

HB 2502 HD2

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 SENATE COMMITTEES ON
AGRICULTURE AND HAWAIIAN AFFAIRS
AND
ENERGY AND ENVIRONMENT
THURSDAY, MARCH 20, 2008
2:45 p.m.
Room 224

HOUSE BILL 2502, HOUSE DRAFT 2
RELATING TO SOLAR ENERGY

Chairpersons Tokuda and Menor and Members of the Committees:

Thank you for the opportunity to testify on House Bill No. 2502, House Draft 2 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 responsible development of renewable energy resources from a wide array of sources. House Draft 2 promotes the development of solar energy facilities by making them a permissible use within the Agricultural District, thereby reducing the land use permits necessary for their development and operation. The Department of Agriculture supports this measure with one amendment.

Agricultural lands with Land Study Bureau "D" and "E" overall productivity ratings often have value for agricultural production. Perhaps the most well-known example of high-value production on "E"-rated land is Kona coffee which thrives on unirrigated and rocky soil. There are many cases throughout the State where "marginal" lands achieve a rating of "C", "B", and even "A" if irrigation is available. When sugarcane cultivation dominated the agricultural landscape not too many years ago, the majority of small farmers established their businesses on "D" and "E" lands. Even where irrigation is

unavailable, there are many areas where "D" and "E" lands are in extensive agricultural production such as cattle grazing lands or intensively used such as the Puna/Kapoho area for papaya. Nursery and foliage operations excel on crushed lava lands that are rated "E".

To ensure that solar energy facilities do not adversely affect agricultural uses and activities, the Department recommends the following amendment (in bold print, double-underscored):

(page 3, end of line 4)

(6) Solar energy facilities; provided that this paragraph shall apply only to land with soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class D or E, **and where the solar energy facility is compatible with agricultural uses and activities on the parcel and adjacent parcels;**



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

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March 20, 2008

HEARING BEFORE THE
SENATE COMMITTEE ON AGRICULTURE & HAWAIIAN AFFAIRS
AND
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

TESTIMONY ON
HB 2502, HD 2
RELATING TO SOLAR ENERGY

Chair Tokuda and Chair English 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 (HFBF) supports the intent of HB 2502, HD 2, which makes solar energy facilities a permitted use in the agricultural district on class D or E land.

While we support the growth of renewable energy activities for the entire State of Hawaii, we must be cognizant of how these non-agricultural uses will affect 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. We also need to be aware of how these renewable energy facilities will interface with existing and future agricultural uses that may have to compete for all agricultural lands and resources statewide. We have always believed that food production is a priority and a necessity for Hawaii's self. We strongly support the idea of allowing renewable energy activity as a secondary and accessory to the agricultural activity,

Thank you for allowing us to testify on this measure.

**DOWLING
COMPANY, INC**

March 19, 2008

e-mail testimony to: testimony@capitol.hawaii.gov

Hearing on HB2502, HD2, Relating to Solar Energy
Before the Senate Committees on Agriculture & Hawaiian Affairs and
Energy & Environmental
on Thursday, March 20, 2008 at 2:45 p.m. in Conference Room 224

Dear Chairs Tokuda and Menor, and members of the Committee:

My name is Jennifer Stites and I am the Green Development Manager for Dowling Company, Inc. ("DCI"). DCI is a Maui-based real estate development company that is committed to sustainable development. To guide this effort and determine our performance metrics, we have adopted the nationally recognized U.S. Green Building Council's ("USGBC") Leadership in Energy and Environmental Design ("LEED") rating system. As the land owner of 1800 acres in Makena, including the Maui Prince Hotel and Makena North and South Golf Courses, we have set the very ambitious goal of developing a net-zero energy community. Through energy reduction and renewable energy production on-site, we hope to develop a model sustainable community for Hawaii.

