WRITTEN TESTIMONY ONLY

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
File:

HOUSE COMMITTEE ON FINANCE

H.B. 2259, Relating to Energy

Testimony of Loretta J. Fuddy, A.C.S.W., M.P.H.
Director of Health

February 28, 2012
2:00 PM

Department's Position: The Department of Health supports the intent of this bill but has reservations and comments.

Fiscal Implications: This measure calls for an unspecified amount of general funds to be appropriated to the department to administer and implement the program.

Purpose and Justification: The purpose of this bill is to establish a state hydrogen permitting authority in the department. The hydrogen permitting authority would adopt the National Fire Protection Association's Hydrogen Technologies Code to hydrogen production, storage, use and handling for stationary and portable applications in the State.

The department believes that it should not be the state hydrogen permitting authority. Further research and development should be conducted to identify any changes needed to any existing environmental permitting processes. Though we recognize the need for alternative energy sources, the department does not believe that a separate permit process for hydrogen is an ideal model at this time. The department believes that if such an authority is established that it would be better located within other entities such as the county fire departments that perform similar functions. In addition, this bill

includes recommendations that are too costly to implement as we do not currently have the staff or expertise to implement this program. We look forward to working with the legislature, counties, and state agencies to identify an appropriate policy to address hydrogen power development in Hawaii. We request a year to analyze the situation and then make recommendations to the legislature.

Thank you for the opportunity to testify.

TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
TWENTY-SIXTH LEGISLATURE, 2012

ON THE FOLLOWING MEASURE:
H.B. NO. 2259, RELATING TO ENERGY.

BEFORE THE:
HOUSE COMMITTEE ON FINANCE

DATE: Tuesday, February 28, 2012 **TIME:** 2:00 p.m.

LOCATION: State Capitol, Room 308

TESTIFIER(S): David M. Louie, Attorney General, or
Willam F. Cooper, Deputy Attorney General

Chair Oshiro and Members of the Committee:

The Department of the Attorney General supports the intent of this bill but has concerns about the bill as currently written, because it may constitute an improper delegation of legislative authority.

The purpose of this bill is to enhance Hawaii's energy resources, improve the State's economy, and reduce the State's dependence on imported fossil fuel by making the requirements of the National Fire Protection Association's Hydrogen Technologies Code (hereinafter "the Code") applicable to all aspects of hydrogen production, storage, use, and handling in the State for stationary and portable applications.

Our main concern with the proposed bill is that it defines the Code, in the proposed new section 196-__(e), Hawaii Revised Statutes (HRS), on page 4, lines 5 to 7, to mean "the most recent iteration of the National Fire Protection Association's Hydrogen Technologies Code." Thus it incorporates by reference into state law future "iterations" of the Code. This can be considered an improper delegation of legislative authority to the National Fire Protection Association, because the bill would allow the National Fire Protection Association to determine Hawaii law by deciding the content of the future iterations of the Code. State v. Tengan, 67 Haw. 451, 463, 691, P.2d 365, 373 (1984).

We recommend that bill require that the Code be adopted and implemented by the Department of Health via expedited rulemaking authority and not directly by the Legislature. The rules can be used to incorporate by reference specific codes, compendia, and reference material from outside organizations, but that incorporation must be limited to specific documents

in existence at the time of incorporation. A good example of how the Legislature has done this in the past can be found in section 328-96, HRS, which allows for the adoption and the updating of the incorporated compendia of therapeutically equivalent generic drugs via an expedited rulemaking process. We suggest that the wording in this bill be amended to reflect the wording and process contained in section 328-96, HRS.

Another concern with the bill as drafted is that it does not retain any residual power with the State to modify the Code, as it deems appropriate, to address its particular present and future needs. The process contained in sections 196-__(c)(5), 196-__(c)(6), and 196-__(c)(7), found on page 3, lines 16 to 22, and page 4, lines 1 and 2, is inadequate, and does not retain state authority to make the final decisions on what is best, or most appropriate, for the State to have in the Code. This issue can be addressed, as is the case in section 328-96, HRS, by giving the Department of Health authority to adopt, with the rules, an additions and deletions list applicable to the Code, that will allow the Department of Health to add requirements that the Code may lack, and delete portions of the Code that it determines would not be appropriate.

We respectfully ask the Committee to make these recommended amendments.

