



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of
LUIS P. SALAVERIA
Director

Department of Business, Economic Development, and Tourism
before the

HOUSE COMMITTEE ON FINANCE

Tuesday, March 1, 2016

11:02 a.m.

State Capitol, Conference Room 308

in consideration of
HB 2080, HD1

RELATING TO FUEL CELL ELECTRIC VEHICLES.

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

The Department of Business, Economic Development, and Tourism (DBEDT) supports House Bill 2080, HD1, which amends the definition of electric vehicles to include fuel cell electric vehicles (FCEV), and grant procurement priority for fuel cell electric vehicles for state and county vehicle purchases.

DBEDT understands it is important to treat hydrogen FCEVs similarly to electric vehicles, since both have zero tailpipe emissions and the potential to utilize renewable energy sources. Including FCEVs into the definition of electric vehicle sends a signal to industry that Hawaii is interested in the deployment of advanced transportation technologies and the development of hydrogen fueling infrastructure.

As this measure concerns State facility management and the regulation of high occupancy vehicle lanes, DBEDT respectfully defers to the Hawaii Department of Accounting and General Services and the Hawaii Department of Transportation on these matters.

Thank you for the opportunity to provide these comments regarding HB 2080, HD1.



Statement of
Robbie Melton
Executive Director & CEO
High Technology Development Corporation
before the
House Committee on Finance
Tuesday, March 1, 2016
11:02 a.m.
State Capitol, Conference Room 308

In consideration of
HB2080 HD1
RELATING TO FUEL CELL ELECTRIC VEHICLES.

Chair Luke, Vice Chair Nishimoto, and Members of the Committee on Finance.

The High Technology Development Corporation (HTDC) **supports** HB2080 HD1 which amends the definition of electric vehicles to include fuel cell electric vehicles (FCEV), and grants procurement priority for fuel cell electric vehicles for state and county vehicle purchases.

Since 1993 HTDC's Hawaii Center for Advanced Transportation Technologies (HCATT) program has been awarded more than \$40 million in federal funds matched by another \$23 million from private partners to develop advanced low emission and zero emission vehicles centered on electric drive technologies. In the past 5 years, HCATT has been focused on fuel cell electric vehicle demonstration projects.

HTDC understands it is important to treat hydrogen FCEVs similarly to electric vehicles, since both have zero tailpipe emissions and the potential to utilize renewable energy sources. Including FCEVs into the definition of electric vehicle is an actionable step that sends a signal to industry that Hawaii is interested in the deployment of advanced transportation technologies and the development of hydrogen fueling infrastructure.

As this measure concerns State facility management and the regulation of high occupancy vehicle lanes, HTDC respectfully defers to the Hawaii Department of Accounting and General Services and the Hawaii Department of Transportation.

Thank you for the opportunity to offer these comments.



