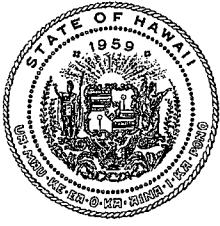


SB 1671



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

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/dbedt

Telephone: (808) 586-2355
Fax: (808) 586-2377

Statement of
THEODORE E. LIU
Director

Department of Business, Economic Development, and Tourism
before the
Senate COMMITTEE ON ENERGY AND THE ENVIRONMENT
Thursday, February 5, 2009
4:15 p.m.
State Capitol, Conference Room 225

in consideration of

SB 1671
**RELATING TO HAWAII'S CLEAN ENERGY INITIATIVE IN ELECTRIC
GENERATION AND DELIVERY.**

Good afternoon, Chair Gabbard, Vice Chair English, and Members of the Committee.

Senate Bill 1671 prohibits the permitting of new electricity generating facilities using fossil fuel, and the modification of existing facilities to allow the use of more fossil fuel. These provisions are necessary for and contribute to the Hawaii Clean Energy Initiative's goal to transition Hawaii's energy sector to 70% non-fossil based sources by 2030. The Department of Business, Economic Development, and Tourism (DBEDT) strongly supports this bill.

The transformation to a clean energy economy and the increased use and development of renewable energy resources will greatly benefit Hawaii's economy, environment, energy security and sustainability, in many ways including achieving the following:

1. Energy security through reduced reliance on imported oil supplies and exposure to the volatile prices of the world oil market;
2. Risk management by increased diversification of the electricity generation portfolio;
3. Economic benefits including increased quality job creation, economic development and diversification, and fewer dollars leaving Hawaii's economy;
4. Reduced greenhouse emissions and the attendant negative impact on climate change, global warming, and Hawaii's environment.

This bill will contribute significantly towards achieving Hawaii's energy goals.

Currently, the Hawaii utilities use fossil fuel to generate over ninety per cent of the total electricity they sold, which represents almost twenty-five per cent of Hawaii's total oil imports. Only about nine per cent of the electricity sold is generated from renewable resources.

Any new fossil fuel-based generation installed in the future will have a useful lifetime of 30 to 50 years or more, which will perpetuate Hawaii's dependence on imported oil, compromising Hawaii's future energy security and sustainability as well as the attendant negative impact on Hawaii's economy and environment. Furthermore, the price risks of Hawaii's heavy dependence on imported fossil fuel for electricity generation are currently borne entirely by Hawaii's consumers. To the extent possible, future requirements for additional energy must be met by electricity generation and biofuel production from renewable resources.

This provision for no new fossil-based electric generating units greater than two megawatts which has been agreed to in the Energy Agreement between the State and the HECO

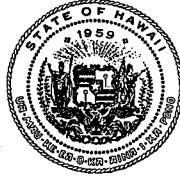
companies, will help to significantly accelerate the replacement rate of fossil-based electrical generation by renewable sources of generation. It will thereby enable significant progress towards reducing Hawaii's current ninety per cent dependency upon petroleum based products for electricity generation, and move the State towards the goal of seventy per cent reliance upon renewable sources for generation. This measure is consistent with the Hawaii Clean Energy Initiative (HCEI) and is also included among the proposals in the HCEI electric generation and delivery bill, Senate Bill 870.

This bill further supports the achievement of the increased Renewable Portfolio Standard (RPS) identified under the Hawaii Clean Energy Initiative (HCEI) and proposed in other Senate bills such as SB 870 and SB 1843, as critical in transforming Hawaii's energy sector. This bill supports and helps to advance the State's goal of increasing the overall proportion of electricity generation fueled by renewable sources, and increasing Hawaii's energy security, economic and environmental benefits by weaning our State off of fossil fuel dependency.

The islands of Hawaii are blessed by an abundance of renewable energy resources from the sun, wind, ocean, and earth. The sun provides us abundant and free energy resource for solar water heating and for photovoltaic generation of electricity. Assessment of opportunities to harvest our ample wind and bioenergy resources have been identified and continued to be updated. The use of wave energy for electricity generation is being tested and explored, and we possess extensive and as yet untapped geothermal resources on the Big Island.