COLLEGE OF SOCIAL SCIENCES
HAWAII ENERGY POLICY FORUM
UNIVERSITY OF HAWAI'I AT MĀNOA

Testimony
Presented Before the
House Committee on Finance
The Honorable Marcus R. Oshiro, Chair
The Honorable Marilyn B. Lee, Vice Chair, and Members

DATE: Tuesday, February 28, 2012
TIME: 2:00 p.m.
PLACE: Conference Room 308
State Capitol
415 South Beretania Street
by
Warren Bollmeier
Chair, Renewable Energy Working Group
Hawaii Energy Policy Forum

IN SUPPORT OF HB2259, Relating to Energy:

I am Warren Bollmeier, Chair of the Renewable Energy Working Group of the Hawaii Energy Policy Forum ("Forum"). The Forum is comprised of 46 representatives from the electric utilities, oil and natural gas suppliers, environmental groups, renewable energy industry, and federal, state and local government, including representatives from the neighbor islands. We have been meeting since 2002, and have adopted a common mission and a vision of a preferred energy future for Hawaii. In 2005 it adopted a comprehensive "10 Point Action Plan" which serves as a framework for meeting our preferred energy vision and goals. HB 2259 achieves the following Forum goals:

1) Expanding renewable energy opportunities,

2) Reducing greenhouse gas emissions in Hawaii,

3) Improving energy efficiency & options in transportation,

4) Supporting sustainable development & use of biofuels, and

5) Ensuring the security & reliability of energy supply & distribution.

The State of Hawaii's Renewable Hydrogen Program [Section196-10, HRS] calls for the development of a hydrogen economy in Hawaii and specifically calls for a hydrogen infrastructure, including hydrogen production, storage and dispensing capabilities. Currently there are several hydrogen infrastructure projects underway in Hawaii -- hydrogen fueling stations at three military bases on Oahu, and on the island of Hawaii, a fueling station at Hawaii Volcanoes National Park, a geothermal-to-hydrogen project, and a fuel cell electric bus to be operated by the County of Hawaii Mass transportation Agency. General Motors has identified Hawaii for the rollout of its hydrogen fuel cell electric vehicles and is working with Hawaii partners as part of the Hawaii Hydrogen Initiative (H2I) to introduce at least 25 hydrogen fueling stations on Oahu over the next 10 years.

COLLEGE OF SOCIAL SCIENCES

HAWAII ENERGY POLICY FORUM

UNIVERSITY OF HAWAI'I AT MĀNOA

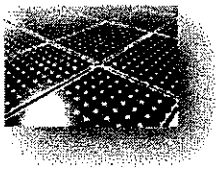
The state currently does not have established hydrogen codes and standards. The current system is ad hoc. This makes each project a unique and time-consuming effort, and considerable time and money must be invested in ensuring that adequate safety is being accomplished in the development and execution of a design.

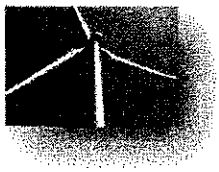
A lack of accepted codes and standards makes it difficult for relevant experts to implement the policies and meet many of the objectives of Section 196, and specifically for design engineers to design the needed infrastructure, for permitting authorities to evaluate the safety of projects and to accordingly issue permits, for the insurance industry to assess compliance and risk, and for developers to determine accurate cost estimates and acquire effective insurance policies. By utilizing an accepted standard – the National Fire Protection Association Hydrogen Technologies Code (NFPA 2), which is continuously updated by a combination of industry, academia, and national labs, the State can be assured that the state and projects are implemented using accepted standards. An additional benefit to the state is that we will have established codes and standards which can be implemented immediately without the cost of developing our own or the lengthy ad hoc review process that impedes development of an alternative fuel for Hawaii.

For the foregoing reasons, the Forum supports passage of HB2259. Thank you for the opportunity to testify.

This testimony reflects the position of the Forum as a whole and not necessarily of the individual Forum members or their companies or organization.

blue planet FOUNDATION





HOUSE COMMITTEE ON FINANCE
February 28, 2012, 2:00 P.M.
Room 308
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 2259

Chair Oshiro and members of the Committee:

The Blue Planet Foundation supports HB 2259, establishing hydrogen safety codes and standards. We believe passage of this measure will facilitate the research and development of hydrogen projects in Hawaii.

