



Chamber of Commerce HAWAII  
*The Voice of Business*

**Testimony to the Senate Committee on Economic Development, Environment,  
& Technology  
Wednesday, March 16, 2016 at 1:20 P.M.  
Conference Room 414, State Capitol**

**RE: HOUSE BILL 2669 HD 1 RELATING TO THE ISSUANCE OF SPECIAL  
PURPOSE REVENUE BONDS TO ASSIST TRUTAG TECHNOLOGIES, INC.**

Chair Wakai, Vice Chair Slom, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** HB 2669 HD 1, which authorizes the issuance of special purpose revenue bonds for TruTag Technologies, Inc.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 1,000 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.

Trutag Technologies, Inc. utilizes nanotechnology solutions to create unique microtags, offering a powerful product security measure, which can be used across many different industries and products. The Chamber supports the issuance of special purpose revenue bonds for the purpose of assisting TruTag Technologies, Inc., a Hawaii corporation, to finance or refinance the planning, construction, improvement, and equipping of its manufacturing facilities in the State.

Thank you for the opportunity to testify.



The Honorable Glenn Wakai  
Chair, Senate Committee on Economic Development, Environment and Technology

Wednesday, March 16, 2016  
Conference Room 414; 1:20 PM

RE: **HB 2669 HD1– Relating to the Issuance of Special Purpose Revenue Bonds to  
Assist TruTag Technologies, Inc. – IN SUPPORT**

Aloha Chair Wakai, Vice Chair Slom and members of the Committee,

I am Dr. Hank C.K. Wuh, Chairman of the Board of TruTag Technologies, Inc. Thank you for passing the companion bill, SB 2506, unamended. We are in strong support of HB 2669 HD1, however the HD1 has a blank appropriation and a defective date. Therefore, we request that this bill be amended to reflect special purpose revenue bonds in a total amount not to exceed \$15,000,000 and an effective date of July 1, 2016.

TruTag Technologies, Inc. is a Hawaii-based company that provides product authentication and brand protection solutions for multiple industries, addressing the trillion-dollar global problem of counterfeit and diverted goods.

TruTag's technology platform, featuring nano-porous silica microtags that serve as inert, covert "edible bar codes", allow high-volume, high-value items, such as medicine, electronics, industrial parts and consumer goods, to be identified at the lot or batch level and tracked through the global supply chain without the need for labels or packaging.

TruTag Technologies, Inc. opened its facility in Kapolei in December 2013. This site houses our advanced research, development and manufacturing operations for our proprietary spectral microtags. We are requesting authorization for \$15,000,000 in special purpose revenue bonds to expand our manufacturing facility in Kapolei to increase our taggant manufacturing capacity. The money will be used for facility design and build out, facility equipment and manufacturing equipment. As one of the most sophisticated nano-porous silica manufacturing plants in the world, Hawaii serves as our headquarters to showcase the technology to potential customers who will visit us from around the world.

We expect the facility expansion to generate approximately 40 jobs and are working to partner with University of Hawaii Engineering, Physics and Chemistry departments to help generate a recruiting pipeline.

Thank you again and I respectfully ask for your support in passing this bill with our requested amendments.

The Honorable Glenn Wakai  
Chair, Senate Committee on Economic Development, Environment and Technology

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RE: **HB 2669 HD1 – Relating to the Issuance of Special Purpose Revenue Bonds to Assist TruTag Technologies, Inc. – IN SUPPORT**

Aloha Chair Wakai, Vice Chair Slom and members of the Committee,

My name Mark Mugiishi, MD, and I am Associate Chair for the University of Hawaii Department of Surgery at JABSOM and also Chief Medical Officer at HMSA. Thank you for this opportunity to submit testimony in strong support of HB 2669 HD1. I am providing testimony in this instance as an individual and not as a representative of either of my organizations.

I have always maintained that Hawaii could diversify its economy (so important for our current one-dimensional situation) by encouraging and developing manufacturing in very specific areas. In fact, in 2014 I worked with Enterprise Honolulu to try to obtain a Federal Economic Development Assistance (EDA) grant surrounding manufacturing in Hawaii.

To succeed in manufacturing initiatives in Hawaii, the isolated geography of our state would have to be an asset rather than a drawback. That would work for manufacturing of items that require some degree of security, would possibly be of interest to both the East and West, all the while not requiring much resource in the way of shipping due to limited size and weight. In short, innovative medical devices and products would fit very well here.

TruTag Technologies, Inc. is a Hawaii Corporation which provides product authentication brand protection solutions for multiple industries, addressing the trillion dollar global problem of counterfeit and diverted goods. It's most impactful application is for authentication of pharmaceuticals, making it critical for safety as well as being a commercially viable product. TruTag's technology platform, featuring silica microtags that serve as inert, covert "edible bar codes", allow high-volume, high-value items, make it ideal for the pharmaceutical industry. TruTags incredibly light weight shipping requirements, the need for isolation and security in manufacturing, and its equal applicability to Asia as well as the US and Europe make Hawaii an ideal location for manufacturing.

