DAVID Y. IGE GOVERNOR

EMPLOYEES' RETIREMENT SYSTEM HAWAI'I EMPLOYER-UNION HEALTH BENEFITS TRUST FUND

OFFICE OF THE PUBLIC DEFENDER



CRAIG K. HIRAI DIRECTOR

GLORIA CHANG DEPUTY DIRECTOR

STATE OF HAWAI'I DEPARTMENT OF BUDGET AND FINANCE P.O. BOX 150 HONOLULU, HAWAI'I 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 SENATE BILL NO. 2865, S.D. 2

March 22, 2022 9:30 A.M. Room 325 and 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 Senate Bill No. 2865, S.D. 2, 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 Statues. The amount of the authorization is unspecified.

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 House Bill No. 1829, H.D. 2 specifies that the entire allocation of the state bond ceiling cap shall be used for housing related projects for the

next six years provided that the allocations authorized, but not issued before July 1, 2022 shall not be affected. An authorization to issue a SPRB does not allocate the state bond ceiling. The allocation of the state bond ceiling is made at the closing of the bonds. Since the bill specifies that the entire state bond ceiling shall be used for housing related projects, all authorized and not issued SPRBs subject to the bond ceiling cap will be prohibited from issuance by the Department for the next six years regardless of the authorization received prior to July 1, 2022. For additional information, please consult our FAQ located at the following link: <u>http://budget.hawaii.gov/wpcontent/uploads/2012/11/SPRB-FAQ.pdf</u>.

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

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Telephone: Web: (808) 587-3807 energy.hawaii.gov

Testimony of SCOTT J. GLENN, Chief Energy Officer

before the HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, March 22, 2022 9:30 AM State Capitol, Conference Room 325 & Videoconference

SUPPORT SB 2865, SD2 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 SB 2865, SD2, which authorizes the issuance of special purpose revenue bonds to assist DIBSHawaii LLC in the construction of a netzero carbon capture storage utilization platform that will recover, scrub, and liquify carbon dioxide emissions into food grade liquid carbon dioxide. This bill is a companion to HB 2203, which this committee heard and approved in February.

HSEO supports the use of Special Purpose Revenue Bonds for this purpose and believes that the project is in the public interest.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 those listed in the bill as well as for carbonated beverages,

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.

agricultural technology, water 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, establishing this capability in Hawai'i helps build the knowledge and expertise for Hawai'i to source carbon dioxide using renewable resources in the future as fossil energy is phased out and Hawai'i transitions to a net-negative, resilient clean energy economy.

HSEO defers to the appropriate agency for the implementation and fiscal impacts of this bill.

Thank you for the opportunity to testify.

DIBSHAWAII, LLC

86122 Kakaiapola St., Waianae, HI 96792 · (808) 554-9247 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 SB2865 SD2 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.

SB2865 SD2 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 is in full support of SB2865 SD2 and has much appreciation to this committee for considering 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.







1578 Alewa Dr • Honolulu, HI 96817• (585) 635.9263 E-Mail: char@craft8ventures.com

Date: 3/21/2022

Aloha kakou,

Committee on Energy & Environmental Protection

Rep. Nicole E. Lowen, Chair

Rep. Lisa Marten, Vice Chair

Relating to the issuance of Special Purpose Revenue Bonds to assist DIBSHawaii LLC.

Craft 8 Ventures, Inc. wishes to express full support of SB2865.

Craft 8 Ventures, Inc. a Farmland and Agricultural Development Holding Co. base in Hawai'i established solely to support small farms and reclaim lands for food security, green initiatives, and affordable housing is in full support of SB2865. Further the Board of Directors supports issuance of special purpose revenue bond to assist DIBS Hawaii LLC in the construction of a net-zero carbon capture storage utilization platform that will recover vented carbon dioxide emissions and scrub into food grade liquid carbon dioxide.

DIBS Hawaii providing a virtual carbon capture pipeline across the state will reduce carbon emissions as well as provide CO2 infused water systems to our local farmers improving food security and enhancing carbon sequestration efforts state wide. DIBS Hawaii's efforts will create a sustainable source of Co2 produced on island with a ripple of reducing carbon emissions in the transport of Co2 from off island sources.

DIBS Hawai'I LLC innovative application is providing a model for carbon negative applications across all island industry to evolve at a critical time in history.