In conclusion, this bill will go a great distance to substantively enable the achievement of the State's goal of a secure, clean energy future via increasing the use and development of renewable energy resources.

Thank you for the opportunity to offer these comments.



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
File:

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

S.B. 1671, RELATING TO FOSSIL FUELS

**Testimony of Chiyome Leinaala Fukino, M.D.
Director of Health**

**February 5, 2009
4:15 p.m.**

1 **Department's Position:** The Department of Health strongly supports the intent of this measure that
2 contributes towards Hawaii's energy goal of 70% non-fossil sources by 2030 and its pollution control
3 goal of reducing greenhouse gas emissions down to 1990 levels by 2020; however, we have concerns
4 that the Department's air pollution control program is not the appropriate agency to outright prohibit
5 new, fossil-fuel electric generating facilities.

6 **Fiscal Implications:** None.

7 **Purpose and Justification:** In an effort to transition Hawaii away from fossil fuel dependency and to
8 combat global warming, this bill prohibits the Department of Health, effective July 1, 2009, from
9 permitting any new fossil fuel electric generating facility rated more than two megawatts, and from
10 permitting any existing fossil fuel electric facility of the same rating to burn more fossil fuel than
11 already allowed. The bill also includes similar provisions for the public utilities commission to disallow
12 new fossil fuel electric facilities.

13 First, we appreciate that the bill supports the Hawaii Clean Energy Initiative (HCEI) goal of
14 70% renewable Hawaii energy by 2030 and greenhouse gas emission reduction goal of reaching 1990
15 levels by 2020. We understand the serious nature of Hawaii's dependence on imported oil and the
16 urgency to move towards renewable energy whose increasing use will benefit not only Hawaii's energy

1 security but its environment and economy as well. We understand that the Energy Agreement between
2 the State and the HECO companies provides for no new fossil-based electric generating units greater
3 than two megawatts. Although they have different goals, both the HCEI work groups and the
4 Greenhouse Gas Emission Reduction Task Force do have some objectives and actions which cross and
5 complement each other. The Greenhouse Gas Task Force will be making their recommendations to the
6 legislature at the end of the 2009 calendar year.

7 Second, the Department's air pollution control program currently has a different purpose than
8 this bill provides. It serves to protect public health and the environment by evaluating a given facility
9 for its air quality impacts primarily from what the U.S. Environmental Protection Agency classifies as
10 "criteria pollutants" for which national health and welfare based standards have been set. The
11 department regulates facilities to ensure their operations will be within those established standards. A
12 facility will be disapproved if the Department has determined that the operation will have an adverse
13 impact on the ambient air quality.

14 HRS 342B, Air Pollution Control, has not been used to prohibit outright the construction or
15 modification of any specific source category, particularly fossil fuel electric facilities which Hawaii
16 currently depends on for its energy. A prohibition such as the one proposed, may be more appropriately
17 left to an entity involved with Hawaii's energy, development, and growth policies because it will be
18 better able to assess the state's overall resources and energy needs, technology advancements, and
19 economic effects on the state.

20 Accordingly, the Department prefers and supports the approach taken in the Administration Bill,
21 S.B. 870, Relating to Hawaii's Clean Energy Initiative in Electric Generation and Delivery. This bill
22 includes changes to the renewable energy portfolio standards in chapter 269, Hawaii Revised Statutes,
23 which deals with the Public Utilities Commission.

24 Thank you for this opportunity to testify.

**SB 1671
RELATING TO FOSSIL FUELS**

**PAUL T. OSHIRO
MANAGER – GOVERNMENT RELATIONS
ALEXANDER & BALDWIN, INC.**

FEBRUARY 5, 2009

Chair Gabbard and Members of the Senate Committee on Energy &
Environment:

I am Paul Oshiro, testifying on behalf of Alexander & Baldwin, Inc. (A&B) and its agricultural company Hawaiian Commercial & Sugar Company on SB 1671, "A BILL FOR AN ACT RELATING TO FOSSIL FUELS."

