DAVID Y. IGE
GOVERNOR

SHAN TSUTSUI
LT. GOVERNOR

MARIA E. ZIELINSKI
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STATE OF HAWAII
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To: The Honorable Sylvia Luke, Chair
and Members of the House Committee on Finance

Date: Tuesday, March 3, 2015
Time: 1:30 P.M.
Place: Conference Room 308, State Capitol

From: Maria E. Zielinski, Director
Department of Taxation

Re: H.B.1471, H.D. 1, Relating to the Funding of Government Programs

The Department of Taxation (Department) appreciates the intent of H.B. 1471, H.D. 1 and offers the following comments.

H.B. 1471, H.D. 1 applies the Environmental Response, Energy, and Fuel Security Tax to fossil fuels other than petroleum products distributed within the state at a rate of nineteen cents per British thermal unit sold by a distributor. The changes are made effective on July 1, 2015.

First, subsection (c) exempts coal used to fulfill a signed power purchase agreement between an independent power producer and an electric utility from the new tax proposed in this measure. The Department notes that this provision may be difficult to enforce, as the Environmental Response, Energy, and Food Security Tax is paid by the distributor of petroleum products or fossil fuels. Distributors are not necessarily the users of those fuels, and as such would not have control over how a given product is ultimately used.

Second, the Department is unclear as to the intent of the second sentence in subsection (c), which expressly allows an independent power producer to pass on the new tax. This provision does not seem to be necessary because the new tax is to be paid by the distributor and the coal used to fulfill power purchase agreements are specifically exempted from the new tax. The Department suggests clarification of this provision.

Finally, the Department notes that administering this measure will require a change in forms and instructions, as well as efforts to educate taxpayers about the change in law. The Department therefore requests that the bill be made effective after December 31, 2015, to allow time to implement these changes.

Thank you for the opportunity to provide comments.

DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

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 3, 2015
1:30 p.m.
State Capitol, Conference Room 308

in consideration of
HB 1471, HD 1

RELATING TO THE FUNDING OF GOVERNMENT PROGRAMS.

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

The Department of Business, Economic Development & Tourism (DBEDT) supports HB 1471, HD1, which expands the application of the Environmental Response, Energy, and Food Security Tax ("Barrel Tax") to all fossil fuels.

DBEDT notes that the taxation of all fossil fuels is consistent with the original intent of the Environmental Response, Energy, and Food Security Tax created by Act 73, Session Laws of Hawaii, 2010 ("Act 73"), to support self-sufficiency in energy by reducing energy imports and increasing reliance on readily-available renewable resources. Barrel Tax funds deposited into the Energy Security Special Fund will be used lead the State's efforts to exceed the Hawaii Clean Energy Initiative goal of 70% clean energy by 2030.

As a matter of fairness, the Department recommends that the rate of taxation be equivalent for all fuels and avoid double-taxation where applicable—such as in the case where naphtha, a liquid fuel, is transformed into synthetic natural gas, a gaseous fuel. The Department appreciates that this measure keeps HRS §243-3.5 (a) as is and believes it is prudent to maintain the unit of taxation as "barrel" for petroleum products and using other units for solid and gaseous fuels. To be consistent with this acceptance of the existing statute, the Department recommends

removal of the conversion of barrel to British thermal units (Btu) (page 5, lines 19-21), as this conversion is not necessary for the currently-taxed petroleum imports, and thus, is irrelevant while the tax imposed on fossil fuels other than petroleum is already assessed on a Btu basis.

The Department defers to the Department of Budget and Finance on any impacts to the budget; the Department of Taxation on the administration of taxes, and the Public Utilities Commission on the impact of using a separate surcharge to collect the pass through tax.

Thank you for the opportunity to offer these supportive comments regarding HB 1471, HD1.

OFFICE OF HAWAIIAN AFFAIRS
Legislative Testimony

HB1471 HD1
RELATING TO FUNDING OF GOVERNMENT PROGRAMS
House Committee on Finance

March 3, 2015 1:30 p.m. Room 308

The Office of Hawaiian Affairs (OHA) **SUPPORTS** HB1471 HD1, which will ensure continued funding for important government programs related to our state's energy and food security and self-sufficiency.

Historically, Hawai'i has been almost entirely dependent on one form of fossil fuel, petroleum, to meet its energy needs. As this measure notes, the state now utilizes a tax of $1.05 on every imported barrel of petroleum product, in order to fund important programs relating to environmental protection and remediation, as well as to our energy and food security and self-sufficiency. As Hawai'i seeks to diversify its energy sources by seeking out other forms of non-petroleum fossil fuels, such as natural gas, revenues derived from taxing petroleum imports may decrease. As a result, financial support for these important programs may decline, notwithstanding the continued dependency on nonrenewable energy resources to meet our islands' energy needs.

Accordingly, this measure will ensure continued funding for programs dedicated to decreasing our reliance on fossil fuels and imported food, which should in the long-term reduce the rate of increase in our cost of living, provide greater stability to our local economy, and increase our islands' capacity to achieve food security and self-sufficiency in a changing climate. OHA notes that the proposed tax of $0.19 per million British Thermal Units (BTUs) of imported, non-petroleum fossil fuels is on par with the tax-per-energy rate of the current $1.05 tax on each barrel of petroleum, which contains approximately 5-6 million BTUs per barrel. This comparable rate will also ensure stability in revenue generation, even in the event of significant shifts between our nonrenewable energy sources.

Therefore, OHA urges the Committee to **PASS** HB1471 HD1. Mahalo nui loa for the opportunity to testify.

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE HOUSE COMMITTEE ON FINANCE

HB 1471 HD1, RELATING TO FUNDING OF GOVERNMENT PROGRAMS

March 3, 2015

Chair Luke, Vice-Chair Nishimoto and members of the Committee, I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is an industry-based, nonprofit corporation in Hawaii established in 1995. Our mission is to support, through education and advocacy, the use of renewables for a sustainable, energy-efficient, environmentally-friendly, economically-sound future for Hawaii. One of our goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to encourage increased use of renewables in Hawaii.

