we are extremely short on time.

Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are a great idea. Realistic benchmarks that consider all of the issues will make it abundantly clear that 2045 is far, far too late to address the climate chaos that gets worse every day.

The benchmarks this plan sets need to steer Hawaii toward a goal of 100% clean energy by 2030, not 2045.

Unprecedented wildfires, floods, hurricanes, heat, rain bombs and other monthly catastrophes make it clear that every level of government, everywhere, needs to act like the climate is an emergency. Because it is. And we have a decade before it's too late.

Last year, for example, towns and cities in Hawaii set or tied 270 record hot days. 270 in one year. Last week Britain had a "bomb cyclone" that caused 100 foot waves.

We can still avoid some of the Climate Crisis's most cataclysmic effects. But only if we act immediately, and with enormous resolve.

Pass this. Watch the reports and disasters get worse. Then next year, pass laws that will get us to 100% by 2030. That will leave us eight years to take real action.

Katherine Kazlauskas

Submitted on: 2/18/2020 10:18:10 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Climate Protector	Testifying for Climate Protectors Coalition	Support	No

Comments:

NOTICE OF DECISION MAKING

DATE: Thursday, February 20, 2020

TIME: 10:35 A.M.

Conference Room 211

PLACE: State Capitol

415 South Beretania Street

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Committee on Ways and Means
The Climate Protectors Coalition Supports SB2818 SD1!

We are a new 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, and rising sea levels. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible.

This bill is important for achieving the State's 2045 energy goals. It makes good sense to have the State Energy Office develop a strategic plan and benchmarks to help reach

those goals. This will help Hawaii develop its energy future without natural gas, which is mostly methane—a potent greenhouse gas. Hawaii needs to avoid methane, not encourage its use even temporarily as a "bridge fuel." Please pass this bill to help minimize greenhouse gas emissions. Mahalo!



TESTIMONY BEFORE SENATE COMMITTEE ON WAYS AND MEANS

S.B. 2072, SD 1

Relating to Renewable Energy

Thursday, February 20, 2020 10:35 a.m., Agenda Item #9 State Capitol, Conference Room 211

Chris Lau
Manager, Corporate Energy Planning
Hawaiian Electric Company, Inc.

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

My name is Chris Lau and I am testifying on behalf of Hawaiian Electric Company, Inc., **offering comments on S.B. 2072, SD1**, Relating to Renewable Energy. The bill requires the Hawai'i State Energy Office (HSEO) to submit a strategic plan, including proposed strategies and benchmarks to measure progress toward achieving the goal of 100% energy self-sufficiency by 2045 and appropriates funds for the development of the plan.

Hawaiian Electric supports the development of a State energy plan to raise and address energy policy issues and offers the following comments for consideration:

- The strategic plan developed by HSEO should be coordinated with Hawaiian
 Electric to align HSEO's planning with Hawaiian Electric's long-term planning
 processes such as the Integrated Grid Planning process. This will help to ensure
 that the strategic plan meets Hawaiian Electric's system planning criteria.
- HSEO should work with a broad set of stakeholders to collaboratively develop its strategic plan. This will increase support for the plan and ensure it is as robust as possible.

Thank you for this opportunity to testify.

Submitted on: 2/15/2020 7:50:08 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

Comments:

I support SB 2072 with amendments.

We must have a strategic plan that outlines benchmarks needed to meet our 100% renewable energy portfolio standard. The plan must have cover in detail many critical areas so that accountable officials and groups can guide our efforts towards achieving our clean energy goals. Benchmarks that are measurable and the metrics to monitor progress toward attaining the 100% goal should be incorporated.

The bill must be amended to exclude any dependency on alternative/bridge fuels. Better yet - the bill should refer to solution needing to not only be fossil-fuel free but also emission-free. We have the opportunity to leverage locally available energy sources (e.g., solar, wind, hydro, geothermal) in order to meet or exceed our goal. To include alternative fuels as a solution will only distract us and delay our transition. 2045 is already not aggressive enough. Let's not build in further delays.

Please pass this with recommended amendments.

Sincerely, Noel Morin Hilo

Submitted on: 2/15/2020 2:34:50 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Peter Sternlicht	Individual	Support	No

Comments:

To: Chair Wakai, Vice Chair Taniguchi, and Members of the Committee,

My name is Peter Sternlicht. I live in Pepeekeo on the Big Island of Hawaii.

The future of clean, renewable energy is very important to me and my family. I am very much aware of the challenges we face in the future as an Island state with regard to energy, how we use it and where it comes from. The two most pressing challenges in my opinion are Climate Change and the availability and the affordability of our energy mix in the future. I see these as two parts of the same existential threat.

