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 SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM ON SENATE BILL NO. 2865

February 4, 2022 3:00 P.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 Senate Bill No. 2865 which authorizes the issuance of Special Purpose Revenue Bonds (SPRB) to assist DIBSHawaii LLC 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 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. For additional information, please consult our FAQ located at the following link: <u>http://budget.hawaii.gov/wp-content/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 SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

> Friday, February 4, 2022 3:00 PM State Capitol, Conference Room 224 & Videoconference

SUPPORT SB 2865 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST DIBSHAWAII LLC.

Chair Wakai, Vice Chair Misalucha, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports SB 2865, which authorizes the issuance of special purpose revenue bonds to assist DIBS Hawai'i LLC in the construction of a netzero 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.

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, beginning this helps build the knowledge 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.

<u>SB-2865</u> Submitted on: 2/1/2022 6:43:12 PM Testimony for EET on 2/4/2022 3:00:00 PM

 Submitted By	Organization	Testifier Position	Remote Testimony Requested
Keoni ford	Testifying for Dibshawaii llc	Support	Yes

Comments:

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 to sand for sandblasting and water for pressure washing. So instead of using sand and water with chemicals we are using carbon dioxide to clean.

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 is 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.

Hawaii and other island communities will be the first to experience climate change through rising sea levels, and we must take action now to mitigate our carbon emissions by capturing the co2 stream one source at a time.

<u>SB-2865</u>

Submitted on: 2/3/2022 6:50:03 AM Testimony for EET on 2/4/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
DEREK CONSELVA	Testifying for HRA, LCC, WEDG, AKVO	Support	No

Comments:

Aloha,

My Name is Derek Conselva and I support Bill SB2865. I have worked in the foodservice industry and organizations for more than 46 years. Currently on the Board at Wahiawa Economic Development Group (WEDG), Board Member of the Hawaii Restaurant Association, and on the Advisory Board at Leeward Community College Culinary Arts Division. Member of the Rotary Club of Wahiawa-Waialua, Native Hawaiian Chamber of Commerce, Hawaii Aquaculture & Aquaponics Association.

Owner of DC Sales and Marketing LLC

Ownership in AKVO LLC (AWG)

President of LOKAHI I KE OLA (non-profit organization) My farm to My Table

The State of Hawaii should move forward in the proposals that DIBS HAWAII is presenting in Bill SB2865. The benefits will provide clean energy and a self-sufficient Greener HAWAII.

Mahalo, Derek Conselva



Cement and Concrete Products Industry of Hawaii 2153 N. King St. # 327 Honolulu, HI 96819 Telephone (808) 848-7100

Website: www.ccpihawaii.org

February 3, 2022

2022 Chairman of the Board John Romanowski

> Vice Chairman Jim Beaton

> > Secretary Ed McCary

Treasurer Eileen Mori-Mishina

> Past Chairman Gavin Shiraki

Executive Director Kirk Hashimoto kirk@ccpihawaii.org Position Statement of the Cement and Concrete Products Industry of Hawaii Re: HB 574March 24, 2017

Honorable Legislators of the 2017 Hawaii State Legislature:

The Cement and Concrete Products Industry of Hawaii (CCPI Hawaii) acts as the local concrete industry group which provides support, information, certification, education and training on concrete. CCPI Hawaii supports greener building initiatives and our industry continues to seek ways to implement materials, manufacturing methods and design improvements which reduce environmental impacts. We support SB2865 as a means for Hawaii to develop independent, local infrastructure to capture local carbon dioxide emissions and use them locally.

The bill mentions use of carbon dioxide mineralization in concrete and CCPI invites you to review the attached letter for our position on this legislation and methodology.

Industry in Hawaii faces many challenges with high taxes, high property costs and expensive freight and utility costs. This grant helps to offset some of those costs and risks while supporting greener development in Hawaii. Having a local facility will not only reduce the carbon emissions but will also provide a local supply of a product that is limited in supply. Although concrete technology for use of carbon dioxide continues to develop and we strive to incorporate sequestration into production in a viable manner, developing the infrastructure to provide the carbon dioxide in anticipation of the demand seems prudent.

Please contact us with any questions or comments.

Mahalo,

Kirk S. Hashimoto Executive Director

Member Firms: BOMAT, Ltd dba Bonded Materials Co. / Glover-Honsador (Kauai) / GPRM Prestress, LLC / Hawaii Precast Inc. / Hawaiian Cement (Cement) / Hawaiian Cement (Halawa) / Hawaiian Cement (Maui) / HC&D LLC (Oahu) / HC&D LLC (Maui) / Hawaii Precast, Inc. (Hawaii Island) / Island Ready Mix Concrete, Ltd. / Jas. W. Glover, Ltd. / Jensen Precast / Kauai Concrete and Aggregates / Tileco. Inc. / Walker Industries, Ltd. / West Hawaii Concrete / Yamada & Sons, Inc. dba Con-Agg of Hawaii (Big Island)