The purposes of HB 1471 HD1 are to (i) apply the state environmental response tax to fossil fuel other than petroleum product and bases the tax on one million British thermal units (MBTU); (ii) define "fossil fuel" to exclude petroleum product; (iii) exclude coal from the fossil fuel tax under certain conditions; (iv) authorize independent power producers to pass the fossil fuel tax on to the electric utilities; and (v) authorize the electric utilities to recover the cost of the fossil fuel tax through a surcharge.

HREA **supports** this measure.

Mahalo for this opportunity to testify.

TAX FOUNDATION OF HAWAII

126 Queen Street, Suite 304 Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: FUEL, Broaden and reallocate environmental response, energy, and food security tax

BILL NUMBER: HB 1471, HD-1

INTRODUCED BY: House Committee on Energy and Environmental Protection

EXECUTIVE SUMMARY: Initially, the 5 cents per barrel environmental response tax was established to address oil spills in state waters. It was temporarily increased to $1.05, much of which was earmarked to numerous special funds, and was scheduled to sunset on 6/30/30. This measure subjects gaseous and non petroleum based fossil fuels to the tax, which is a tax increase.

The tax has taken on a life of its own and lacks transparency, and the special funds it feeds do not come under close scrutiny by either lawmakers or the public. The barrel tax should be repealed and all programs funded out of the environmental response tax should be funded through the general fund.

BRIEF SUMMARY: Amends HRS section 243-3.5(a) to provide that the environmental response tax shall be imposed on each unit of fossil fuel, other than petroleum products, at the rate of $0.19 on each one million British thermal units of fossil fuel; provided that: (1)___% of the tax collected under this section shall be deposited into the energy security special fund; (2)___% of the tax shall be deposited into the energy systems development special fund; and (3)___% of the tax shall be deposited into the agricultural development and food security special fund. The tax shall not apply to coal used to fulfill a signed power purchase agreement between an independent power producer and an electric utility that is in effect as of June 30, 2015. Allows an independent power producer to pass the tax on to an electric utility, who in turn may recover the cost of the tax through a surcharge subject to the approval of the public utilities commission

Defines "fossil fuel" as a hydrocarbon deposit, such as coal, natural gas, or liquefied natural gas, derived from the accumulated remains of ancient plants or animals and used for fuel; provided that the term specifically does not include petroleum products. (Petroleum products are already subject to this tax and will continue to be subject to the tax.)

EFFECTIVE DATE: July 1, 2015

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 collections of the tax were deposited into the environmental response revolving fund until such time the balance in the fund reached $7 million at which time the imposition of tax was suspended until the balance in the fund declined to less than $3 million, at which time the imposition would be reinstated.

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 a newly established environmental response revolving fund; 15 cents shall be deposited into a newly established energy security special fund, 10 cents shall be

deposited into a newly established energy systems development special fund; 15 cents shall be deposited into the newly established 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. Act 107, SLH 2014, extended the sunset date of the $1.05 environmental response, energy, and food security tax from 6/30/15 to 6/30/30. This measure would extend the environmental response tax to include gaseous and non petroleum fuels.

The environmental response tax was initially adopted 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. Now that the fund has become a cash cow, lawmakers have placed other responsibilities on the fund, including environmental protection, food security, and natural resource protection programs, energy conservation and alternative energy development, 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.

The basic problem with the barrel tax is that it lacks transparency, and because the funds are earmarked they do not come under close scrutiny by either lawmakers or the public. 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. If general funds are insufficient to underwrite all the essential programs and programs such as those funded through the barrel tax, then lawmakers need to justify any increase in taxes which underwrite the general fund or lawmakers will be forced to set priorities for those precious general funds. Currently, lawmakers are able to side step that difficult task by creating these hidden taxes and earmarked funds like the barrel tax. 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.

Digested 3/2/15

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March 3, 2015

TO: COMMITTEE ON FINANCE
Representative Sylvia Luke, Chair
Representative Scott Nishimoto, Vice Chair

FR: BLAKE K. OSHIRO
Director of Government Relations
Alston Hunt Floyd & Ing

RE: H. B. 1471 HD1 Relating to the Funding of Government Programs.
Position: Support the Intent

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

On behalf of Hawaii Gas, we submit this testimony in **support of the intent of this bill, but request specific amendments.**

Today, Hawaii Gas sells the cleanest of all fossil fuel products throughout Hawaii, which emit some 30% to 50% less carbon dioxide than coal and oil.
HB1471 HD1 seeks to amend Section 243-3.5, Hawaii Revised Statutes to expand the tax to include gaseous fossil fuels in the amount of 19 cents per million British Thermal Units (MMBtu). If this bill becomes law, the State will increase its revenue by approximately $1.2 million dollars per year by taxing our Synthetic Natural Gas (SNG) and propane. The cost of this tax will be passed through to our 70,000 residential and commercial customers the same as it is now done for electric utility customers.

Hawaii Gas offers the following suggestions and modifications to further clarify the bill:

> Hawaii Gas requests specific language be added to ensure the tax can be passed through as part of our Fuel Adjustment Charge similar to how the tax is now collected from electric utility customers as part of the fuel cost. We therefore suggest the following language be included: "A gas utility shall be allowed to recover the cost of this tax imposed under subsection (b) as part of its fuel cost in its Fuel Adjustment Charge without any further approval by the public utilities commission."

Thank you for this opportunity to provide testimony.

Sincerely,

Blake K. Oshiro

Testimony before the House Committee on Finance

By Todd Kanja
Manager, LNG Enterprise Solutions
Hawaiian Electric Company, Inc.

