



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Written Testimony Presented to the
Senate Committee on Ways and Means
Thursday, February 20, 2020 at 10:35 a.m.

By

Richard Rocheleau, Director
Hawai'i Natural Energy Institute

And

Michael Bruno, PhD

Provost

University of Hawai'i at Mānoa

SB 2818 SD1 – RELATING TO RENEWABLE ENERGY

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

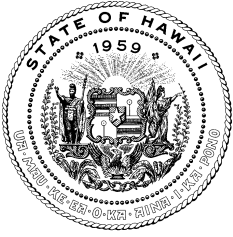
The Hawai'i Natural Energy Institute (HNEI) supports the intent of this bill and provides the following comments.

SB 2818 SD1 would require the Hawai'i State Energy Office (HSEO) to contract with HNEI to conduct a study to determine the economic and technical feasibility of the use of renewable gas by gas utilities, and would appropriate funds for the study.

HNEI is currently conducting preliminary assessments of the potential for producing renewable natural gas (RNG) in the state. These assessments will include an inventory of existing and potential feedstocks, conversion technologies, a review of incentives in other locations, and greenhouse gas emissions impacts of RNG production.

The study contemplated by the bill is both broader than HNEI's current assessments and includes more specific factors to be assessed, which may be appropriate before requiring gas utilities to meet specific renewable targets. However, HNEI believes that some of the listed factors such as those listed in section 3(a)(10)(F) effects on the economy, (G) balance of trade, culture, community, environment, land, and water, and (I) demographics, are unclear or overly broad. HNEI requests that these factors be clarified or left for the HSEO to determine their practicality and relevance to the study.

Thank you for the opportunity to comment on SB 2818 SD1.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5TH 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 WAYS AND MEANS
Thursday, February 20, 2020
10:35 AM
State Capitol, Conference Room 211

in SUPPORT of
SB 2818, 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 2818, SD1, which would assess the total potential of renewable natural gas production and use in Hawaii, with a specific focus on the potential for renewable gas to be distributed by regulated gas utility service providers, provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget.

Renewable natural gas is currently produced and used in Hawaii, providing valuable energy services, utilizing waste products, and capturing and diverting methane, a potent greenhouse gas, for beneficial use. It is our understanding that the Hawaii Natural Energy Institute is working on preliminary assessments.

We look forward to the results of their efforts, and to working with local and national experts, to develop realistic and integrated assessments of resources, economics, and milestones, including the production of renewable natural gas in Hawaii.

We do note that the list of tasks in the bill is quite extensive; removing some of the less easily quantified items on page 6 may allow for a more timely and focused study.

Thank you for the opportunity to testify.



LATE

DAVID Y. IGE
GOVERNOR

JOSH GREEN
LT. GOVERNOR

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

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

CATHERINE P. AWAKUNI COLÓN
DIRECTOR

JO ANN M. UCHIDA TAKEUCHI
DEPUTY DIRECTOR

Testimony of the Department of Commerce and Consumer Affairs

**Before the
Senate Committee on Ways and Means
Thursday, February 20, 2020
10:35 a.m.
State Capitol, Conference Room 211**

**On the following measure:
S.B. 2818, S.D. 1, RELATING TO RENEWABLE ENERGY**

WRITTEN TESTIMONY ONLY

Chair Dela Cruz and Members of the Committee:

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

The purposes of this bill are to: (1) require a study to determine economic and technical feasibility of the use of renewable gas by Hawaii gas utility companies; and (2) appropriate funds for the study.

The Department supports studying the ability of Hawaii's gas industry to produce cost-effective renewable gas so that the potential impact of imposing a renewable standard on customers can be evaluated. This study could help inform reasonable goals that can be established in any future renewable gas portfolio standards.

The Department appreciates how section 3(a) of the bill outlines the expected findings, which shall include, but not be limited to: (1) the potential volume and costs to

produce and/or import renewable gas to meet Hawaii's market needs; (2) an inventory of currently available feedstock and acreage in Hawaii for renewable gas production; (3) currently available incentives to develop renewable gas sources in Hawaii and in other jurisdictions; (4) how the use of renewable gas could affect the production of greenhouse gas emissions; and (5) the barriers to producing and utilizing renewable gas in Hawaii and possible solutions to overcome the barriers.

The Department appreciates how S.D. 1 has recognized the importance of studying and understanding Hawaii's existing gas market, which consists of both regulated and unregulated gas sales, to avoid unintended consequences. This holistic approach should better align any useful findings in the study, mitigate the potential for unintended shifts in sales to unregulated operations, and any future proposed statutory mechanisms, with the goals of reducing Hawaii's contribution to carbon production and greenhouse gases.

In addition, based on the Department's understanding of discussions that occurred between the Public Utilities Commission and the Hawaii State Energy Office (HSEO), the Department appreciates how S.D. 1 has tasked HSEO as the state agency to contract with Hawaii Natural Energy Institute (HNEI) to conduct the proposed study. The Department defers to the HSEO on whether the proposed amount of funding for the proposed study is sufficient.

Thank you for the opportunity to testify on this bill.



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, 10:35am

In strong opposition to SB 2818 SD1

Aloha Chair Dela Cruz and members,

350Hawaii.org's 6,000 members strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Company. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating “We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years.” In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Furthermore, the veiled threats by Hawaii Gas that consumer prices may have to be increased if pressed to transition towards renewable energy sources is particularly egregious. We have abundant data showing that renewable energy is now cheaper than fossil fuels. Hawaii is blessed with abundant zero-emission energy sources. With existing technology including energy storage, we can have energy independence for Hawaii through 100% clean energy if we invest properly in these resources and at the scale required. Rather than putting money into an unnecessary study, it would be much more in our best interests to invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals. There is no justification for taxpayer dollars to be put forward for such a study.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

Brodie Lockard
Founder, 350Hawaii.org



February 17, 2020

The Honorable Glenn Wakai, 15th District
415 South Beretania Street
Hawaii State Capitol, Room 407
Honolulu, HI 96813

RE: SB 2818 – Renewable Natural Gas Study – SUPPORT

Dear Senator Wakai,

The Coalition for Renewable Natural Gas (RNG Coalition) writes in strong **SUPPORT** of **SB 2818**, important legislation that would call for a study regarding the availability, feasibility, and costs of the use of renewable gas in Hawai'i by gas utility companies.

The RNG Coalition is the non-profit organization that provides public policy advocacy and education for the renewable natural gas industry in Hawai'i and across North America. Our membership is comprised of 220+ member companies - leaders from each sector of the industry - including producers of 95% of all RNG in the United States and Canada. Together, we advocate for the sustainable development, deployment and utilization of renewable natural gas (RNG or biogas-derived biomethane) so that present and future generations have access to domestic, renewable, clean fuel and energy.

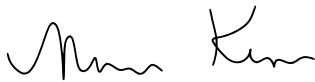
RNG is sustainably produced from methane captured as organic waste decomposes naturally at landfills, food waste recycling facilities, wastewater treatment plants, livestock and agricultural operations. RNG production facilities capture, control and convert methane that would otherwise be flared (combusted and wasted) – or worse, escape fugitively into the atmosphere as a greenhouse gas that is up to 86 times more potent than carbon dioxide – into an ultra-low carbon (or carbon negative) transportation fuel, renewable electricity or heat for residential, commercial and industrial customers.

