



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

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Statement of

LUIS P. SALAVERIA
Director

Department of Business, Economic Development & Tourism

before the

HOUSE COMMITTEE ON FINANCE

Wednesday, March 4, 2015

1:30 p.m.

State Capitol, Conference Room 308

in consideration of

HB 867, HD 1

**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS' BASALT REBAR INITIATIVE.**

Chair Luke, Vice Chair Nishimoto, and members of the Committee.

The Department of Business, Economic Development and Tourism supports the intent of this bill to fund an engineering study to explore the possibility of establishing a basalt rebar plant in Hawaii.

Hawaii currently imports iron rebar from China, but has experienced high transportation costs and quality issues with these imports (e.g., product rust, poor manufacturing quality). Given that the Hawaiian Islands are made of basalt material, there may be industrial potential for fabricating basalt rebar in Hawaii as a substitute for imported iron rebar currently used for civil engineering projects statewide. PISCES' vision is to help establish a pilot processing plant in Hawaii that would demonstrate the manufacture of basalt rebar, initially using imported basalt-extruded fibers from Russia and China, but eventually using local basalt. Funding appropriated through this measure would be used to conduct an engineering study that would determine if Hawaii basalt can be used to produce the fibers required for basalt rebar; if local construction companies can use basalt rebar as a substitute for iron/steel rebar; the energy costs associated with the proposed facility; and where a pilot basalt rebar plant might be located.

We support this bill provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget.

Thank you for the opportunity to testify on this measure.

TESTIMONY BY WESLEY K. MACHIDA
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE HOUSE COMMITTEE ON FINANCE
ON
HOUSE BILL NO. 867, H.D. 1

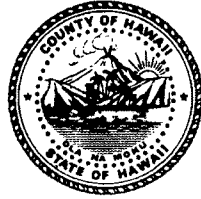
March 4, 2015

RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS' BASALT REBAR INITIATIVE

House Bill No. 867, H.D. 1, authorizes the Director of Finance to issue general obligation (G.O.) bonds to support the Pacific International Space Center for Exploration Systems' Basalt Rebar Initiative, including construction of a basalt rebar plant and engineering assessments of the manufactured basalt rebar; provided that no funds shall be made available unless the private sector and the federal government collectively provide a \$2 for \$1 match of funds.

The Department of Budget and Finance would like to make several technical comments on the bill. First, federal tax law requires that tax-exempt G.O. bond proceeds be used only to finance projects that serve public purposes. This project appears to be a private activity that would have to be funded with taxable G.O. bonds or special purpose revenue bonds. Second, as funding for this basalt rebar plant is not included in the proposed Executive Budget, an amount for the corresponding annual debt service will need to be included in the Legislature's version of the budget should this bill pass the Legislature.

DENNIS "FRESH" ONISHI
Council Member
District 3



PHONE: (808) 961-8396
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EMAIL: donishi@co.hawaii.hi.us

HAWAI'I COUNTY COUNCIL

25 Aupuni Street, Hilo, Hawai'i 96720

March 3, 2015

The Honorable Sylvia Luke, Chair
and Members of the House Committee on Finance

Dear Chair Luke, Vice Chair Nishimoto and Committee Members,

Thank you for the opportunity to provide testimony in support of House Bill No. 867, which will provide funding for the Pacific International Space Center for Exploration Systems' basalt rebar initiative and advance the State's economic development and sustainability.

A basalt rebar plant will reduce the import of steel rebar and provide a local basalt rebar source, supporting the State's high technology development corporation's initiative to create eighty thousand new technology jobs with salaries of \$80,000 or above by 2030.

Further, the technologies that will be developed – basaltic construction and fabrication, off-grid renewable energy and water reclamation – will spur sustainable living for others here on Earth.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Dennis Onishi'. The signature is fluid and cursive.

Dennis "Fresh" Onishi
Hawai'i County Council Member



Pacific International
Space Center for
Exploration Systems

February 7, 2015

To whom it may concern.