COLLEGE OF SOCIAL SCIENCES

HAWAII ENERGY POLICY FORUM

UNIVERSITY OF HAWAI'I AT MĀNOA

Hawaii Energy Policy Forum

Jeanne Schultz Afuvai, Hawaii Inst. for Public Affairs
Karlle Asato, Hawaii Government Employees Assn
Joseph Boivin, Hawaii Gas
Warren Bollmeier, Hawaii Renewable Energy Alliance
Michael Brittain, IBEW, Local Union 1260
Albert Chee, Chevron
Elizabeth Cole, The Kohala Center
Kyle Datta, Ulupono Initiative
Mitch Ewan, UH Hawaii Natural Energy Institute
Jay Fidell, ThinkTech Hawaii
Carl Freedman, Haiku Design & Analysis
Matthias Fripp, REIS at University of Hawaii
Ford Fuchigami, Hawaii Dept of Transportation
Mark Glick, Hawaii State Energy Office, DBEDT
Justin Gruenstein, City & County of Honolulu
Dale Hahn, Ofc of US Senator Brian Schatz
Michael Hamnett, SSRI at University of Hawaii
Senator Lorraine Inouye, Hawaii State Legislature
Randy Iwase, Public Utilities Commission
Ashley Kaono, Ofc of US Representative Tulsi Gabbard
Jim Kelly, Kauai Island Utility Cooperative
Darren Kimura, Energy Industries
Kelly King, Sustainable Biodiesel Alliance
Kal Kobayashi, Maui County Energy Office
Representative Chris Lee, Hawaii State Legislature
Gladys Marrone, Building Industry Assn of Hawaii
Stephen Meder, UH Facilities and Planning
Hermima Morita, Energy Dynamics
Sharon Moriaki, UH Public Policy Center
Tim O'Connell, US Dept of Agriculture
Jeffrey Ono, Division of Consumer Advocacy, DCCA
Stan Osserman, HCATT
Darren Pai, Hawaiian Electric Companies
Melissa Pavlicek, Hawaii Public Policy Advocates
Randy Perreira, Hawaii Government Employees Assn
Rick Reed, Hawaii Solar Energy Assn
Cynthia Rezentes, Ofc of US Representative Mark Takai
Rick Rocheleau, UH Hawaii Natural Energy Institute
Will Rolston, Hawaii County, Research & Development
Riley Saito, SunPower Systems
Scott Seu, Hawaiian Electric Companies
Joelle Simonpietri, US Pacific Command Energy Ofc
H. Ray Starling, Hawaii Energy
Ben Sullivan, Kauai County
Lance Tanaka, Par Hawaii, Inc.
Maria Tome, Public Utilities Commission
Alan Yamamoto, Ofc of US Senator Mazie Hirono

Testimony of the
Hawaii Energy Policy Forum
Before the
House Committee on Finance
March 1, 2016 at 11:02 am in Conference Room 308

In **SUPPORT OF HB 2080 HD1** Relating to Fuel Cell Electric Vehicles

Chair Luke, Vice Chair Nishimoto, and Members of the Committee,

The Hawaii Energy Policy Forum ("HEPF"), created in 2002, is comprised of over 40 representatives from Hawaii's electric utilities, oil and natural gas suppliers, environmental and community groups, renewable energy industry, and federal, state and local government, including representatives from the neighbor islands. Our vision and mission, and comprehensive "10 Point Action Plan" serves as a guide to move Hawaii toward its preferred energy goals and our support for this bill. It is for that reason that we support HB 2080 HD1.

HB 2080 HD1 clarifies that fuel cell powered vehicles are "electric vehicles" that use a fuel cell to convert hydrogen gas and oxygen into electricity to power one or more onboard electric motors to propel the vehicle.

The Forum supports this measure that would provide fuel cell electric vehicles with the same "market pull" incentives as those enjoyed by battery electric vehicles, i.e., parking fee exemptions and HOV lane use. It also directs all state and county agencies, when purchasing new vehicles, to consider fuel cell electric vehicles.

The Forum supports HB 2080 HD1, and respectfully urges passage of the bill.

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.

**Testimony of
Gary M. Slovin / Mihoko E. Ito
on behalf of
The Alliance of Automobile Manufacturers**

DATE: February 29, 2016

TO: Representative Sylvia Luke
Chair, Committee on Finance

Submitted via FINtestimony@capitol.hawaii.gov

RE: **H.B. 2080 H.D.1 – Relating to Fuel Cell Electric Vehicles**
Hearing Date: Tuesday, March 1, 2016, 11:02 a.m.
Conference Room: 308

Dear Chair Luke and Members of the Committee on Finance,

The Alliance of Automobile Manufacturers (“Alliance”) would like to express **support** for H.B. 2080, H.D.1. The Alliance is a trade association of twelve car and light truck manufacturers including BMW Group, Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of North America, and Volvo.

Automobile manufacturers have invested billions in the research and development of hydrogen technology, and the Alliance is very supportive of efforts to increase the availability of passenger fuel cell electric vehicles. H.B. 2080, H.D.1 would clarify that battery electric vehicles and fuel cell electric vehicles are both electric vehicles for purposes of encouraging early adoption of fuel cell electric vehicles.