We believe that the adoption of SB 2818 would provide the state of Hawai'i with important data to support future policies to increase the development, deployment and utilization of renewable natural gas. An increase in RNG activity would represent an excellent opportunity to decarbonize the State's economy while simultaneously improving environmental quality,

fostering improved management of waste streams, diversifying energy and fuel supply, and advancing Hawai'i's clean energy objectives by generating additional market demand for RNG. The development of RNG production facilities in Hawai'i would also improve the management of *organic* waste streams – thereby reducing the related air, soil, and water impacts of that waste. RNG projects developed in Hawai'i would also bring substantial economic benefits to the State. RNG production facilities attract between \$10-\$100 million in capital investment per project and the creation of up to 173 direct and indirect jobs per project.¹

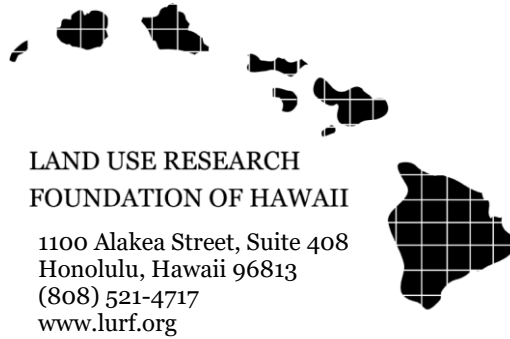
We appreciate your authorship of this important legislation and look forward to working together. The RNG Coalition is pleased to support SB 2818.

Sincerely,

A handwritten signature in black ink, appearing to read "Nina Kapoor". The signature is fluid and cursive.

Nina Kapoor Oliveira
Director of State Government Affairs
Coalition for Renewable Natural Gas
916.588.3033
Nina@RNGCoalition.com

¹https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/59077544ebbd1ad192d13ff6/1493660998766/ICF_RNG+Jobs+Study_FINAL+with+infographic.pdf



February 17, 2020

Senator Donovan Dela Cruz, Chair
Senator Gilbert S.C. Keith-Agaran, Vice Chair
Senate Committee on Ways and Means

Strong Support of SB 2818, SD1 RELATING TO RENEWABLE ENERGY (Requires the Hawaii State Energy Office to conduct a study regarding renewable gas to determine economic and technical feasibility of the use of renewable gas by gas utility companies. Appropriates funds for the study. (SD1))

WAM Hearing: Thursday, February 20, 2020, 10:35 a.m., in Conf Rm 211

The Land Use Research Foundation of Hawaii (LURF) is a private, non-profit research and trade association whose members include major Hawaii landowners, developers and utility companies. LURF's mission is to advocate for reasonable, rational and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources, and public health and safety.

Kama'aina LURF members have been generating and using renewable energy for over 100 years. LURF's members are the leaders in Hawaii's renewable energy research and development, technology, generation, transmission and provide renewable energy opportunities for agriculture, residential, commercial, industrial, and tourism projects.

LURF appreciates the opportunity to express its **strong support for SB 2818, SD1.**

SB 2818, SD1. This measure requires the Hawaii State Energy Office to conduct a study regarding renewable gas to determine economic and technical feasibility of the use of renewable gas by gas utility companies. The purpose of this bill is to conduct a study regarding the availability, feasibility, and costs of the use of renewable gas in Hawaii by gas utility companies; and to appropriate funds for the study.

LURF's position. Section 269-91, Hawaii Revised Statutes (HRS), identifies nine renewable energy resources, of which, at least five can be used to create some form of renewable gas: biogas, geothermal, biomass, biofuels and hydrogen.

These renewable gas resources can help Hawaii try to achieve its Renewable Portfolio Standards (RPS) goal of 100 percent by 2045, however, further study of this resource is needed to provide more information regarding the availability, feasibility and costs of this renewable energy source. To reach Hawaii's RPS goals, Hawaii's renewable energy future must include renewable gas resources, as well as all forms of renewable energy, as defined by Section 269-91, HRS.

This measure requires an appropriate, objective, science – and technology-driven study to explore and provide information regarding the feasibility of using more renewable gas by Hawaii's gas utilities.

We understand, however, that there may also be county legislation that would frustrate the purposes of this study, by severely restricting the further research, development and use of renewable natural gas, and increasing energy costs for consumers. Since it appears that the goal of this study is to provide the information and data that could develop a comprehensive information necessary to create policy and renewable energy standards for the use of renewable natural gas, **LURF would respectfully recommend that this bill be amended to add a provision** to restrict the counties from taking any actions that would frustrate the purposes of this study, restrict the further research, development and use of renewable gas, or increase the energy costs for consumers.

Conclusion. In view of the above discussion, LURF **strongly supports** the intent of SB 2818, SD1, and respectfully requests that your Committees adopt the above proposed amendments to SB 2818, SD1.

Thank you for the opportunity to provide comments relating to this measure.



Email: communications@ulupono.com

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

Ulupono Initiative supports SB 2818 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 2818 SD 1, which requires the Hawaii State Energy Office to conduct a study regarding renewable natural gas to determine economic and technical feasibility of the use of renewable gas by gas utility companies.

Ulupono supports renewable energy diversity in the State's effort to reach its 2045 goal. Having a well-developed and planned approach for gas utility renewable energy standards will prove to have lasting effects on Hawai'i's energy future. Renewable natural gas technologies certainly exist but pushing the gas utility to go to renewable sources as quickly as the electric utility ignores current market and technological realities. Establishing a renewable portfolio standard (RPS) for the gas utility should be done after careful study and that effort should not be used as a reason to delay fixing the well-known defects in the RPS definition for the electric utility.

Thank you for this opportunity to testify.

Respectfully,

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

Investing in a Sustainable Hawai'i

Hawaii Bioeconomy Trade Organization

HOUSE OF REPRESENTATIVES / HAWAII STATE SENATE
THE THIRTIETH LEGISLATURE
REGULAR SESSION OF 2020

COMMITTEE ON FINANCE/WAYS AND MEANS

Sen Donovan Dela Cruz, Chair
Sen Gil Keith-Agaran, Vice Chair

DATE: February 20, 2020
TIME: 10:35am
PLACE: Conference Room 211
State Capitol
415 South Beretania Street

TESTIMONY ON SENATE BILL NO. 2818 SD1, RELATING TO RENEWABLE ENERGY

Position: Support

To the Honorable Sen Donovan Dela Cruz, Chair; the Honorable Sen Gil Keith-Agaran, Vice Chair; and Members of the Committee:

The Hawaii Bioeconomy Trade Organization, made up of the commercial stakeholders in the fuels sector in Hawaii, strongly supports this bill.

We, now as ever, believe that the path towards a renewable future for Hawaii necessarily includes fuels and gases. However, in order to prevent price shocks, stalls and stoppages in service, and economic stress across many sectors, including Hospitality, we believe it is vital to perform a comprehensive study with a detailed scope of work prior to the assigning of arbitrary goals. Though it may look on the surface that creating aggressive goals produces positive long term outcomes, in this case, comparing Renewable Fuels to Renewable Electricity as a blanket approach would cause more harm than good. The Supply Chain and infrastructure for Renewable Fuels must be considered and accommodated for, and include a program to invite investors and new technology, feedstock growth and an increase in local agriculture.

This measure when passed will require that a locally based, comprehensive study with a detailed scope of work be performed. The results of this study can then be used to define and then implement the responsible steps needed to achieve a successful Renewable Fuels Portfolio Standard specific to the needs, challenges and opportunities of the State of Hawaii.

Many thanks for your time and consideration.

Carl Campagna
Executive Director
Hawaii Bioeconomy Trade Organization
808-383-7699
carl@hawaiibioeconomy.org

SB-2818-SD-1

Submitted on: 2/18/2020 9:31:12 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	Oppose	No

Comments:

To: The Senate Committee on Ways and Means

From: **Katherine Kazlauskas**

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

In strong opposition to SB 2818 SD1

Aloha Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Corporation. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating “We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years.” In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Furthermore, the veiled threats by Hawaii Gas that consumer prices may have to be increased if pressed to transition towards renewable energy sources is particularly egregious. We have abundant data showing that renewable energy is now cheaper than fossil fuels. Hawaii is blessed with abundant zero-emission energy sources. With existing technology including energy storage, we can have energy independence for Hawaii through 100% clean energy if we invest properly in these resources and at the scale required. Rather than putting money into an unnecessary study, it would be much

more in our best interests to invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals. There is no justification for taxpayer dollars to be put forward for such a study.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

Katherine Kazlauskas



**Testimony to the
Committee on Ways and Means**

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

Senate Bill 2818 SD1

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

Hawaii Gas **strongly supports** SB 2818 SD1, which requires the Hawaii state energy office to conduct a study regarding the availability, feasibility, and costs of the use of renewable gas in Hawaii by gas utility companies.