Subject: Testimony for HB867 / Basalt Rebar Initiative

It is with pleasure that PISCES provides supportive testimony in regard to HB867 / Basalt Rebar Initiative.

PISCES see a potential to expand basalt rebar technology into terrestrial applications within the State of Hawaii as an emerging economic development project for civil engineering. Currently, Hawaii imports iron rebar from China, but has experienced the high expense of transportation and quality issues with the imports (rust, manufacturing quality, etc). Given the fact that the Hawaiian isles are made of basalt material, it follows that there may be industrial potential for eventually fabricating basalt rebar in Hawaii for a substitute to iron rebar for civil engineering projects within the State.

Thus, PISCES supports the State's effort to perform an engineering study to address any questions relative to basalt rebar prior to the establishment of a Phase 1 pilot plant in Hawaii that could manufacture basalt rebar using imported basalt-extruded-fibers from Russia/China. If there appears to be an interest within the State to adopt basalt rebar for civil engineering construction projects, it follows that Phase 2 could be considered where the basalt fibers themselves are constructed in Hawaii from indigenous basalt...eventually eliminating the need to import iron rebar from China.

Hence, there appears to be an application of basalt rebar for assessing planetary construction for Moon/Mars in the PISCES engineering landing pad construction project, but also a real potential for regional economic development and new industry creation within the State of Hawaii for civil engineering.

Note: The current bill incorrectly states a "\$2 to \$1 match". This provision was inadvertently left in the bills during re-write to shift from requesting funds for the Phase 1 project and instead seeking only engineering study funds. There is not a matching component for the study...only in regard to the Phase 1 pilot plant. It is recommended that the bill be revise to correct this oversight.

Thus, PISCES strongly endorses HB867 / Basalt Rebar Initiative.

With much mahalo,

Robert M. Kelso
Executive Director, PISCES

TESTIMONY IN SUPPORT OF:

HB867 and SB671– RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR EXPLORATION
SYSTEMS' (PISCES) BASALT REBAR INITIATIVE.

Dear Members of the 28th Hawaii State Legislature,

I am a registered architect in the State of Hawaii and a principal of Ferraro Choi and Associates, Ltd. I am writing in support of the passage of HB867/SB671. Our firm specializes in the design of sustainable projects which require the use of locally manufactured products. Hawaiian construction, unlike most areas in the United States is susceptible to high levels of corrosion. Standard steel rebar eventually rusts and causes spalling or cracking of concrete which reduces the life of our buildings and increases repair and maintenance costs.

Currently, Hawaii imports iron rebar from China, but has encountered quality issues and high transportation expense with the imports. Given the fact that the Hawaiian Islands are made of basalt material, it follows that there may be industrial potential for eventually fabricating basalt rebar in Hawaii as a substitute for iron rebar in civil engineering projects within the State. There is also potential for the export of basalt fibers or basalt rebar.

There is an established basalt rebar manufacturing company in the continental United States, proving the viability of the product. This company purchases the basalt fibers used for the basalt rebar manufacturing process from China. The study funded by these bills would determine the suitability of Hawaii basalt for use in this process and the viability of actual manufacture of basalt rebar in the State of Hawaii, thereby establishing an entirely new industry in Hawaii.

In addition, the State of Hawaii has a genuine need to broaden its economic base. We now have the opportunity to move towards that end. HB867/SB671 provides funding for a study that would explore engineering questions related to the establishment of basalt rebar manufacturing within the State of Hawaii.

Note: The current bill incorrectly states a "\$2 to \$1 match". This provision was inadvertently left in the bills during re-write to shift from requesting funds for the Phase 1 project and instead seeking only engineering study funds. There is not a matching component for the study...only in regard to the Phase 1 pilot plant. It is recommended that the bill be revise to correct this oversight.

Your affirmative consideration of these bills will be deeply appreciated.

Mahalo for your serious consideration,



Joseph J. Ferraro, FAIA, LEED AP
Principal

HENK B. ROGERS

55 Merchant Street
Honolulu, HI, 96813

TESTIMONY IN SUPPORT OF:

HB867 and SB671– RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR EXPLORATION SYSTEMS' (PISCES) BASALT REBAR INITIATIVE.

