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ECONOMIC DEVELOPMENT & TOURISM**

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Statement of  
**RICHARD C. LIM**  
Director

Department of Business, Economic Development, and Tourism  
before the

**HOUSE COMMITTEE ON FINANCE**

Wednesday, February 20, 2013  
2:00 p.m.  
State Capitol, Conference Room 308

in consideration of  
**HB 451, HD1**

**RELATING TO FOSSIL FUELS.**

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

The Department of Business, Economic Development & Tourism (DBEDT) provides comments and proposed amendments on HB 451, HD1, which expands the Environmental Response, Energy, and Food Security Tax (“barrel tax”) to be levied on each barrel equivalent of liquid, gaseous, or solid fossil fuels having an energy content of 5,800,000 British Thermal Units.

DBEDT believes it is prudent to maintain the unit of taxation as “barrel” for petroleum products already being taxed for clarity. We are proposing suggested amendments to maintain existing implementation of the barrel tax on petroleum products, while adding new paragraphs for the taxation of liquefied natural gas or gaseous fossil fuels and solid fossil fuels to clarify the intent of HB 451, HD1; reallocating barrel tax revenues to its original intended purposes; and removing the sunset dates for the Energy Systems Development Special Fund and for Act 73, Session Laws of Hawaii 2010.

There is strong public support to return the barrel tax revenues to its original intended purposes. A recent survey by OmniTrack (copy attached) shows that 78% of Hawaii residents agreed that the barrel tax funds should be restored for the intended purposes of improving energy and food self-sufficiency.

The reallocated clean energy funds will fully support the State Energy Office programs and staff positions to deploy clean energy and execute effective policies. These dedicated funds for clean energy are the primary source of funding for the Hawaii Clean Energy Initiative, the internationally regarded 70% clean energy goal in 2030 and DBEDT's State Energy Office has been the driving force in engaging Hawaii communities and other stakeholders to implement the Initiative and the Task Force recommendations. Clear evidence of the Initiative's contribution to economic growth is that in 2012, 26% of Hawaii's construction-related expenditures were related to solar. In a time of declining construction spending, solar construction has brought welcomed relief to the industry.

Programs to be funded are focused on high impact solutions to move the needle on Renewable Portfolio Standard and Energy Efficiency Portfolio requirements, transportation goals, and business development opportunities to stimulate clean energy entrepreneurship and test bed investments. Examples of programs and strategies to be funded include, but are not limited to, the following:

- Permitting assistance, such as upgrades to the Permitting Wizard, additional e-Permitting state and county projects, investigation to clarify rules regarding the issuance of special use permits for A-C agricultural land classifications that can save clean energy developers up to 30% of permit processing time and lower overall project development time and costs.
- Procuring subject matter experts for renewable energy development and transmission projects with the potential for greater than 800 GWh annually, alternative transition fuel sources, and to further build the State's capacity to respond to energy emergencies.
- Procuring financial, legal and technical advisors to develop clean energy innovation sector and position Hawaii as a global test bed to attract and create new businesses, jobs and investment into the sector and to develop new solutions to address Hawaii's energy challenges.
- Procuring professional technical assistance for benchmarking and certification for Energy Star buildings and developing contract models to extend Hawaii's national leadership in energy savings performance contracting.

