

DAVID Y. IGE
GOVERNOR



CRAIG K. HIRAI
DIRECTOR

GLORIA CHANG
DEPUTY DIRECTOR

EMPLOYEES' RETIREMENT SYSTEM
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND
OFFICE OF THE PUBLIC DEFENDER

**STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE**

P.O. BOX 150
HONOLULU, HAWAII 96810-0150

ADMINISTRATIVE AND RESEARCH OFFICE
BUDGET, PROGRAM PLANNING AND
MANAGEMENT DIVISION
FINANCIAL ADMINISTRATION DIVISION
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

WRITTEN ONLY

TESTIMONY BY CRAIG K. HIRAI
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
ON
HOUSE BILL NO. 2203

**February 15, 2022
9:45 A.M.
Via Videoconference**

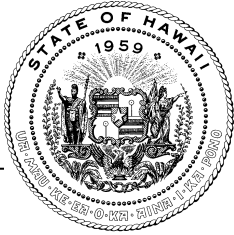
RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO
ASSIST DIBSHAWAII LLC.

The Department of Budget and Finance (the "Department") offers the following comments on House Bill No. 2203 which authorizes the issuance of Special Purpose Revenue Bonds (SPRB) to assist DIBSHawaii LLC, a Hawaii limited liability company, to build a net zero carbon capture storage utilization platform that will recover vented carbon dioxide emissions and scrub and liquify them into food grade liquid carbon dioxide that can be placed in pressurized storage tanks creating a virtual terminal for food grade carbon dioxide to be utilized across the State pursuant to Part V, Chapter 39A, Hawaii Revised Statutes.

The Department would like to inform the Legislature and prospective SPRB parties that should the legislation be approved, approval of the SPRB issuance and conduit loan will require further review of the financing proposal to ensure compliance with all federal, state and credit underwriting requirements. Additionally, the Department would like to note that Senate Bill No. 2812 and House Bill No. 2019 specifies that the State's allocation of the bond ceiling cap and all returned bond ceiling

cap from the counties, shall be entirely used for housing related projects. Should the legislation be approved, all SPRBs subject to the bond ceiling cap will be prohibited from issuance by the Department for the next five years. Furthermore, House Bill No. 1829 specifies that the entire allocation of the state bond ceiling cap shall be used for housing related projects. Should the legislation be approved all SPRBs subject to the bond ceiling cap will be prohibited from issuance by the Department and counties for the next five years. For additional information, please consult our FAQ located at the following link: <http://budget.hawaii.gov/wp-content/uploads/2012/11/SPRB-FAQ.pdf>.

Thank you for your consideration of our comments.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

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Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, February 15, 2022
9:45 AM

State Capitol, Conference Room 325 & Videoconference

**SUPPORT
HB 2203
RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO
ASSIST DIBSHAWAII LLC.**

Chair Lowen, Vice Chair Marten, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports HB 2203, which authorizes the issuance of special purpose revenue bonds to assist DIBS Hawai'i LLC in the construction of a net-zero carbon capture storage utilization platform that will recover vented carbon dioxide emissions and scrub them into food grade liquid carbon dioxide.

HSEO believes that the project is in the public interest and supports the use of Special Purpose Revenue Bonds for this purpose.¹

Due to global supply chain issues as a result of the pandemic, Hawai'i is experiencing a carbon dioxide shortage for economic activity, much like the rest of the nation, but more acutely as there is only one facility in Hawai'i that produces carbon dioxide. Sourcing it from the continental US is more difficult due to the shortage and more costly due to the transportation distances. Carbon dioxide in Hawai'i has many commercial uses, including carbonated beverages, agricultural technology, water

¹ Special Purpose Revenue Bonds provide loan financing to assist qualifying capital improvement projects in the public interest. The bonds do not constitute a general obligation of the State and are not State monies.

February 15, 2022

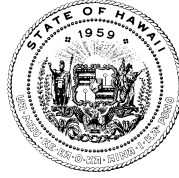
treatment, waterless surface cleaning, dry ice for maintaining freshness of cold items during transport, and others.