Tuesday, March 3, 2015
1:30 pm, Conference Room 308

House Bill 1471, HD 1 - Relating to the Funding of Government Programs

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

My name is Todd Kanja and I am testifying on behalf of Hawaiian Electric Company, Inc. and its subsidiaries, Hawai'i Electric Light Company, Inc. and Maui Electric Company, Ltd.

HB 1471, HD 1 proposes to amend Hawai'i Revised Statutes ("HRS") Chapter 243 to establish a new tax of $0.19 on each one million British thermal unit ("Btu") of "fossil fuel, other than petroleum product sold by a distributor to any retail dealer or end user, other than a refiner, of fossil fuel". HB 1471 also adds definitions for the terms "barrel" and "fossil fuel". Finally, HB 1471 excludes from the fossil fuel tax coal that is used to fulfill a signed power purchase agreement between an independent power producer and an electric utility that is in effect as of June 30, 2015. While we appreciate and support the intent of this bill, and we are not opposed to broadening the barrel tax to include other forms of fossil fuels, we have concerns with the bill as it is currently written, and therefore request that the following changes be made. With these revisions, we would be able to support the bill.

First, the new proposed subsection, HRS § 243-3.5(b), does not tax "fossil fuels" in a manner that is consistent with the existing tax on "petroleum products". That is, "petroleum products" are taxed on a volumetric basis at a flat rate of $1.05 per barrel ("Bbl"). This bill, however, proposes to tax "fossil fuels" (i.e., natural gas, coal, etc) on an energy basis (i.e., million Btu ("MBtu")) at a rate of $0.19/MBtu. This rate would be equivalent to the $1.05/Bbl if the heat content for the fuel is 5.5 MBtu/Bbl. The majority of the fuel currently consumed by Hawaiian Electric, however, is low sulfur fuel oil ("LSFO"), which has a heat content of approximately 6.2 MBtu/Bbl. Hawaiian Electric also consumes smaller volumes of diesel, which has a heat content of approximately 5.86 MBtu/Bbl. Accordingly, as shown in the table that follows, this bill would create a tax advantage in favor of LSFO and against "fossil fuels" like coal and natural gas.

	Petroleum Total Products*	Import Total*	LSFO**	Diesel**	Coal**	Natural Gas**
Tax, $/UM	1.05	1.05	1.05	1.05	3.800	0.198
MBtu/UM	5.497	5.899	6.2	5.86	20	1.04
$/MBtu	0.191	0.178	0.169	0.179	0.190	0.190
% Difference	0.0%	-6.8%	-11.3%	-6.2%	-0.5%	-0.6%

UM = Unit Measure = Bbl for Oil = Short Ton for Coal = 1,000 SCF for Natural Gas
* MBtu/UM EIA Monthly Energy Review, Table A.2, 2014
** MBtu/UM Hawaiian Electric Company Estimate

Like oil, fossil fuels like coal and natural gas are typically measured on a volumetric /mass basis (e.g., tons of coal, standard cubic feet ("scf") of natural gas, tonnes of liquefied natural gas). Accordingly, to simplify the calculation of this tax, we would propose to have the tax applied on a volumetric /mass basis for "fossil fuels" that are consumed for power generation. We also request that "fossil fuels" like coal and natural gas be subject to the tax at a rate equivalent to that of LSFO in order to avoid giving a tax advantage to one fuel over another. That way, in the event a fuel is displaced by another (e.g., LSFO displaced by natural gas), the net barrel tax on the fuel would not change.

We propose the tax rates of $0.175 per 1,000 standard cubic feet of natural gas, and $3.40 per short ton of coal.

	Petroleum Total Products*	Import Total*	LSFO**	Diesel**	Coal**	Natural Gas**
Tax, $/UM	1.05	1.05	1.05	1.05	3.400	0.175
MBtu/UM	5.497	5.899	6.2	5.86	20	1.04
$/MBtu	0.191	0.178	0.169	0.179	0.170	0.168
% Difference	0.0%	-6.8%	-11.3%	-6.2%	-11.0%	-11.9%

UM = Unit Measure = Bbl for Oil = Short Ton for Coal = 1,000 SCF for natural gas
* MBtu/UM = EIA Monthly Energy Review, Table A.2, 2014
**MBtu/UM HECO Estimate

Second, we note that HB 1471, HD 1 does not propose to change the definition of "distributor" in HRS §243-1. HRS §243-1 defines "distributor" in terms of a "person" handling "liquid fuel", as that term is also defined in HRS §243-1. If the definition of "distributor" is not amended, it would be unclear who is responsible for paying the tax in the newly proposed addition to HRS §243-3.5.

Hawaiian Electric, therefore, suggests amending the definition of "distributor" in HRS §243-1 to add the language "or fossil fuel" everywhere the term "liquid fuel" appears.

Third, we propose that the language of this bill be revised, beginning on page 3, line 9, to read: "In addition to subsection (a), the tax shall also be imposed on each **short ton of coal and each 1,000 standard cubic feet of natural gas** sold by a distributor to any retail dealer or end user of fossil fuel. The tax shall be **$3.40 for each short ton of coal, $0.175 for each 1,000 standard cubic feet of natural gas, and** $0.19 on each one million British thermal units for **all other fossil fuels** sold by a distributor to any retail dealer or end user of fuel; provided that of the tax collected pursuant to this subsection. . ."

Fourth, for clarity, we suggest amending the first clause in each of sections (b)(1), (b)(2), and (b)(3) to read: "____ per cent of the tax on **the total tax collected from fossil fuels** shall be deposited into…".

