

LINDA LINGLE  
Governor



State of Hawaii  
DEPARTMENT OF AGRICULTURE  
1428 South King Street  
Honolulu, Hawaii 96814-2512

SANDRA LEE KUNIMOTO  
Chairperson, Board of Agriculture

DUANE K. OKAMOTO  
Deputy to the Chairperson

TESTIMONY OF SANDRA LEE KUNIMOTO  
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEES ON WATER, LAND, OCEAN RESOURCES  
AND HAWAIIAN AFFAIRS, AND AGRICULTURE  
WEDNESDAY, FEBRUARY 20, 2008  
9:00 a.m.  
Room 325

HOUSE BILL 2502, HOUSE DRAFT 1  
RELATING TO SOLAR ENERGY

Chairpersons Ito and Tsuji and Members of the Committees:

Thank you for the opportunity to testify on House Bill No. 2502, House Draft 1 that proposes to designate solar energy facilities as a permissible use in the Agricultural District on Land Study Bureau "D" and "E" rated agricultural land. The Department of Agriculture supports the intent of this bill and offers an amendment. The development of renewable energy resources in the Agricultural District should have relationship to an agricultural use and/or should not adversely impact other agricultural uses in the vicinity. House Draft 1 limits the footprint of the solar energy facility on a parcel to ten acres or one percent of the land area, whichever is less. This provision makes it less likely that the area of a parcel to be developed as a solar energy facility will become the primary use on productive agricultural lands that happen to have "D" or "E" ratings. To ensure solar energy facilities do not adversely affect agricultural uses and activities, the Department recommends the following amendment (in bold print):

(page 6)

(6) Solar energy facilities; provided that this paragraph shall apply only to land:

- (A) With soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class D or E;
- (B) Where the total acreage to be used by the solar energy facility is ten acres or one per cent of the parcel, whichever is less;
- (C) Where the solar energy facility is compatible with agricultural uses and activities on the parcel and adjacent parcels;**
- ~~(C)~~ **(D)** That is located in the vicinity of an existing electrical transmission and distribution system; and
- ~~(D)~~ **(E)** That can generate between:
  - (i) Eight and fourteen kWh/m<sup>2</sup>/day (hours per day when array is providing peak output) based on solar insolation maps on a two-axis tracking flat plate; or
  - (ii) Five and fourteen kWh/m<sup>2</sup>/day (hours per day when concentrator is providing peak output) based on solar insolation maps on a two-axis tracking concentrator system.



**Hawaii Farm Bureau**  
F E D E R A T I O N

2343 Rose Street, Honolulu, HI 96819  
PH: (808)848-2074; Fax: (808) 848-1921

February 20, 2008

HEARING BEFORE THE  
HOUSE COMMITTEE ON WATER, LAND,  
OCEAN RESOURCES & HAWAIIAN AFFAIRS  
AND HOUSE COMMITTEE ON AGRICULTURE

TESTIMONY ON  
HB 2502, HD 1  
RELATING TO SOLAR ENERGY

Chair Ito and Tsuji and committee members:

My name is Alan Takemoto, Executive Director, of the Hawaii Farm Bureau Federation, which is the largest non-profit general agriculture organization representing approximately 1,600 farm and ranch family members statewide.

The Hawaii Farm Bureau Federation (HFBB) does not support HB 2502, HD 1, which makes solar energy facilities a permitted use in the agricultural district on class D or E land.

We are concerned how these non-agricultural uses will impact existing small farm operations who occupy lands that are not considered prime agricultural lands, but unique and important to those that can make these lands productive. Areas such as the Kona coffee belt may not have deep rich soil, but have other soil and environmental qualities that is prime for growing coffee.

While we all support renewable energy activities like solar and wind mills, we need to be cognizant of how it will interface with existing and future agricultural uses that may have to compete for all agricultural lands and resources statewide. We would prefer that the existing land use process remain in place to further ensure that it does not negatively impact our farmers.

Thank you.



## **Maui County Farm Bureau**

*An Affiliate of the American Farm Bureau Federation and Hawaii Farm Bureau Federation  
Serving Maui's Farmers and Ranchers*

### **TESTIMONY**

#### **HB 2502 HD1 RELATING TO SOLAR ENERGY**

#### **HEARING BEFORE THE HOUSE COMMITTEE ON WATER, LAND, OCEAN RESOURCES & HAWAIIAN AFFAIRS AND COMMITTEE ON AGRICULTURE**

Chair Ito, Tsuji and Committee Members:

My name is Warren Watanabe, Executive Director of the Maui County Farm Bureau, a non-profit general agriculture organization and an affiliate of the Hawaii Farm Bureau Federation.

Maui County Farm Bureau, on behalf of its member farmers, ranchers and agricultural organizations **continues to have strong concerns about HB 2502 HD1 as amended** defining solar energy facilities as a permissible use on agricultural district lands defined as class D or E. **We oppose this measure in its' current format.**

The committee report states that the intent of the amendments was to recognize legitimate agricultural activity on these lands. As an agricultural organization, we believe that this can only be accomplished when a non-ag activity is recognized as accessory and secondary to the agricultural activity. Allowing non-agricultural activity on agricultural lands make these lands prime picking for these other uses. These uses are able to pass on their costs to customers. Subsequently, they will be willing to pay a higher price for the lands than farmers or ranchers. Some of Hawaii's small farmers and ranchers occupy lands classified as D and E. They have been identified as unique, such as in the coffee region of Kona to recognize other environmental factors that make the lands valuable for agricultural production. How will legitimate farmers and ranchers compete for these lands? What will happen to their property taxes? They are already being challenged by "lifestyle farmers". We do not need another category of challenges.

We recognize and support the importance of solar energy in Hawaii's future and that it does provide significant opportunities for our ranchers. There may be lands that should be designated for renewable energy use. Then, they should be classified as such. Rural may be an appropriate designation. We should not create another non-ag permissible use category under agriculture.

We respectfully request further clarification of use of these agricultural lands for renewable energy facilities unrelated to the agricultural operation. A caveat regarding agricultural impact should be included. There are many lands that can be reclassified for renewable energy production. By

P.O. Box 148  
Kula, HI 96790

ph: 808 2819718  
email:mauicountyfb@hotmail.com



recognizing these uses as permissible uses, we assume benefits such as reduced property tax rates would be afforded to these companies. Is this the intent of reduced property taxes on agricultural lands? We strongly believe that wind farms (existing), solar and all other renewable energy facilities not associated with agriculture be required to take into account impacts on adjacent agricultural operations and if they are not agriculture, be rezoned into another land use classification. Energy facilities have a greater ability to pass on costs and other financial advantages not provided to agriculture – this makes it important that benefits meant for agriculture stay only with agriculture.

HB2503 also heard during this meeting, recognizes the complementary alternative uses of these lands. HB2503 recognizes the role of agriculture in the expansion of renewable energy, while preserving the intent of agricultural lands. As Hawaii embarks on increasing its energy self sufficiency, we strongly feel that it is timely that the land use classifications be clarified. Adding non-agricultural uses into the agricultural district is not in the interest of Hawaii.

We respectfully request amendments of this bill to:

- 1) Clarify that renewable energy facilities, secondary and accessory to a farming or ranching operation is allowed – similar to that done for biofuels during the last session.
- 2) Provide a streamlined reclassification process for renewable energy facilities on Class C,D and E lands if they are independent of agricultural operations. Impacts of these facilities on existing agricultural operations should be considered.
- 3) Expand definition to include all renewable energy ...it seems a waste of resources to do this for each individual type of renewable energy production.

Farm Bureau supports efforts to expand renewable energy operations in Hawaii. However, just as energy is needed, a strong agricultural industry is also needed. We ask that both uses be balanced as we move forward. Thank you for this opportunity to provide our comments on this important matter.



**The Chamber of  
Commerce of Hawaii**

Since 1850

TESTIMONY TO THE HOUSE COMMITTEES ON WATER, LAND, OCEAN RESOURCES  
& HAWAIIAN AFFAIRS & AGRICULTURE  
WEDNESDAY, FEBRUARY 20, 2008 AT 9:00 A.M.  
ROOM 325, STATE CAPITOL

RE: H.B. 2502 Relating to Solar Energy

Chairs Ito and Tsuji, Vice Chairs Karamatsu and Brower, Members of the Committees:

My name is Christine H. H. Camp, Chair of the Chamber of Commerce of Hawaii, Land Use and Transportation Committee. The Chamber of Commerce of Hawaii strongly supports H.B. 2502 HD1 as originally drafted.

The Chamber is the largest business organization in Hawaii, representing 1100 businesses. Approximately 80% of our members are small businesses with less than 20 employees. The organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

H.B. No. 2502 HD 1, proposes amend Section 205-2 HRS to include a solar energy facility as a "permitted use" within the agricultural district on land with soil classified as overall (master) productivity rating class D or E by the land study bureau's detailed land classification.