We are committed to using as much renewable gas in our pipelines as possible, and we continue to do our part to meet Hawaii's 2045 carbon neutrality goal, together, in an affordable, resilient, and sustainable way for our ratepayers and Hawaii's communities.

We believe that the transition to renewable gas fuel sources must be carefully studied so that the transition can occur in a responsible and cost-effective way for the people of Hawaii.

HRS §269-95 (renewable portfolio standards study) required the Hawaii natural energy institute to study the capability of Hawaii's electric utility companies to achieve renewable portfolio standards in a cost-effective manner before any standards were advanced for the electric utilities. That study, required every 5 years, established the blueprint from which meaningful, science-driven, attainable, and sustainable changes could be made by the electric utilities.

Renewable gas has never been afforded a locally focused study, and it is critically important to assess the true cost and impact on ratepayers. Does Hawaii have the resources in-state to create reliable renewable natural gas and renewable hydrogen? What about the impact of the competing demands for land-use in Hawaii and the numerous legislative priorities that establish land use policy? The state's limited prime lands are in high and competitive demand by agriculture, solar, affordable housing, and energy crops. This bill provides for these items to be carefully studied.

While sun, wind and biomass create limitless potential resources available to create renewable electricity, readily available resources to create renewable gas in Hawaii are sparse. For renewable gas to be a scalable, viable source beyond what is available today, research and development is required. In Hawaii, there are currently only three known ways to create renewable gas: capture methane produced from wastewater treatment plants and landfills, create renewable hydrogen through renewable energy developments (both of which are controlled by others), or grow crops and process them through biodigesters. Local production



would require access to local resources, such as methane, land, water, farmers, labor and curtailed renewable energy. Alternatively, renewable gas can be imported at potentially greater cost. Whether locally produced or imported, each option comes with availability, cost, feasibility and reliability of supply issues.

The renewable gas development at the City and County Honouliuli waste water treatment plant, for example, is an award-winning facility that has demonstrated great promise in utilizing waste product to create renewable gas. Unfortunately, that competitively procured supply contract expires in 2024, essentially eliminating this precious resource needed to produce renewable gas and thwarting our progress.

Similarly, Hawaii Gas is recognized as a leader in utilizing hydrogen in our pipeline, and we have more hydrogen in our distribution system than any other gas utility in the country. While more hydrogen could be created by curtailed renewable energy such as geothermal, wind, and solar, that curtailed energy is owned by other utilities and contractually not available to Hawaii Gas. The potential use of that inaccessible renewable energy would be part of this study.

We know that Hawaii residents are facing dire economic struggles. People struggle to make ends meet and find affordable housing, forcing many of them to leave Hawaii entirely. It's impossible to ignore the ALICE report's troubling finding that 37% face severe financial hardship and poverty. Parity and fairness should be focused on the ratepayer, and we remain mindful of our efforts on their pocketbooks.

Even now, the Legislature contemplates changing the RPS for electric utilities. The legislature is posing wise questions: are the 100% RPS by 2045 and interim targets realistic, too low, or a vision that is unrealistically out of reach? Are the terms in the original statute correctly defined?

Hawaii Gas has been committed to its employees and the people and communities of Hawaii for over 115 years. While we represent less than 2% of the state's energy demand and less than 1% of its carbon emissions, we take very seriously our critical role in the state's environment and resiliency in the event of natural disasters, and we understand all too well that our residential and commercial customers depend on us to provide this service at a cost they can afford.

Hawaii Gas supports an appropriate, objective, and science and technology driven study to explore the feasibility of using more renewable gas by gas utilities. These studied findings will be compiled and reviewed by energy utility experts and will address the many questions on availability, feasibility and cost that must be answered to inform the legislature.

For these reasons, we strongly support SB2818 SD1 and thank you for the opportunity to testify.



**Testimony to the Senate Committee on Ways and Means
Thursday, February 20, 2020 at 10:35 A.M.
Conference Room 211, State Capitol**

RE: SB 2818 SD1, RELATING TO RENEWABLE ENERGY

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

The Chamber of Commerce Hawaii ("The Chamber") **supports** SB 2818 SD1, which requires the Hawaii State Energy Office to conduct a study regarding renewable gas to determine economic and technical feasibility of the use of renewable gas by gas utility companies and appropriates funds for the study.

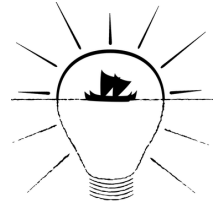
The Chamber is Hawaii's leading statewide business advocacy organization, representing 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

Hawaii continues to play a leading role in protecting our environment and increasing energy efficiency. We believe in the benefits of a sustainable future, but we must ensure that solutions that would affect the business community do not impede or create unintended burdens on entrepreneurs. Policies need to be shaped to create common ground, especially so that businesses can have the flexibility to develop and create practical, reasonable and rational solutions to address these important issues. A comprehensive study on the feasibility of the use of renewable gas will provide lawmakers with valuable data regarding future policies and ensure that businesses and consumers are presented with accurate information.

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

Big Island Community Coalition

421 Lama St.
Hilo, HI 96720



February 19, 2020

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

On behalf of the Big Island Community Coalition, I'd like to offer testimony in **SUPPORT** of **SB 2818 SD1**. This measure will help the state determine the viability, technical considerations, and economic implications of the generation and use of renewable gas by the gas utility.

The Big Island Community Coalition supports all efforts to eliminate our dependency on fossil fuels, reduce energy costs for our residents, enhance our use of abundant local renewable energy sources (solar, wind, hydro, geothermal, and tidal/wave), and establish energy independence and resiliency.

This measure's reference to "Hydrogen gas derived from renewable energy sources..." is of special interest to us. There is an incredible source of geothermal energy beneath Hawaii Island and Maui (the 'hot spot'). This energy can be leveraged to not only generate electricity for the grid, it can be used to generate **hydrogen**.

We must aggressively investigate ways to eliminate our fossil fuel dependency. We have the access to great gifts of renewable energy sources that can be used to generate alternatives to propane and synthetic gas.

Please pass **SB 2818 SD1** so that we can better understand this opportunity.

Sincerely,

A handwritten signature in black ink that reads "Richard Ha". The signature is fluid and cursive.

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.



**Hawaiian
Electric**

**TESTIMONY BEFORE SENATE COMMITTEE ON
WAYS AND MEANS**

S.B. 2818, SD1

Relating to Renewable Energy

Thursday, February 20, 2020
10:35 am, Agenda Item #14
State Capitol, Conference Room 211

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

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. **in support of S.B. 2818, SD1**, Relating to Renewable Energy. The bill requires the Hawai'i State Energy Office (HSEO) to conduct a feasibility study of the use of renewable gas by the gas utilities and appropriates funds for the study.

Hawaiian Electric supports a study on the feasibility of renewable gas in Hawai'i. Renewable gas could help to achieve the State's renewable and greenhouse gas emissions goals by ensuring customers who choose to generate their electricity using fossil fuels have the ability to become renewable over time. However, renewable gas would need to be available at cost effective quantities to accomplish this. The study proposed in S.B. 2818, SD1 takes the first step in assessing several important factors for the development of renewable gas in the State.

Hawaiian Electric remains committed to achieving a 100 percent renewable

portfolio standard by 2045 and getting off fossil fuels, but recognizes that achievement of this goal will require the collaborative efforts of many stakeholders. Renewable gas is a unique resource that sits at the nexus between the electricity sector and transportation sector where it can facilitate the addition of further renewables in the electricity sector, reducing emissions there, as well as reduce emissions in the transportation sector, where emissions have increased in recent years. Further study of this resource is warranted to better understand how it can help achieve the State's goals.