Thank you for the opportunity to submit testimony in support of this measure.

Gary M. Slovin
Mihoko E. Ito
C. Mike Kido
Tiffany N. Yajima

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HOUSE COMMITTEES ON FINANCE

March 1, 2016, 11:02 A.M., Room 308

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 2080 HD1

Aloha Chair Luke, Vice Chair Nishimoto, and members of the Committees:

Blue Planet Foundation supports HB 2080 HD1, which would include fuel cell electric vehicles in the state's definition of electric vehicles and grants procurement priority for fuel cell electric vehicles for public fleets.

As it is a policy of the state to eliminate imported fuels from the ground transportation and electricity sectors, we believe that fuel cell electric vehicles have the potential to help the state gain greater energy independence in both sectors. Hydrogen is a fuel which when combusted produces no green house gas emissions or other air pollutants. It can be produced from renewable sources of energy such as wind and solar.

As increasing amounts of renewable energy are added to Hawaii's electricity portfolio, it is anticipated that there will be an increasing potential for curtailed energy and increasing need for energy storage. Producing hydrogen from curtailed wind or solar power will be a cost effective way to capture that energy and then make it available for ground transportation. Therefore fuel cell vehicles have the potential to increase the cost effectiveness of wind and solar power generation while at the same time displacing gasoline and diesel imports for ground transportation.

Given the tremendous potential economic and environmental benefits of fuel cell vehicles, we believe it is appropriate to incentivize them by granting them with public fleet procurement priority and allow them to enjoy the same benefits as battery electric vehicles.

Thank you for the opportunity to testify.

**Servco Pacific Inc. Testimony in SUPPORT of
HB2080, HD1
Relating to Fuel Cell Electric Vehicles**

Presented to the Committee on Finance at the public hearing to be held on Tuesday, March 1, 2016 at 11:02 a.m. in Conference Room 308, Hawaii State Capitol

Aloha Chair Luke, Vice Chair Nishimoto, and Members of the Committee:

Servco Pacific Inc. (Servco) supports this measure that would provide fuel cell electric vehicles with the already available incentives afforded to battery electric vehicles (i.e. parking fee exemptions, HOV lane use).

A Hydrogen Fuel Cell Vehicle (HFCV) is an electric vehicle which uses fuel cell technology to convert hydrogen and oxygen into electricity to power one or more onboard electric motors. The only emission of the HFCV is water.

As only the second state in the U.S. to do so, Servco has recently introduced the Toyota Mirai HFCV to Hawaii with plans for retail sales of the vehicle to start later this year. The 2016 model year Toyota Mirai, which launched in Japan as a production vehicle in late 2014, has a driving range of 312 miles, refueling time of about 5 minutes and the driving experience and performance similar to gasoline engine vehicles. Hydrogen fuel cell vehicles provide zero vehicle emissions with minimal compromise and lifestyle change.

Passing HB2080, HD1 will help broaden awareness of alternative renewable fuel technologies and help Hawaii fulfill the goals of the Hawaii Clean Energy Initiative (in the ground transportation sector) to reduce fossil fuel use by 40% through use of renewable fuels and 30% by efficiencies by 2013 thereby making a positive impact on current and future generations of Hawaii.

Servco supports HB2080, HD1 and encourages all committee members to support passage of the bill.

Thank you for the opportunity to testify.

DAVID Y. IGE
GOVERNOR



Testimony by:
FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

March 1, 2016
11:02 a.m.
State Capitol, Room 308

**H.B. 2080, H.D.1
RELATING TO FUEL CELL ENERGY VEHICLES**

House Committee on Finance

The Department of Transportation (DOT) **supports** this bill which amends the definition of electric vehicles to include fuel cell electric vehicles and grant procurement priority for fuel cell electric vehicles for State and County vehicle purchases.

The DOT believes the incentives of this bill promotes sustainable transportation in meeting Hawaii's energy goals.

Thank you for the opportunity to provide testimony.