TESTIMONY OF CARLITO P. CALIBOSO
CHAIRMAN, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

MARCH 17, 2009

Bill No. 1202
Support Y N
Date 3/16/09
Time 1630
Cat AF (AS) AX B C
Type 1 (2) WI

MEASURE: S.B. No. 1202 S.D.2
TITLE: Relating to Transportation Energy Initiatives

Chair Morita and Members of the Committee:

DESCRIPTION:

This bill: (1) establishes the development of non-fossil fuel transportation as a state policy goal; (2) provides tax credits for the purchase and installation of electric vehicle charging infrastructure and alternative fuel refueling infrastructure; (3) requires the designation of parking spaces for electric vehicles; (4) requires state and county agencies to follow a priority list when purchasing energy-efficient vehicles, including electric vehicles; (5) requires the director of transportation to furnish information to the state energy resources coordinator on the use of electric vehicles in the State; and (6) requires the Department of Transportation to develop a plan for electric vehicle infrastructure. In addition, this measure proposes to exempt electric vehicle charging from regulation as a public utility under Chapter 269, HRS.

POSITION:

The Public Utilities Commission ("Commission") has no objection to the proposed exemption from Chapter 269, HRS.

Thank you for the opportunity to testify.

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Bill No. 1202
Support (Y) N
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Statement of
THEODORE E. LIU
Director
Department of Business, Economic Development, and Tourism
before the

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

Tuesday, March 17, 2009
8:30 AM
State Capitol, Conference Room 325

in consideration of
SB 1202 SD2
RELATING TO TRANSPORTATION ENERGY INITIATIVES.

Chair Morita, Vice Chair Coffman, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent of SB 1202, SD2 but would like to offer amendments. This bill is intended to begin the transformation of Hawaii's ground transportation sector to be less dependent on petroleum. We prefer, however, the comprehensive approach of HB 1054 as introduced by the Administration and ask that the Committee reconsider the provisions in that bill.

The Department strongly supports sections 2 and 3; these changes are consistent with the best energy, economic, and environmental outcomes for the people of Hawaii.

Section 4 designates parking spaces for the unique needs and attributes of electric vehicles. The designation of parking spaces for electric vehicles, and eventually the connection of vehicles to the grid at these points, is important for the establishment of an electric vehicle network and for grid management.

However, we have concerns with the number and location of spaces required and the inclusion of a charging requirement at the same time as the establishment of parking. We believe that parking spaces should be established in 2010, without a charging requirement, but with provisions for enforcement. We recommend that this section be revised to read as follows:

§291-A Designation of parking spaces for electric vehicles. All public, private, and government parking facilities with more than 100 parking spaces available for use by the general public shall designate at least one out of every one hundred spaces as exclusively for electric vehicles; provided that at least one of the designated spaces shall be near the building entrance; provided further that the other designated spaces shall be either near the building entrance or near electrical service, at the discretion of the facility manager. Such spaces shall be designated, clearly marked, and enforced by December 31, 2010.

For the purposes of this section, "electric vehicle" means an electric vehicle or neighborhood electric vehicle with an electric vehicle license plate.

§291-B Parking spaces reserved for electric vehicles; penalties. (a) Beginning January 1, 2011, any person who parks a non-electric vehicle in a space designated and marked as reserved for electric vehicles shall receive a warning.

(b) Beginning July 1, 2011, any person who parks a non-electric vehicle in a space designated and marked as reserved for electric vehicles shall be guilty of a traffic infraction under chapter 291D and shall be fined not less than $50 nor more than $100 and pay any costs incurred by the court related to assessing the fine.

(c) Any citation issued under this chapter may be mailed to the violator pursuant to section 291C-165(b)."

Section 5 makes it clear that an installer of electric vehicle charging equipment is not an electric utility. We support Section 5.

Section 6 sets forth clear instructions for government agencies to lead by example by selecting vehicles that have great promise for Hawaii and those that have greater barriers to market development. We would like to point out that this section contains a provision that agencies may apply for exemptions to the extent that vehicles are not available, and allows life cycle costs to be included in the determination of whether the vehicles meet the needs of the agencies. Recommended clarifications to this section are noted below.

We recommend that on page 16, line 3, the term "Flexible fuel vehicles" be replaced by the term "Other alternative fuel vehicles" in order to include dedicated or dual-fueled alternative fuel vehicles, to read as follows:

(3) Other alternative fuel vehicles;

We also recommend that the definition of "Light duty vehicle" beginning on page 17 line 21, be revised to read as follows:

["~~Light-duty vehicle~~"] "Light duty motor vehicle" has the same meaning as contained in 10 Code of Federal Regulations Part 490[~~.~~], not including any vehicle incapable of traveling on highways or any vehicle with a gross vehicle weight rating greater than 8,500 pounds.

We support section 7, which allows vehicle information to be provided to DBEDT for use in tracking the numbers and types of vehicles in use. This is an important step in determining the baseline as well as measuring progress.

We defer to the Department of Transportation on Section 8 regarding the availability of resources to meet this requirement.

Thank you for the opportunity to offer these comments.

ECONOMIC DEVELOPMENT
ISLAND OF OAHU

March 16, 2009

Hawaii State legislature
State Capital
Honolulu, Hawaii 96813

Bill No. 1202
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Date 3/16/09
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Support Testimony on
S.B. NO. 1202

Relating to Non-fossil fuel transportation

Committee on Energy and Environment Protection
Representative Hermina M. Morita, Chair
Representative Denny Coffman, Vice Chair

Tuesday, March 17, 2009, 8:30 a.m., Conference Room 325

Enterprise Honolulu, the Oahu Economic Development Board supports SB 1202, establishing the development of non-fossil fuel transportation as a state policy goal and providing for the purchase and installation of electric vehicle charging infrastructure and alternative fuel refueling infrastructure.

Today there can be no more vulnerable place on earth than Hawai'i with 100% imported oil and 85% imported food dependency. Hawai'i now imports 100% of our oil, (33%) for electricity production, (33%) ground and marine transportation and (33%) aviation. The Department of Energy and the National Renewable Energy Lab reported that in 2008, the yearly cost of this imported oil to every man, women and child in Hawai'i is over $2,000 per capita. That's over $8,000 a year for every household of 4.

The following projects are necessary to accelerate Hawai'i's transition to renewable energy and food security:

- Build the smart grid including the interisland marine cables so renewable off peak energy can be used for electric transportation alternatives.
- Align the permitting, licensing and Environmental permitting processes to expedite simultaneous development of the smart grid, while siting renewable energy projects and grid upgrades to support distributed generation, smart demand side management, and time of day billing.

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- Expedite the use of smart metering on every Hawai'i home, business, school, university and government building. This can also employ hundreds, perhaps thousands of workers annually with good paying "green collar" jobs.
- Accelerate the infrastructure development and incentives for electric cars including incentives for infrastructure, purchase, and renewable grid implementation.

For every electric vehicle replacing a fossil fuelled vehicle, Hawaii saves an average of 700 gallons of gasoline annually while increasing the use of off peak renewable energy. This helps bring more renewable energy to market faster while directly contributing to the reduction in fossil fuel use and green house gases.

The timing is right for these activities and this legislation takes a good first step in the process.

Enterprise Honolulu, the Oahu Economic Development Board, supports SB 1202.

John Strom

VP Director of Business Development & Technology

Bill No. 1202
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Time 1729
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HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

March 17, 2009, 8:30 A.M.

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 1202, SD2

Aloha Chair Morita and Members of the Committees:

The Sierra Club, Hawai`i Chapter, with 5500 dues paying members statewide, supports SB 1202 SD2, encouraging the development of electric and alternative fuel cars in Hawai`i.

New Zealand -- a comparable location to Hawai`i -- currently produces over 60% of their electrical power needs from renewable sources. The key element to this "greenness" is storage capacity. Successful electrical grids must be able to tap a source of energy when wind and solar power wanes.

Electric vehicles, which are idle an average of 22 hours a day, are an ideal storage option. For example, the eBox (a 100% electric conversion of a Toyota Scion xB) can drive 140-180 miles or power twenty average homes for one hour.[1] Vehicle-to-grid technology allows car owners to use the power stored in the batteries to reduce their power consumption, store solar-generated power for clean driving, or back up the power grid.

Electrical cars have other benefits. They are silent, create no air pollution, and need little maintenance. No tune ups, oil changes, or radiator repairs are necessary (these items don't exist on an electrical car). Most importantly, they reduce Hawai`i's fossil fuel consumption, which is currently the most dependent state on oil in the nation.

Moreover, the limited geography of Hawai`i makes it an ideal location for electric vehicles. Most commutes are well within an electric vehicles capacity, thus

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[1] "How Near are Vehicle-to-Grid Electric Cars?" by Leonard J. Beck, available at http://evworld.com/article.cfm?storyid=1633

eliminating the need for a gas powered engine (as is included in a hybrid vehicle), reducing Hawaii's fossil-fuel consumption.

Other places have adopted similar measures as proposed in SB 1202. Last November, Oregon became the first state to develop standards for a statewide infrastructure of electric-car plug-in stations in terms of performance, safety, and voltage. If Hawai`i does not act now, it is possible it will lose the investors who want to develop Hawai`i as a pilot project to demonstrate the feasibility of this technology to the rest of the world.

Thank you for the opportunity to testify.

Bill No. 1202
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Time 1932

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

Cat AF AS AX (B) C
Type 1 (2) WI

Testimony of
Darren T. Kimura
Co-Chair – Energy Efficiency Energy and Transportation Working Group
Hawai'i Energy Policy Forum

House Committee on Energy and Environmental Protection
Tuesday, March 11, 2008March 17, 2009
8:30 am
Conference Room 325

IN SUPPORT OF SB 1202, SD 2 – Relating to transportation energy initiatives

I am Darren T. Kimura, Co-Chair of the Energy Efficiency and Transportation 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 and community 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 vision and mission, and a comprehensive "10 Point Action Plan," which serves as a framework and guide for meeting our preferred energy vision and goals. The Forum generally supports the passage of SD 2.

SD 2 describe bill provisions:

- Designation and reservation of parking spaces for electric vehicles
- Further defines energy efficient vehicles
- Provides for information and the development of a plan for electric vehicle infrastructure.

These bullet points support The Forum's Point 7 of the 10 Point Action Plan to improve Energy Efficiencies and Options in Transportation Action 1 to Explore energy efficient strategies in the transportation sector and thus we support the passage of SD 2 for the above cited reasons and respectfully requests that it be filed.

Thank you for this 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

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blue planet FOUNDATION

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HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
March 17, 2009, 8:30 A.M.
Room 325

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 1202 SD2, SUGGESTED AMENDMENTS

Chair Morita and members of the committee:

The Blue Planet Foundation supports Senate Bill 1202 SD2, implementing various policies to support the use of non-fossil transportation energy options. We support efforts to require the state to purchase high efficiency vehicles and particularly support using life-cycle costing to determine the best transportation options for state vehicles. **We respectfully ask that this Committee amend this measure to contain the income tax credits for electric vehicle charging infrastructure and alternative refueling infrastructure as found in the Senate Draft 1 of the measure (as well as an appropriate start date).**

Regarding the incentives and requirements for electric vehicle infrastructure, Blue Planet strongly supports significant efforts to foster the rapid development of Hawaii's clean transportation future. Electric vehicles (EV) will play an integral role in Hawaii's clean energy future. By using stored electrical energy, EVs can take advantage of intermittent solar, wind, and other clean energy resources. Most vehicles sit idle 22+ hours of the day, so they become *de facto* energy storage devices if their batteries are plugged into the grid when they are not in use. With smart grid infrastructure in place, EVs become an essential component to electricity

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load and clean energy resource balancing—in addition to providing clean mobility solutions for Hawai'i residents.

Electric vehicles today have evolved from their "golf cart" roots. In fact, one new production model, the Tesla Roadster, is a high-end sports car that can accelerate from zero to 60 miles per hour in under four seconds—beating almost all regular internal combustion engines on the road today. The drawback, however, is its price. As with most full performance EVs, the battery technology currently adds considerable expense to the cost of the EV. Tax incentives for EV purchase will help to overcome this barrier, and some EV companies are considering business models that will reduce the upfront cost of EVs for Hawai'i residents.

In addition to tax credits for EV charging infrastructure, Blue Planet supports the creation of preferential electricity rates to encourage EV charging off-peak with electricity from clean energy sources. Such a policy would support three clean energy goals: encouraging EV use, increasing clean energy consumption, and leveling out the electricity demand on the grid. We are happy to work with the committee to craft such a preferential charging rate policy.

Finally, Blue Planet supports amending SB 1202 SD1 that would establish a schedule of steadily increasing parking stall EV charging capacity requirements over time. This would prepare building owners and managers for the upcoming requirements and help their EV investment decision making. Such a policy would also help to overcome the "chicken and the egg" problem of customer EV adoption; if residents know that infrastructure is coming, they will feel more comfortable about investing in a vehicle.

Thank you for the opportunity to testify.