Therefore, we applaud the Senate and House Majority in introducing this bill which makes solar energy facilities a permitted use in the agricultural district on class D or E lands. **We are in strong support of HB2502, HD2 Relating to Solar Energy.**

This bill will stream line the process to site solar energy facilities in the agricultural district on class D or E lands, and thus, encourage the use of solar energy and reduce Hawaii's dependency on fossil fuels. For example, DCI currently has 40-50 acres of land in Makena that it plans to use for a solar farm. The land is in the agricultural district and is classified as E land. They are not suitable for the cultivation of crops and because of the limited acreage they are not suitable for grazing or pasture lands. If we do not use this land for a solar farm, it will remain barren and unproductive.

Thank you for the opportunity to testify in support of this important measure, HB2502, HD2.



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Testimony by Castle & Cooke Hawaii

Before the Senate Committees on Agriculture and Hawaiian Affairs and Energy and Environment

March 20, 2008

2:45 p.m.

Room 224

HB 2502, HD2 Relating to Solar Energy

Chairs Tokuda and Menor, Vice Chairs English and Hooser, 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 strong support for HB 2502, HD2, clarifying that solar facilities will be an approved use on agricultural D and E land.

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, HD2 is essential to our efforts and to the success of the State's renewable energy mandate.

We strongly support HB 2502, HD2 and want to emphasize that Castle & Cooke's proposed solar energy facilities are going to be placed on land that has been fallow for more than twenty years. Castle & Cooke's proposed solar energy facilities will NOT displace any farmers or create a competitive situation for natural resources. Rather, Castle & Cooke's Lanai renewable energy projects will take land that is currently non-productive and create clean energy resources that will support the state's renewable energy mandate.

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
 - 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 ready 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 provide and efficient and 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, HD2 because the legislation provides much needed clarification that solar facilities are a permitted use on D and E agricultural land.

On behalf of Castle & Cooke, I ask for your support for HB 2502, HD2. 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
548-4811

Tim Hill
Executive Vice President, Castle & Cooke Lanai Renewable Energy Programs
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Carleton Ching
Vice President, Castle & Cooke Hawaii, Community and Government Relations
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**The Chamber of
Commerce of Hawaii**

Since 1850

**Testimony to the Senate Committees on Agriculture and Hawaiian Affairs and
Energy and Environment
Thursday, March 20, 2008 at 2:45 p.m.
Conference Room 224, State Capitol**

RE: HOUSE BILL NO. 2502, HD2 SOLAR ENERGY

Chairs Tokuda and Menor, Vice Chairs English and Hooser, and Members of the Committees:

My name is Jim Tollefson and I am the President and CEO of The Chamber of Commerce of Hawaii ("The Chamber"). The Chamber of Commerce of Hawaii strongly supports H.B. 2502 HD 2.

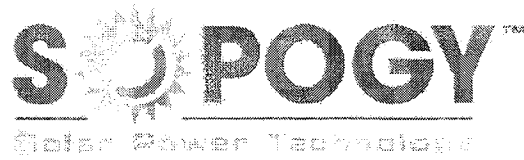
The Chamber is the largest business organization in Hawaii, representing 1100 businesses. Approximately 80% of our members are small businesses with less than 20 employees. The organization works on behalf of members and the entire business community to improve the state's economic climate and to foster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

H.B. No. 2502 HD 2, proposes to 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.

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.

Thank you for this opportunity to express our views.



**To: Senator Jill Tokuda, Chair
Committee on Agriculture and Hawaiian Affairs**

**Senator Menor, Chair
Committee on Energy and Environment**

From: Sopogy Inc.

Date: March 18, 2008

Subject: Support for HB 2502 HD2 – Relating to Solar Energy

Chair Tokuda, Chair Menor, Vice Chair English, Vice-Chair Hooser, and Members of the Committees:

Sopogy, Inc. is a renewable technology company based in Hawaii and our purpose is to bring renewable solar energy technologies to Hawaii and its people for the betterment of our environment, independence from volatile imported fossil fuels, and energy stability. Sopogy has developed a concentrating solar panel that enables the production of electricity, air conditioning, and/or process heat using the sun's power.

Sopogy supports HB 2502 HD2 in that the Bill would permit solar energy facilities on land with soil classified D or E. These lands account for over 70% of the State's agricultural land and would allow for additional solar energy facilities to supply electricity to be used by the local utility or internal processes such as pumping water from deep, fresh water wells.

In general, Sopogy, Inc. supports the adoption of renewable energy and energy efficiency measures that lessen the state's dependence on oil, reduce greenhouse gas emissions, and provide energy price stability to Hawaii's consumers.

Thank you for this opportunity to testify.



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COLLEGE OF SOCIAL SCIENCES
HAWAII ENERGY POLICY FORUM
UNIVERSITY OF HAWAII AT MĀNOA

Hawai'i Energy Policy Forum

Mr. Robbie Alm, HECO
Ms. Amy Asselbaye, Ofc of US Rep.
Neil Abercrombie
Ms. Madeleine Austin, World Business
Academy
Ms. Catherine Awakuni, Div. of
Consumer Advocacy
Mr. Warren Bollmeier
Hi Renewable Energy Alliance
Mr. Carlito Caliboso, PUC (Observer)
Mr. Albert Chee, Chevron
Mr. Kyle Datta, U.S. Biofuels
Sen. Kalani English, HI State Senate
Mr. Mitch Ewan, UH HNEI
Mr. Carl Freedman
Haiku Design and Analysis
Mr. Mark Glick, OHA
Mr. Steve Golden, The Gas Company
Dr. Michael Hamnett, RCUH
Ms. Paula Helfrich, EDAH
Mr. William Kaneko, HI Institute for
Public Affairs
Mr. Darren Kimura, Energy Industries
Holdings
Mr. Mike Kitamura, Ofc of US Sen.
Daniel K. Akaka
Mr. Kai Kobayashi, Maui County
Mr. Laurence Lau, DOH
Ms. Yvonne Lau, Ofc of US Rep.
Mazie Hirono
Mr. Allyn Lee, C&C of HNL
Mr. Aaron Leong, Ofc of US Senator
Daniel K. Inouye
Dr. Stephen Meder, AIA-Honolulu
Sen. Ron Menor, HI State Senate
Mr. Jeff Mikulina, Sierra Club
Dr. Bruce Miller, UH Ofc of
Sustainability
Dr. Sharon Miyashiro, Social
Sciences Public Policy Ctr.
Rep. Hermina Morita, HI State
House of Representatives
Mr. Tim O'Connell, USDA/Rural
Development
Mr. Richard Paglinawan
Pa Ku'i A Lua
Ms. Melissa Pavlicek, Western States
Petroleum Assn
Mr. Randy Perreira, HI State AFL-CIO
Mr. Rick Reed, Inter-Island
Solar Supply
Dr. Rick Rocheleau, UH HNEI
Mr. Peter Rosegg, HECO
Mr. Steven Rymsha, KIUC
Mr. Riley Saito, PowerLight Corp.
Mr. Glenn Sato, Kauai County OED
Ms. Carilyn Shon, DBEDT
Mr. Bill Short, BIA of Hawaii
Mr. Ray Staring, HI Energy Grp
Mr. Lance Tanaka, Tesoro HI Corp
Dr. Don Thomas, UH Center for the
Study of Active Volcanoes
Mr. Murray Towill, Hawai'i
Hotel Assn
Ms. Joan White, Hon Community
Action Program

Testimony of
Warren Bollmeier
Co-Chair – Renewable Energy Working Group
Hawai'i Energy Policy Forum

Senate Committee on Agriculture & Hawaiian Affairs
Senate Committee on Energy & Environment
Thursday, March 20, 2008
2:45 pm
Conference Room 224

IN SUPPORT OF H.B. 2502, H.D. 2 - Relating to Solar Energy

I am Warren Bollmeier, Co-Chair of the Renewable Energy Working Group of the Hawaii Energy Policy Forum ("Forum"). The Forum is comprised of 46 representatives from the electric utilities, oil and natural gas suppliers, environmental and community groups, renewable energy industry, and federal, state and local government, including representatives from the neighbor islands. We have been meeting since 2002 and have adopted a common vision and mission, and a comprehensive "10 Point Action Plan," which serves as a framework and guide for meeting our preferred energy vision and goals.