As an American island state, we are dependent on fossil fuel in a manner that is different from those on the mainland. We use petroleum for both electricity generation and transportation. I encourage you to use the existing mandate for 100 percent renewable energy goal by 2045 to ensure we use all the local resources available to us in that effort. The less we rely on imported resources the healthier our community will be.

Readily available academic research on the future of fossil fuel supplies combined with the idea of using "bridge fuels" (natural gas) clearly indicates that if we go the "bridge fuel" route we will waste valuable time and financial resources; time and money we don't have to waste

The boom in fracked natural gas is rapidly drying up. If you look at investment trends and production yields today that will be quite clear. I support a strategy that utilizes resources that are not based on short term speculation (10 years or less) while minimizing our unavoidable dependency on imported resources.

This is a matter that is urgent and needs State leadership to set the rules in a manner that will be effective, efficient and timely. All scaled mitigation efforts will take time to implement. Time is not on our side.

I encourage a making approval of our strategy development a high-level priority that considers all stakeholders' interests, inputs and potential outcomes.

Respectfully,

Peter Sternlicht

Submitted on: 2/15/2020 4:03:40 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Rachel Solemsaas	Individual	Support	No

Comments:

I support SB 2072 with amendments.

We must have a strategic plan that outlines benchmarks needed to meet our 100% renewable energy portfolio standard. The plan must have cover in detail many critical areas so that accountable officials and groups can guide our efforts towards achieving our clean energy goals. Benchmarks that are measurable and the metrics to monitor progress toward attaining the 100% goal should be incorporated.

Please consider an amendment to exclude any dependency on alternative/bridge fuels. With climate change upon us, we need solutions to be fossil fuel free and emission free. To include alternative fuels as a solution will only distract us and delay our transition. 2045 is already may even be too late. This bill can give us an opportunity to act now.

Submitted on: 2/16/2020 9:47:36 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
tlaloc tokuda	Individual	Support	No

Comments:

To: The Senate Committee on Ways and Means

From: Tlaloc Tokuda, 350 HI volunteer

Date: Thursday, February 20, 2020, 10:35 am

In support of SB 2072 SD1 with amendments

Dear Chair Dela Cruz and members:

I support SB 2072 SD1 if it is amended in several ways.

We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard. Five years passing before someone noticed that we have no plan demonstrates clearly how low a priority that RPS has been for the legislature.

The plan needs to go into great detail in dozens of areas so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

The plan needs to NOT include any temporary use of alternative fuels that may be used as so-called "bridge fuels." Even considering such fuels only delays real progress toward our goal. They're a distraction and a waste of effort and time. And we are extremely short on time.

Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are a great idea. Realistic benchmarks that consider all of the issues will make it abundantly clear that 2045 is far, far too late to address the climate chaos that gets worse every day.

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Unprecedented wildfires, floods, hurricanes, heat, rain bombs and other monthly catastrophes make it clear that every level of government, everywhere, needs to act like the climate is an emergency. Because it is. And we have a decade before it's too late.

Last year, for example, towns and cities in Hawaii set or tied 270 record hot days. 270 in one year. Last week Britain had a "bomb cyclone" that caused 100 foot waves.

We can still avoid some of the Climate Crisis's most cataclysmic effects. But only if we act immediately, and with enormous resolve.

Pass this. Watch the reports and disasters get worse. Then next year, pass laws that will get us to 100% by 2030. That will leave us eight years to take real action.

Tlaloc Tokuda

Kailua Kona HI 96740

<u>SB-2072-SD-1</u> Submitted on: 2/16/2020 9:50:09 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

Submitted on: 2/17/2020 9:29:25 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
ryan christopher	Individual	Support	No

Comments:

Dear Chair Dela Cruz and members:

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Ryan Christopher

Honokaa HI

<u>SB-2072-SD-1</u> Submitted on: 2/17/2020 12:52:52 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

Submitted on: 2/17/2020 12:28:01 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

Dear Chair Dela Cruz and members:

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We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard. Five years passing before someone noticed that we have no plandemonstrates clearly how low a priority that RPS has been for the legislature.

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me ke aloha 'Ä• ina,

Nanea Lo

<u>SB-2072-SD-1</u> Submitted on: 2/17/2020 1:53:53 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
william metzger	Individual	Support	No	

Comments:

I support this measure.

<u>SB-2072-SD-1</u> Submitted on: 2/17/2020 2:30:58 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Katherine Pomeroy	Individual	Support	No

Submitted on: 2/17/2020 3:45:37 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Elif Beall	Individual	Support	No

Comments:

To: The Senate Committee on Ways and Means

From: Elif Beall

Date: Thursday, February 20, 2020, 10:35 am

In support of SB 2072 SD1 with amendments

Dear Chair Dela Cruz and members:

I support SB 2072 SD1 if it is amended in several ways.

We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard.