The purpose of identifying a solar energy facility as a "permitted use" in the agricultural district would simplify the permitting process by eliminating the need for a conditional use permit from the county.

A little less than half of the State of Hawaii is presently zoned agriculture with approximately the same amount zoned conservation (see table below).

2006	Ag	Con	Urban	Rural	Total Acres
Oahu	128,839 (33%)	158,519 (41%)	100,730 (26%)		386,188
Hawaii	1,214,527	1,304,347	53,722	804	2,573,400
Maui	402,992	311,601	27,981	8,326	750,900
Kauai	185,020	199,169	14,558	1,253	400,000
	1,931,378	1,973,636	196,991	10,383	4,112,388

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The Chamber of Commerce of Hawaii Testimony on HB 2502 HD1  
February 20, 2008

Much of the existing agricultural lands are fallow as the state is still struggling to transition from mono-crops and plantation agriculture to other forms of agribusinesses.

The Legislature is aware of the constitutional mandate regarding important agricultural lands, which mentioned a desire to move the state toward becoming more self-sufficient from an agricultural perspective. Recent events in the world have exposed Hawaii's vulnerability and dependency on imported oil. From an energy self-sufficiency standpoint, the State should be encouraging development of a wide range of alternative energy sources.

Streamlining and expediting the permitting process seems to be a step in the right direction to create incentives for investment in alternative energy in Hawaii. With our abundance of agricultural zoned lands and the current constraints on developing alternative energy in anyone of the other land use categories (e.g. Urban, Rural and Conservation) it seems logical to encourage development of alternative energy in the agricultural district. Fears of overdevelopment of solar on agricultural zoned lands appear to be unfounded as solar is efficiency is based on high levels of insolation. Thus, we respectfully recommend that the bill be amended to the original version prior to the present HD 1.

Thank you for this opportunity to express our views.



100 Kahelu Avenue  
Mililani, Hawai'i 96789-3997  
P.O. Box 898900  
Mililani, Hawai'i 96789-8900  
(808) 548-4811 • Fax (808) 548-6670

**Testimony by Castle & Cooke Hawaii**

**Before the House Committees on Water, Land, Ocean Resources & Hawaiian  
Affairs and Agriculture**

**February 20, 2008**

**9:00 am**

**Room 325**

**HB 2502 HD 1 Relating to Solar Energy**

Chairs Ito and Tsuji, Vice Chairs Karamatsu and Brower and Members of the  
Committees:

On behalf of Castle & Cooke Hawaii, thank you for allowing me to testify today.

**I am Tim Hill, Executive Vice President, Castle & Cooke Lanai Renewable  
Energy Programs; here to express our support for HB 2502, in its original  
form, that makes solar facilities a permitted use on agricultural D and E land.  
In the alternative, we suggest that the technical voltage requirements as set  
forth at Section 2, Sub (6)(D) of HB 2502, HD1 be removed as they are soon to  
be outdated and are a hindrance to the development of solar facilities.**

Castle & Cooke is committed to bringing renewable energy to Hawaii. Today, I  
want to tell you what Castle & Cooke is doing, our record of delivering on our  
commitments, and why we believe that HB 2502, in its original form is essential to  
our efforts and to the success of the State's renewable energy mandate. We  
strongly support HB 2502 and we further believe that the legislature should  
consider possibly expanding this measure to allow solar facilities on other classes  
of agricultural lands.



## **Castle & Cooke Renewable Energy Programs**

Castle & Cooke is committed to supporting Hawaii's energy independence by developing alternative energy resources on the island of Lanai while preserving unique environmental, cultural and historic resources found on the island.

In her State of the State address, Governor Lingle challenged all of us to move Hawaii away from oil dependence and to do so "more rapidly than some would like and others believe possible." We share this view that the time for action is now.

At Castle & Cooke, we have already initiated projects to reduce reliance on fossil fuels and to transform Lanai into a showcase for renewable and green energy.