Hawaiian Commercial & Sugar Company (HC&S) has been in operation for over 125 years. While Hawaii's many other sugar companies have shut down over the years, HC&S has been fortunate, through significant investments in our agricultural infrastructure and operations and the implementation of our diversified bio-production program, to have sustained our operations and continue as a major employer in the State of Hawaii. Today, as we face increasingly lower margins from raw sugar production because of flat commodity prices along with increasing production costs, HC&S is in the process of transitioning from a primary producer of commodity sugar into the production of specialty sugar and bio-based products. In addition to being the sole supplier of Sugar In The Raw, the little brown packets of sugar seen at restaurants and coffee shops across the nation, HC&S is also expanding production of our specialty Maui Brand Sugar.

In addition, HC&S generates biomass produced electricity for its sugar milling, irrigation pumping, and other internal operations and also provides electricity to Maui Electric Company (MECO). This biomass electricity is primarily produced by burning bagasse, the residual fiber of the sugar cane plant, as a fuel to generate steam for the production of power. In addition to providing approximately 7% of MECO's electricity, HC&S also serves as a firm power source to MECO, and has played a significant role in the restoration of MECO's electrical service during power outages.

This bill prohibits the development of new facilities and the modification of existing facilities with a rated capacity of more than two megawatts that generate electricity from fossil fuel sources. HC&S presently produces renewable energy primarily from sugar cane biomass, supplemented with fossil fuels, which is used to provide the energy needs for HC&S with the balance transmitted to MECO for their distribution and use. While HC&S's biomass power generating facilities are fueled primarily by sugar cane bagasse, there is a need for these generating facilities to periodically burn an amount of fossil fuels to maintain stable boiler operations (biomass fuel quality can vary depending on harvesting and mill operations), to remain in compliance with air emission regulations, and to meet power commitments, particularly during the off season maintenance period when bagasse is not available. We respectfully request your consideration to incorporate amendments into this bill to exclude facilities that utilize biomass as its primary source of fuel for the generation of electricity. We have attached amended language for your consideration.

Your consideration to incorporate the above mentioned amendments into this bill is sincerely appreciated. Thank you for the opportunity to testify.

SB 1671 SD1 (PROPOSED)

RELATING TO FOSSIL FUELS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that fossil fuel use is not part of Hawaii's clean, independent, and sustainable energy future. All fossil fuel used in Hawaii is imported from thousands of miles away by ship. The burning of fossil fuel degrades the air quality and the State's image as the "Health State" and a clean destination.

The legislature further finds that carbon dioxide from fossil fuel consumption is implicated in global climate change and may have profound consequences on the State's environment and quality of life. Current scientific consensus predicts a very different future from what we are accustomed to, if heat-trapping greenhouse gas emissions continue unabated. The Pacific ocean may inundate most of Waikiki, the business district in Honolulu, and coastal resort areas on other islands. Saltwater intrusion may contaminate island aquifers and more frequent storms and hurricanes may strike the islands. Prolonged droughts and subtle shifts in island microclimates may rapidly increase the extinction of endangered plants and animals. The State can play a pivotal role in utilizing technologies that reduce humankind's contribution to global

climate change by transitioning away from fossil fuel sources to generate electricity and demonstrating technologies that reduce negative effects on global climate change.

The legislature further finds that the State's dependency on foreign fossil fuel results in the annual outflow of billions of dollars from the state economy. In 2005, the State imported over 51,000,000 barrels of petroleum and 805,000 short tons of coal. In the summer of 2008, the price per barrel of oil exceeded \$140. As a result, billions of dollars are directly exported from the State each year. Efforts to dramatically reduce fossil fuel consumed in the State will benefit both the economy and the environment.

The purpose of this Act is to align the State's energy policy with the State's preferred clean energy future by prohibiting new or expanded fossil fuel power plants.

SECTION 2. Chapter 342B, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

"§342B- Fossil fuel electricity generating facilities.

(a) Effective July 1, 2009, no new electricity generating covered source with a rated capacity of more than two megawatts shall be permitted to allow the generation of electricity from fossil fuel sources; provided that this subsection shall not apply to a electricity generating covered source in which the

annual actual heat input from biomass fuels exceeds the annual actual heat input of fossil fuels.