Sincerely,

Charlene Matila Founder - CEO

Bill SB 2865 to support Carbon Capture Storage Utilization

Supporter Key Messages

My name is Scotty Reis-Moniz and I live at 41-852 Oluolu Street.

I am a 57 year resident of Waimānalo, and serve as the Executive Director and President of the Friends of Waimānalo, a local non-profit agency.

Our mission is support, empowerment, and progress. We have a variety of programs available to accomplish this mission. One of which is industrial hemp farming, and the other is Education (Build and Trades Academy [one of our programs]), and Outreach (such as assisting with Honolulu Habitat for Humanity, etc.), to name just a few of things we do.

Industrial hemp can provide the fiber and materials needed to create Hempwood, Hempcrete and Bio Diesel fuel.

Industrial hemp can provide us a way to become more self sufficient.

- We would be able to produce our own Hempwood and Hempcrete to build homes and buildings.
- We would not need to rely on importing wood and concrete from outside of our state. This would cut down on shipping costs and delays.
- Producing our own Hempwood and Hempcrete would keep building costs down, and will have a trickle down effect.
- It would create more job opportunities.
- It will create more affordable housing for people to be able to own their own homes.
- More job opportunities and affordable homes will allow us to keep our families and talent here in Hawai'i, instead of them seeking out a living elsewhere.

We also support DIBS Hawaii in their efforts.

It is known, that farming is not easy. It is very labor, energy, 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 way, is to increase CO2 in the water which the plants thrive on. This increases growth and maturity, thus increasing yields.

So I support Bill SB 2865 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 our families and communities.

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.

In addition, I support Bill SB 2865 to authorize the issuance of special purpose revenue bonds to assist DIBSHawaii 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"

This in an effort to fully address the supply chain issues around carbon dioxide, and stabilize the cost and storage capacity for local industry without competing for supply with the Soft drink industry.

A local 3rd party co2 infrastructure allows for the rapid development of a virtual terminal to store, transport, utilize and sequester large volumes of carbon dioxide to combat climate change.



March 20, 2022

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

<u>Testimony in Support of SB 2865, Relating to the issuance of Special Purpose Revenue Bonds to Assist</u> <u>DibsHawaii LLC.</u>

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 SB 2865, "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. Senate Bill 2865 supports current Hawaii laws, regulations, and practices.

Senate Bill 2865 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. SB 2865 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 SB 2865 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

Senate Bill 2865 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 will also produce 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 for years after the structure is built. This reduces importing materials for building homes and other critical structures. It assists in the production of renewable clean aviation fuel, reducing our 100% reliance of importing fuel, and reducing the requirement for mass fuel storage.



SB 2865 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.

SB 2865 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.

White b. With

Sincerely,

COL (Ret.) Alika G. Watts President Eco4Life LLC (808) 223-3268 <u>alika@eco4life.us</u>

<u>SB-2865-SD-2</u>

Submitted on: 3/20/2022 12:06:51 PM Testimony for EEP on 3/22/2022 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Oppose	Written Testimony Only

Comments:

Special purpose bonds seem like a good way to cheat the state out of revenue. No bond holder should be allowed to not pay state taxes on profits.

SB-2865-SD-2

Submitted on: 3/20/2022 7:05:38 PM Testimony for EEP on 3/22/2022 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Sidney Higa	Individual	Support	Written Testimony Only

Comments:

Senate Bill 2865 SPRB to support Carbon Capture Storage Utilization

Supporter Key Messages

Carbon Dioxide (Co2) is a by product of a lot of the uses we have for fossil fuels. There has been an abundance of Co2 produced from refineries, coal electricity generation, etc. Although there have been studies that Co2 is a cause for global warming, there are a lot of uses for Co2 that are not taken into account.

The problem arises in that the capture of and reuse of Co2 has not been a part of the global economy. Co2 has many uses and is known to be used by plants as part of the photosynthesis process whereby we get oxygen and food crops.

There are many uses for Co2 and by capturing it at the largest sources producing it in the State we can reuse Co2 to aid in agriculture and other industries.

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. Co2 can also be injected into the concrete manufacturing process thereby sequestering Co2 while making the concrete stronger.

So I support Senate Bill 2865 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 and as an additive to make concrete stronger.

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