It is HSEO's understanding that DIBS Hawai'i is a native Hawaiian-owned company and is planning to build a net-zero carbon capture storage utilization platform. This is consistent with Hawai'i's interests, as it captures carbon dioxide that would otherwise be released into the atmosphere; uses already-available rather than imported material for local applications; and supports a locally-owned business in promoting import substitution and economic diversification.

Capturing emissions from the atmosphere for economic activity and long-term sequestration is an important feature in Hawai'i's clean energy, decarbonized economy transition and statutory commitment to the Paris Agreement. Furthermore, this project will help to build the local knowledge base and expertise for Hawai'i to source carbon dioxide from renewable sources in the future as fossil energy is phased out and Hawai'i transitions to a net-negative, resilient clean energy economy.

Thank you for the opportunity to testify.

DAVID Y. IGE
GOVERNOR
STATE OF HAWAII



WILLIAM J. AILA, JR.
CHAIRMAN
HAWAIIAN HOMES COMMISSION

JOSH GREEN
LT. GOVERNOR
STATE OF HAWAII

TYLER I. GOMES
DEPUTY TO THE CHAIRMAN

**STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS**

P. O. BOX 1879
HONOLULU, HAWAII 96805

WRITTEN ONLY

TESTIMONY BY WILLIAM J. AILĀ, JR.
CHAIRMAN, DEPARTMENT OF HAWAIIAN HOME LANDS
TO THE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

TUESDAY, FEBRUARY 15, 2022
9:45 AM
STATE CAPITOL, CONFERENCE ROOM 325 AND VIDEOCONFERENCE

IN SUPPORT

HOUSE BILL NO. 2203
RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST
DIBSHAWAII LLC.

Chair Lowen, Vice Chair Marten and members of the Committee, the Department of Hawaiian Home Lands (DHHL) Supports HB 2203, which authorizes the issuance of special revenue bonds to assist DIBS Hawai'i, LLC in construction of a net zero carbon capture storage utilization platform that will recover vented carbon dioxide (CO₂) emissions and scrub them into food grade liquid carbon dioxide.

DHHL supports partnerships and alliances that can improve the success of our agriculture/farming homesteads. Hawaii currently imports one hundred percent of the CO₂ utilized in the State. The sourcing of this commodity from mainland sources has made it more costly for local businesses due to transportation cost and global supply chain issues. Very little of the State's CO₂ makes it to the agriculture sector due to the high cost of importing and limited State supply. It is DHHL's understanding that 75% of the recovered CO₂ is intended for agriculture and energy. The use of CO₂ recovered from the net zero carbon capture-storage-utilization platform in agriculture is beneficial to DHHL and the State as it both sequesters CO₂ that would otherwise be released into the atmosphere and is expected to reduce the cost of CO₂ use in agriculture through in-state production and greater supply.

The DHHL is governed by the Hawaiian Homes Commission Act (HHCA) of 1920, enacted by the U.S. Congress to protect and improve the lives of native Hawaiians. The intent of the HCCA is, “*to enable native Hawaiians to return to their lands in order to fully support self-sufficiency for native Hawaiians and the self-determination of native Hawaiians . . . and the preservation of the values, traditions, and culture of native Hawaiians.*” DHHL supports the use of the recovered food grade liquid carbon dioxide product for agriculture, energy and carbon storage as this will advance not only the State’s goals of food security and resilience but also DHHL’s mission to improve the lives of native Hawaiians.

Mahalo for your consideration of this testimony.

DIBSHAWAII, LLC

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kford@dibshawaii.com · www.dibshawaii.com

Aloha kakou

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Lisa Marten, Vice Chair

Mahalo for the opportunity to provide testimony on HB2203 we show our full support

RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST DIBSHAWAII LLC.

Dibshawaii LLC business model was built upon using carbon dioxide from a carbon neutral stance. To be able to clean without creating any secondary waste stream. The result of the dry ice cleaning platform is mitigating our carbon footprint and being able to provide accolade level environmental cleaning without adding any additional waste streams and the burning of fossil fuels and consumption of other products that would then need to be disposed of. That was the premise of why I started this so we could clean at a higher level with integrity to our consumption and the mindfulness of protecting the environment.