(b) Effective July 1, 2009, no electricity generating covered source with a rated capacity of more than two megawatts and existing on July 1, 2009, shall be modified in any manner that allows it to use more fossil fuel as a source of electricity generation than allowed under its permit as of July 1, 2009; provided that this subsection shall not apply to a electricity generating covered source in which the annual actual heat input from biomass fuels exceeds the annual actual heat input of fossil fuels."

SECTION 3. Section 269-92, Hawaii Revised Statutes, is amended by amending subsection (b) to read as follows:

"(b) The public utilities commission may establish standards for each utility that prescribe what portion of the renewable portfolio standards shall be met by specific types of renewable electrical energy resources; provided that:

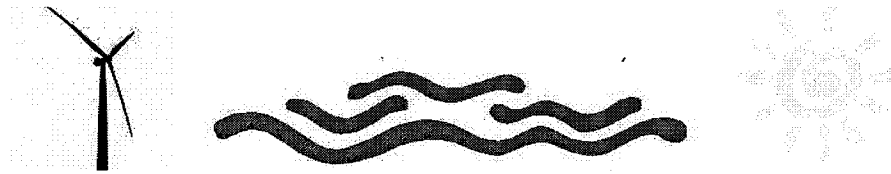
- (1) At least fifty per cent of the renewable portfolio standards shall be met by electrical energy generated using renewable energy as the source;
- (2) Where electrical energy is generated or displaced by a combination of renewable and nonrenewable means, the proportion attributable to the renewable means shall be credited as renewable energy; [~~and~~]

(3) Where fossil and renewable fuels are co-fired in the same generating unit, the unit shall be considered to generate renewable electrical energy (electricity) in direct proportion to the percentage of the total heat value represented by the heat value of the renewable fuels[-]; and

(4) Effective July 1, 2009, the public utilities commission shall not approve any application to build a new generation facility with a rated capacity greater than two megawatts that uses fossil fuel as the source of electricity generation; provided that this section shall not apply to electricity generating units in which the annual actual heat input from biomass fuels exceeds the annual actual heat input of fossil fuels."

SECTION 4. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 5. This Act shall take effect on July 1, 2009.



LIFE OF THE LAND

76 North King Street, Suite 203

Honolulu, Hawai'i 96817

Phone: 533-3454; E: henry.lifeoftheland@gmail.com

COMMITTEE ON ENERGY AND ENVIRONMENT

Senator Mike Gabbard, Chair

Senator J. Kalani English, Vice Chair

DATE: Thursday, February 5, 2009

TIME: 4:15 p.m.

PLACE: Conference Room 225

Aloha Chair Gabbard, Vice Chair English and Members of the Committee

My name is Henry Curtis and I am the Executive Director of Life of the Land, Hawai'i's own energy, environmental and community action group advocating for the people and `aina for almost four decades. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

SB 1671 RELATING TO FOSSIL FUELS. Prohibits the approval of any new electricity generating facilities using fossil fuel and the modification of existing electricity generating facilities to allow the use of more fossil fuel. ENE, CPN Sen Majority

Effective July 1, 2009, no new electricity generating covered source with a rated capacity of more than two megawatts shall be permitted to allow the generation of electricity from fossil fuel **sources**.

Effective July 1, 2009, no electricity generating covered source with a rated capacity of more than two megawatts and existing on July 1, 2009, shall be modified in any manner that allows it to use more fossil fuel as a source of electricity generation than allowed under its permit as of July 1, 2009.

This proposed bill is a solid first step needed to get us to move from a fossil fuel past to a renewable future.

Hawai'i has every known renewable energy resource on the planet, and in great abundance, so there is no reason to delay this transition.

However, as written there are three ways around the intent of this proposed bill

(1) A series of smaller generators, each with a limit of 2 MW could be built. The Honolulu International Airport has proposed to install four generators with a 2MW rated capacity each – having a combined peak capacity of 10 MW.

(2) A fossil fuel generator could be built for non-electrical purposes. This includes refineries.