Blue Planet's mission is to end the use of fossil fuel on Earth, starting by making Hawaii a global role model for energy independence. Hydrogen—the most common element in the universe—will likely play a key role in our clean energy future, particularly in the transportation sector. Hydrogen can be used as a storage fuel, where hydrogen is created from geothermal, wind, or solar energy and stored (in pure gas, compressed, some chemical state, or through another medium) and used later in combustion or fuel cell applications.

The lack of established codes and standards for hydrogen use in Hawaii makes it difficult for researchers and engineers to design the needed infrastructure, for permitting authorities to evaluate the safety of projects and to accordingly issue permits, for the insurance industry to assess compliance and risk, and for developers to determine accurate cost estimates and acquire effective insurance policies. By utilizing an accepted standard – the National Fire Protection Association Hydrogen Technologies Code (NFPA 2), which is continuously updated by a combination of industry, academia, and national labs, the State can be assured that the state and projects are implemented using accepted standards. An additional benefit to the state is that we will have established codes and standards which can be implemented immediately without the cost of developing our own or the lengthy ad hoc review process that impedes development of an alternative fuel for Hawaii.

Thank you for the opportunity to testify.

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org
55 Merchant Street 17th Floor • Honolulu, Hawai'i 96813 • 808-954-6142 • blueplanetfoundation.org

REALGREEN POWER

Zero Pollution, Zero Waste

February 27, 2012

Testimony in Support of HB 2259

Presented Before the House Committee on Finance

The Honorable Marcus Oshiro, Chair
The Honorable Marylin Lee, Vice Chair, and Members

DATE: Tuesday, February 28, 2012
TIME: 2:00 P.M.
PLACE: Conference Room 308
State Capitol
415 South Beretania Street

by
Dennis Furukawa, CEO
RealGreen Power, Inc

Chairman Oshiro, Representative Lee, members of the Committee,

I am writing to you in my capacity as CEO of RealGreen Power, a renewable energy/environmental company based here in Hawai`i. RealGreen Power produces methane biogas by treating wastewater in anaerobic bioreactors. Methane is a major substrate for the production of hydrogen, through a process known as steam reforming.

I urge you to pass HB 2259 which will set clear standards for the review and permitting of hydrogen production, storage and filling stations. The National Fire Protection Association's Hydrogen Technology Code is a nationally recognized standard that addresses the risks associated with all phases of hydrogen manufacture, storage, and handling. Without clear published standards development and permitting of hydrogen fueling stations will be subjected to case-by-case requirements and rule making and will result in delays and extra costs for developers, and reduced public safety. This in turn will dissuade project develops from seeking to do business in Hawai`i and slow the transition form imported fossil fuels to locally produced renewable energy.

Thank you for your attention in this important matter.

Signed,

Dennis Furukawa, CEO
RealGreen Power, Inc.

5333 Likini Street - Suite 1710 - Honolulu, HI 96818 USA
5 Third Street - Suite 808 - San Francisco, CA 94103 USA
www.realgreenpower.com

SES

Select Engineering Services

Select Engineering Services (SES)
1544 Woodland Park Dr. Suite 310
Layton UT 84041
(801) 399-1858
Fax: (801) 399-1863

27 February 2012

The Honorable Marcus R. Oshiro, Chair
The Honorable Marilyn B. Lee, Vice Chair, and Members
House Committee on Finance
State Capitol
Honolulu, Hawaii 96813

RE: HB 2259 – Relating to Energy – Testimony in Support

Select Engineering Services (SES) has offices in Honolulu and supports hydrogen infrastructure currently being developed at Schofield Barracks. Included in the hydrogen infrastructure at Schofield Barracks are hydrogen production, storage and dispensing capabilities. Additional ptototype hydrogen infrastructure is being planned/developed for K-Bay and Puna Geo-Thermal locations. The current lack of established codes and standards drives various state, local and industrial project owners/participants to derive unique solutions, in order to ensure adequate safety elements/procedures are designed and built into each facility.

SES supports and recommends the utilization of the National Fire Protection Association Hydrogen Technologies Code (NFPA 2), which is continuously updated by a combinaiton of industry, academia, and national labs. Adoption of NFPA 2 will assure the State of Hawaii that its hydrogen related projects are implemented using widely accepted standards. These established codes and standards provide a solid foundation for developers, designers, and permitting authorities to consistantly and cohesively work toward the comomon objectives of Section 196. A solid foundation of codes and standards will help create a working environment that fosters the further development of hydrogen as a viable fuel for Hawaii.