Associate Members: Aggritek International, Inc. / Consolidated Engineering Laboratories An Atlas Company / Construction Engineering Labs / Downstream, Inc. / Geotech Solutions, Inc. / Grace Pacific LLC. / Haggith's Structural Scan & Inspection / Hawaiian Dredging Construction Co. / White Cap / ISE Logik Industries, Inc. / KSF Inc. / Largo Concrete, Inc. / MasterBuilders Solutions – Admixture Systems / OK Hardware & Construction Supply / Penhall Company dba Concrete Coring Co. of Hawaii / Puna Rock Co. (Hawaii Island) / Simpson Strong Tie Co. Ohana hui Ventures, Inc 41-207 Kauholokahiki Street Waimanalo, Hi 96795 808-450-4244

SB2865 to support Carbon Capture Storage Utilization My Name is Scott K Wong and I'm a resident of Waimanalo on Hawaiian Homestead Lands. I also own and operate Ohana Hui Ventures, Inc which holds 400 acres of Agricultural Lands in Whitmore Village on ADC lands.

My family is from Laie and we were raised as fishermen and farming was the way of life for my ancestors up until the early 1950's when everything could be bought in the stores.

My mom and dad met in the United States Marine Corps and we became a modern family but always kept in touch with family farming and fishing. I eventually became a Marine and after going around the world and seeing the many different types of living conditions I came home to understand that food security and renewable energy was key for Hawaii. We started Ohana Hui Ventures, Inc specifically to enhance Kanaka ideas and technology for the betterment of our people in Hawaii. To seek out advance cutting edge technologies in the film industries, food agriculture, drone technology and industrial hemp. We have also partnered with Atmospheric Water Generator systems and Co2 technology. We are committed to supporting and enhancing this technology to better the Agribusiness sector and to create high tech jobs and innovation to put Hawaii into a leader in diversified agriculture and attracting more youth to new high tech jobs.

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

So I support SB2865 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 my self, 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.

Our non profit arm, Friends of Waimanalo, a 501c3 workforce development organization is focused on community engagement to train and certify our people to do these jobs in agriculture, Co2 grow systems, hemp farming and processing. Net zero energy and techniques for Non Destructive, Non Toxic, and Non-conductive for Advanced Surface Preparations. Friends of Waimanalo intends to train the future workforce these new tech jobs through our workforce development programs. Senate Bill 2865 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 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.

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

<u>SB-2865</u> Submitted on: 2/2/2022 6:34:06 AM

Testimony for EET on 2/4/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Richard H Cox	Individual	Support	No

Comments:

I am in support of senate bill 2865 and the use of carbon dioxide to benefit the State of Hawaii to to grow food, nutrient dense soil systems, value added products like industrial hemp and hempcrete that sequester co2.

I support better practices using dry ice to clean hawaiis infrastructure.

this is an incredible opportunity for the state to recover carbon dioxide reduce its carbon footprint and provide better practices moving forward that use carbon dioxide to eliminate secondary waste streams.

The utilization of carbon dioxide for these reasons is a good thing.

I support the efforts of a local 3rd party co2 infustrusture that benefits small businesses in the state of hawaii.

I am in full support of Senate Bill 2865

- 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 tons of CO2 into the atmosphere every day. Not only will this reduce our carbon footprint, but several industries are in full cooperation with CO2 capturing.
- Currently Hawaii imports 100% of its CO2, which is still not enough to meet current demands. Senate Bill 2865 will enable 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.
- Benefits of Carbon Dioxide (CO2) to the State of Hawaii are:
 - The ability to grow an abundance of safe, healthy, and nutritious food through advance technological processes, such as future vertical farming.
 - Create feedstock for livestock, poultry, and fisheries.
 - Produce nutrient dense soil systems to replenish Hawaii's soil that has been depleted from harmful pesticides and other past farming practices
 - 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 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.
 - Create our own Dry Ice production, across the State of Hawaii for commercial, community, and individual use.
- Senate Bill 2865 concurrently supports several other climate change, and sustainability Senate and House Bills, which are also being proposed during this session.
- Senate Bill 2865 supports current Hawaii laws, regulations, and practices.
- It establishes better practices of using dry ice to clean Hawaii's infrastructure, especially new electronic component technologies, such as 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, the United States of America, and the entire world.

<u>SB-2865</u> Submitted on: 2/3/2022 8:46:49 AM Testimony for EET on 2/4/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Lehua Abrigo	Individual	Support	No

Comments:

Aloha mai kākou,

I am providing tesitmony in support of Senate Bill 2865.

This is an incredible opportunity for the State of Hawai'i to recover carbon dioxide(CO 2) from Hawaii-based industries, which currently emit carbon dioxide into the atmosphere daily. While the science part is a little over my head, the possibility that Hawai'ii has the capacity to reduce our own island carbon footprint is pretty amazing.