Accordingly, Hawaiian Electric supports S.B. 2818, SD1 in its current form.

Thank you for this opportunity to testify.



LATE

February 19, 2020

**TESTIMONY SUPPORTING
SENATE BILL 2818, SENATE DRAFT 1, RELATING TO RENEWABLE ENERGY**

Senate Committee on Ways & Means
The Honorable Donovan Dela Cruz, Chair
The Honorable Gilbert Keith-Agaran, Vice Chair

Thursday, February 20, 2020 at 10:35 a.m.
State Capitol, Conference Room 211

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

Thank you for this opportunity to submit written testimony commenting on Senate Bill 2818, Relating to Renewable Energy. My name is Lance Tanaka, director of government and public affairs for Par Hawaii. Par Hawaii, LLC and Par Hawaii Refining, LLC are subsidiaries of Texas-based Par Pacific Holdings, Inc. Par Hawaii operates the state's only refinery, markets fuels through a statewide network of Hele- and 76-branded retail locations, and distributes fuels via pipelines on Oahu and barges to all major harbors in the state.

SB 2818, SD 1 requires the Hawaii State Energy Office to conduct a study regarding renewable gas to determine economic and technical feasibility of the use of renewable gas by gas utility companies. Appropriates funds for the study.

Par Hawaii fully supports conducting a comprehensive study prior to enacting RPS legislation for renewable gas to avoid any unintended consequences that could be detrimental to consumers.

Thank you for allowing Par Hawaii the opportunity to present this testimony for the Committee's consideration.



LATE

SENATE COMMITTEE ON WAYS AND MEANS

February 20, 2020, 10:35 A.M.
Room 211
(Testimony is 5 pages long)

TESTIMONY IN SUPPORT OF SB 2818 SD1 WITH AMENDMENTS

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee members:

Blue Planet Foundation **supports SB 2818 SD1** if it is amended to require that gas utility companies in Hawai'i achieve the same renewable energy targets as Hawai'i's electric utilities. Given the existential threat of climate change to Hawai'i's economy and way of life, it is time to set an expiration date on all fossil fuel use in Hawai'i—not just certain companies or certain sectors. Passing an amended version of SB 2818 SD1 is essential for **accelerating progress** and ensuring **consistency, fairness, and consumer confidence** in Hawai'i's 100% renewable energy target.

THE SUCCESS AND IMPORTANCE OF THE RPS LAW

Hawai'i's RPS law has been a resounding success. In 2015, the legislature set a vision for Hawai'i's energy security, economic viability, and environmental protection by setting a target of 100% renewable energy by 2045. The 100% RPS law has since impacted the energy system exactly as intended, and is driving energy progress in the state. It has unlocked innovation, strengthened collaborations, and fostered alignment on a variety of regulatory and technology issues. With strong Public Utilities Commission guidance and oversight, Hawai'i's 100% RPS is resulting in utility long-range plans that will achieve the mandate ahead of schedule, while simultaneously saving consumers billions of dollars compared to the fossil fuel status quo.

The 100% RPS has set market expectations. Hawai'i is now securing 100% renewable energy projects, able to provide energy at any time of day or night, for a stable cost that is substantially less than the cost of fossil fuel. Recent renewable energy contracts between developers and the electric utility are set to deliver clean energy at record low prices, proving it is possible to generate clean electricity far cheaper than from fossil fuels.¹ The power from these projects will be as low as 8 cents per kilowatt-hour (kWh), with most coming in below 10 cents per kWh.

¹ See <https://www.hawaiianelectric.com/new-solar-plus-storage-projects-set-low-price-benchmark-for-renewable-energy-in-hawaii>

Even the highest-priced project is substantially lower than the 15 cents per kWh average cost to produce electricity from fossil fuels. By comparison, just a few years ago, Hawai'i was considering importing liquefied natural gas (LNG)—another fossil fuel—to generate electricity for 15 to 20 cents per kWh.

100% RPS FOR GAS UTILITIES IS CRITICAL

Senate Bill 2818 should be amended to establish a renewable portfolio standard requiring that 100% of gas sold by gas utility companies in the state be renewable by 2045. Expanding Hawai'i's 100% RPS to apply to gas utility companies is a necessary next step if we hope to achieve our ambitious clean energy and climate targets—particularly meeting the commitment to the Paris Climate Agreement (Act 32 of 2017) and target of net carbon neutral by 2045 (Act 15 of 2018). **Simultaneously, such a policy would fix the current unfairness in the energy market**, which requires electric utilities, but not gas utilities, to comply with a renewable portfolio standard. Without an RPS policy for gas, Hawai'i could remain dependent on fossil fuels for decades and fail to achieve its critical climate goals.

Consumers sometimes confuse “natural gas” with renewable energy. As most commonly used, natural gas is “natural” in the same way that oil and coal are “natural.” **Natural gas is a fossil fuel.** It is not renewable, and it is inconsistent with a shift to 100% renewable energy. On the mainland, natural gas is now responsible for more climate-heating emissions than coal is. Globally, fossil gas is the fastest-growing source of climate change emissions, according to study published in Environmental Research Letters last month.²

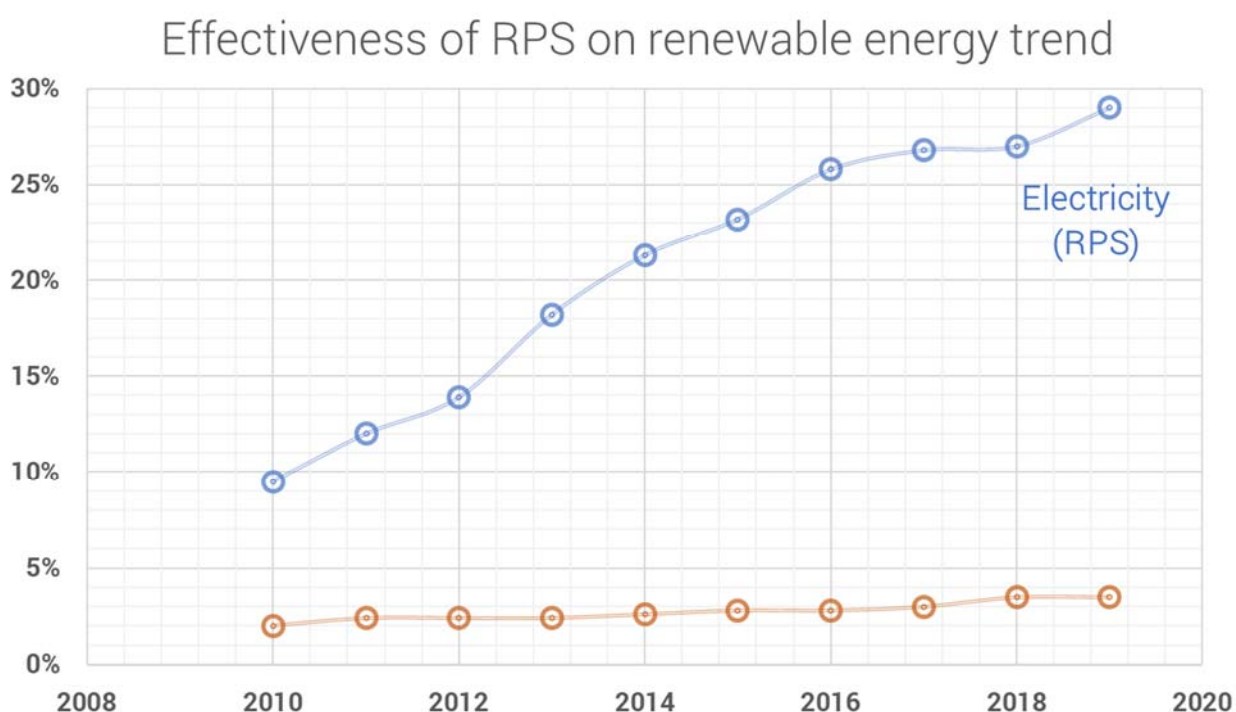
In Hawai'i, a former Hawaii Gas executive has called attention to the folly of promoting fossil natural gas use in the islands. In written testimony on January 23, 2020, to the Honolulu City Council regarding Bill 25 (2019), former Hawaii Gas Executive Vice President Joseph Boivin wrote: “Promoting the use of natural gas or propane, renewable or not, does not make sense in Hawaii, and especially so given the impact that we know fossil fuels are having on our environment.” In regards to using gas water heaters over solar water heaters, he wrote: “Despite the claims, the economics do not in any way favor the ongoing use of gas energy over the sun. To argue otherwise is disingenuous and ludicrous.”³