Our projects include:

- **Solar:** Awaiting permit approval to create largest solar farm in Hawaii
  - Converts 10 acres of "grade D" ag land to 1.5 MW solar farm
  - Can supply up to 10% of Lanai's annual electricity needs
- **Wind:** Examining economic, cultural and environmental feasibility
  - Goal is 300-400 MW wind farm from towers spaced across 10,000 acres in northern Lanai
  - Could supply up to 15% of Oahu's peak power needs
- **Bio-Fuels:** Exploring feasibility of growing crops for fuel
  - Test crops of jatropha to be planted as part of solar program
  - Working with UH College of Tropical Agriculture and HARC (with Dole Food Company)

The investments we are prepared to make reflect our commitment to Hawaii:

- Close to \$1 billion for solar and wind energy projects
- The State is pursuing an important agenda for energy independence and other needs while struggling with a potential budget shortfall of \$350 million. Castle & Cooke is committed to renewable energy, and we're investing more than \$765 million to make it happen in Hawaii.
- Our goal is to make Lanai powered by 100% renewable energy

In opening remarks, House Speaker Calvin Say noted that, "If we could just produce half of Hawaii's energy, we could add at least \$2 billion to the state's

economy. And the money stays here.” Castle & Cooke’s renewable energy projects are a big step toward that vision.

We foresee additional benefits for the people of Lanai and Hawaii. We believe our projects will help stabilize energy costs and thus stabilize the cost of living in our state. We also believe that they will provide new job opportunities for residents. And we know that they will help us utilize our bountiful natural resources. All of which means, these projects are instrumental in building a truly sustainable Hawaii.

Senate President Colleen Hanabusa said that when it comes to sustainability, we all play for the same team. Castle & Cooke is a committed part of that team.

### **Castle & Cooke: Part of Hawaii’s Past, Part of Hawaii’s Future**

Castle & Cooke has been a business leader in Hawaii for 150 years, and we plan to be here for the next 150 years. We like to say that we are “Investing in Hawaii...Creating communities...Delivering dreams.”

You may know Castle & Cooke as a leading agriculture and land development company. We’re also a diversified firm with the commitment and resources to deliver solutions. Look at our track record:

- **Mililani:** We promised a diverse, master-planned community for Hawaii families, and we delivered:
  - Home to over 50,000 people in more than 16,000 homes.
  - Mililani is the only Hawaii community to be designated an All-America City.
  - In 2005, *Money* magazine called Mililani one of the best places to live in the United States.
  - Started in 1968, we will complete Mililani on the first quarter of 2008; a 40 year commitment of providing homes for Hawaii Families
- Our total investment is in the order of \$3.85 billion in infrastructure and vertical construction; an average of \$96 million each year for the past 40 years.

We see renewable energy as essential for Hawaii’s future, and our commitment to that future comes directly from our owner, Mr. David Murdock, who has committed resources to make it happen. We believe renewable energy projects

make the best use of our Lanai lands, and can provide positive results for the future of Hawaii.

Renewable energy is essential to that future. We are prepared to invest close to \$1 billion of our resources in renewable energy. That's our commitment. We will deliver.

Castle & Cooke supports HB 2502 because the legislation clarifies that solar energy facilities are a permitted use in the agricultural district on class D and E land.

So far, the process of establishing large scale renewable projects in Hawaii has averaged ten years, many of which were bogged down in redundant and time consuming permitting processes. This type of unpredictable and drawn out permitting process is injurious to further investment by private industry into the large scale renewable energy projects Hawaii needs to secure its energy future and meets its renewable goals.

As a developer committed to Hawaii's future, what Castle & Cooke is looking to the Legislature for is some predictability with respect to the government permitting process. **Castle & Cooke is not trying to avoid an environmental impact statement, or any other required studies or/or reports. However, Castle & Cooke believes that ten years is too long to be mired in redundant permitting process, which currently does not have explicit timetables, except for the public comment process.** Castle & Cooke firmly believes that the government permitting process needs to prioritize renewable energy projects and HB 2502 provides much needed clarification that solar facilities are approved on D and E agricultural land.

On behalf of Castle & Cooke, I ask for your support for HB 2502. Mahalo and thank you for your consideration of our testimony.

If you have any questions, please feel free to contact:

Harry Saunders  
President, Castle & Cooke Hawaii  
[aktsukamoto@castlecooke.com](mailto:aktsukamoto@castlecooke.com)  
548-4811

Tim Hill

Executive Vice President, Castle & Cooke Lanai Renewable Energy Programs

[thill@castlecooke.com](mailto:thill@castlecooke.com)

559-0286

Carleton Ching

Vice President, Castle & Cooke Hawaii, Community and Government Relations

[cching@castlecooke.com](mailto:cching@castlecooke.com)

548-3776