Fifth, we propose to revise the exemption set forth in the proposed subsection (c) of the bill. This section exempts "coal used to fulfill a signed power purchase agreement between an independent power producer and an electric utility that is in effect as of June 30, 2015." Since coal is not presently subject to any tax, this exemption would benefit our customers since no new tax would be passed through to them as a result of costs associated with existing power purchase agreements ("PPAs") that Hawaiian Electric has with independent power producers ("IPPs"). However, to ensure that all fossil fuels are eventually subject to the same tax liabilities, we would ask that the proposed language make clear that the exemption only applies to existing PPAs in the form that is effective as of June 30, 2015. Any extension or amendment to the existing PPAs should not be subject to this exemption. To address this, we would propose to amend the language of the bill, beginning on page 4, line 9, to read as follows: "(c) The tax imposed under subsection (b) shall not apply to coal used to fulfill a signed power purchase agreement between an independent power producer and an electric utility **in the form** that is in effect as of June 30, 2015. **The tax shall be imposed on any extensions or amendments to the purchase power agreement.**"

Finally, in order to fairly administer this tax, Hawaiian Electric proposes to have HB 1471, HD 1 make clear that any tax imposed on a unit of fuel under Chapter 243 only be charged once, and not on each person in the chain of custody.

Thank you for the opportunity to testify on this matter.



HOUSE COMMITTEE ON FINANCE
March 3, 2015, 1:30 P.M.
Room 308

TESTIMONY IN SUPPORT OF HB 1471

Chair Luke, Vice-Chair Nishimoto, and members of the Committee:

The Blue Planet Foundation supports HB 1471, which more fairly levies the environmental response, energy, and food security tax (the "barrel tax") to all fossil fuels, rather than giving favorable treatment to coal and gas. We believe that it would also be appropriate at this time to align the allocation of the barrel tax with the original intention of the legislature when it enacted the barrel tax.

We note that a similar Senate bill (SB 358) was amended to incorporate a lower barrel tax rate for gaseous fossil fuels.[1] This amendment may have been in response to testimony from the Hawaiian Electric Companies (HECO) and The Gas Company (TGC). We note that the HECO and TGC testimony appear to erroneously use the BTU-content for low sulfur fuel oil, to calculate a lower tax rate on gas. This is incorrect; the current barrel tax applies to an "entire" barrel of oil, not just a fuel oil component. The table below uses standard information on energy content of various fuels, from the U.S. Energy Information Administration, to propose that the barrel tax rate should be set at 20 cents per million BTU.

(1) It is Fair and Sensible to Apply the Barrel Tax to All Fossil Fuels

The barrel tax currently exempts coal and gas, while taxing petroleum. The state should not provide favorable treatment to some fossil fuels and some fossil fuel importers. This is neither fair, nor advantageous to the public.

The fair inclusion of all fossil fuels in the barrel tax is smart energy policy. Hawai'i's barrel tax law is keystone clean energy policy that provides a dedicated investment in clean energy, funding the critical planning, development, and implementation of clean energy programs that will foster energy security for Hawai'i. Blue Planet believes the best way to fund solutions is by tapping the source of our problem—imported fossil fuel. We have also found, through three

[1] Amended to 17 cents per million BTU, in comparison to 19 cents per million BTU in this bill.

separate surveys commissioned by Blue Planet, that Hawai'i residents support this taxing policy (see section 3).

The petroleum products currently covered by the barrel tax are fossil fuels, just like coal and natural gas. The environmental response, energy, and food security issues addressed by the barrel tax are no less threatened by coal and gas imports than by any other fossil fuel. In addition, if the energy system shifts from one fossil fuel to another, the work funded by the barrel tax should not be reduced.

While Blue Planet Foundation believes that $1.05 per barrel of petroleum is far less than the true negative impact of each barrel of fossil fuel, we do believe that the proposed tax fairly apportions the existing $1.05 per barrel tax to solid fossil fuel (i.e. coal) and gaseous fossil fuel (i.e. natural gas) based on the energy content of the various fuels. The tax amounts reflected in the bill are fairly consistent with information from the U.S. Energy Information Administration ("EIA"; see Attachment 1). To reflect current EIA data precisely, the tax should be established at $0.20 per million BTU.

	Unit	Unit heat content (from Attachment 1)	Existing tax	Tax per mmBTU	Tax per physical unit
Petroleum	Barrel ("bbl")	5.174 mmBTU / bbl	$1.05 / bbl	$0.20 / mmBTU	$1.05 / bbl
Coal	Short ton ("ton")	19.21 mmBTU / ton		$0.20 / mmBTU	$3.90 / ton
Natural Gas	Thousand cubic feet ("mcf")	1.027 mmBTU / mcf		$0.20 / mmBTU	$0.21 / mcf

(2) The Barrel Tax Can – and Should – Be Allocated In Accordance With the Prior Intent of the Legislature

If we truly want to rapidly transition Hawai'i to a clean, sustainable energy future, we have to be prepared to invest in that preferred future today. The reallocation of the barrel tax would provide needed funding for clean energy and efficiency research, planning, and implementation to transition the energy system. As we dramatically expand our clean energy capacity in Hawai'i, 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 Hawai'i's energy transformation.

We note that to achieve this allocation, the tax amounts could be amended as follows:

(1) ~~5~~ 15 cents of the tax on each barrel shall be deposited into the environmental response revolving fund established under section 128D-2;

(2) ~~15~~ 40 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-2169.1[~~,~~]; and

(4) ~~15~~ 40 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 corresponding percentage amounts would be as follows:

(1) 14.3% of the tax on each unit of fossil fuel shall be deposited into the environmental response revolving fund established under section 128D-2;

(2) 38.1% of the tax on each unit of fossil fuel shall be deposited into the energy security special fund established under section 201-12.8;

(3) 9.5% of the tax on each unit of fossil fuel shall be deposited into the energy systems development special fund established under section 304A-2169.1; and