² R B Jackson, et al. 2019. Environmental Research Letters. 14, 121001

³ Written testimony of Joseph Boivin to the Honolulu City Council Committee on Zoning, Planning and Housing on Bill 25. January 23, 2020. Available at [http://www4.honolulu.gov/docushare/dsweb/Get/Document-250019/M-0040\(20\).PDF](http://www4.honolulu.gov/docushare/dsweb/Get/Document-250019/M-0040(20).PDF)

HAWAII'S RENEWABLE GAS PERCENTAGE IS FAR BEHIND RENEWABLE ELECTRICITY

It is clear, however, that renewable standards are required to ensure that Hawaii Gas continue to increase the amount of renewable gas in their system. Despite promises over the past decade about increasing the use of renewable gas, the actual use of RNG has remained nearly flat. The chart below, using data from the statutorily required renewable energy annual reports,⁴ compares the renewable progress made by the electric utility versus the gas utility. The electric utility has steadily increasing renewable goals set for by the RPS.



Hawaii Gas previously stated that they plan to “diversify our feed stock to include gas from renewable resources such as landfill gas and bio-methane, and other renewable sources, including animal fat and plant oils that are locally produced.”⁵ A *Honolulu Advertiser* article from November 22, 2009 discussed the Gas Company’s plans and their belief that integrating high amounts of local feedstock is a good business decision for the company and for customers. In 2009 testimony to the legislature on HB 1464, The Gas Company stated: “We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the

⁴ Renewable Energy Annual Reports filed with the Hawaii Public Utilities Commission, available at <http://puc.hawaii.gov/reports/energy-reports/>

⁵ The Gas Company Testimony in Support of HB 1464 HD2, Relating to Energy Resources (Feb. 26, 2009), available at http://www.capitol.hawaii.gov/session2009/testimony/HB1464_HD2_TESTIMONY_FIN_02-27-09_4_.pdf

entire state within five years.”⁶ These statements likely gave some comfort to lawmakers at the time that binding renewable energy targets for natural gas weren’t necessary. Unfortunately, we are seeing the effect of those decisions ten years later.

FOSSIL NATURAL GAS IS BEING BANNED THROUGHOUT THE COUNTRY

An increasing number of cities across the country are banning natural gas for new buildings because of its threat to climate and health. Berkeley, California, was the first, followed in the state by San Jose, Mountain View, Santa Rosa and Brisbane. On the East Coast, Brookline, Massachusetts, last November became the first city in the state to ban new gas hookups. Dozens of other cities, from Cambridge and Newton in Massachusetts to Seattle, are considering similar bans.

RENEWABLE GAS OPTIONS AVAILABLE

Blue Planet recognizes that Hawaii Gas has started to integrate small amounts of renewable natural gas (RNG) into its supply. In December 2018, Hawaii Gas launched its operations at the first renewable natural gas facility in the islands, capturing and processing biogas created during the process of treating wastewater at the Honouliuli Wastewater Treatment Plant on Oahu.⁷ The plant is expected to produce 800,000 therms energy per year, which is equivalent to about 15,000 barrels of oil. Previously, this gas was flared (i.e. burned) at the plant. With this project, the City and County of Honolulu will now derive revenue by selling the gas, rather than wasting it, and bring RNG on O’ahu to roughly 5% of the total gas supply. This is an admirable win-win solution. Blue Planet Foundation strongly supports these efforts to transition to renewable gas.

Scaling this will require the development of additional renewable natural gas sources—particularly identifying new solutions for local private and public entities, such as that developed with Honouliuli. These might include: wastewater treatment facilities, landfills, other waste sources, local crops, or renewable hydrogen. Suppliers in other locations may also become an option. In the continental U.S., Clean Energy Fuels Corp. is currently marketing a renewable natural gas product called “Redeem.” This is collected from various waste sources, such as landfills and farms, and then distributed across the country via a natural gas pipeline system. It is presently used to fuel thousands of vehicles each day.

Beyond using waste gas from sewage treatment and landfills, the gas utility has raised concerns about the viability, cost, and available volume of locally produced feedstock for renewable gas. While this may present real challenges, renewable natural gas is not the only option for the incumbent gas utility. Renewably produced hydrogen presents a perfect opportunity as a

⁶ *Id.*

⁷ See <https://www.bizjournals.com/pacific/news/2018/12/20/hawaii-gas-completes-first-renewable-gas-facility.html>.

sustainable fuel—one with tremendous growth potential. Hydrogen—the most common element in the universe—will likely play a key role in our clean energy future, particularly in the transportation sector. Hydrogen can be used as a storage fuel, where hydrogen is created from geothermal, wind, or solar energy and stored (in pure gas, compressed, some chemical state, or through another medium) and used later in combustion or fuel cell applications.

Progressive gas companies around the globe are exploring the use of renewable hydrogen as a replacement for their natural gas sales. In Australia, Evoenergy and Canberra Institute of Technology are testing the direct conversion of natural gas infrastructure and pipelines to hydrogen.⁸ In the United Kingdom, three natural gas distributors have detailed plans to convert the UK's residential gas system to a hydrogen delivery system. UK firms Northern Gas Networks and Cadent, as well as Norwegian gas firm Equinor, suggested an initial roll-out of the program to 3.7 million homes and 400,000 businesses in Northern England could commence as soon as 2028.⁹

Establishing an RPS for gas in Hawai'i will help foster the transition to low-carbon replacements for natural gas, and could help unlock a transformation to a hydrogen-based clean energy system for the state.

In the interest of achieving our state's critical clean energy and climate goals, robust state energy policy, fairness, and unlocking innovation, Blue Planet Foundation strongly supports establishing a gas RPS via SB 2818.

CONCLUSION

Blue Planet Foundation strongly supports amending SB 2818 SD1 to help **accelerate Hawai'i's clean energy progress, increase fairness across the energy sectors, and spur innovation and development in new, locally produced, renewable fuels**. This is an important measure for ensuring consistency, fairness, and consumer confidence in Hawai'i's 100% renewable energy target.

We look forward to working with the legislature on this key policy.

Thank you for the opportunity to testify.

⁸ Canberra Institute of Technology, "Nation's first hydrogen test station at CIT Fyshwick," December 4, 2018 (https://cit.edu.au/news/hydrogen_test_station).

⁹ <https://arstechnica.com/science/2018/11/natural-gas-distributors-outline-proposal-to-convert-home-heating-to-hydrogen/>

SB-2818-SD-1

Submitted on: 2/19/2020 9:01:57 PM

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

LATE

Submitted By	Organization	Testifier Position	Present at Hearing
David Mulinix	Testifying for Our Revolution Hawaii	Support	No

Comments:

SB-2818-SD-1

Submitted on: 2/16/2020 9:41:15 PM

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

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

Comments:

To: The Senate Committee on Ways and Means

From: **Tlaloc Tokuda, volunteer . 350HI**

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

In strong opposition to SB 2818 SD1

Aloha Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Corporation. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating “We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years.” In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Furthermore, the veiled threats by Hawaii Gas that consumer prices may have to be increased if pressed to transition towards renewable energy sources is particularly egregious. We have abundant data showing that renewable energy is now cheaper than fossil fuels. Hawaii is blessed with abundant zero-emission energy sources. With existing technology including energy storage, we can have energy independence for Hawaii through 100% clean energy if we invest properly in these resources and at the scale required. Rather than putting money into an unnecessary study, it would be much

more in our best interests to invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals. There is no justification for taxpayer dollars to be put forward for such a study.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

Tlaloc Tokuda

Kailua Kona HI 96740

SB-2818-SD-1

Submitted on: 2/16/2020 9:48:35 PM

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

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

Comments:

This whole bill is just a smokescreen to make Hawaii Gas look like they are taking renewables seriously. It's a stall. This is made clear by the part of the bill that wants American Gas Association and Gas Technology Institute to peer review their study. We don't have time for nonsense like this.