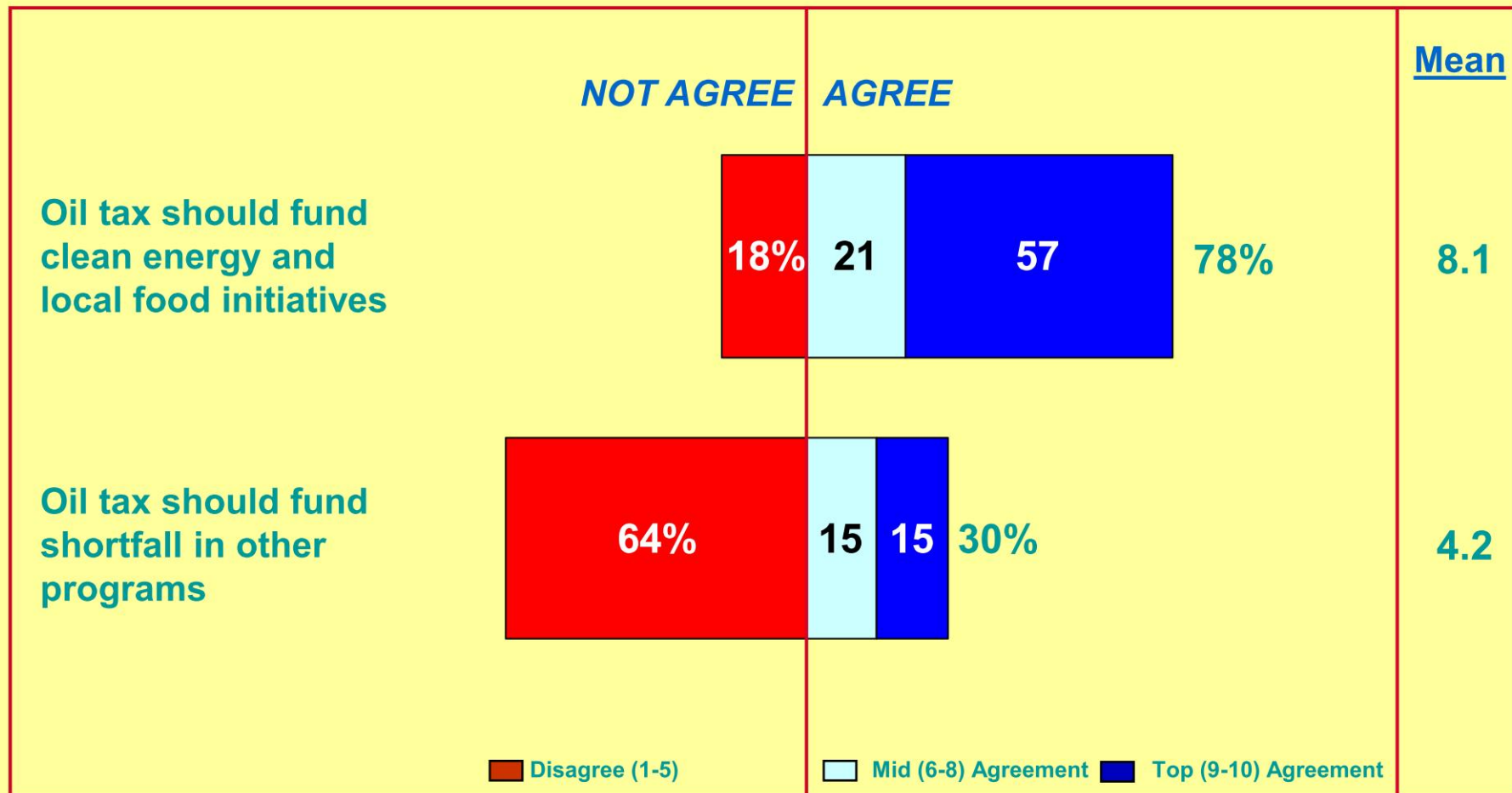
The proposed barrel tax funds will replace federal Recovery Act funds that previously served as the primary funding source for DBEDT's clean energy positions and programs. Because of previous funding for these programs, Hawaii is on track to meet its 2015 clean energy goals and the requested funds will ensure that Hawaii is best capable of transforming its energy and economic future to achieve Hawaii's aggressive 70% clean energy goal in 2030.

DBEDT is also supportive of the need for and use of funds to support food safety and security and environmental response and defers to the Department of Agriculture and Department of Health on specific programs to be supported through the amendment to this measure to reallocate funds to the original intended purposes.

DBEDT defers to the Department of Taxation on the administration of the tax.

Thank you for the opportunity to offer these comments and suggested amendments on HB 451, HD1.

# Strong Support for Dedicated Funding of Energy and Food Sustainability Initiatives



Q: As you may know, in 2010 the legislature passed a \$1.05 tax on each barrel of oil imported into Hawaii, the purpose being three fold: first, to promote energy independence and clean energy alternatives, secondly, to promote locally-grown food and, third, to address environmental impacts like oil spills. However, most of the oil tax revenue was diverted to fund other state programs; and now some people want the monies from now on to be used for its original purpose. Using a 10-point scale where 10 means Completely Agree and 1 means Do Not Agree At All, how much do you agree or disagree that...?

- 1) Having clean energy sources and reducing reliance on imported food and energy are important and the oil tax revenue should go to fund these goals as intended
- 2) Most of the oil tax revenues should continue to fund the shortfall in the general state budget to pay for other governmental programs

SECTION 2. Section 243-3.5, Hawaii Revised Statutes, is amended as follows:

**"§243-3.5 Environmental response, energy, and food security tax; uses.** (a) In addition to any other taxes provided by law, subject to the exemptions set forth in section 243-7, there is hereby imposed a state environmental response, energy, and food security tax on each barrel or fractional part of a barrel of [~~petroleum~~] fossil fuel product sold by a distributor to any retail dealer or end user of [~~petroleum~~] fossil fuel product, other than a refiner. The fossil fuel products to be taxed are as follows:

- (1) petroleum product;
- (2) liquefied natural gas or gaseous fossil fuel, provided that each barrel is equivalent to 5.8 million british thermal units; and
- (3) solid fossil fuel, provided that each barrel is equivalent to 5.8 million british thermal units, whereby each short ton of solid fossil fuel shall be equivalent to 25 million british thermal units.

(b) The tax shall be \$1.05 on each barrel or fractional part of a barrel of [~~petroleum~~] fossil fuel product that is not aviation fuel; provided that of the tax collected pursuant to this subsection[+] shall not apply to solid fossil fuels used to fulfill a signed power purchase agreement in effect as of June

30, 2013; provided further that the tax collected pursuant to this subsection shall apply to solid fossil fuels used to fulfill any power purchase agreement extended, modified, or renewed after June 30, 2013; and provided further that of the tax collected pursuant to this subsection:

- (1) [~~5~~] 10 cents of the tax on each barrel shall be deposited into the environmental response revolving fund established under section 128D-2;
- (2) [~~15~~] 42.5 cents of the tax on each barrel shall be deposited into the energy security special fund established under section 201-12.8;
- (3) 10 cents of the tax on each barrel shall be deposited into the energy systems development special fund established under section 304A-2169; and
- (4) [~~15~~] 42.5 cents of the tax on each barrel shall be deposited into the agricultural development and food security special fund established under section 141-10.