Through this process of using dry ice to clean we could be more consistent, and we could ultimately support better practices, for the federal government, the state of Hawaii and private industry. By using these actions and performances using carbon dioxide to clean with no secondary waste stream, we could demonstrate to other small business trying to achieve those goals that there are advanced tooling and proven processes within reach.

As a small business we are dependent on carbon dioxide in its liquid state. Stored liquid carbon dioxide can be utilized to create dry ice. The Dry ice would then be used to supplement sand for sandblasting and water for pressure washing. So instead of using sand and water with chemicals we are using carbon dioxide to clean. Eliminating the costly steps to dispose of contaminated spent media and water greatly reducing the projects carbon emissions.

Our local supply chain issues with carbon dioxide in the state of Hawaii and our availability of carbon dioxide has put us at a disadvantage for the last decade meaning it inhibited us from truly reaching our potential. It did not allow for us to expand our operations because of the unreliability, unavailability and ultimately the high cost of the carbon dioxide. Hawaii is the most expensive place in the world to buy carbon dioxide as a small business or individual.

Dibshawaii LLC, a native Hawaiian Veteran owned company. Along with a consortium of Hawaiian owned businesses we are teaming together to construct a Net Zero Carbon Capture Storage Utilization (CCSU) platform.

This third-party CO2 infrastructure will recover large volumes of vented carbon dioxide emissions from industrial oil & gas refining, biomass to energy production, and geothermal operations. This repurposed carbon dioxide will be sequestered into the soil to produce an abundance of healthy and nutritious agricultural products for local consumption. It will also be

applied in the development of locally sourced building materials such as hempcrete and concrete mineralization. CO2 will also be available to support locally emerging sustainable jet fuel production platforms.

Hawaii and other island communities will be the first to experience climate change through rising sea levels, and we must act now to mitigate our carbon emissions by capturing the CO2 stream one source at a time.

This is an excellent opportunity for farmers, small business, and investors whom are pivoting to advanced farming practices vertical farming, protected farming, glass house agriculture all which will require dissolved CO2 for irrigation systems to increase yields and food production by 30% and mitigate disease and pathogens on crops. Locally grown nutrient dense food and revitalization of carbon rich soil systems is a requirement that needs our states attention.

The benefits of these actions help to offset our import on food and the direct application of carbon dioxide being absorbed into the soil systems building carbon rich soil systems to combat 100 years of plantation agriculture.

HB 2203 will allow for a natural progression towards education and awareness and the connection between food, energy, our ability utilize and sequester carbon dioxide. Learner programs will demonstrate our ability to mitigate our carbon footprint at commercial scale through mindful and innovative actions.

Dibshawaii LLC in full support of HB2203 and has much appreciation to this committee for drafting a bill that can open doors on climate change locally, carbon credits and incentives, technical assistance, and a platform to grow people to grow our food locally in support of our Hawaiian lifestyle.

Sincerely,

Keoni Ford,



HB-2203

Submitted on: 2/14/2022 7:27:11 AM

Testimony for EEP on 2/15/2022 9:45:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Scott Wong	Ohana Hui Ventures, inc	Support	No

Comments:

I am in support of HB 2203. Hawaii needs to make serious steps towards the reduction, capture and storage of Co2 and less dependant on outside suppliers. Having our own capturing and storage units in Hawaii will benefit the State by having readily available Co2 for dry ice manufacturing, industrial cleaning, Co2 infused water for agriculture, ethanol for clean fuel and for netzero energy.

HB-2203

Submitted on: 2/10/2022 3:25:10 PM

Testimony for EEP on 2/15/2022 9:45:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Gerard Silva	Individual	Oppose	No

Comments:

This is Toxic. Should not be Used!!

HB-2203

Submitted on: 2/12/2022 7:28:53 PM

Testimony for EEP on 2/15/2022 9:45:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Sidney Higa	Individual	Support	No

Comments:

House Bill 2203 SPRB to support Carbon Capture Storage Utilization

Supporter Key Messages

My Name is Sidney Higa and live at 92-739 Makakilo Drive

I am a 40 year resident of Makakilo, a 24 year Military Veteran and I was born in the Ewa district when Hawaii was still a territory.

