



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

DAVID Y. IGE  
GOVERNOR

MIKE MCCARTNEY  
DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
Web site: [dbedt.hawaii.gov](http://dbedt.hawaii.gov)

Telephone: (808) 586-2355  
Fax: (808) 586-2377

Statement of  
**MIKE MCCARTNEY**  
Director

Department of Business, Economic Development and Tourism  
before the

**SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

Friday, January 31, 2020

2:55 PM

State Capitol, Conference Room 414

In consideration of  
**SB2072**  
**RELATING TO RENEWABLE ENERGY.**

Chair Wakai, Vice Chair Taniguchi, and members of the Committee. The Department of Business, Economic Development & Tourism (DBEDT) appreciates the intent and provides the following comments for SB2072, 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.

We recognize the urgency of this effort. However, in order to allow for more complete outcome, we recommend that the due date for the actual strategy be set further out.

I will do what I can to support the HSEO and the Office of the Governor in this effort.

Thank you for the opportunity to testify.



# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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

DAVID Y. IGE  
GOVERNOR

SCOTT J. GLENN  
CHIEF ENERGY OFFICER

(808) 587-3807

## Testimony of **SCOTT J. GLENN, Chief Energy Officer**

before the  
**SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**  
Friday, January 31, 2020  
2:55 PM  
State Capitol, Conference Room 414

## In SUPPORT of **SB 2072** **RELATING TO RENEWABLE ENERGY.**

Chair Glenn Wakai, Vice Chair Taniguchi, and members of the Committee. The Hawaii State Energy Office (HSEO) supports SB 2072, requiring the development of a strategic plan that outlines benchmarks to achieve Hawaii's energy objectives. 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 broader stakeholders to refine and achieve these important objectives. HSEO appreciates the need for a lead entity to synthesize, envision, and explain how Hawaii's several related statutes regarding renewable energy, energy efficiency, energy self-sufficiency, greenhouse gas emissions, 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.

To ensure adequate implementation, we request your further guidance on the description of the goal. 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.

We also have concerns that the current bill may not allow adequate time and funding for the quantity and quality of work required for this important effort as envisioned in the bill, so request that funding be allocated from the Energy Security Special Fund and that the timeline be lengthened. Using the timeline in the current bill, we anticipate that the HSEO could develop a high-level strategic plan by working with the Legislature and key stakeholders in Hawaii’s energy landscape, which we envision could be the basis for a living document that could, as stated in the bill, “provide clarity for utilities, utility-scale developers, and energy distributors” and could be updated when necessary to reflect major changes in technologies, policies, and costs.

Thank you for the opportunity to testify.



**Hawaiian  
Electric**

**TESTIMONY BEFORE SENATE COMMITTEE ON  
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

**S.B. 2072  
Relating to Renewable Energy**

Friday, January 31, 2020  
2:55pm, Agenda Item #5  
State Capitol, Conference Room 414

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

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

My name is Chris Lau and I am testifying on behalf of Hawaiian Electric, offering **comments** on S.B. 2072, Relating to Renewable Energy. The bill requires the Department of Business, Economic Development, and Tourism (DBEDT) to submit a strategic plan, including proposed strategies and benchmarks to measure progress toward achieving the State's 100 percent renewable energy goal by 2045.

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 DBEDT should be coordinated with Hawaiian Electric to align DBEDT'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.
- DBEDT 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 given the short timeframe to develop it.

Thank you for this opportunity to testify.



P.O. Box 37158, Honolulu, Hawai'i 96837-0158  
Phone: 927-0709 [henry.lifeoftheland@gmail.com](mailto:henry.lifeoftheland@gmail.com)

COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM  
Senator Glenn Wakai, Chair  
Senator Brian T. Taniguchi, Vice Chair

DATE: Friday, January 31, 2020  
TIME: 2:55 p.m.  
PLACE: Conference Room 414

SB 2072 RELATING TO RENEWABLE ENERGY. Oppose

Aloha Chair Wakai, Vice Chair Taniguchi, and Members of the Committee

Life of the Land is Hawai'i's own energy, environmental and community action group advocating for the people and `aina for 49 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

The Public Utilities Commission has guided the Hawaiian Electric Companies to conduct community-interactive planning processes for three decades, first through Integrated Resource Planning (IRP) then Power Supply Improvement Planning (PSIP), and now Integrated Grid Planning (IGP).