SES supports the passage of HB2259 and further recommends that the State of Hawaii consider all applicable existing resources to analyze and establish codes and standards in an efficient and cost effective manner.

Sincerely,

SHANE D. HIRSCHI, P.E., C.E.M.
Vice-President
Select Engineering Services
1544 N. Woodland Park Dr. #310
Layton, UT 84041
Office: 801.528.5165
Cell: 801.791.1817

THE GAS COMPANY

P.O. Box 3000
Honolulu, Hawaii 96802-3000
www.hawaiigas.com

February 28, 2012

Chair Marcus Oshiro
Members of the Committee
Committee on Finance

Testimony of Stephanie Ackerman
Vice President Public Policy and Communications

H.B. 2259
Relating to Energy

Chair Oshiro, Vice Chair Lee, and Members of the Committee:

I am Stephanie Ackerman, Vice President of the Gas Company. The Gas Company supports this measure.

The Gas Company provides safe, clean, efficient and reliable gas energy to residential, business and government customers in every community across Hawaii's six major islands. Hydrogen is a key part of our synthetic natural gas that is manufactured and distributed on Oahu, and has comprised approximately 10 percent of the SNG gas stream since 1972.

Hydrogen has many applications. One of which is ground transportation including passenger vehicles, public transportation and various types of ground support equipment. To support the use of hydrogen for transportation applications The Gas Company formed the Hawaii Hydrogen Initiative (H2I) with General Motors. H2I is a partnership consisting of agencies, companies and universities with the common purpose of working together to develop hydrogen infrastructure in Hawaii. We believe that hydrogen fuel cell technology has a definite place in Hawaii's renewable portfolio.

Hawaii, however, does not have established hydrogen codes and standards which can cause confusion and delay in designing and approving hydrogen related projects. The National Fire Protection Association Hydrogen Technologies Code (NFPA 2) is a nationally recognized standard that addresses the risks associated with all phases of hydrogen manufacture storage and handling. NFPA 2 contains the codes and standards that ensure hydrogen projects are designed and approved according to a set of common standards. We urge you to pass this measure and adopt NFPA 2.

Thank you for allowing me to testify on H.B. 2259.

February 27, 2012

Testimony in SUPPORT OF THE CONCEPT OF HB2259

RELATING TO ENERGY

Presented to the House Committee on Finance
The Honorable Marcus R. Oshiro, Chair
The Honorable Marilyn B. Lee, Vice Chair

At the public hearing 2 p.m. Tuesday, February 28, 2012
in Conference Room 308, Hawaii State Capitol
Submitted by David H. Rolf, for the Hawaii Automobile Dealers Association
Hawaii's Franchised New Car Dealers

Chair Oshiro, Vice Chair Lee, and members of the committees,

I'm David Rolf, representing Hawaii's franchised new car dealers.

HADA is in support of the concept of HB2259 which designates the Department of Health as the State hydrogen permitting authority and establishes the National Fire Protection Association's Hydrogen Technologies Code for application to all aspects of hydrogen production, storage, use and handling for stationary and portable applications in the State.

Background:

HADA dealers have been supportive of the Hawaii Clean Energy Initiative which has a goal of 70% clean energy by 2030—with 40% coming from use of renewable fuels (like electric power and hydrogen) and 30% from increased efficiencies. See the attached chart of projected new vehicle sales through 2030 and the HADA projected introduction and adoption of hydrogen fuel cell vehicles in the State. Note: This is a 2010 estimate by HADA of how many vehicle sales utilizing various forms of clean or efficient technologies would be necessary to reach the goals of the HCEI. Recent significant improvements in internal combustion engine efficiencies may dramatically affect these projections, though.