My father’s family were farmers and had a Poi factory and Taro farm in Kahaluu Valley and my father worked for the sugar plantation in Ewa after returning from serving in the USMC during the Korean War.

My uncle Thomas “Taro” Higa served in the 442nd 100th battalion Military Intelligence and was a part of the group who restocked Okinawa with Pigs and other livestock after WWII left the Island barren.

Farming is not easy as referenced in Hawaii Business Magazine and my family can attest to that. The bottom line is that farming is very labor intensive, energy intensive, and water intensive and unless you can increase yields, Hawaii will not become food independent.

There are new technologies and methods that make it possible for regular farms and small urban gardens to be very productive. One of these is to increase CO2 in the water which the plants thrive on. This increases growth and maturity thus increasing yields.

So I support House Bill 2203 because:

CO2 is being vented and is a source of climate change and global warming and needs to be captured.

CO2 is what plants use as food to grow. The more food we grow the closer to self-sufficiency for our food production. This in turn feeds myself, my children, my grandchildren and my great grandchildren.

CO2 has industrial uses such as dry ice for cold storage and transportation.

CO2 is a future source for aviation fuel and will help to offset imported oil.

CO2 will create many opportunities including job opportunities, which in turn creates housing opportunities and choices.

Sidney Higa

February 13, 2022

The Honorable Representative Nicole Lowen, Chair
The Honorable Representative Lisa Marten, Vice Chair
Committee on Energy & Environmental Protection

Testimony in Support of HB 2203, Relating to the Issuance of Special Purpose Revenue Bonds to Assist DIBSHawaii LLC

Aloha Chair Lowen and Vice Chair Marten:

I support HB 2203.

The Special Purpose Revenue Bonds will assist DIBSHawaii in reducing carbon emissions and climate change while developing a carbon use industry in the State of Hawaii.

Why import CO₂ or produce it from fossil fuels? Let's keep the local dollars in the local economy! And better yet, let's use renewable, clean, 24/7 power sources to make it happen!!


Warren Lee



February 14, 2022

The Honorable Thirty-First Legislature, 2022
House of Representatives, State of Hawaii,
State Capitol, Room 325
Honolulu, Hawaii 96813

Dear Honorable Legislators

My name is Alika Watts. I am a native Hawaiian, a retired military Veteran with over 28 years of service, and a small business owner. I am in full support of HB2203, "Relating to Carbon Sequestration Incentives". This House Bill is on track, along with several other bills introduced this year related to the importance of recovering large volumes of vented Carbon Dioxide emissions from Hawaii industries. House Bill 2203 supports current Hawaii laws, regulations, and practices.

House Bill 2203 presents an incredible opportunity for the State of Hawaii to Capture, Store, and Utilize Carbon Dioxide (CO₂), from Hawaii based industries, which are currently emitting hundreds of tons of CO₂ into the atmosphere every day. Not only will this reduce our carbon footprint, but several industries are already in full cooperation with CO₂ capturing.

Currently Hawaii imports 100% of its CO₂, which is still not enough to meet current demands. HB2203 enables Hawaii to be independent through capturing its own CO₂. This will provide more than enough to support today's CO₂ requirements and much more to expand usage for generations to come.

I support HB2203 dedicated focus on Hawaii's responsibility to reduce its negative contribution to climate changes and at the same time make a positive spin through sequestering carbon into the soil to produce nutrient dense soils and replenish Hawaii's soil that has been depleted from harmful pesticides and other past unhealthy outdated farming practices

This Bill supports Hawaii's ability to grow an abundance of safe, healthy, and nutritious food through advance technological processes, such as future vertical farming. Further reducing our dependence on importing pre-ripen fruits and vegetables. Creating an abundance of healthy and nutritious agricultural products for local consumption. It produces wholesome feedstock for livestock, poultry, and fisheries.

There are several other advantages to Hawaii from capturing its own CO₂, and not importing it in. Hawaii can create our own value-added products such as industrial Hemp and Hempcrete, which also continues to sequester CO₂. This reduces importing materials for building homes and other critical structures. Assist in the production of renewable clean aviation fuel, reducing our 100% reliance of importing fuel, and reducing the requirement for mass fuel storage.