Please stop gaslighting the public with these disingenuous bills.

Mahalo,

Koohan Paik

SB-2818-SD-1

Submitted on: 2/16/2020 10:00:24 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Dawn Morais Webster Ph.D.	Individual	Oppose	No

Comments:

Hawaii Gas is owned by a multi-billion dollar conglomerate (Macquarie Infrastructure Corporation), which should be paying for this study, which, if really needed, should have been done five years ago when Hawaii set its clean energy target for 2045.

This bill is just a smokescreen to make Hawaii Gas look like they are taking renewables seriously. It's a stall. This is made clear by the part of the bill that wants American Gas Association and Gas Technology Institute to peer review their study. We don't have time for nonsense like this.

Hawaii Gas has built a solar energy farm. They should be transitioning as quickly as they can into those types of projects, and leaving gas in the ground where it belongs. The gas industry is dying, just like coal, and Hawaii Gas knows it. Don't help them prolong the inevitable, using the money of the hardworking people of Hawaii. Please stop this bill in its tracks. Thank you.

SB-2818-SD-1

Submitted on: 2/17/2020 8:14:43 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Debbie Millikan	Individual	Oppose	No

Comments:

To: The Senate Committee on Ways and Means

From: Debbie Millikan

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

In strong opposition to SB 2818 SD1

Aloha Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Corporation. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating “We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years.” In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Furthermore, the veiled threats by Hawaii Gas that consumer prices may have to be increased if pressed to transition towards renewable energy sources is particularly egregious. We have abundant data showing that renewable energy is

now cheaper than fossil fuels. Hawaii is blessed with abundant zero-emission energy sources. With existing technology including energy storage, we can have energy independence for Hawaii through 100% clean energy if we invest properly in these resources and at the scale required. Rather than putting money into an unnecessary study, it would be much more in our best interests to invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals. There is no justification for taxpayer dollars to be put forward for such a study.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

Mahalo for the opportunity to testify,

Debbie Millikan

SB-2818-SD-1

Submitted on: 2/17/2020 9:24:08 AM

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

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

Comments:

Aloha Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Corporation. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating “We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years.” In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Furthermore, the veiled threats by Hawaii Gas that consumer prices may have to be increased if pressed to transition towards renewable energy sources is particularly egregious. We have abundant data showing that renewable energy is now cheaper than fossil fuels. Hawaii is blessed with abundant zero-emission energy sources. With existing technology including energy storage, we can have energy independence for Hawaii through 100% clean energy if we invest properly in these resources and at the scale required. Rather than putting money into an unnecessary study, it would be much more in our best interests to invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals. There is no justification for taxpayer dollars to be put forward for such a study.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer

review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

Ryan Christopher

Honokaa HI

SB-2818-SD-1

Submitted on: 2/17/2020 12:26:06 PM

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

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

Comments:

Hello Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Corporation. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating "We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years." In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Furthermore, the veiled threats by Hawaii Gas that consumer prices may have to be increased if pressed to transition towards renewable energy sources is particularly egregious. We have abundant data showing that renewable energy is now cheaper than fossil fuels. Hawaii is blessed with abundant zero-emission energy sources. With existing technology including energy storage, we can have energy independence for Hawaii through 100% clean energy if we invest properly in these resources and at the scale required. Rather than putting money into an unnecessary study, it would be much more in our best interests to invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals. There is no justification for taxpayer dollars to be put forward for such a study.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer

review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

me ke aloha 'Ä• ina,

Nanea Lo

SB-2818-SD-1

Submitted on: 2/17/2020 12:49:39 PM

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

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

Comments:

SB-2818-SD-1

Submitted on: 2/17/2020 1:52:40 PM

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

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

Comments:

This is a waste of money.

SB-2818-SD-1

Submitted on: 2/17/2020 2:29:43 PM

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

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

Comments:

SB-2818-SD-1

Submitted on: 2/17/2020 3:24:22 PM

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

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

Comments:

To: The Senate Committee on Ways and Means

From: Elif Beall

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

In strong opposition to SB 2818 SD1

Aloha Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

In 2009 Hawaii Gas testified that they were working hard to make half of their gas renewable within five years. But, renewable gas can only be made in Hawaii from landfill waste and a very few other sources, which exist here only in very limited quantities. As proof of this, Hawaii Gas also testified in 2019 to the Honolulu City Council that, of the gas they produced, a mere 3% was renewable.

Hawaii Gas is owned by a multi-billion dollar conglomerate (Macquarie Infrastructure Corporation), which should be paying for any study of their own operations and business opportunities. There is no justification for taxpayer dollars to be put forward for such a study.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest United Nations IPCC report.

Elif Beall

Kilauea, HI

SB-2818-SD-1

Submitted on: 2/18/2020 8:52:06 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Glenn Yamada	Individual	Support	No

Comments:

Renewable gas is in my opinion a clean and economical solution for Hawaii's energy supply. Afterall electric also requires fuel energy to generate it for the most part.

SB-2818-SD-1

Submitted on: 2/18/2020 8:58:08 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
EDWIN SAWA	Individual	Support	No

Comments:

First of all, I am a supporter of renewable energy. However, we should develop a plan that is economical, reliable, and attainable. We need to all keep in mind that the consumer will bear the cost of all renewable energy initiatives. I grew up using gas for cooking and water heating. During power outages, I am so thankful that we had gas so we could still cook and take a hot shower.

I am not convinced that restricting gas water heaters should be such a high priority. There are much greater consumers of fossil fuel. Automobiles.

SB-2818-SD-1

Submitted on: 2/18/2020 8:58:44 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Kristen	Individual	Support	No

Comments:

Gas is a cleaner and reliable source of energy which can be used for heating hot water, cooking and is even a great failsafe in case of emergencies or natural disasters. Gas represents less than 2% of the state's energy demand and less than 1% of its carbon emissions, while providing an essential option for residents and businesses across the state. More studies such as how it will affect the cost to consumers should first be made.

Thank you for considering my testimony.

Aloha,

Kristen Asato

SB-2818-SD-1

Submitted on: 2/18/2020 9:24:18 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Kathleen P Wright	Individual	Support	No

Comments:

SB-2818-SD-1

Submitted on: 2/18/2020 10:11:54 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Mustafa Demirbag	Individual	Support	No

Comments:

The cost of living is very high in Hawaii. Many of my family members and friends struggle to support their households. Gas is the only energy source that is affordable and reliable. We can not afford to add anymore financial burden on our families and friends in Hawaii.

SB-2818-SD-1

Submitted on: 2/18/2020 10:15:29 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Millicent Sakamoto	Individual	Support	No

Comments:

With the cost of living in Hawaii being so high, I cannot see why our legislators would want our residents to carry more financial burdens by removing an affordable and reliable energy source such as gas. As a gas consumer, with gas being provided through the utility lines and by using gas as my main source of energy at home, I can say that moving appliances from electric to gas has lowered my utility bills. Therefore, I fully support a feasibility study on the use of renewable gas by gas utility companies. Thank you!

SB-2818-SD-1

Submitted on: 2/18/2020 10:40:13 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Genine N Nishihara	Individual	Support	No

Comments:

SB-2818-SD-1

Submitted on: 2/18/2020 11:39:29 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Christopher Hall	Individual	Support	No

Comments:

I believe the transition to renewable gas fuel sources must be carefully studied so that the transition can occur in a responsible and cost-effective way for the people of Hawaii. Renewable Gas has never been afforded a locally focused study and it is critically important to assess the true cost and impact on ratepayers before moving forward. This study is a sensible, logical step before mandating policy that may be unrealistic and unachievable, and I support SB2818.

SB-2818-SD-1

Submitted on: 2/18/2020 11:39:56 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Antonio Prietto	Individual	Support	No

Comments:

Good Morning,

With regards to SB2818, this has my fullest support and makes total sense. Though gas is only a small sliver of our state's total energy consumption, every part needs to be considered. At the same time, we need to know in advance whether, or not, we are trying to squeeze blood out of a turnip.

When you consider the how much we spend consuming energy, including gasoline, jet fuel, diesel, bio-diesel, electricity natural gas, propane, etc., the proposed cost of this study is below minor.

The point of bringing in peers (AGA and IGT) for review is another plus for this evaluation. Too often we, the state of Hawaii, spend too much time and effort either trying to re-create the wheel or trying to be the first one to implement the newest and unproven technology.

Yes Hawaii is our jewel of the world and we want to keep it that way. However to go all-in and spend our limited time and resources on un-proven ideas and technologies is far too risky for my wallet and tax dollars.

Thank you for those leading this effort to study and evaluate before mandating or forcing unrealistic goals on us, the citizens of Hawaii.

Mahalo for your Time,

Antonio J. Prietto
Kamuela, HI

SB-2818-SD-1

Submitted on: 2/18/2020 12:39:28 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Chris Johnson	Individual	Support	No

Comments:

I'm in support of SB2818. The state of Hawaii already has very high utility rates which are passed down to its consumers. The local gas utility company needs a fair fight in achieving the renewable energy goal of 2045 and this bill would support a test platform of Renewable Natural Gas (RNG) to show the State that RNG is safe, reliable, and good alternative to producing natural gas from their Synthetic Natural Gas plant. The electric utility company has the sun and wind for renewable energy, so the gas utility company will use people and animals alike to help produce biogas (aka waste). The sun and wind are not always available to produce renewable energy due to cloud cover, nighttime, and lack of wind. People and animals are always producing biogas which creates an endless source of biogas 24/7 365 day a year which is able to supply the RNG process and production. For those reasons mentioned above, please support SB2818.

SB-2818-SD-1

Submitted on: 2/18/2020 1:36:30 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Shirlyn Hookano	Individual	Support	No

Comments:

I am in support of SB2818. Finally, a bill that seems sensible if it's done right. Renewable gas has never been afforded a locally focused study that assesses the true cost and impact on ratepayers and future generations. Does Hawaii have the local resources to create reliable renewable gas without having negative impacts to land use?

Why isn't more effort being expended on fixing the homeless situation first? Mahalo.

SB-2818-SD-1

Submitted on: 2/18/2020 2:08:18 PM

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

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

Comments:

SB-2818-SD-1

Submitted on: 2/18/2020 3:15:38 PM

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

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

Comments:

Dear Chair Dela Cruz and WAM members,

I strongly oppose bill SB2818 SD1.

Funding a plan to show that renewable gas is technically feasible in Hawaii is a waste of tax payer money. The gas company has had adequate time to demonstrate this possibility; but instead, they have spent years trying to promote gas as a bridge fuel until renewables were viable. During this time, renewable solar and wind have proven their value--economically and environmentally--and now the gas "bridge to Nowhere" should disappear (last year the gas company managed to produce a meager 3% of its product as renewable).

The gas company would be wise to transition their business to truly renewable resources as coal companies are having to do as well. I am not against gas employees; I strongly support HB1934 HD1 which appropriates funds to help companies plan for the transition to renewable energy and the hundreds--possibly thousands--of jobs they will provide in Hawaii. This is the future that the gas companies should embrace.

Please oppose SB2818 SD1.

Thank you,

Jan Pappas

Aiea, Hawaii

SB-2818-SD-1

Submitted on: 2/18/2020 4:05:16 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Okouchi	Individual	Support	No

Comments:

If it will financially unburden the people of Hawaii with it's high cost of living, I will support this bill.

SB-2818-SD-1

Submitted on: 2/18/2020 4:48:49 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Audrey Okaneku	Individual	Oppose	No

Comments:

SB-2818-SD-1

Submitted on: 2/18/2020 6:45:29 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	Oppose	No

Comments:

SB-2818-SD-1

Submitted on: 2/18/2020 7:01:07 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support SB2818. Our coral reefs are dying due in large part to warming oceans, and valuable coastline is eroding due to sea level rise. Climate change is already occurring. We need to be a leader in renewable energy.

Thank you for the opportunity to present my testimony.

Sincerely,

Andrea Quinn

Kihei, Maui

SB-2818-SD-1

Submitted on: 2/18/2020 7:54:10 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Brian Yee	Individual	Support	No

Comments:

I am in support of SB2818 SD1.

We are an island state and need to have as many energy choices as possible and gas remains a viable, affordable option. Take the time to study the transition to renewable gas, can it be done, are there readily available resources to produce rng, what will it cost? These are all questions that need to be answered before an RPS mandate is issued. Please do not pass laws without clearly understanding the negative impacts that it will have on the average Hawaii citizen, making it more difficult each year to live and raise a family in Hawaii.

Mahalo

SB-2818-SD-1

Submitted on: 2/18/2020 8:53:07 PM

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

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

Comments:

Aloha Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Corporation. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating "We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years." In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

Mahalo,

Caroline Kunitake

SB-2818-SD-1

Submitted on: 2/18/2020 9:02:54 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Keith	Individual	Support	No

Comments:

While there are limitless potential resources to create renewable electricity, readily available resources to create renewable gas in Hawaii is very limited.

SB-2818-SD-1

Submitted on: 2/18/2020 9:16:01 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Ryan Yoshida	Individual	Support	No

Comments:

Dear Committee Members,

Thank you very much for reading my tesitmony supporting SB2818 SD1 to initiate and appropriate funds for a renewable gas study in Hawaii. I believe in the promotion of renewable energy in Hawaii, and would like to find out more about the feasibility and potential for renewable gas. The cost of utilities is already high, so I'm interested to find out how much renewable gas could potentially save or cost residents and businesses. Thank you for your time and effort.

SB-2818-SD-1

Submitted on: 2/18/2020 9:48:58 PM

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

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

Comments:

To: The Senate Committee on Ways and Means

From: Dr. John and Debra Nix, Kihei

Date: Thursday, February 18, 2020,

In strong opposition to SB 2818 SD1

Aloha Chair Dela Cruz and members,

I strongly oppose SB 2818 SD1.

SB2818 goes against the best interests of hard-working people in Hawaii, and in particular, our youth, who will have to live with the worst effects of Climate Breakdown if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

Why should the State spend taxpayer money on behalf of the gas utility on a feasibility study on the use of renewable gas? Hawaii Gas is owned by a multi-billion-dollar corporation, Macquarie Infrastructure Corporation. If anything, it is their responsibility to conduct such a study. They can certainly afford it.

And if Hawaii Gas was sincerely a good-neighbor company, they would have conducted this study a long time ago. Hawaii Gas testified at the legislature in 2009 stating “We are actively taking the necessary steps to increase the renewable content of our gas to 50 percent for the entire state within five years.” In a 2019 hearing at the Honolulu City Council, however, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Thus, we see the regrettable result of not having included gas utilities in the RPS from the beginning.

Furthermore, the veiled threats by Hawaii Gas that consumer prices may have to be increased if pressed to transition towards renewable energy sources is particularly egregious. We have abundant data showing that renewable energy is now cheaper than fossil fuels. Hawaii is blessed with abundant zero-emission energy sources. With existing technology including energy storage, we can have energy independence for Hawaii through 100% clean energy if we invest properly in these resources and at the scale required. Rather than putting money into an unnecessary study, it would be much

more in our best interests to invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals. There is no justification for taxpayer dollars to be put forward for such a study.