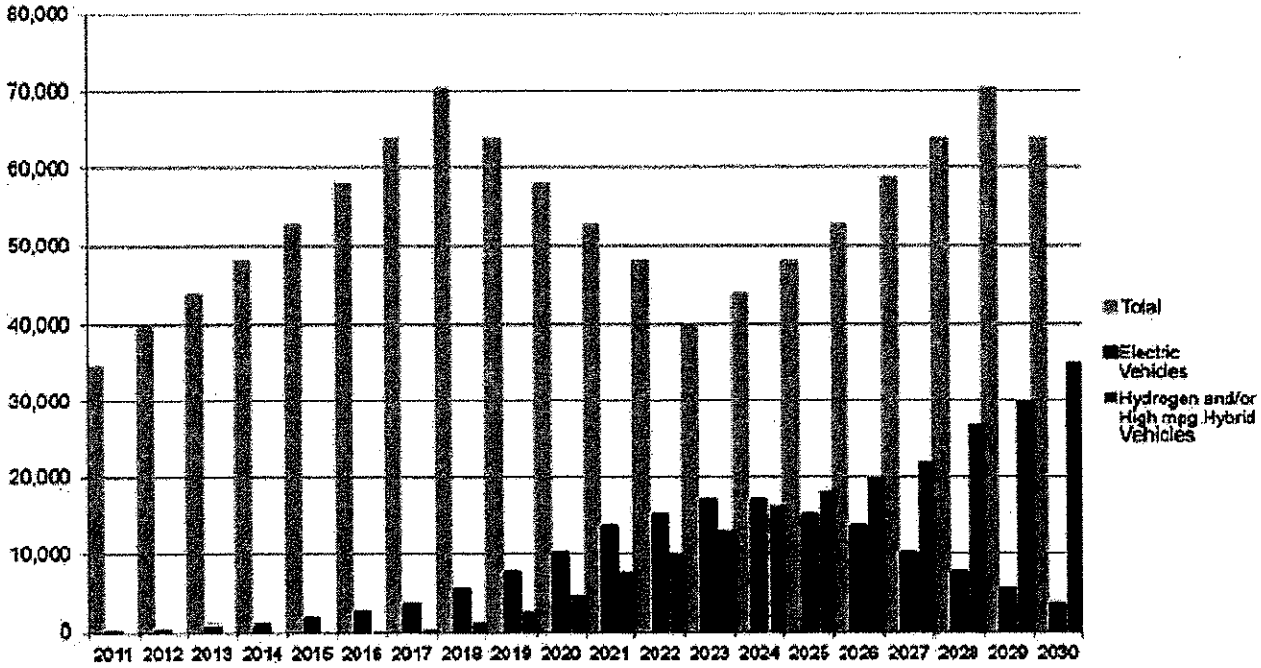
It is hoped that the bill will help foster the development of a strategic energy plan for Hawaii with a focus on the development and use of renewable energy. Hawaii is the perfect test bed for such research with regard to renewable fuels for transportation.

HADA respectfully requests that the committees pass HB 2259 .

Please see attached chart.

Electric /Hydrogen Vehicle Adoption Rate 2011-2030

Needed to meet goals of Hawaii Clean Energy Initiative



Source: HADA—Note: Blue (EV) ad — (hydrogen fuel cell or high mpg hybrids) bars show projected component composition in total.

Respectfully submitted,
David H. Rolf
For the members of the Hawaii Automobile Dealers Association
1100 Alakea St. Suite 2601
Honolulu, Hawaii 96813
Tel: 808 593-0031 Cell: 808 223-6015 Fax: 808 593-0569
Email: drolf@hawaiidealer.com website: www.hawaiiautodealer.com

FINTestimony

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 28, 2012 10:43 AM
To: FINTestimony
Cc: henk@tetris.com
Subject: Testimony for HB2259 on 2/28/2012 2:00:00 PM

Testimony for FIN 2/28/2012 2:00:00 PM HB2259

Conference room: 308
Testifier position: Support
Testifier will be present: No
Submitted by: Henk B. Rogers
Organization: Individual
E-mail: henk@tetris.com
Submitted on: 2/28/2012

Comments:
The hydrogen economy, the local production of hydrogen using indigenous clean energy resources fueling vehicles, is an absolutely necessary step in the direction of energy independence.
I drive an electric vehicle. It an absolutely wonderful technology with great potential. The only problem with the vehicle is that batteries simply don't give me the range I really need coupled with the fact that at best, it takes hours to recharge. Hydrogen is the way forward for electric vehicles.
I implore those of you who are in a position to help Hawaii move towards the hydrogen conomy. It should be our legacy.

FINTestimony

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 27, 2012 7:53 PM
To: FINTestimony
Cc: Brenda.Kosky@gmail.com
Subject: Testimony for HB2259 on 2/28/2012 2:00:00 PM

Testimony for FIN 2/28/2012 2:00:00 PM HB2259

Conference room: 308
Testifier position: Support
Testifier will be present: No
Submitted by: Brenda Kosky
Organization: Individual
E-mail: Brenda.Kosky@gmail.com
Submitted on: 2/27/2012

Comments: