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GOVERNOR



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DEPARTMENT OF TRANSPORTATION
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IN REPLY REFER TO:

April 6, 2009

TESTIMONY OF THE DEPARTMENT OF TRANSPORTATION

COMMITTEE ON FINANCE

SENATE BILL NO. 1202, S.D.2., H.D.1,
RELATING TO TRANSPORTATION ENERGY INITIATIVES.

We **support** the intent of this bill, which is to reduce the transportation sector's dependence on petroleum-based fuels

Senate Bill No. 1202, S.D.2, H.D. 1 seeks to develop a transportation infrastructure for electric vehicles by requiring an aggressive timetable to replace fossil fuel vehicles with electric and alternative fuel vehicles.

While the DOT supports the intent of this bill, we present the following concerns for your consideration:

1. The DOT is willing to consider plug-in locations at our airport and harbor parking facilities. However, several concerns are raised.

The DOT is willing to allow private sector service providers to install plug-in locations at airport and harbor parking facilities, provided that these plug-in locations do not compromise security or the operations of the facility.

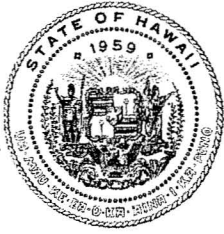
In addition, the DOT would prefer to not allocate separate and independent locations for the various providers. To this end, the DOT will work with any qualified private service provider who can install universal plug-in locations that can be utilized by other interested service providers as well. Therefore, each provider must be able to implement a system that enables their individual customers to be identified as such and allows for the accounting of their own electrical charges and their own customer billing.

Furthermore, because the provider will benefit by the revenues generated from the use of the plug-in stations, the provider should be responsible for the cost of installing, operating, and maintaining these plug-in stations.

Senate Bill No. 1202, S.D.2, H.D.1, Relating to Transportation Energy Initiatives.
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2. The permitting and installation of battery exchange stations and electric vehicle charging outlets in homes, businesses, public parking lots, and other buildings and facilities throughout the State are actions far outside the purview, authority, and resources of the DOT. Therefore, this task of developing and implementing the plan required by Section 12 of Senate Bill No. 1202, S.D. 2, H.D. 1 must be assigned to a more appropriate agency. If the Committee is intent on designating the DOT as the lead agency for this task, we request that the task be limited to a plan to expedite permitting and installation of battery exchange stations and electric vehicle charging outlets within DOT airport and harbor facilities only.

Thank you for the opportunity to testify on this very important measure.



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

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Statement of
THEODORE E. LIU
Director
Department of Business, Economic Development, and Tourism
before the

HOUSE COMMITTEE ON FINANCE

Monday, April 6, 2009
3:00 PM
State Capitol, Conference Room 308

in consideration of
SB 1202 SD2 HD1
RELATING TO TRANSPORTATION ENERGY INITIATIVES.

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

The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent of SB 1202, SD2, HD1, 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.

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 the section beginning on page 7, line 20, through page 8, line 17, 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. "

We support sections 5 through 8, which: make it clear that an installer of electric vehicle charging equipment is not an electric utility; set forth clear instructions for government agencies to lead by example by selecting vehicles that have great promise for Hawaii and those that face greater barriers to market development; allow vehicle information to be provided to DBEDT for use in tracking the numbers and types of vehicles in use, to determine the baseline as well as measure progress; and enables the use of Federal funds, if available, for transportation energy transformation grants. There are two programs under the American Recovery and Reinvestment Act of 2009 that provide funding for advanced technology vehicles and refueling infrastructure; if we are successful in attracting those funds, this will enable us to make them available for Hawaii vehicles and infrastructure.

Finally, we defer to the Department of Transportation on Section 9 regarding the availability of resources to meet this requirement.

Thank you for the opportunity to offer these comments.

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

APRIL 6, 2009

MEASURE: S.B. No. 1202 S.D.2 H.D.1

TITLE: Relating to Transportation Energy Initiatives

Chair Oshiro and Members of the Committee:

DESCRIPTION:

This bill: (1) establishes the development of non-fossil fuel transportation as a state policy goal; (2) requires the designation of parking spaces for electric vehicles; (3) requires state and county agencies to follow a priority list when purchasing energy-efficient vehicles, including electric vehicles; (4) includes requirements for developing an electric vehicle infrastructure and (5) establishes the Transportation Energy Transformation Grant Fund Program. 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.

Testimony before the House Committee on
Finance

S.B. 1202, SD2, HD1 Relating to Transportation Energy Initiatives

Monday, April 6, 2009
3:00 p.m. (Agenda #2), Conference Room 308

By Carlos Perez Loriga
Director
Customer Technology Applications Division
Hawaiian Electric Company, Inc.

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

My name is Carlos Perez Loriga and I am testifying on behalf of Hawaiian Electric Company, Inc., and its subsidiary utilities, Maui Electric Company, Ltd., and Hawaii Electric Light Company, Inc.

S. B. 1202, SD2, HD1 provides incentives and requirements to help enable electrification of transportation in Hawaii.

While sensitive of the financial challenges that the State is currently facing, Hawaiian Electric Company supports S.B. 1202, SD2, HD1 to promote the increased acceptance and use of electric and plug-in hybrid electric automobiles. Increased acceptance and use of these types of vehicles will aid in the reduction of greenhouse emissions and fossil fuel use and will help enable the Hawaii Clean Energy Initiative's goal of 70% clean, renewable energy by 2030.

Thank you for the opportunity to testify.



April 6, 2009

Hawaii State legislature
State Capital
Honolulu, Hawaii 96813

**Support Testimony on
S.B. NO. 1202
Relating to Non-fossil fuel transportation**

COMMITTEE ON FINANCE
Representative Marcus R. Oshiro, Chair
Representative Marilyn B. Lee Vice Chair

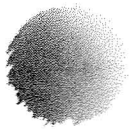
Monday, April 6, 2009, 3:00 p.m., Conference Room 308

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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THE BUSINESS CLIMATE OF PARADISE

- 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.

A handwritten signature in black ink, appearing to read "John R. Strom". The signature is fluid and cursive, with a large initial "J" and "S".

John Strom

VP Director of Business Development & Technology

better place



BEFORE THE
HOUSE COMMITTEE ON FINANCE
Representative Marcus Oshiro, Chair
Representative Marilyn Lee, Vice Chair

Testimony of

PETE COOPER
Better Place Hawaii
745 Fort Street, Suite 2100
Honolulu, Hawaii 96813

SB1202, SD2, HD1
RELATING TO TRANSPORTATION ENERGY INITIATIVES

Monday, April 6, 2009
3:00 pm
State Capitol, Room 308

Chair Oshiro and members of the Committee on Finance:

My name is Pete Cooper of Better Place Hawaii. Better Place Hawaii coordinates with Hawaii utilities, automobile dealers, State and county governments and other stakeholders to deploy an electric vehicle charging network powered by renewable energy.

Better Place Hawaii **SUPPORTS** SB1202, SD2, HD1 which provides policy guidelines, business incentives, and mandates to dramatically transform the use of fossil-fuel cars to a more efficient renewable transportation system which supports electric vehicles.

With the State's goal of utilizing renewable sources for 70% of its energy by 2030, government action to further the use of electric vehicles is essential. In so doing, Hawaii will benefit in the following ways:

- Reduced demand for gas and oil imports.
- Reduced demand for electricity during peak demand times of day, hence lowering costs to ratepayers/taxpayers.
- Increased demand for off-peak and renewable energy when capacity is high, resulting in lower costs of renewable energy.
- Reduced utility costs resulting from distributed network of batteries in EVs.
- Increased tax receipts from the EV industry as a whole.

In particular, Better Place Hawaii supports Part I of these measures, which amends certain sections of the Hawaii State Plan. SB1202, SD2, HD1 establishes objectives and policies that will increase and diversify Hawaii's economic base, including the research and development of non-fossil fuel and energy efficient modes of transportation; as well as directs the state's energy systems to be dependable, efficient, and economical, leading towards increased energy self-sufficiency. Those additional guidelines in HRS Chapter 226 would better reflect the State's commitment towards non-fossil fuel and energy efficient transportation in Hawaii.

Part II of SB1202, SD2, HD1 provides for parking lot requirements where designated spaces and charge spots will be placed in public and government parking lots available for use by the general public. These parking requirements are an essential component to support electric vehicles.

Part III of SB1202, SD2, HD1 requires that government agencies lead the effort towards the electrification of transportation in Hawaii. We believe that State and local government can provide a strong kick-start to utilizing EVs in Hawaii. The measures and requirements outlined in SB1202, SD2, HD1 are strongly supported by Better Place Hawaii.

Par IV of SB1202, S2, HD1 establishes the Transportation Energy Transformation Grant Fund to provide for grants that diversify grant transportation energy sources or that help coordinate activities that will coordinate activities to diversify transportation energy sources. We believe that funding sources to assist in the diversification of transportation alternatives is beneficial to Hawaii.

Lastly, Part V of SB1202, SD2, HD1 requires that the Department of Transportation develop and implement a battery charging outlet plan to expedite State and county permitting and installation of EV charge outlets in homes, businesses, public parking lots and buildings and facilities throughout the state. To ensure that Hawaii is prepared for this new wave of electric vehicles to be introduced by automakers throughout the world, a well planned and developed EV charging infrastructure must be in place by no later than 2011. We believe that the Department of Transportation may not be the appropriate agency to conduct this study. However, we support this Committee's determination as to which entity would be most appropriate to address these issues.

Thank you for the opportunity to testify in **SUPPORT** of SB1202, SD2, HD1. Please feel free to contact me if you have any questions.



HOUSE COMMITTEE ON FINANCE

April 6, 2009, 3:00 P.M.

Room 308

(Testimony is 5 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 1202 SD2 HD1, SUGGESTED AMENDMENTS

Chair Oshiro and members of the committee:

The Blue Planet Foundation supports Senate Bill 1202 SD2 HD1, 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. Draft language is contained at the end of this testimony.**

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

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org

55 Merchant Street 17th Floor • Honolulu, Hawaii 96813 • 808-954-6142 • blueplanetfoundation.org

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.

Thank you for the opportunity to testify.

SUGGESTED AMENDMENTS FOR EV / ALTERNATIVE FUEL INCENTIVES:

Chapter 235, Hawaii Revised Statutes, is amended by adding two new sections to be appropriately designated and to read as follows:

"§235-A Electric vehicle charging infrastructure; income tax credit. (a) Each individual or corporate taxpayer that files an individual or corporate net income tax return for a taxable year may claim a tax credit under this section against the Hawaii state individual or corporate net income tax. The tax credit may be claimed for code-compliant electric

vehicle charging infrastructure installed and placed in service in the State by a taxpayer during the taxable year. This credit shall be available for infrastructure installed and placed in service in the State after January 1, 2010, and prior to January 1, 2016. For taxable years ending before January 1, 2016, an income tax credit shall be allowed for purchase and installation of electric vehicle charging infrastructure. The credit shall be up to seventy per cent of the actual cost of the electric vehicle charging system or \$1,000 per electric vehicle charge point of the system, whichever is less.

(b) For the purposes of this section:

"Actual cost" means costs related to the electric vehicle charging system under subsection (a), including accessories and installation, but not including the cost of consumer incentive premiums unrelated to the operation of the system or offered with the sale of the system and costs for which another credit is claimed under this chapter.

"Electric vehicle charge point" means the part of the electric vehicle charging system that delivers electricity from a source outside an electric vehicle into one electric vehicle.

"Electric vehicle charging system" means a system that is designed in compliance with Article 625 of the National Electrical Code and delivers electricity from a source outside an electric vehicle into one or more electric vehicles. An electric vehicle charging system may include several charge points simultaneously connecting several electric vehicles to the system.

(c) The director of taxation shall prepare any forms that may be necessary to claim a tax credit under this section. The director may also require the taxpayer to furnish reasonable information to ascertain the

validity of the claim for credit made under this section and may adopt rules necessary to effectuate the purposes of this section pursuant to chapter 91.

(d) If the tax credit under this section exceeds the taxpayer's income tax liability, the excess of the credit over liability may be used as a credit against the taxpayer's income tax liability in subsequent years until exhausted.

(e) The income and corporate tax credits issued under subsection (a) by the department of taxation shall not exceed the amount of the funds available in the transportation energy efficiency and infrastructure fund provided in section _____.

(f) The director of taxation shall provide an annual report to the legislature on the amount of income and corporate tax credits claimed under subsection (a).

§235-B Alternative fuel refueling infrastructure; income tax credit. (a) Each individual or corporate taxpayer that files an individual or corporate net income tax return for a taxable year may claim a tax credit under this section against the Hawaii state individual or corporate net income tax. The tax credit may be claimed for alternative fuel refueling infrastructure installed and placed in service during the taxable year. For taxable years ending before January 1, 2016, an income tax credit shall be allowed for purchase and installation of alternative fuel refueling infrastructure. The credit shall be up to thirty per cent of the actual cost of the alternative fuel refueling infrastructure or \$25,000, whichever is less.

(b) For the purposes of this section:

"Actual cost" means costs related to the alternative fuel refueling infrastructure under subsection (a), including accessories and installation, but not including costs for which another credit is claimed under this chapter.

"Alternative fuel refueling infrastructure" means equipment for the storage and dispensing of alternative fuels for the refueling of alternative fuel vehicles, as further described and defined in the Internal Revenue Code, Section 30C.

(c) The director of taxation shall prepare any forms that may be necessary to claim a tax credit under this section. The director may also require the taxpayer to furnish reasonable information to ascertain the validity of the claim for credit made under this section and may adopt rules necessary to effectuate the purposes of this section pursuant to chapter 91.

(d) If the tax credit under this section exceeds the taxpayer's income tax liability, the excess of the credit over liability may be used as a credit against the taxpayer's income tax liability in subsequent years until exhausted.

(e) The income and corporate tax credits issued under subsection (a) by the department of taxation shall not exceed the amount of funds available in the transportation energy efficiency and infrastructure fund provided in section _____.

(f) The director of taxation shall provide an annual report to the legislature on the amount of income and corporate tax credits claimed under subsection (a)."