The plan needs to go into great detail in dozens of areas so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

The plan should not include any temporary use of alternative fuels that may be used as so-called "bridge fuels." Even considering such fuels only delays real progress toward our goal.

Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are a great idea. Realistic benchmarks that consider all of the issues will make it abundantly clear that 2045 is far, far too late to address the climate chaos that gets worse every day.

The benchmarks this plan sets need to steer Hawaii toward a goal of 100% clean energy by 2030, not 2045.

Unprecedented wildfires, floods, hurricanes, heat, rain bombs and other monthly catastrophes make it clear that every level of government, everywhere, needs to act like the climate is an emergency. Because it is. And science tells us we have a decade before it's too late.

Last year, for example, towns and cities in Hawaii set or tied 270 record hot days. And in my community, the "rain bomb" that hit north Kaua`i and destroyed homes and roads made news around the world.

We can still avoid some of the Climate Crisis's most cataclysmic effects. But only if we act immediately, and with enormous resolve. SB 2072 SD1 if it is amended in these ways will help.

Elif Beall

Submitted on: 2/18/2020 11:50:11 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

Comments:

aloha and mahalo for supporting this bill which requires the Governor; Department of Business, Economic Development, and Tourism; and the Hawaii State Energy Office to develop a strategic plan that outlines benchmarks to achieve a 100% renewable energy portfolio standard. it also requires the Department of Business, Economic Development, and Tourism to submit the strategic plan to the Legislature before the Regular Session of 2022.

It is long overdue as are most actions to protect our islands and world from the ravages of wasteful energy use and climate change.

sincerely,

janice palma-glennie

<u>SB-2072-SD-1</u> Submitted on: 2/18/2020 11:56:34 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

<u>SB-2072-SD-1</u> Submitted on: 2/18/2020 2:02:34 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
nicole tergeoglou	Individual	Support	No	

<u>SB-2072-SD-1</u> Submitted on: 2/18/2020 6:47:41 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Mark K.Wilson III	Individual	Support	No

Submitted on: 2/18/2020 8:57:50 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

Comments:

Dear Chair Dela Cruz and Members of the Committee on Ways and Means,

I am writing in support of SB2072 SD1.

I support SB 2072 SD1 if it is amended in several ways.

We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard. Five years passing before someone noticed that we have no plandemonstrates clearly how low a priority that RPS has been for the legislature.

The plan needs to go into great detail in dozens of areas so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

The plan needs to NOT include any temporary use of alternative fuels that may be used as so-called "bridge fuels." Even considering such fuels only delays real progress toward our goal. They're a distraction and a waste of effort and time. And we are extremely short on time.

Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are a great idea. Realistic benchmarks that consider all of the issues will make it abundantly clear that 2045 is far, far too late to address the climate chaos that gets worse every day.

The benchmarks this plan sets need to steer Hawaii toward a goal of 100% clean energy by 2030, not 2045.

Unprecedented wildfires, floods, hurricanes, heat, rain bombs and other monthly catastrophes make it clear that every level of government, everywhere, needs to act like the climate is an emergency. Because it is. And we have a decade before it's too late.

Last year, for example, towns and cities in Hawaii set or tied 270 record hot days. 270 in one year. Last week Britain had a "bomb cyclone" that caused 100 foot waves.

We can still avoid some of the Climate Crisis's most cataclysmic effects. But only if we act immediately, and with enormous resolve.

Pass this. Watch the reports and disasters get worse. Then next year, pass laws that will get us to 100% by 2030. That will leave us eight years to take real action.

Mahalo,

Caroline Kunitake

Submitted on: 2/18/2020 9:05:13 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

Comments:

Dear Chair Dela Cruz and WAM members,

I strongly support the need for a strategic plan to reach 100% renewable energy in our State. Such a plan may become critical to our very survival in Hawaii. However, I have some comments on how and when this goal should be met.

- I agree that the plan should consist of realistic and measurable benchmarks that are clear to all persons, organizations and companies contributing to meeting the 100% renewable energy goal.
- There should be complete agreement on what types of energy are renewable. Any mention of "bridge fuels" should be eliminated from the plan. An example would be liquid natural gas (LNG) which is a fossil fuel.
- The year for achieving 100% renewable energy in Hawaii should be revised to 2030 based on the latest scientific information and the time frame we face with global warming. Our planet simply cannot wait until 2045 for these changes to take effect.
- In particular, the steps for achieving 100% renewable energy in the transportation sector need to be clearly spelled out due to their importance in mitgating climate change. I would also add that the agriculture sector is extremely important to include in the plan due not only to its current fossil fuel usage but also for its future carbon sequestration capabilities.
- I agree that the plan must be completed prior to the start of the 2022 legislative session. Regardless of the cost, this plan, if prepared and carried out judiciously, will save the State billions in the long run.