HB2203 will allow Hawaii to create our own Dry Ice production, across the State of Hawaii for commercial, community, and individual use. The price of dry ice has increased over 800 percent in just the past few years. With a more abundance of feasible dry ice, Hawaii can take advantage of expanding the export of current economical markets and have the advantage of developing new export markets.

HB2203 establishes better practices of using dry ice to clean Hawaii's infrastructure, especially new electronic component technologies, such as cleaning and maintaining electric car power stations. It provides better practices moving forward that use carbon dioxide to eliminate secondary waste streams, which must be exported out of Hawaii creating more transportation emissions.

I support the efforts of a local 3rd party CO2 infrastructure that benefits small businesses in the State of Hawaii. The capturing and reutilization of carbon dioxide (CO2) for these reasons is not only of significant importance today, but also an excellent investment for future generations living in Hawaii.

Hawaii and other island communities will be the first to experience climate change thru rising sea levels. It is imperative to do our part to mitigate our carbon emissions by capturing carbon dioxide stream and making a positive spin to not only benefit the citizens of the state of Hawaii, but the world.

Eco4Life is a Hawaii based, native Hawaiian, Veteran owned, company dedicated to providing state of the art, successfully proven, next generation technological advancements, to maximize community resources by increasing self-sustainability and decreasing reliance on external imports.

Sincerely,

COL (Ret.) Alike G. Watts
President
Eco4Life LLC
(808) 223-3268
alika@eco4life.us

HB-2203

Submitted on: 2/14/2022 9:36:57 AM

Testimony for EEP on 2/15/2022 9:45:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Sally Ford	Individual	Support	No

Comments:

I am in favor of this bill because it highlights the ways Hawaii can move forward toward climate change, improved agricultural practices, creating much needed jobs, and not only capturing carbon, but sequestering it.

TESTIMONY ON HOUSE BILL 2203 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS
TO ASSIST DIBSHAWAII LLC

PRESENTATION TO THE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

By Sharlette Poe

February 15, 2022

Chair Nicole E. Lowen, Vice Chair Lisa Marten and Members of the Committee on Energy and Environmental Protection. My name is Sharlette Poe and I am testifying in support of House Bill 2203 (HB2203), which authorizes the issuance of special purpose revenue bonds to assist Dibshawai'i LLC in building a net zero carbon capture storage utilization (CCSU) platform that will recover vented carbon dioxide emissions and scrub and liquify them into food grade liquid carbon dioxide.

While I am still learning about the technological and technical parts I do understand that this platform will have cascading benefits in multiple sectors leading to a more secure and resilient Hawaii. By supporting HB2203 and acting now we can increasingly reduce Hawaii's carbon footprint, dependence on food imports and reliance upon building materials, while creating living-wages local jobs and opportunities for business development. Mahalo for this opportunity to provide testimony.

Reducing Hawaii's Carbon Footprint

Industrial processes that have large volumes of vented carbon dioxide emissions are exactly where we can start. Instead of venting this carbon dioxide and releasing it into the air to act like a blanket, holding heat in the atmosphere and warming the planet, it can be captured, recovered, scrubbed and liquefied to food grade carbon dioxide (LCO₂). This net zero CCSU platform will capture this CO₂ before it is released – and wasted, therefore mitigating our carbon footprint and creating additional beneficial uses.

Food Security and Advanced Farming

Food grade LCO₂ will be utilized for agriculture, energy, and carbon storage especially as Hawaii moves toward reducing its dependency on imported foods. We can also use this captured carbon dioxide in our soil to restore a hundred years of monoculture lands and develop nutrient dense soil systems to grow nutrient dense foods. With nutrient dense food we can grow healthy communities, healthy families and healthy keiki.

Greener Building Materials

This repurposed carbon dioxide will also be applied in the development of locally sourced building materials such as hempcrete and concrete mineralization.

Jobs & Industry Growth

With the creation of this CCSU platform and the development of an independent carbon dioxide infrastructure, we will be adapting to new technologies, that will need a steady increase of workers, experts, and businesses. There will be great opportunities for long-term, living-wage jobs as well as a need for more small businesses in the related areas around Carbon Capture Storage and Utilization.