TruTag Technologies, Inc. opened its facility in Kapolei and is now in the process of scaling for commercial type manufacturing. They are requesting authorization for \$15,000,000 in special purpose revenue bonds to expand this manufacturing facility. Success of this venture is a win for TruTags and a huge win for Hawaii. It validates the model that a highly successful manufacturing effort around medical devices and technology can succeed here, and that there are advantages for using Hawaii as a location for those with specific characteristics.

I hope you will consider issuing this special bond to aid making this new, innovative, and flagship effort into diversifying Hawaii's economy and industry.

Thank you for allowing me to provide my viewpoints and I respectfully ask for your favorable consideration of this bill.

Mark Mugiishi, MD



The Honorable Glenn Wakai  
Chair, Senate Committee on Economic Development, Environment and Technology

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RE: **HB 2669 HD1 - Relating to the Issuance of Special Purpose Revenue Bonds to Assist TruTag Technologies, Inc. - IN SUPPORT**

Aloha Chair Wakai, Vice Chair Slom and members of the Committee,

My name Carolyn Weeks-Levy, Ph.D., and I am President of Weeks-Levy Consulting. I have worked in the pharmaceutical and biotech fields for over thirty years managing research, development, manufacturing, clinical trials and licensure of pharmaceutical and biologicals. Thank you for this opportunity to submit testimony in support of HB 2669 HD1. I am providing testimony in this instance as an individual.

TruTag Technologies, Inc. has developed a technology platform to manufacture silica microtags that are edible and carry unique codes and information for authentication of items to which they are attached. This manufacturing technology platform provides a means to address the mounting problem of counterfeit and diverted pharmaceutical products, and is especially appealing to the pharmaceutical industry due to the safety of these edible tags. Diverted and counterfeit medicines affect the health of individuals leading to increased morbidity and mortality. The problem is so great that the World Health Organization has launched the Substandard, Spurious, Falsely Labeled, Falsified and Counterfeit (SSFFC) Medicinal Products initiative to track products affected and the impact on individual's lives (see [www.who.int/medicines/regulation/ssffc/en/](http://www.who.int/medicines/regulation/ssffc/en/)).

TruTag Technologies, Inc. is operating a manufacturing facility in Kapolei that can meet Current Good Manufacturing Practices (cGMP) which is essential for providing tags for use in medicines. The facility is currently scaling the manufacturing to meet the needs of pharmaceutical manufacturers and is requesting authorization for \$15,000,000 in special purpose revenue bonds to expand this manufacturing facility.

The expansion of the manufacturing facility provides a tremendous opportunity for Hawai'i to diversify the industries that can thrive in the state. Location of the company in Hawai'i will be good for the economy by providing new jobs and bringing notoriety to support that Hawai'i can develop and manufacture a world-class technology that will save lives around the globe.

I am strongly supportive of HB 2669 HD1 and hope you will consider authorizing the issuance of special purpose revenue bonds to support scale-up of the TruTag Technologies manufacturing facility to meet the needs of the pharmaceutical industry. This opportunity for Hawai'i to diversify its industry base and enable the manufacturing of a life-saving technology should not be missed.

Thank you for allowing me to provide my viewpoints, and I respectfully ask for your favorable consideration of this bill.

Carolyn Weeks-Levy, Ph.D.

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RE: **HB 2669 HD1 – Relating to the Issuance of Special Purpose Revenue Bonds to Assist TruTag Technologies, Inc. – IN SUPPORT**

Aloha Chair Wakai, Vice Chair Slom and members of the Committee,

My name is Leslie Isaki, PhD, and I am the Director of Grant Development for Eyegenix, LLC. I was the Director of Biomedical Research at JABSOM, University of Hawaii, under Dean Edwin Cadman. Thank you for this opportunity to submit testimony in strong support of HB 2669 HD1. I am providing testimony in this instance as an individual.

For Hawaii to diversify its economy, the State must encourage and develop high tech enterprises by supporting R&D and manufacturing in targeted areas. Because of our isolated geography, the sphere of manufacture necessitates a product that does not require much resources and be light-weight. Most importantly, the product must have high potential to be in demand worldwide not only now but into the future as well.

TruTag Technologies, Inc. is a Hawaii Corporation headquartered in Kapolei that provides such a product. TruTag Technologies has developed an edible microtag, branded *TruTag*®, for identification, authentication, brand protection and quality assurance of individual medicines, electronic components, industrial parts, food items, and a range of consumer goods. Their authentication brand protection solutions address the trillion dollar global problem of counterfeit and diverted goods.

TruTag Technologies, Inc. opened its facility in Kapolei and is now in the process of scaling for commercial type manufacturing. They are requesting authorization for \$15,000,000 in special purpose revenue bonds to expand this manufacturing facility. Success of this venture can be foundational in carrying Hawaii's economy into the future. It validates the model that a highly successful manufacturing effort in high tech enterprises can succeed here.

I hope you will consider authorizing the issuance of special bonds to aid making this new, innovative, and flagship effort into diversifying Hawaii's economy and industry.

Thank you for allowing me to provide my viewpoints and I respectfully ask for your favorable consideration of this bill.

Leslie Isaki, PhD