The tax imposed by this subsection shall be paid by the distributor of the [~~petroleum~~] fossil fuel product.

[~~(b)~~] (c) Each distributor subject to the tax imposed by subsection (a), on or before the last day of each calendar month,

shall file with the director, on forms prescribed, prepared, and furnished by the director, a return statement of the tax under this section for which the distributor is liable for the preceding month. The form and payment of the tax shall be transmitted to the department of taxation in the appropriate district.

~~[(e)]~~ (d) Notwithstanding section 248-8 to the contrary, the environmental response, energy, and food security tax collected under this section shall be paid over to the director of finance for deposit as provided in subsection (a).

~~[(d)]~~ (e) Every distributor shall keep in the State and preserve for five years a record in such form as the department of taxation shall prescribe showing the total number of barrels and the fractional part of barrels of ~~[petroleum]~~ fossil fuel product sold by the distributor during any calendar month. The record shall show such other data and figures relevant to the enforcement and administration of this chapter as the department may require."

SECTION 3. Act 253, Session Laws of Hawaii 2007, as amended by Act 151, Session Laws of Hawaii 2012, is amended by amending section 8 to read as follows:

"SECTION 8. This Act shall take effect on July 1, 2007~~[-~~ provided that sections 304A-C, 304A-D, and 304A-E, Hawaii Revised Statutes, shall be repealed on June 30, 2013]."

SECTION 4. Act 73, Session Laws of Hawaii 2010, is amended by amending section 14 to read as follows:

~~"SECTION 14. This Act shall take effect on July 1, 2010[+ provided that sections 2, 3, 4, and 7 of this Act shall be repealed on June 30, 2015, and sections 128D-2, 201-12.8, and 243-3.5, Hawaii Revised Statutes, shall be reenacted in the form in which they read on June 30, 2010]."~~

SECTION 5. Act 73, Session Laws of Hawaii 2010, is amended by repealing section 10.

~~["SECTION 10. Any unexpended or unencumbered funds remaining in the agricultural development and food security special fund established by this Act, as of the close of business on June 30, 2015, shall lapse to the credit of the general fund."]~~

SECTION 6. There is appropriated out of the energy security special fund the sum of \$7,150,000 or so much thereof as may be necessary for fiscal year 2013-2014 and the same sum or so much thereof as may be necessary for fiscal year 2014-2015 to carry out the purposes of this Act.

The sums appropriated shall be expended by the department of business, economic development, and tourism.

SECTION 7. There is appropriated out of the agricultural development and food security special fund the sum of \$7,150,000 or so much thereof as may be necessary for fiscal year 2013-2014



and the same sum or so much thereof as may be necessary for fiscal year 2014-2015 to carry out the purposes of this Act.

The sums appropriated shall be expended by the department of agriculture.

SECTION 8. There is appropriated out of the environmental response revolving fund the sum of \$1,400,000 or so much thereof as may be necessary for fiscal year 2013-2014 and the same sum or so much thereof as may be necessary for fiscal year 2014-2015 to carry out the purposes of this Act.

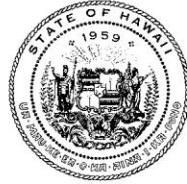
The sums appropriated shall be expended by the department of health.

SECTION 9. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 10. This Act shall, upon its approval, take effect on July 1, 2013; provided that section 3 shall take effect on June 29, 2013.

NEIL ABERCROMBIE  
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FREDERICK D. PABLO  
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JOSHUA WISCH  
DEPUTY DIRECTOR

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

Date: Wednesday, February 20, 2013  
Time: 2:00 P.M.  
Place: Conference Room 325, State Capitol

From: Frederick D. Pablo, Director  
Department of Taxation

Re: H.B. 451, H.D.1 Relating to Fossil Fuels

The Department appreciates the intent of H.B.451, H.D. 1 and provides the following information and comments for your consideration.

This measure amends the environmental response, energy, and food security tax such that it would apply to "liquid, gaseous, or solid fossil fuels" rather than to "petroleum products."

The Department notes that the environmental response, energy, and food security tax currently applies to "petroleum products" as that term is defined in Section 243-2, Hawaii Revised Statutes. The current definition of "petroleum products" includes only products of the processing of crude oil that are liquids at standard temperature and pressure, and would not apply to liquid natural gas or other fuels that may be utilized within the State. The change suggested by H.B. 451, H.D. 1 would cause the environmental response, energy, and food security tax to apply to a broader range of fuels.

H.B. 451, H.D. 1 applies the environmental response, energy, and food security tax to "liquid, gaseous, or solid fossil fuels," a term which is not defined in Chapter 243, Hawaii Revised Statutes. The Department suggests that the term "fossil fuels" be defined such that forms of fuel that the tax is imposed upon are clear from a reading of the statute, which will ease administration of the tax.