Please support SB2072 SD1 this legislative session. It is critical if Hawaii is to make substantial, demonstrable progress on our goal of 100% renewable energy.

Thank you for the opportunity to comment.

Sincerely,

Jan Pappas

Aiea, Hawaii

Submitted on: 2/18/2020 9:59:26 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
John Nix	Individual	Support	No

Comments:

To: The Senate Committee on Ways and Means

From: **Dr. John and Nix, Kihei** Date: Thursday, February 20, 2020,

In support of SB 2072 SD1 with amendments

Dear Chair Dela Cruz and members:

I support SB 2072 SD1 if it is amended in several ways.

We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard. Five years passing before someone noticed that we have no plandemonstrates clearly how low a priority that RPS has been for the legislature.

The plan needs to go into great detail in dozens of areas so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

The plan needs to NOT include any temporary use of alternative fuels that may be used as so-called "bridge fuels." Even considering such fuels only delays real progress toward our goal. They're a distraction and a waste of effort and time. And we are extremely short on time.

Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are a great idea. Realistic benchmarks that consider all of the issues will make it abundantly clear that 2045 is far, far too late to address the climate chaos that gets worse every day.

The benchmarks this plan sets need to steer Hawaii toward a goal of 100% clean energy by 2030, not 2045.

Unprecedented wildfires, floods, hurricanes, heat, rain bombs and other monthly catastrophes make it clear that every level of government, everywhere, needs to act like the climate is an emergency. Because it is. And we have a decade before it's too late.

Last year, for example, towns and cities in Hawaii set or tied 270 record hot days. 270 in one year. Last week Britain had a "bomb cyclone" that caused 100 foot waves.

We can still avoid some of the Climate Crisis's most cataclysmic effects. But only if we act immediately, and with enormous resolve.

Pass this. Watch the reports and disasters get worse. Then next year, pass laws that will get us to 100% by 2030. That will leave us eight years to take real action.

Mahalo,

Dr. John and Nix, Kihei

Submitted on: 2/18/2020 10:28:17 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lynn Aaberg	Individual	Support	No

Comments:

Aloha Chair Dela Cruz and members:

I support SB 2072 SD1 if it is amended in several ways.

We must have a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard.

The plan needs to go into great detail in dozens of areas so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

The plan needs to NOT include any temporary use of alternative fuels that may be used as so-called "bridge fuels." Even considering such fuels only delays real progress toward our goal. They're a distraction and a waste of effort and time, rewarding only the oil and gas companies.

Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are needed. Realistic benchmarks that consider all of the issues will make it abundantly clear that 2045 is far, far too late to address the climate chaos that gets worse every day.

The benchmarks this plan sets need to steer Hawaii toward a goal of 100% clean energy by 2030, not 2045.

This is a climate emergency and we must act before it is too late! We must act immediately and with resolve. These are times like no other, and require those working on behalf of our citizens to act with moral courage.

Sincerely,

Lynn Aaberg

<u>SB-2072-SD-1</u> Submitted on: 2/18/2020 10:35:23 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lori Nakamura-Higa	Individual	Support	No

Comments:

Aloha! Thank you for the opportunity to testify.

I strongly support SB2072 SD1

Mahalo and kind regards.

<u>SB-2072-SD-1</u> Submitted on: 2/19/2020 10:28:49 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Henri Etta Schmitz	Individual	Support	No

Submitted on: 2/19/2020 3:57:14 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Severine Busquet	Individual	Support	No

Comments:

Dear Chair Dela Cruz and members:

I support SB 2072 SD1 if it is amended in several ways.

We certainly need a strategic plan that outlines benchmarks to meet our 100% renewable energy portfolio standard. The plan needs to go into great detail so that the governor, DBEDT, and the Hawaii state energy office clarify how much needs to be done and how far behind we are in planning and reaching 100% clean energy.

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Benchmarks that are quantitatively and qualitatively measurable and the metrics to determine progress toward attaining the 100% goal are a great idea. The benchmarks this plan sets need to steer Hawaii toward a goal of 100% clean energy by 2030, not 2045.

We can still avoid some of the Climate Crisis's most cataclysmic effects. But only if we act immediately, and with enormous resolve.

Thanks for your attention

Severine Busquet

Hawaii Kai, Honolulu

Submitted on: 2/19/2020 4:41:37 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

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

Comments:

HAWAII MUST BE 100% RENEWABLE ENERGY.

THIS MEANS SOLAR. WE HAVE SUN 12 HOURS A DAY.

no, burning trees is not renewable. Stop Hu Honua now.

no, burning trees is not renewable. Stop Hu Honua now.

no, burning trees is not renewable. Stop Hu Honua now.

no, burning trees is not renewable. Stop Hu Honua now.