The Forum supports the passage of HB 2502, HD 2 as it helps achieve the goal of Point One - expand renewable energy opportunities.

The purpose of HB 2502, HD 2 is to make solar energy facilities a permitted use in the agricultural district on class D or E land. Allowing the use of marginal lands for solar energy facilities will increase opportunities for the further development of renewable energy use in Hawaii. The Forum is aware, however, that there may be competing agricultural uses for these lands and as such, there should be further discussion on this measure to ensure that the best use of the lands is achieved.

Thank you for this opportunity to testify.

This testimony reflects the position of the Forum as a whole and not necessarily of the individual Forum members or their companies or organization

SUNPOWER®

LATE

JOINT COMMITTEE MEETING

COMMITTEE ON AGRICULTURE AND HAWAIIAN AFFAIRS AND COMMITTEE ON ENERGY AND ENVIRONMENT

Room # 224 2:45 PM March 20, 2008

HB 2502, HD2 RELATING TO SOLAR ENERGY

Senator Jill N Tokuda, Chair and Senator Ron Menor Chair, and Committee Members:

Thank you for the opportunity to testify **in support of HB 2502, HD2**. My name is John Crouch Senior Consultant, Pacific Region, and Project Manager – Lanai for **SunPower Corporation** Systems.

SunPower Corp (previously PowerLight Corporation) is the leading global provider of large-scale solar power systems; with over 250 megawatts of photovoltaic power installed and operating world wide. **SunPower Corp** has been a supporter of the renewable energy initiatives in Hawaii for over ten years. Mahalo in advance, for accepting these few comments in strong support of **HB 2502, HD2**.

SunPower Corp agrees that agricultural land designated D and E should be available for use for renewable energy. The law already allows wind and bio-fuels in Ag lands. It should therefore follow that certain Ag lands should be available for photovoltaic technology since the three technologies all get their energy from the sun.

By including solar energy facilities as permitted use in class D and E AG lands we bring another energy tool into play to significantly reduce the use of expensive and scarce fossil fuel for the production of electricity.

Use of PV on Ag land does not preclude the use of the land for other Ag uses. Sheep are regularly grazed under PV panels and low rising crops can be grown since the PV panels, allow sufficient sunlight and rain fall to sustain such crops.

PV energy is, clean, quiet, non invasive, and possesses over ten years of experience for use in Hawaii to commercially generate electricity. I respectfully request that you **pass HB 2502 HD2 as presented**.

Mahalo, John J. Crouch

www.sunpowercorp.com

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The Pacific Resource
PARTNERSHIP



Testimony of C. Mike Kido
External Affairs
The Pacific Resource Partnership

Committee on Agriculture and Hawaiian Affairs
Senator Jill Tokuda, Chair
Senator J. Kalani English, Vice Chair

Committee on Energy and Environment
Senator Ron Menor, Chair
Senator Gary Hooser, Vice Chair

HB2502 HD2
Thursday, March 20, 2008
2:45 pm
Conference Room 224

Senators Jill Tokuda and Ron Menor Chairs, and Members of the Committee on Agriculture and Hawaiian Affairs and the Committee on Energy and Environment:

My name is C. Mike Kido, External Affairs of the Pacific Resource Partnership (PRP), a labor-management consortium representing over 220 signatory contractors and the Hawaii Carpenters Union.

The Pacific Resource Partnership strongly support the passage of HB2502 HD2 – Relating to Solar Energy.

HB 2502 HD2 proposed to 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.

PRP believes that the primary proponents of this proposed legislation have already initiated projects to reduce reliance on fossil fuels and have committed to transform Lanai into a showcase for renewable and green energy.

PRP respectfully ask for your favorable consideration of HB2502 HD2 to demonstrate our commitment to a sustainable community in Hawaii.

Mahalo and thank you for your consideration of our testimony.