Hawai'i is dependent on receiving our food and energy resources from elsewhere. Carbon Dioxide is no different. We import 100% of our CO 2. With several industries in full cooperation of CO 2 capturing, this bill will enable DIBSHawai'i LLC to build a net zero carbon capture storage utilization (CCSU) platform that would have the capacity to harness the incredible properties of this industrial gas. This will put Hawai'i on track to independently capture and utilize our own CO 2. Some benefits of carbon dioxide utilization (CO 2) to the State of Hawai'i include:

- Growing an abundance of safe, healthy and nutritious food through advanced technological processes, such as vertical farming.
- Producing nutrient dense soil systems to replenish Hawai'i soil that has been depleted from harmful pesticides and past farming practices.
- Creating feedstock for livestock, poultry, and fisheries.
- Creating our own value added products such as industrial Hemp and Hempcrete, (that continue to sequester CO 2), which in turn reduces the need to import materials for building homes and other structures.
- Contributing to the production of renewable clean aviation fuel, reducing our 100% reliance of importing fuel, and reducing the requirement for mass fuel storage. i.e. help to remedy the current Red Hill crisis.
- Creating our own dry ice production across the state for commercial, community, and individual use.

I support the efforts of locally owned and operated DIBSHawaii LLC and their proposed CO2 infrastructure that has the potential to benefit the State of Hawai'i in so may ways, not only today but for many generations to come. Senate Bill 2865 will provide for better practices moving forward.

Mahalo nui for your support.

Aloha,

Lehua Abrigo

<u>SB-2865</u> Submitted on: 2/3/2022 9:22:19 AM Testimony for EET on 2/4/2022 3:00:00 PM

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

Comments:

This bill provides an amazing opportunity for Hawaii to become a leader in climate change, expanded agriculture, new jobs, and reducing the need for fossil fuels.

TESTIMONY ON SENATE BILL 2865 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST DIBSHAWAII LLC

PRESENTATION TO THE HOUSE COMMITTEE ON COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

ΒY

William R Spray

February 3, 2022

Chair Glenn Wakai, Vice Chair Bennette E. Misalucha and Members of the Committee on Energy, Economic Development and Tourism

My name is William R Spray and I am testifying in **SUPPORT** of Senate Bill 2865.

Thank you for the opportunity to provide written testimony. I support this measure due to the innovation and leading the way for cutting-edge technology that will benefit not only the state of Hawaii but future generations.

Thank you for the opportunity to support SB 2865.

If you have any questions or need additional information to our response, please contact Rusty Spray at (808) 330-7744 or at <u>rustyspray@gmail.com</u>

<u>SB-2865</u> Submitted on: 2/3/2022 2:47:00 PM Testimony for EET on 2/4/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
scotty Reis-Moniz	Individual	Support	No

Comments:

Attach please find my Support letter for SB2865

Scotty Reis-Moniz

<u>SB-2865</u> Submitted on: 2/3/2022 8:09:39 PM Testimony for EET on 2/4/2022 3:00:00 PM

_	Submitted By	Organization	Testifier Position	Remote Testimony Requested
	Ikaika Hussey	Individual	Support	No

Comments:

Aloha Chair Wakai, Vice-Chair Misalucha, and members Lee, Fevella, and Riviere:

Thank you for the opportunity to testify in support of this measure, and apologies that it is arriving after the 24-hour deadline.

I'm submitting this testimony on behalf of Hawaii Federated Industries (HIFI), a new public benefit corporation with a threefold mission: to reverse climate change, strengthen and circularize our island economy, and create good local jobs. We're developing an island facility to manufacture carbon-neutral aviation fuel using CO2 pulled from the atmosphere with the goal of decarbonizing long-haul aviation.

I appreciate the leadership of your committee in supporting the establishment of carbon capture storage and utilization (CCSU) capacity within our islands. A CCSU economy brings numerous benefits: it reduces our greenhouse gas emissions while reducing imports; it creates local green jobs in the carbon capture facilities themselves; and it is a useful feedstock for other industries, such as the work that Mr. Ford is doing at DIBS Hawaii, or the applications of CO2 within the food industry, for fuels, or other synthetic materials.

It's worth pointing out that this bill reinforces Hawaii's role as a leader in the global climate conversation. While others are aiming for climate neutrality, our islands are already discussing going carbon-negative. Your leadership is a step in this direction. Mahalo for your support.

Sincerely,

Ikaika Hussey President Hawaii Federated Industries https://hawaii.federated.industries Work: 808-354-0630 Mobile: 808-221-2843



Submitted By	Organization	Testifier Position	Remote Testimony Requested
Sharlette Poe	Individual	Support	No

Comments:

TESTIMONY ON SENATE BILL 2865 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST DIBSHAWAII LLC

TO THE SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Chair Glenn Wakai, Vice Chair Bennette E. Misalucha and Members of the Committee on Energy, Economic Development and Tourism. My name is Sharlette Poe from the Waianae Moku (96792), and I am testifying in full **Support** of Senate Bill 2865 (SB2865), 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 continue to increase my knowledge and understanding of the technological and technical aspects of CCSU I do understand that this platform will have cascading benefits in multiple sectors leading to a more secure and resilient Hawaii. By supporting SB2865 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 successful small business development.

If needed I can be reached at sharpoe@gmail.com.