Even more concerning is the stipulation in this bill that fossil fuel-promoting entities including the American Gas Association and Gas Technology Institute conduct the peer review. The fossil fuel industry knew about climate change for decades, yet fueled a colossal denial machine to block any meaningful action to confront it. As a result, we have lost precious time and are now in the midst of a Climate Crisis. We cannot afford to waste more time on any unnecessary studies. Our only recourse now is to act swiftly and boldly to reduce our greenhouse gas emissions lest we destroy our children's future. We must continue to do our part to avoid the most devastating impacts of climate change.

Mahalo,

Dr. John and Debra Nix, Kihei

SB-2818-SD-1

Submitted on: 2/18/2020 10:17:53 PM

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

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

Comments:

Dear Chair Dela Cruz and Members,

I am strongly opposed to SB2818, asking the state (meaning us!) to pay for a feasibility study on behalf of the gas company, which is owned by the Multi-billion dollar company, Macquarie Infrastructure Corp. The oil and gas company has not taken seriously the problem of climate change, and I urge you all, especially on behalf of our young people, to oppose this bill. The gas company has the money it needs to conduct this study, which they could have (should have) done five years ago when the State was setting its goals. And even renewable gas simply isn't good enough. We should not be burning more gas (that means more carbon and more heat), especially when we have the means to use non-polluting renewables--solar and wind!

Respectfully,

Lynn Aaberg

SB-2818-SD-1

Submitted on: 2/18/2020 10:29:43 PM

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

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

Comments:

Aloha! Thank you for the opportunity to testify.

I strongly OPPOSE SB2818 SD1

Mahalo and kind regards

SB-2818-SD-1

Submitted on: 2/18/2020 11:01:28 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Luke M Bailey	Individual	Support	No

Comments:

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

As we are all aware, the cost of living in Hawai'i has a significant impact on our community. In a long-standing effort to reduce the cost of living in Hawai'i, we need to be realistic about our access to energy.

To reach our state-wide goal of being net carbon neutral by 2045, we must research better gas solutions that can be part of Hawai'i's energy mix. As such, please support the allocation of appropriations for renewable gas studies to demonstrate the economic and industrial feasibility and applications that renewable gas has for our future.

Respectfully,

Dr. Luke Bailey

SB-2818-SD-1

Submitted on: 2/19/2020 7:35:42 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Kevin Nishimura	Individual	Support	No

Comments:

Aloha Senate Ways and Means Committee.

I am in strong support of SB2818. This is an important step toward clean and affordable energy for Hawaii. We must move forward with renewable energy initiatives, and do so with a methodical and well informed process. I applaud you for taking action now for our future, and thank you in advance for supporting this particular initiative.

Mahalo!

SB-2818-SD-1

Submitted on: 2/19/2020 7:36:17 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Zoe Williams	Individual	Support	No

Comments:

SB-2818-SD-1

Submitted on: 2/19/2020 9:04:49 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Shane Imai	Individual	Support	No

Comments:

SB-2818-SD-1

Submitted on: 2/19/2020 9:25:23 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
John C. Cross	Individual	Support	No

Comments:

Please support SB 2818 SD1 regarding renewal gases. Specifically I am looking forward to the production of Hydrogen Fuel resources for our State. The Hydrogen fuel can be made from renewable energy producers such as Hydroelectric and Geothermal. These producers of green electricity will use electrolysis to create the hydrogen fuel.

The time is NOW to convert our transportation and heating fuel needs to Hydrogen. I have worked in the Coffee Industry for many years and the use of propane to dry coffee parchment and to roast green coffee is a very expensive and inefficient use of fossil fuels. Let's get these burners off of Propane and onto Hydrogen!!

SB-2818-SD-1

Submitted on: 2/19/2020 10:22:57 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:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members,

I'm in **SUPPORT** of this measure, one that I hope results in our state taking advantage of our renewable energy sources to generate "renewable" gas, particularly hydrogen.

We have ample renewable energy sources, including **geothermal**, a source that I feel is not fully understood and can offer the energy required to not only support local electricity need, but also support energy-intensive processes like those required to generate **hydrogen**. This, along with solar, wind, hydro, and other renewables, might offer our state and its residents the opportunity to not only decarbonize our grid, it may also allow our gas-dependent industries and processes to wean itself from fossil fuel.

Thanks for the opportunity to testify.

Noel Morin - Hilo

SB-2818-SD-1

Submitted on: 2/19/2020 10:29:58 AM

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

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

Comments:

LATE

SB-2818-SD-1

Submitted on: 2/19/2020 11:22:26 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Jared Pasalo	Individual	Support	No

Comments:

LATE

SB-2818-SD-1

Submitted on: 2/19/2020 11:24:00 AM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Mari Sekiya	Individual	Support	No

Comments:

SB-2818-SD-1

Submitted on: 2/19/2020 11:37:33 AM

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

LATE

Submitted By	Organization	Testifier Position	Present at Hearing
DARREN CHANG	Individual	Support	No

Comments:

LATE

SB-2818-SD-1

Submitted on: 2/19/2020 11:50:48 AM
Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jenny	Individual	Support	No

Comments:

I believe the transition to renewable gas fuel sources must be carefully studied so that the transition can occur in a responsible and cost-effective way for the people of Hawaii.

While sun, wind and biomass create limitless potential resources to create renewable electricity, readily available resources to create renewable gas in Hawaii is limited.

Renewable Gas has never been afforded a locally focused study, and it is critically important to assess the true cost and impact on ratepayers. Does Hawaii have the resources in-state to create reliable renewable gas? What about the impact of the competing demands for land-use in Hawaii and the numerous legislative priorities that establish land use policy? This bill provides for these items to be carefully studied.

I am a native and local resident of Hawaii am struggling, living paycheck to paycheck. While some advocate for “visionary goals” to spur innovation, when these goals carry consequences to the ratepayer, I believe it’s wrong to legislate such goals without first analyzing its impacts.

This study is a sensible, logical step before mandating policy that may be unrealistic and unachievable, and we strongly support SB2818.

LATE

SB-2818-SD-1

Submitted on: 2/19/2020 3:51:53 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
donovan egloria jr	Individual	Support	No

Comments:

i think doing research on anything that can help the people in hawaii is a good thing

LATE

SB-2818-SD-1

Submitted on: 2/19/2020 4:16:47 PM

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

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

Comments:

Aloha Chair Dela Cruz and members,

SB2818 goes against the best interests of people in Hawaii, and in particular, our youth, who will have to live with the worst effects on the Climate Crisis if we fail to quickly transition off fossil fuels and reduce our greenhouse gas emissions immediately, as recommended in the latest IPCC report.

In a 2019 hearing at the Honolulu City Council, Hawaii Gas testified that renewable natural gas is a mere 3% of what they produce. Not even sure if renewable gas is a thing except when producing Hydrogen from an electrolyzer powered by a renewable energy source. Gas is a fossil fuel than usually emits when leaking greenhouse gases. Gas is not a sustainable solution. There is no justification for taxpayer dollars to be put forward for such a study. Better invest that money towards a clean energy economy now, so that Hawaii can move as quickly as possible to attain our renewable energy goals.

For these reasons, I strongly oppose SB2818 SD1.

Thanks for your attention

Severine Busquet

Hawaii Kai, Honolulu

LATE

SB-2818-SD-1

Submitted on: 2/19/2020 9:59:53 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Oppose	No

Comments:

Hawaii Gas and their use of fracked LNG is helping to fuel the climate crisis. Gas Utilities need to be included in the renewable portfolio standard, period. Stalling with a study is a waste of tax payer money. It also wastes time that could be better spent in ensuring a livable planet for our children by focusing our efforts towards truly clean, nonclimate-harming renewable energy. Scientists say we have 10 years to make significant reductions in our greenhouse gas emissions to avert climate disaster. We simply don't have time for wasteful, unnecessary studies any longer. It's time to get down to the business of saving our planet.

Thank you for this opportunity to testify.