(3) Under state law, a company which blends a ton of coal and a blade of grass to generate a teaspoon of ethanol can call the resulting ethanol 100% renewable energy.

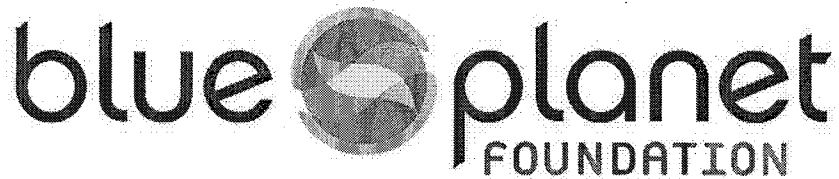
Proposed amendments:

Effective July 1, 2009, no new electricity generating covered source with a combined rated capacity of more than two megawatts shall be permitted by the Department of Health.

Effective July 1, 2009, no state agency shall approve the use of coal-derived biofuels.

Mahalo,

Henry Curtis
Executive Director



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 5th, 2008, 4:15 P.M.

Room 225

(Testimony is 1 page long)

TESTIMONY IN STRONG SUPPORT OF SB 1671

Chair Gabbard and members of the committee:

The Blue Planet Foundation strongly supports strongly supports SB 1671, prohibiting the addition or expansion of any new fossil fuel burning facilities for electricity generation. Fossil fuels are simply not part of Hawaii's clean energy future. Hawaii's state policy should reflect our preferred energy future powered by clean, indigenous, renewable sources of electricity.

Hawaii is the most dependent state in the nation on imported oil. Some 50 million barrels are imported annually, nearly 80% of which originate from foreign sources¹. In addition, over 805,000 tons of coal are imported into our state². These sources provide power for over 92% of Hawaii's electricity generation. The combustion of these resources also contributes over 23 million tons of climate changing greenhouse gas into our atmosphere annually³. Hawaii's economic, environmental, and energy security demand that we reduce the amount of fossil fuel imported and consumed in Hawaii.

Senate Bill 1671 addresses that need by prohibiting the permitting of future fossil fuel-fired electricity generating facilities in the state. To be clear, SB 1671 is not a prohibition on existing fossil fuel electricity generating facilities; it is prospective in nature, only addressing future projects. It exempts small (less than 2 MW) generators that are used for backup generation by hospitals and other emergency needs—an exemption that can be revisited by the legislature in the future as more capable storage technologies come online or indigenous biofuel sources become more readily available.

Blue Planet Foundation is committed to creating Hawaii's clean energy future. Our goal is making Hawaii's energy independent by 2020. New fossil fuel facilities play no role in Hawaii's clean energy future. Please pass SB 1671 to help ensure that we stay on the right path for a sustainable Hawaii.

Thank you for the opportunity to testify.

¹ The State of Hawaii Data Book 2007

² *Ibid.*

³ ICF International. Inventory of Greenhouse Gas Emissions and Sinks in Hawaii: 1990 and 2007. December 2008.



Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803
808.537.9019 hawaii.chapter@sierraclub.org

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 5, 2009, 4:15 P.M.

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 1671

Chair Gabbard and members of the Committee:

The Sierra Club, Hawaii Chapter, with 5500 dues paying members statewide, strongly supports SB 1671, banning the addition or expansion of any new fossil fuel burning facilities for electricity generation. This is a historic bill that will be praised for years to come. Moreover, it makes sense. Hawaii's state policy should reflect our preferred choice of clean, indigenous, renewable sources of electricity.

Although obviously an "environmental" bill, SB 1671 makes economic sense and furthers Hawaii's long-term stability. Hawaii is the most dependent state in the nation on imported oil. Some 50 million barrels are imported annually, nearly 80% of which originate from foreign sources. In addition, over 805,000 tons of coal are imported into our state. These sources provide power for over 92% of Hawaii's electricity generation. The combustion of these resources also contributes over 23 million tons of climate changing greenhouse gas into our atmosphere annually.

Hawaii's economic, environmental, and energy security demand that we reduce the amount of fossil fuel imported and consumed in Hawaii. This bill is a solid step in that direction.

Thank you for this opportunity to provide testimony.