The Department also notes that the environmental response, energy, and food security tax currently applies to products of petroleum refining, is levied on a per-barrel basis, and is well-understood by taxpayers. The Department suggests that extension of the tax to other forms of fuel be done in a different paragraph. Separating "petroleum products" and "liquid, gaseous, or solid fossil fuels" into different paragraphs would allow taxpayers to continue paying the tax on

petroleum products without confusion regarding the energy content of those fuels while also applying the tax to liquid, gaseous, and solid fossil fuels based on the energy content of those fuels.

Thank you for the opportunity to provide comments.

# TAXBILLSERVICE

126 Queen Street, Suite 304

TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel. 536-4587

**SUBJECT:** FUEL, Environmental response, energy and food security tax on liquid, gaseous or solid fossil fuels

**BILL NUMBER:** HB 451, HD-1

**INTRODUCED BY:** House Committee on Energy & Environmental Protection

**BRIEF SUMMARY:** Amends HRS section 243-3.5(a) to provide that the environmental response, energy and food security tax shall be imposed on liquid, gaseous or solid fossil fuels that have an energy content of 5,800,000 BTUs.

This act shall be repealed on June 30, 2015 and HRS 243-3.5 shall be reenacted in the form in which it read on June 30, 2010.

**EFFECTIVE DATE:** January 1, 2100

**STAFF COMMENTS:** The legislature by Act 300, SLH 1993, enacted an environmental response tax of 5 cents per barrel on petroleum products sold by a distributor to any retail dealer or end user. The legislature by Act 73, SLH 2010, increased the amount of the tax to \$1.05 per barrel and provided that 5 cents of the tax shall be deposited into the environmental response revolving fund; 15 cents shall be deposited into the energy security special fund, 10 cents shall be deposited into the energy systems development special fund; 15 cents shall be deposited into the agricultural development and food security special fund; and the residual of 60 cents shall be deposited into the general fund between 7/1/10 and 6/30/15. This measure would add liquid, gaseous or solid fossil fuel (coal) to petroleum products imported into the state as the liquid gas alternative of fossil fuel is being explored as a replacement for petroleum. As such, this proposal is nothing more than another attempt to generate more funds for the state or in other words, a tax increase.

It should be remembered that when the environmental response tax was initially adopted, it was established for the purpose of setting up a reserve should an oil spill occur on the ocean waters that would affect Hawaii's shoreline. The nexus was between the oil importers and the possibility that a spill might occur as the oil product was being imported into the state. While this measure would impose the environmental response tax on all liquid, gaseous or solid fossil fuels beginning on July 1, 2013, the remedial action due to a "gas leak" in the case of a liquid gas alternative or a spillage from coal, is nowhere as hazardous to the environment as other fossil fuels, so it is questionable why they would be subject to the same tax rate.

In other words, lawmakers have abused the original intent of the "barrel tax" which was to address shoreline spills and it is now nothing more than a cash cow to fund all sorts of unrelated energy and food security programs. The tax has become nothing more than a full-on tax increase on the people of Hawaii and an additional burden on Hawaii's economy. The damage that will be done by higher energy costs to the future vibrancy of Hawaii's economy should be laid directly at the feet of the advocates of the "dollar per barrel" tax. Although it may have been argued that imposing the additional one dollar on petroleum products imported into the state would provide funding for finding energy alternatives to fossil fuel and

pay for food security, the long and short of it is that the barrel tax became nothing more than a way to raise additional funds from taxpayers while at the same time insuring that the cost of living and doing business soared along with the additional cost on energy. Now this proposal would impose the “barrel” tax on alternative sources of energy that could lead to other types of resources that may not have any impact on the environment. But in the meantime advocates of the tax will do everything possible to destroy the economic outlook for the state and its people apparently having little concern for the financial impact the added tax will impose on families and the economy.

Now that the fund has become a cash cow, lawmakers have placed other responsibilities on the fund, including environmental protection and natural resource protection programs, such as energy conservation and alternative energy development, to address concerns related to air quality, global warming, clean water, polluted runoff, solid and hazardous waste, drinking water, and underground storage tanks, including support for the underground storage tank program of the department of health. It should be noted that the enactment of the barrel tax for the environmental response revolving fund is the classic effort of getting one’s foot in the door as it was initially enacted with a palatable and acceptable tax rate of 5 cents and subsequently increasing the tax rate once it was enacted which is what it has morphed into as evidenced by the \$1.05 tax rate. Because the tax is imposed at the front end of the product chain, the final consumer does not know that the higher cost of the product is due to the tax. Thus, there is little, if any, accountability between the lawmakers who enacted the tax and the vast majority of the public that ends up paying the tax albeit indirectly. Proponents ought to be ashamed that they are promoting a less than transparent tax increase in the burden on families all in the name of environmental protection and food security.

It should be remembered that the State Auditor has singled out the environmental response revolving fund as not meeting the criteria established and recommended that it be repealed. The Auditor criticized the use of such funds as they hide various sums of money from policymakers as they are not available for any other use and tend to be tacitly acknowledged in the budget process. More importantly, it should be recognized that it is not only the users of petroleum products who benefit from a cleaner environment, but it is the public who benefits. If this point can be accepted, then the public, as a whole, should be asked to pay for the clean up and preservation of the environment.