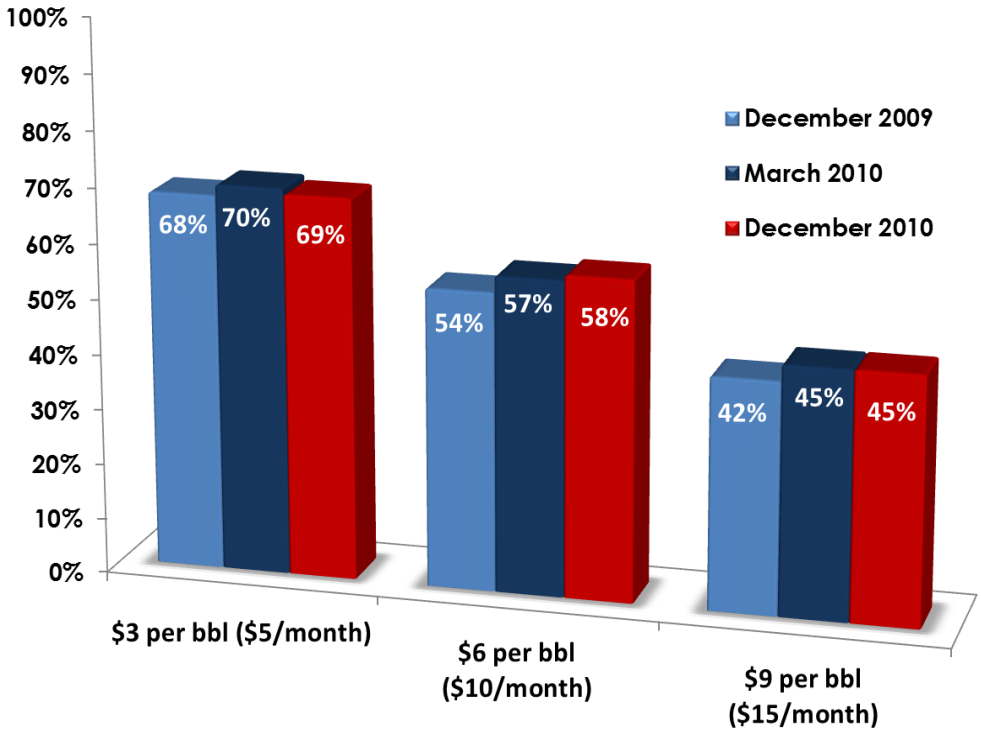
(4) 38.1% of the tax on each unit of fossil fuel shall be deposited into the agricultural development and food security special fund established under section 141-10.

(3) A Carbon Tax is Smart Energy Policy, Supported by the Public

The barrel tax (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 measure is to help "internalize" the external costs of certain activities; 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 petroleum 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, most residents and businesses can take actions reduce that impact their share of the barrel tax. 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 LED light bulbs at home and ensuring that car tires are properly inflated.

Blue Planet Foundation conducted market research in December 2009, March 2010, and December 2010 to discern the level of public support for a barrel tax for clean energy investment. The statewide survey of residents found broad support for a barrel 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.



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 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 Hawai'i's clean energy future—Hawai'i's residents are willing to pay to wean Hawai'i from its oil dependence.

While it's clear that we need to aggressively increase our energy efficiency and clean energy use in Hawai'i to decrease our reliance on imported crude, we cannot do it without adequate funding for development and implementation. We believe with appropriate amendments to Hawai'i's carbon tax policy, we can wisely tap the source of its problem—imported fossil fuel—to fund a food- and energy-secure future.

Mahalo for the opportunity to testify.

ATTACHMENT 1: Excerpt from January 2015 U.S. Energy Information Administration Report, including appendices indicating heat content of various fossil fuels.

January 2015

Monthly Energy Review

Independent Statistics & Analysis
U.S. Energy Information Administration

www.eia.gov/mer

Table A3. Approximate Heat Content of Petroleum Consumption and Fuel Ethanol

(Million Btu per Barrel)

	Total Petroleum[a] Consumption by Sector						Distillate Fuel Oil Consumption[f]	Liquefied Petroleum Gases Consumption[g]	Motor Gasoline (Finished) Consumption[h]	Petroleum Coke Consumption[i]	Fuel Ethanol[j]	*Fuel Ethanol Feedstock Factor*[k]
	Residential	Commercial[b]	Industrial[b]	Transportation[b,c]	Electric Power[d,e]	Total[b,c]						
1950	5.473	5.817	5.953	5.461	6.254	5.649	5.825	4.011	5.253	6.024	NA	*NA*
1955	5.469	5.781	5.881	5.407	6.254	5.591	5.825	4.011	5.253	6.024	NA	*NA*
1960	5.417	5.781	5.818	5.387	6.267	5.555	5.825	4.011	5.253	6.024	NA	*NA*
1965	5.364	5.760	5.748	5.386	6.267	5.532	5.825	4.011	5.253	6.024	NA	*NA*
1970	5.260	5.708	5.595	5.393	6.252	5.503	5.825	[g] 3.779	5.253	6.024	NA	*NA*
1975	5.253	5.649	5.513	5.392	6.250	5.494	5.825	3.715	5.253	6.024	NA	*NA*
1980	5.321	5.751	5.366	5.441	6.254	5.479	5.825	3.674	5.253	6.024	3.563	*6.586*
1981	5.283	5.693	5.299	5.433	6.258	5.448	5.825	3.643	5.253	6.024	3.563	*6.562*
1982	5.266	5.698	5.247	5.423	6.258	5.415	5.825	3.615	5.253	6.024	3.563	*6.539*
1983	5.140	5.591	5.254	5.416	6.255	5.406	5.825	3.614	5.253	6.024	3.563	*6.515*
1984	5.307	5.657	5.207	5.418	6.251	5.395	5.825	3.599	5.253	6.024	3.563	*6.492*
1985	5.263	5.598	5.199	5.423	6.247	5.387	5.825	3.603	5.253	6.024	3.563	*6.469*
1986	5.268	5.632	5.269	5.426	6.257	5.418	5.825	3.640	5.253	6.024	3.563	*6.446*
1987	5.239	5.594	5.233	5.429	6.249	5.403	5.825	3.659	5.253	6.024	3.563	*6.423*
1988	5.257	5.597	5.228	5.433	6.250	5.410	5.825	3.652	5.253	6.024	3.563	*6.400*
1989	5.194	5.549	5.219	5.438	[d] 6.240	5.410	5.825	3.683	5.253	6.024	3.563	*6.377*
1990	5.145	5.553	5.253	5.442	6.244	5.411	5.825	3.625	5.253	6.024	3.563	*6.355*
1991	5.094	5.528	5.167	5.441	6.246	5.384	5.825	3.614	5.253	6.024	3.563	*6.332*
1992	5.124	5.513	5.168	5.443	6.238	5.378	5.825	3.624	5.253	6.024	3.563	*6.309*
1993	5.102	[b,R] 5.504	[b,R] 5.177	[b,R] 5.422	6.230	[b,R] 5.370	5.825	3.606	[h] 5.232	6.024	3.563	*6.287*
1994	[R] 5.095	[R] 5.512	[R] 5.149	5.424	6.213	[R] 5.360	[f] 5.820	3.635	5.231	6.024	3.563	*6.264*
1995	[R] 5.060	[R] 5.475	5.121	[R] 5.418	[R] 6.187	[R] 5.342	5.820	3.623	5.218	6.024	3.563	*6.242*
1996	[R] 4.995	[R] 5.430	5.114	5.420	[R] 6.194	5.336	5.820	3.613	5.218	6.024	3.563	*6.220*
1997	[R] 4.986	[R] 5.388	[R] 5.119	5.416	[R] 6.198	5.336	5.820	3.616	5.215	6.024	3.563	*6.198*
1998	[R] 4.972	[R] 5.362	[R] 5.136	[R] 5.414	6.210	5.349	5.819	3.614	5.215	6.024	3.563	*6.176*
1999	[R] 4.899	[R] 5.288	[R] 5.091	5.413	[R] 6.204	5.328	5.819	3.616	5.213	6.024	3.563	*6.167*
2000	[R] 4.905	[R] 5.313	[R] 5.056	[R] 5.423	[R] 6.188	5.326	5.819	3.607	5.214	6.024	3.563	*6.159*
2001	[R] 4.934	[R] 5.322	[R] 5.141	[R] 5.413	6.199	[R] 5.346	5.819	3.614	5.214	6.024	3.563	*6.151*
2002	[R] 4.883	[R] 5.290	[R] 5.092	5.411	[R] 6.172	5.324	5.819	3.613	5.211	6.024	3.563	*6.143*
2003	[R] 4.918	[R] 5.312	[R] 5.143	[R] 5.404	6.182	[R] 5.338	5.819	3.629	5.203	6.024	3.563	*6.116*
2004	[R] 4.949	[R] 5.323	5.144	[R] 5.410	[R] 6.134	[R] 5.341	5.818	3.618	5.201	[i] 5.982	3.563	*6.089*
2005	[R] 4.913	[R] 5.359	[R] 5.179	[R] 5.412	[R] 6.126	[R] 5.353	5.818	3.620	5.198	5.982	3.563	*6.063*
2006	[R] 4.883	[R] 5.296	[R] 5.159	[R] 5.409	[R] 6.038	[R] 5.336	5.803	3.605	5.191	5.987	3.563	*6.036*
2007	[R] 4.831	[R] 5.271	[R] 5.122	[R] 5.385	[R] 6.064	[R] 5.309	5.785	3.591	5.155	5.996	3.563	*6.009*
2008	[R] 4.769	[R] 5.156	[R] 5.147	[R] 5.355	[R] 6.013	[R] 5.287	5.780	3.600	5.126	5.992	3.563	*5.983*
2009	[R] 4.661	[R] 5.216	[R] 5.014	[c,R] 5.328	[R] 5.987	[c,R] 5.236	5.781	3.558	5.101	6.017	3.563	*5.957*
2010	[R] 4.660	[R] 5.193	[R] 4.983	[R] 5.321	[R] 5.956	[R] 5.222	5.778	3.557	5.078	6.059	3.561	*5.931*
2011	[R] 4.640	[R] 5.163	[R] 4.962	[R] 5.317	[R] 5.900	[R] 5.212	5.776	3.541	5.068	6.077	3.560	*5.905*
2012	[R] 4.703	[R] 5.117	[R] 4.909	[R] 5.305	[R] 5.925	[R] 5.191	5.774	3.534	5.063	6.084	3.560	*5.880*
2013	[RE] 4.675	[RE] 5.060	[RE] 4.864	[RE] 5.301	[RP] 5.895	[R] 5.174	5.774	3.556	5.062	6.089	3.559	*5.880*
2014	[RE] 4.675	[RE] 5.060	[RE] 4.864	[RE] 5.301	[RE] 5.895	[RE] 5.174	[E] 5.774	[E] 3.556	[E] 5.062	[E] 6.089	[E] 3.559	*5.880*

[a] Petroleum products supplied, including natural gas plant liquids and crude oil burned directly as fuel. Quantity-weighted averages of the petroleum products included in each category are calculated by using heat content values for individual products shown in Tables A1 and A3.

[b] Beginning in 1993, includes fuel ethanol blended into motor gasoline.

[c] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[d] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

[e] Electric power sector factors are weighted average heat contents for distillate fuel oil, petroleum coke, and residual fuel oil; they exclude other liquids.

[f] There is a discontinuity in this time series between 1993 and 1994; beginning in 1994, the single constant factor is replaced by a quantity-weighted factor. Quantity-weighted averages of the sulfur-content categories of distillate fuel oil are calculated by using heat content values shown in Table A1. Excludes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[g] There is a discontinuity in this time series between 1966 and 1967; beginning in 1967, the single constant factor is replaced by a quantity-weighted factor. Quantity-weighted averages of the major components of liquefied petroleum gases are calculated by using heat content values shown in Table A1.