Stakeholders across communities, sectors, and interests can participate.

SB 2072 would undermine this process.

The newly formed Hawaii State Energy Office would develop a strategic plan to end fossil fuel use in Hawaii by 2045.

The bill does not mention climate change, has no provisions for input by anyone but HSEO and DBEDT, proposes that the plan include bridge fuels and proposed that the plan provides clarity to developers and utilities. Presumably, the public would pay for the study that ices them out of the process.

Mahalo  
Henry Curtis  
Executive Director

**SB-2072**

Submitted on: 1/30/2020 7:24:12 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ted Bohlen	Testifying for Climate Protectors Coalition	Support	No

Comments:

Dear Chair Wakai, Vice Chair Taniguchi and members:

The Climate Protectors Coalition **strongly supports SB2072!**

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, including by planning strategically for 100% renewable power.

However, The Climate Protectors urge the bill be amended to eliminate any support for "bridge" fossil fuel use, which is not necessary and would only exacerbate the Climate Crisis. Please pass this bill with that amendment. Mahalo!

**SB-2072**

Submitted on: 1/30/2020 10:36:01 AM

Testimony for EET on 1/31/2020 2:55:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	Testifying for We Are One, Inc. - www.WeAreOne.cc - WAO	Support	No

Comments:

Support SB 2072 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.

[www.WeAreOne.cc](http://www.WeAreOne.cc)



---

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

To: The Senate Committee on Energy, Economic Development, and Tourism  
From: Brodie Lockard, Founder, 350Hawaii.org  
Date: Friday, January 31, 2020, 2:55 pm

**In support of SB 2072 with amendments**

Dear Chair Wakai, Vice Chair Taniguchi, and members:

350Hawaii supports SB 2072 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



Email: [communications@ulupono.com](mailto:communications@ulupono.com)

SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM  
Friday, January 31, 2020 — 2:55 p.m. — Room 414

**Ulupono Initiative supports SB 2072, Relating to Renewable Energy.**

Dear Chair Wakai 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**, 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

*Investing in a Sustainable Hawai'i*



## SB 2072, RELATING TO RENEWABLE ENERGY

JANUARY 31, 2020 · SENATE ENERGY, ECONOMIC  
DEVELOPMENT, AND TOURISM COMMITTEE ·  
CHAIR SEN. GLENN WAKAI

**POSITION:** Support.

**RATIONALE:** IMUAlliance supports SB 2072, 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 2021.

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 Columbia Law School, modern-day slavery tends to increase after natural disasters or conflicts where large numbers of people are displaced from their homes. In the decades to come, says Gerrard, **climate change 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.

**LATE**

**SB-2072**

Submitted on: 1/30/2020 11:58:43 PM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
David Mulinix	Testifying for Our Revolution Hawaii	Oppose	No

Comments:

Bridge fuels are a bridge to nowhere, they are not transition fuels and will not get us off of fossil fuels. We need to focus on getting off of fossil fuels and expanding the use of clean renewable energy, that does not include liquified natural gas or burning biomass.

**SB-2072**

Submitted on: 1/28/2020 11:19:03 PM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Caroline Kunitake	Individual	Support	No

Comments:

Please support SB 2072.

Mahalo,

Caroline Kunitake

**SB-2072**

Submitted on: 1/29/2020 9:09:52 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
J Riverstone	Individual	Support	No

Comments:



**SB-2072**

Submitted on: 1/29/2020 11:23:58 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Javier Mendez-Alvarez	Individual	Support	No

Comments:

**SB-2072**

Submitted on: 1/29/2020 12:58:46 PM

Testimony for EET on 1/31/2020 2:55:00 PM

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

Comments:

**SB-2072**

Submitted on: 1/29/2020 3:01:55 PM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
tlaloc tokuda	Individual	Support	No

Comments:

i support this bill

**SB-2072**

Submitted on: 1/29/2020 3:15:18 PM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Stephanie Hall Morin	Individual	Support	No

Comments:

**SB-2072**

Submitted on: 1/30/2020 7:23:45 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Zoe Malia Ozoa Loos	Individual	Support	No

Comments:

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

From: ZOE MALIA OZOA LOOS

Date: 1/30/2020

In support of SB 2072 with amendments

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I support SB 2072 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.

ZOE MALIA OZOA LOOS

**SB-2072**

Submitted on: 1/30/2020 7:56:30 AM

Testimony for EET on 1/31/2020 2:55:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
helen raine	Individual	Comments	No

Comments:

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

From: Helen Raine

Date: Friday, January 31, 2020, 2:55 pm

In support of SB 2072 with amendments

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I support SB 2072 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.

I hope that you will act decisively to ensure that Hawaii has the right plan to solve the climate crisis. Now is not the time for prevarication.

Helen Raine



**SB-2072**

Submitted on: 1/30/2020 8:38:02 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Joy Silver	Individual	Support	No

Comments:

**SB-2072**

Submitted on: 1/30/2020 8:50:09 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lana Rose Olson	Individual	Support	No

Comments:

**SB-2072**

Submitted on: 1/30/2020 10:34:07 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
David Dinner	Individual	Support	No

Comments:

**SB-2072**

Submitted on: 1/30/2020 2:11:43 PM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Nanea Lo	Individual	Support	No

Comments:

In support of SB 2072 with amendments

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I support SB 2072 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.

me ke aloha 'Ā• ina,

Nanea Lo

**LATE**

**SB-2072**

Submitted on: 1/30/2020 5:09:25 PM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Matthew Geyer	Individual	Support	Yes

Comments:

By putting these benchmarks in place we will be able to hold ourselves accountable to providing a solution to the most critical problem we face a state and worldwide. The need for clean renewable energy has never been greater. While we all agree that we need to switch to 100% clean renewable energy, the IPCC (International Panel on Climate Change) has gathered the data from scientists in every nation and their consensus is that we have 12 years to be carbon neutral worldwide. Given that we only have 12 years, we don't have time to use bridge fuels, we need to go straight to clean renewable energy. Hawai'i should lead the world and set an example for a clean renewable society and become an eco tourism destination that shows the world what is possible.

**LATE**

**SB-2072**

Submitted on: 1/30/2020 7:02:49 PM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Noel Morin	Individual	Support	No

Comments:

Dear Chair Wakai, Vice Chair Taniguchi, and members:

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

We must have a strategic plan that outlines benchmarks needed to meet our 100% renewable energy portfolio standard. How can we succeed without milestones that offer feedback on our efforts? 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.

What must be amended:

We must exclude alternative/bridge fuels. There isn't enough time to waste – incorporating alternatives just delays our overall progress and reduces our ability to reach our goals.

We must accelerate our plan – we need to aim for a 100% clean energy reality by 2030. 2045 is, I'm afraid, too late.

Please pass this with recommended amendments.

Sincerely,

Noel Morin

Hilo

**LATE**

**SB-2072**

Submitted on: 1/31/2020 12:03:18 AM

Testimony for EET on 1/31/2020 2:55:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Sherry Pollack	Individual	Oppose	No

Comments:

I strongly oppose this bill whose title says it is regarding renewable energy, yet has no language referencing climate change and instead talks about achieving energy self-sufficiency and proposes plans that include so called 'bridge fuels.' The fossil fuel industry has sold that lie for years, that bridge fuels exist, and we need them to transition to renewable energy. The truth is these 'bridge fuels,' like natural gas, are only a bridge to climate chaos. According to the IPCC report, greenhouse gas emissions need to begin to drop like a stone in 2020. We no longer have the luxury of allowing ourselves to be fooled by the fossil fuel industry and others who only care about their profits and not a livable future for our children. We already have a path to energy self-sufficiency now, and it's cheaper, greener, and more efficient and sustainable. We don't need to waste our time making a slow transition. The future is here right now, it's clean and renewable, it is the sun. Our children want to have a future. They don't want or need a bridge.