Funds deposited into a revolving fund are not subject to close scrutiny as an assumption is made that such funds are self-sustaining. It should be remembered that earmarking of funds for a specific program represents poor public finance policy as it is difficult to determine the adequacy of the revenue source for the purposes of the program. To the extent that earmarking carves out revenues before policymakers can evaluate the appropriateness of the amount earmarked and spent, it removes the accountability for those funds. There is no reason why such programs should not compete for general funds like all other programs which benefit the community as a whole.

Rather than perpetuating the problems of the barrel tax, it should be repealed and all programs that are funded out of the environmental response fund should be funded through the general fund. At least program managers would then have to justify their need for these funds. By continuing to special fund these programs, it makes a statement that such programs are not a high priority for state government. This sort of proliferation of public programs needs to be checked as it appears to be growing out of hand and at the expense of the taxpayer. Again, this proposal is nothing more than another effort to expand state government at the expense of the taxpayer and the economy.



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

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Testimony Presented Before the  
House Committee on Finance  
Wednesday, February 20, 2013 at 2:00pm

by  
Richard Rocheleau, Director  
Hawai'i Natural Energy Institute  
School of Ocean and Earth Science and Technology  
University of Hawai'i at Mānoa

### HB 451 HD1 – RELATING TO FOSSIL FUELS

Chair Luke, Vice-Chairs Nishimoto and Johanson, and members of the committee:

My name is Richard Rocheleau, Director of the Hawai'i Natural Energy Institute at the University of Hawai'i at Mānoa. We support HB 451 HD1, which proposes to amend section 243-3.5, HRS, to redefine the products on which the state environmental response, energy, and food security tax is levied as “each barrel equivalent of liquid, gaseous, or solid fossil fuels . . .”

The portion of the barrel tax that is devoted to energy is crucial in advancing policy initiatives and new efficient and economic energy technologies and will help ensure that Hawai'i continues to move forward to meet its clean energy goals. Amending the law to define the taxed product as “each barrel equivalent of liquid, gaseous, or solid fossil fuels” will ensure the intent of the law is not averted, and the revenue stream it provides will not be diminished should liquefied natural gas, or other fossil fuel products not covered by the current law, be imported to the state and displace a portion of our use of petroleum products.

Testimony of The Nature Conservancy of Hawai'i  
Supporting with Amendments H.B. 451 HD 1 Relating to Fossil Fuels  
House Committee on Finance  
Wednesday, February 20, 2013, 2:00PM, Room 308

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*The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life in these islands depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. Today, we actively manage more than 32,000 acres in 10 nature preserves on Maui, Hawai'i, Moloka'i, Lāna'i, and Kaua'i. We also work closely with government agencies, private parties and communities on cooperative land and marine management projects.*

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The Nature Conservancy supports H.B. 451 HD1 with amendments. In particular, we support the:

- Application of the barrel tax to other liquefied, gaseous and solid fossil fuels; and
- Amendments to this bill proposed by the Dept. of Business, Economic Development and Tourism to:
  - Reallocate barrel tax revenue to oil spill response, clean energy and local agriculture, and
  - Remove the sunset date on the barrel tax.

Climate change caused by burning fossil fuels is an imminent and unprecedented threat to every person in Hawai'i. It is our responsibility to do what we can and what is necessary reduce our own carbon emissions, however small on a global scale, to contribute to the worldwide effort needed to mitigate the growing effects of climate change.

Even if we drastically reduce CO<sub>2</sub> emissions now, however, we will still feel certain effects of climate change. In Hawai'i, science indicates that this will likely include:

- More frequent and more severe storms that can increase runoff and siltation;
- Overall, less rainfall and therefore less fresh water;
- Higher temperatures that affect watershed and agricultural health, while being beneficial to invasive species;
- Sea level rise and high waves that will harm coastal areas and groundwater systems;
- Ocean acidification that will inhibit the growth of protective coral reefs.

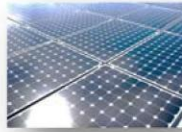
In response, we must plan and implement mitigative and adaptive measures to ensure the resilience of our natural and human systems. Protecting and enhancing the health of our forested watersheds as proposed by the Department of Land and Natural Resources is one critically important initiative. Likewise, investing in local energy and agriculture security are essential components of building self-reliance and resilience here in the middle of the Pacific Ocean.

This bill and the proposed amendments will help to reduce our dependence on imported fossil fuel and imported food, and to improve the State's oil spill response capacity. It's a wise investment in our future. We urge your support.

BOARD OF TRUSTEES

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## HOUSE COMMITTEE ON FINANCE

February 20, 2013, 2:00 P.M.

Room 308

(Testimony is 4 pages long)

### TESTIMONY IN STRONG SUPPORT OF HB 451 HD1

Chair Luke, Vice Chairs Nishimoto and Johanson, and members of the Finance Committee:

The Blue Planet Foundation strongly supports HB 451 HD1, ensuring that the environmental response, energy, and food security tax (the “barrel tax”) on petroleum imports will also be levied on solid and gaseous fossil fuels. We fully support this equitable and responsible approach to extending Hawaii’s fossil fuel fee to gaseous and solid fossil fuels such as coal.

**Blue Planet respectfully requests that the Finance Committee also hear and advance HB 857 HD1, which reallocates the barrel tax funds to their original clean energy and food security purposes.** Alternatively, HB 451 HD1 could be amended to contain these provisions, as the Department of Business, Economic Development, and Tourism (DBEDT) has suggested in their testimony. We support these suggested amendments, except for the amendment to exempt current coal burning from the tax.

### Fossil energy tax is smart policy

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Hawaii’s barrel tax law is keystone clean energy policy that provides for dedicated investment in clean energy, funding the critical planning, development, and implementation of clean energy programs that will foster energy security for Hawaii. Blue Planet believes the best way to provide investment funds is by tapping the source of our problem—imported fossil fuel. We have also found, through three separate surveys commissioned by Blue Planet, that Hawaii residents strongly support this taxing policy.

If we truly want to rapidly transition Hawaii to a clean, sustainable energy future, we have to be prepared to invest in that preferred future today. The expansion of the fossil energy tax to all fossil fuels would provide additional funding for clean energy and efficiency research, planning, implementation to transition to our preferred clean energy future. As we dramatically expand our



clean energy capacity in Hawaii, the real economic benefits of this carbon surcharge will far outweigh the additional burden it may present. The majority of these revenues should be directed to clean energy planning, development, integration, incentives, and other activities facilitating Hawaii's energy transformation.

A fossil fuel fee (or "carbon tax") is smart tax-shifting policy that discourages fossil fuel use while providing a source of revenue for clean energy planning and implementation. The concept behind the policy is to help make fossil fuels pay their honest costs to society; in this case, charge a fee for products that are damaging to the environment and use that money to help mitigate the damage. The link is quite clear between the use of fossil fuel products and corresponding impacts on our fragile island environments—not only in oil spills, which was the original impetus for the environmental response tax, but also in runoff from the roads our cars drive on, in degraded air quality, and in greenhouse gas emissions and climate change.

Unlike many other taxes, the barrel tax is largely avoidable by most residents. Energy efficiency, conservation, and switching to clean sources of power all reduce the burden of the tax. In fact, most residents could reduce the amount of barrel tax they pay by installing some compact fluorescent light bulbs at home and ensuring that car tires are properly inflated.

## Expanding barrel tax to all fossil fuels fair and sensible

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As drafted, the legislative intent of HB 451 HD1 is to ensure that if Hawai'i chooses to import industrial liquefied methane (i.e. natural gas, or "LNG") barrel tax revenues will not be detrimentally impacted, as well as have coal pay its fair share. This is sensible and responsible. The petroleum products currently covered by the barrel tax are fossil fuels, just like LNG and coal. The environmental response, energy, and food security issues addressed by the barrel tax are no less threatened by LNG and coal imports than by any other fossil fuel

The approach taken in HB 451 HD1—basing the fossil tax on energy content—is the optimal approach. By taxing all fossil fuels based on their *energy content* (using an approximation of 5.8 Mbtu per barrel of petroleum as the benchmark), the various fuels are rewarded for efficient end-use. For example, if a fuel's energy content is more efficiently converted to power, the total barrel tax revenues from that fuel source will be lower (because less of the fuel will be imported to produce a given amount of power). Similarly, if a fuel's energy content is not converted efficiently, then the barrel tax revenues for that fuel will be higher (because more fuel must be imported to make a given amount of power). Thus, the approach outlined in HB 451 HD1, based on energy content, is fair, sensible, and rationally related to the environmental and energy purposes of the barrel tax. **We support the amendment proposed by DBEDT to set the energy content for each ton of coal, for tax purposes, to 25 million British Thermal Units.**

## Gaseous fossil fuels have significant negative impacts

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The myth that LNG is a “clean energy” resource has been scientifically debunked. “Natural” gas is comprised primarily of methane (CH<sub>4</sub>). Methane is a potent greenhouse gas – more potent than CO<sub>2</sub>. According to the U.S. EPA, “methane emissions released to the atmosphere (without burning) are about 21 times more powerful than CO<sub>2</sub> in terms of their warming effect on the atmosphere.”<sup>1</sup> This is critical, because LNG production is known to release large quantities of methane into the atmosphere, long before the LNG reaches a power plant to be burned. For example, on January 3, 2013, the highly respected scientific journal *Nature* reported on findings presented by NOAA scientists who measured methane leakage rates from LNG wells. The title of that report is “Methane leaks erode green credentials of natural gas.”<sup>2</sup> Among other things, the report notes that the NOAA scientists measured methane leakage from LNG wells in Utah equating to 9% of well production. This is approximately three times higher than “the 3.2% threshold beyond which gas becomes worse for the climate than coal.”<sup>3</sup> Studies of other well fields and natural gas systems have similarly reported methane leakage exceeding the 3.2% threshold.<sup>4</sup>

Similarly, coal is the dirtiest fossil fuel and produces the most carbon dioxide per energy output at the point of combustion (with significant upstream environmental impacts as well).<sup>5</sup> Therefore, it would be unfair, and make little analytical sense, to exempt gaseous and solid fossil fuels from the barrel tax.

## Public Support

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Blue Planet Foundation conducted market research in December 2009, March 2010, and December 2010 to discern the level of public support for a fossil fuel tax for clean energy investment. The statewide survey of residents found broad support for a fossil tax with roughly 70% supporting a tax of some amount. Each survey had a random sample of 500 residents statewide, providing a margin of error of 4.4% at a 95% confidence level.

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<sup>1</sup> See <http://www.epa.gov/cleanenergy/energy-resources/refs.html>

<sup>2</sup> See Tollefson, Methane Leaks Erode Green Credentials of Natural Gas, *NATURE* (January 3, 2013) (reporting “alarmingly high” leaks of 9% of well production).

<sup>3</sup> See Alvarez et al., Greater focus needed on methane leakage from natural gas infrastructure, *PROC. NAT'L ACAD. SCI.* (April 24, 2012).

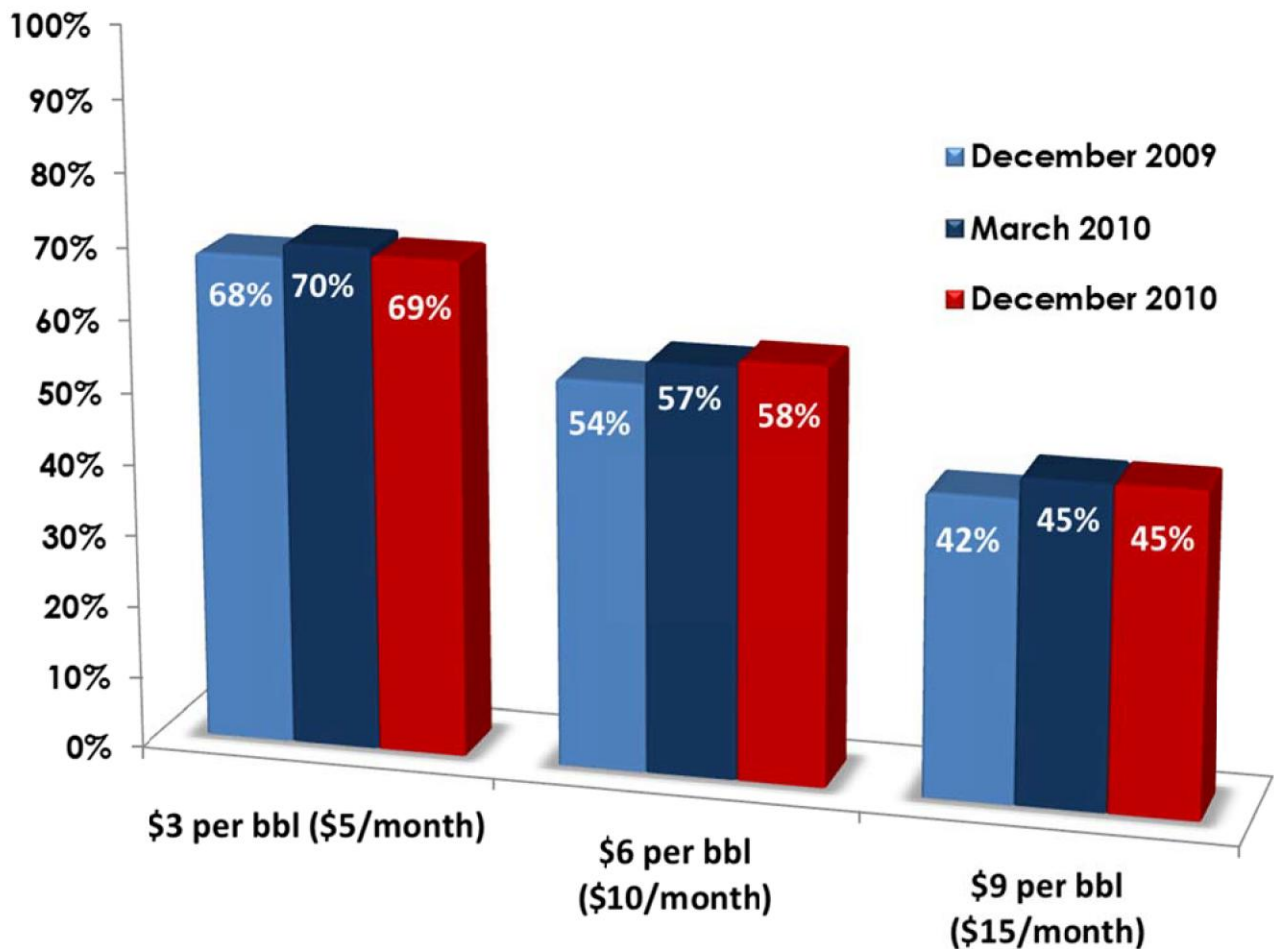
<sup>4</sup> See, e.g., Pétron et al., Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study, *J. GEOPHYS. RES.* 117; (2012); Howarth et al., Methane Emissions from Natural Gas Systems, Background Paper Prepared for the National Climate Assessment, Ref. no. 2011-0003, available at <http://www.eeb.cornell.edu/howarth/Howarth%20et%20al.%20--%20National%20Climate%20Assessment.pdf>

<sup>5</sup> Energy Information Administration, Emissions of Greenhouse Gases in the United States 1985-1990, DOE/EIA-0573 (Washington, DC, September 1993), p. 16.

The average level of support was equivalent to a \$5 per barrel tax. Forty-five percent of residents supported paying an additional \$15 on their total monthly energy bills, equivalent to a \$9 per barrel tax. These findings should provide comfort to decision makers wrestling with how to develop funding for Hawaii’s clean energy future—Hawaii’s residents are willing to pay to wean Hawai’i from its oil dependence. *Please see chart below.*

We respectfully urge the Finance Committee to forward HB 451 HD1.

Thank you for the opportunity to testify.





SENT VIA EMAIL

February 19, 2013

Representative Sylvia Luke  
Chair, Committee on Finance  
Representative Scott Y. Nishimoto  
Vice Chair, Committee on Finance  
Representative Aaron Ling Johanson  
Vice Chair, Committee on Finance  
Hearing on House Bill 451 HD1 - Relating to Fossil Fuels  
State Capitol, Conference Room 308

Aloha Chair Luke and Vice Chairs Nishimoto and Johanson!

Enterprise Honolulu stands in strong support of House Bill 451 HD1.

While reflecting on the recommendations put forth by the Hawaii Economic Development Task Force to the legislature in 2011, it is apparent that the original intent of Act 73 is to serve and care for our home and our people to a healthy future. As we continue to recover from the great recession, our diligence to strengthen our inner core is vital. We must reverse the effects of importing products and services that we can produce here, namely food and energy.

We ask for your legislative support with this important initiative to act on food, energy, and environmental measures.

Please feel free to contact me directly should you have any questions.

Sincerely,

Pono Shim  
President & CEO  
Enterprise Honolulu, Oahu Economic Development Board



ENTERPRISE  
HONOLULU

THE BUSINESS CLIMATE OF PARADISE

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HOUSE COMMITTEE ON  
FINANCE

February 20, 2013

House Bill 451, HD1 Relating to Fossil Fuels

Chair Luke and members of the House Committee on Finance, I am Jeff Walsh, President of AES Hawaii, Inc., testifying on behalf of AES Hawaii, Inc., an independent power producer on Oahu producing electricity for Hawaii Electric using coal among other fuels to generate about 20% of island load at any time. AES Hawaii has provided safe, clean, reliable and affordable power for the past 20 years. The plant utilizes state of the art clean coal technology to effectively comply with all current federal and state environmental standards. AES Hawaii is OPPOSED to House Bill 451, HD1 Relating to Fossil Fuels.

Current emissions controls devices are as follows:

- Particulate removed by a fabric filter bag-houses which is the Best Available Control Technology or BACT;
- NOX control using “in-combustion” Selective Non Catalytic Reduction by injection of anhydrous ammonia;
- SOX control using in bed injection of locally mined limestone.

This proposed bill would significantly impact the business’ ability to continually operate at world class standards, by creating additional financial hardship as there is no “pass thru” clause in our Power Purchase Agreement (PPA), these additional costs could not be passed on and further burden an already financially struggling business. Looking into the future; eventually the PPA will expire, AES Hawaii would continue to generate electricity and would pass on these additional costs to the rate payer.

The AES Hawaii facility serves a critical service now and shall continue in the future to the citizens of Oahu. The plant provides by far the lowest cost energy on the island of Oahu under long term contract with Hawaiian Electric Company. The energy pricing from this plant has provided stable and predictable energy pricing as compared to the highly variable costs of generating electricity with fuel oil and renewable energy. As illustrated by data from the Hawaiian Electric Monthly Energy Cost Adjustment Factor filing with the PUC (the “ECAAF Report”), AES Hawaii provides electricity significantly lower in cost than that of electricity generated from conventional oil or other purchased sources. Based on December 2011 data from the ECAAF Report, the monthly electricity bill to consumers would have been \$20.00 higher per month or almost 10 percent higher without power supplied from AES Hawaii, based on an average monthly consumption of 600kwh.

AES Hawaii is Oahu’s most reliable power plant. AES Hawaii finished 2012 with an availability factor of 99% and a life to date availability factor of 97.3%. With capacity factors of about 95% AES Hawaii is Oahu’s lowest cost, environmentally friendly source of power. As a comparison, the utility’s steam electrical generation units typically run with 85% (93.6% for 2011 according to HECO AOS Filing) availability factors. With wind typically operating at 40-

60% capacity factors and solar at 16-20% capacity factors AES Hawaii complements Oahu's goal of increasing renewable energy.

AES Hawaii, the single largest generator connected to the HECO system, also provides firm capacity to the electric grid and provides dispatchable power which is used to control frequency and voltage on the island grid. This plays a critical role in maintaining grid stability. By providing reliable, readily dispatchable power to control frequency and voltage on the island grid, the plant provides a critical service that is required to allow for further penetration of as-available renewable energy. Without this service, additional renewable energy could create instability in the grid system.

The proposed bill would financially harm AES Hawaii as we have no means for recovery from the proposed tax. The business would be forced to make decisions based more on financials than good engineering practices related to maintenance and capital improvements. This bill could potentially affect the facility's reliability and continued support of the HECO grid as more renewables penetrate the GRID.

Thank you for the opportunity to present this testimony.