[h] Through 1992, excludes oxygenates. Beginning in 1993, includes fuel ethanol blended into motor gasoline; and for 1993–2006, also includes methyl tertiary butyl ether (MTBE) and other oxygenates blended into motor gasoline.

[i] There is a discontinuity in this time series between 2003 and 2004; beginning in 2004, the single constant factor is replaced by a quantity-weighted factor. Quantity-weighted averages of the two categories of petroleum coke are calculated by using heat content values shown in Table A1.

[j] Includes denaturant (petroleum added to ethanol to make it undrinkable). Fuel ethanol factors are weighted average heat contents for undenatured ethanol (3.539 million Btu per barrel) and products used as denaturant (pentanes plus, finished motor gasoline, and motor gasoline blending components—see Tables A1 and A3 for factors). The factor for 2009 is used as the estimated factor for 1980–2008.

[k] Corn input to the production of undenatured ethanol (million Btu corn per barrel undenatured ethanol), used as the factor to estimate total biomass inputs to the production of undenatured ethanol. Observed ethanol yields (gallons undenatured ethanol per bushel of corn) are 2.5 in 1980, 2.666 in 1998, 2.68 in 2002, and 2.764 in 2009; yields in other years are estimated. Corn is assumed to have a gross heat content of 0.392 million Btu per bushel. Undenatured ethanol is assumed to have a gross heat content of 3.539 million Btu per barrel.

R=Revised. P=Preliminary. E=Estimate. NA=Not available.

Note: The heat content values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

This table has been modified to include columns for "Distillate Fuel Oil Consumption," "Motor Gasoline (Finished) Consumption" (formerly called "Motor Gasoline Consumption (New)"), and "Petroleum Coke Consumption." Columns for "Motor Gasoline Consumption (Old)," "Biodiesel," and "Biodiesel Feedstock Factor" have been deleted. Revisions to "Total Petroleum Consumption" factors are due to the incorporation of new and revised commodity factors in Tables A1 and A3.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Production		Consumption[a]				
	Marketed	Dry	End-Use Sectors[b]	Electric Power Sector[c]	Total	Imports	Exports
1950	1,119	1,035	1,035	1,035	1,035	– –	1,035
1955	1,120	1,035	1,035	1,035	1,035	1,035	1,035
1960	1,107	1,035	1,035	1,035	1,035	1,035	1,035
1965	1,101	1,032	1,032	1,032	1,032	1,032	1,032
1970	1,102	1,031	1,031	1,031	1,031	1,031	1,031
1975	1,095	1,021	1,020	1,026	1,021	1,026	1,014
1980	1,098	1,026	1,024	1,035	1,026	1,022	1,013
1981	1,103	1,027	1,025	1,035	1,027	1,014	1,011
1982	1,107	1,028	1,026	1,036	1,028	1,018	1,011
1983	1,115	1,031	1,031	1,030	1,031	1,024	1,010
1984	1,109	1,031	1,030	1,035	1,031	1,005	1,010
1985	1,112	1,032	1,031	1,038	1,032	1,002	1,011
1986	1,110	1,030	1,029	1,034	1,030	997	1,008
1987	1,112	1,031	1,031	1,032	1,031	999	1,011
1988	1,109	1,029	1,029	1,028	1,029	1,002	1,018
1989	1,107	1,031	1,031	[c] 1,028	1,031	1,004	1,019
1990	1,105	1,029	1,030	1,027	1,029	1,012	1,018
1991	1,108	1,030	1,031	1,025	1,030	1,014	1,022
1992	1,110	1,030	1,031	1,025	1,030	1,011	1,018
1993	1,106	1,027	1,028	1,025	1,027	1,020	1,016
1994	1,105	1,028	1,029	1,025	1,028	1,022	1,011
1995	1,106	1,026	1,027	1,021	1,026	1,021	1,011
1996	1,109	1,026	1,027	1,020	1,026	1,022	1,011
1997	1,107	1,026	1,027	1,020	1,026	1,023	1,011
1998	1,109	1,031	1,033	1,024	1,031	1,023	1,011
1999	1,107	1,027	1,028	1,022	1,027	1,022	1,006
2000	1,107	1,025	1,026	1,021	1,025	1,023	1,006
2001	1,105	1,028	1,029	1,026	1,028	1,023	1,010
2002	1,103	1,024	1,025	1,020	1,024	1,022	1,008
2003	1,103	1,028	1,029	1,025	1,028	1,025	1,009
2004	1,104	1,026	1,026	1,027	1,026	1,025	1,009
2005	1,104	1,028	1,028	1,028	1,028	1,025	1,009
2006	1,103	1,028	1,028	1,028	1,028	1,025	1,009
2007	1,102	1,027	1,027	1,027	1,027	1,025	1,009
2008	1,100	1,027	1,027	1,027	1,027	1,025	1,009
2009	1,101	1,025	1,025	1,025	1,025	1,025	1,009
2010	1,098	1,023	1,023	1,022	1,023	1,025	1,009
2011	1,142	1,022	1,022	1,021	1,022	1,025	1,009
2012	1,091	1,024	1,025	1,022	1,024	1,025	1,009
2013	1,100	1,027	1,028	[P] 1,025	[P] 1,027	1,025	1,009
2014	[E] 1,100	[E] 1,027	[E] 1,028	[E] 1,025	[E] 1,027	[E] 1,025	[E] 1,009

[a] Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.
[b] Residential, commercial, industrial, and transportation sectors.
[c] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

P=Preliminary. E=Estimate. – – =Not applicable.

Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

	Coal									Coal Coke
			Consumption							
				Industrial Sector						
	Production[a]	Waste Coal Supplied[b]	Residential and Commercial Sectors[c]	Coke Plants	Other[d]	Electric Power Sector[e,f]	Total	Imports	Exports	Imports and Exports
1950	25.090	NA	24.461	26.798	24.820	23.937	24.989	25.020	26.788	24.800
1955	25.201	NA	24.373	26.794	24.821	24.056	24.982	25.000	26.907	24.800
1960	24.906	NA	24.226	26.791	24.609	23.927	24.713	25.003	26.939	24.800
1965	24.775	NA	24.028	26.787	24.385	23.780	24.537	25.000	26.973	24.800
1970	23.842	NA	23.203	26.784	22.983	22.573	23.440	25.000	26.982	24.800
1975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
1980	22.415	NA	22.543	26.790	22.690	21.295	21.947	25.000	26.384	24.800
1981	22.308	NA	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
1982	22.239	NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
1983	22.052	NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
1984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
1985	21.870	NA	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
1986	21.913	NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
1987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
1988	21.823	NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
1989	21.765	[b] 10.391	23.650	26.800	22.347	[e] 20.898	21.307	25.000	26.160	24.800
1990	21.822	9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
1991	21.681	10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
1992	21.682	10.396	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
1993	21.418	10.638	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
1994	21.394	11.097	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
1995	21.326	11.722	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
1996	21.322	12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
1997	21.296	12.158	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
1998	21.418	12.639	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
1999	21.070	12.552	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
2000	21.072	12.360	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
2001	[a] 20.772	12.169	24.909	27.426	22.622	20.337	20.671	25.000	25.998	24.800
2002	20.673	12.165	22.962	27.426	22.562	20.238	20.541	25.000	26.062	24.800
2003	20.499	12.360	22.242	27.425	22.468	20.082	20.387	25.000	25.972	24.800
2004	20.424	12.266	22.324	27.426	22.473	19.980	20.290	25.000	26.108	24.800
2005	20.348	12.093	22.342	26.279	22.178	19.988	20.246	25.000	25.494	24.800
2006	20.310	12.080	22.066	26.271	22.050	19.931	20.181	25.000	25.453	24.800
2007	20.340	12.090	22.069	26.329	22.371	19.909	20.168	25.000	25.466	24.800
2008	20.208	12.121	[c] 23.035	26.281	22.304	19.713	19.979	25.000	25.399	24.800
2009	19.963	12.076	22.852	26.334	21.823	19.521	19.741	25.000	25.633	24.800
2010	20.173	11.960	22.611	26.295	21.846	19.623	19.870	25.000	25.713	24.800
2011	20.142	11.604	22.099	26.299	21.568	19.341	19.600	25.000	25.645	24.800
2012	20.215	11.539	21.300	28.636	21.449	19.211	19.544	23.128	24.551	24.800
2013[P]	20.187	12.428	21.233	28.705	21.623	19.210	19.548	23.367	24.604	24.800
2014[E]	20.187	12.428	21.233	28.705	21.623	19.210	19.548	23.367	24.604	24.800

[a] Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine, and cleaned to reduce the concentration of noncombustible materials).

[b] Waste coal (including fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and industrial sectors. Beginning in 1989, waste coal supplied is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."

[c] Through 2007, used as the thermal conversion factor for coal consumption by the residential and commercial sectors. Beginning in 2008, used as the thermal conversion factor for coal consumption by the commercial sector only.

[d] Includes transportation. Excludes coal synfuel plants.

[e] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

[f] Electric power sector factors are for anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and, beginning in 1998, coal synfuel.

P=Preliminary. E=Estimate. NA=Not available.

Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

COMMITTEE ON FINANCE
Rep. Sylvia Luke, Chair
Rep. Scott Y. Nishimoto, Vice Chair

LATE

HEARING DATE: Thursday, March 3, 2015
TIME: 1:30 p.m.

House Bill No. 1471 HD1 Relating to the Funding of Government Programs

Testimony of Jeff Walsh
President and General Manager of AES Hawaii, Inc.

Background

Chair Lee, and members of the Committee on Energy and Environmental Protection, I am Jeff Walsh, President of AES Hawaii, Inc. ("AES Hawaii"), an independent power producer on Oahu producing electricity for Hawaiian Electric Company, Inc. ("HECO") using coal, among other recycled fuels such as tire-derived fuel, spent oil, and spent activated carbon to generate about 20% of island load at any time. In addition, AES Hawaii is currently permitted and capable of using up to 20% of renewable biomass to generate electricity, and is currently investigating the use of other recycled and renewable fuel to generate electricity.

AES Hawaii has provided safe, reliable and affordable power for the past 22 plus years. AES Hawaii has a Power Purchase Agreement to provide power to HECO, and is the lowest cost provider of energy to HECO on Oahu and in the State of Hawaii.

The AES Hawaii plant utilizes state of the art clean coal technology to effectively comply with all current federal and state environmental standards. 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.

The AES Hawaii facility serves a critical service now and shall continue in the future to serve the citizens of Oahu. The plant provides by far the lowest cost energy on the island of Oahu under a long term contract with HECO. 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.

AES Hawaii is Oahu's most reliable power plant from plant inception in 1992 to present with an availability factor of approximately 97%. With wind typically operating at 40-60% capacity

factors and solar at 16-20% capacity factors, the stability of AES Hawaii complements and facilitates Hawaii'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.

Comments

AES Hawaii requests that this bill be slightly revised for clarity to revise Section 2 of the bill (which amends HRS § 243-3.5) as follows:

(c) The tax imposed under subsection (b) shall not apply to coal used to fulfill a signed power purchase agreement between an independent power producer and an electric utility that is in effect as of June 30, 2015. An independent power producer shall be permitted to pass the tax imposed under subsection (b) on to an electric utility. In which case, the electric utility may recover the cost of the tax through an appropriate surcharge to the end user that is approved by the public utilities commission.

Thank you for the opportunity to present this testimony.