Dear Members of the 28th Hawaii State Legislature,

I am writing in support of the passage of HB867/SB671.

The State of Hawaii has a genuine need to broaden its economic base. We now have the opportunity to move towards that end. HB867/SB671 provides funding for a study that would explore engineering questions related to the establishment of basalt rebar manufacturing within the State of Hawaii.

Currently, Hawaii imports iron rebar from China, but has encountered quality issues and high transportation expense with the imports. Given the fact that the Hawaiian Islands are made of basalt material, it follows that there may be industrial potential for eventually fabricating basalt rebar in Hawaii as a substitute for iron rebar in civil engineering projects within the State. There is also potential for the export of basalt fibers or basalt rebar.

There is an established basalt rebar manufacturing company in the continental United States, proving the viability of the product. This company purchases the basalt fibers used for the basalt rebar manufacturing process from China. The study funded by these bills would determine the suitability of Hawaii basalt for use in this process and the viability of actual manufacture of basalt rebar

in the State of Hawaii, thereby establishing an entirely new industry in Hawaii.

Note: The current bill incorrectly states a "\$2 to \$1 match". This provision was inadvertently left in the bills during re-write to shift from requesting funds for the Phase 1 project and instead seeking only engineering study funds. There is not a matching component for the study...only in regard to the Phase 1 pilot plant. It is recommended that the bill be revise to correct this oversight.

Your affirmative consideration of these bills will be deeply appreciated.

Mahalo,

A handwritten signature in black ink, appearing to read "Henk B. Rogers", with a long horizontal line extending to the right.

Henk B. Rogers
Entrepreneur

Chairman, Blue Planet Software
Managing Director, The Tetris Company
Chairman, Blue Planet Foundation
Founder, Blue Startups
Chairman, PISCES
Director, East West Center Foundation
Honorary Consul to Hawaii, the Kingdom of the Netherlands
Member, Broadband Task Force

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 02, 2015 10:25 AM
To: FINTestimony
Cc: proth@hawaii.edu
Subject: Submitted testimony for HB867 on Mar 4, 2015 13:30PM
Attachments: PISCES Testimony HB867 Henk Rogers.pdf

HB867

Submitted on: 3/2/2015

Testimony for FIN on Mar 4, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Polly Roth	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: mailinglist@capitol.hawaii.gov
Sent: Saturday, February 28, 2015 3:51 PM
To: FINTestimony
Cc: gigafaze@gmail.com
Subject: Submitted testimony for HB867 on Mar 4, 2015 13:30PM

HB867

Submitted on: 2/28/2015

Testimony for FIN on Mar 4, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Theodore Stethem	Individual	Comments Only	No

Comments: Aloha, I am the kamaaina that is trying to introduce basalt rebar to Hawaii for construction evaluation. The basalt rebar is much stronger than steel, more flexible, lighter, non- corrosive, and can be shaped with zip ties versus labor intensive wire twisting. There are probably millions of pounds of steel rebar being imported to the Hawaiian islands every year. Successful investigation by PISCES to fabricate and test samples of basalt rebar could lead to a very large indigenous resource for Hawaii construction, keeping local dollars local with indigenous basalt material, local fabrication and local jobs. Mahalo for listening to my testimony.

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LATE

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, March 04, 2015 3:02 AM
To: FINTestimony
Cc: kamakane73@gmail.com
Subject: *Submitted testimony for HB867 on Mar 4, 2015 13:30PM*

HB867

Submitted on: 3/4/2015

Testimony for FIN on Mar 4, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Kama Hopkins	Individual	Support	No

Comments:

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finance1-Kim

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 03, 2015 10:42 PM
To: FINTestimony
Cc: amybrinker@mac.com
Subject: *Submitted testimony for HB867 on Mar 4, 2015 13:30PM*

HB867

Submitted on: 3/3/2015

Testimony for FIN on Mar 4, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Amy Brinker	Individual	Support	No

Comments:

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