

# SB2658

Measure Title: RELATING TO SOLAR ENERGY.

Report Title: Solar Energy; Agricultural Land

Description:

Requires that solar facilities on agricultural lands with an overall productivity rating of class B or C occupy up to thirty, rather than ten, per cent of the acreage of the parcel or two or more adjacent parcels having met the applicable county requirements for the joint development or joint lot use of those parcels; provided that the area occupied by the solar facilities in excess of twenty acres shall only be made available for agricultural activities compatible with the solar energy facilities at a lease rate that is at least fifty per cent below fair market rent for comparable properties. Requires that solar energy facilities be removed from the land within twelve months when the facilities are no longer in operation. (SD1)

Companion:

Package: None

Current Referral: ENE/AGL, WTL

Introducer(s): GABBARD, CHUN OAKLAND, Galuteria, Ihara

<u>Sort by Date</u>		Status Text
1/17/2014	S	Introduced.
1/21/2014	S	Passed First Reading.
1/21/2014	S	Referred to AGL/ENE, WTL.
1/27/2014	S	Re-Referred to ENE/AGL, WTL.
1/29/2014	S	The committee(s) on ENE/AGL has scheduled a public hearing on 02-06-14 3:30PM in conference room 225.
2/6/2014	S	The committee(s) on ENE recommend(s) that the measure be PASSED, WITH AMENDMENTS. The votes in ENE were as follows: 3 Aye(s): Senator(s) Gabbard, Ruderman, Chun Oakland; Aye(s) with reservations: none ; 0 No(es): none; and 2 Excused: Senator(s) Ihara, Slom.
2/6/2014	S	The committee(s) on AGL recommend(s) that the measure be PASSED, WITH AMENDMENTS. The votes in AGL were as follows: 5 Aye(s): Senator(s) Nishihara, Kouchi, Dela Cruz, English, Wakai; Aye(s) with reservations: none ; 0 No(es): none; and 2 Excused: Senator(s) L. Thielen, Slom.
2/12/2014	S	Reported from ENE/AGL (Stand. Com. Rep. No. 2217) with recommendation of passage on Second Reading, as amended (SD 1) and referral to WTL.
2/12/2014	S	Report adopted; Passed Second Reading, as amended (SD 1) and referred to WTL.
2/14/2014	S	The committee(s) on WTL has scheduled a public hearing on 02-19-14 1:00PM in conference room 225.

**NEIL ABERCROMBIE**  
Governor

**SHAN S. TSUTSUI**  
Lieutenant Governor

**RICHARD LIM**  
Director

**MARY ALICE EVANS**  
Deputy Director



**LAND USE COMMISSION**  
Department of Business, Economic Development & Tourism  
State of Hawai'i

**DANIEL ORODENKER**  
Executive Officer

**Bert K. Saruwatari**  
Planner  
**SCOTT A.K. DERRICKSON AICP**  
Planner

**RILEY K. HAKODA**  
Chief Clerk

**FRED A. TALON**  
Drafting Technician

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Statement of  
**Daniel E. Orodener**  
**Executive Officer**  
Land Use Commission  
Before the  
**Senate Committee on Water & Land**  
February 19, 2014  
1:00 PM  
State Capitol, Conference Room 225

In consideration of  
**SB 2658 SD1**  
**RELATING TO SOLAR ENERGY**

Chair Solomon, Vice Chair Galuteria and members of the Committee on Water and Land;

The Land Use Commission takes no position with regard to the policy considerations raised by this measure. We do, however, offer the following comments regarding SB 2658 SD1 that seeks to make utility scale solar energy facilities a permissible use within the State Agricultural District on lands classified by the Land Study Bureau (LSB) as class B and C.

We would recommend that the measure be modified to require that solar energy facilities proposed for LSB class B or C lands go through the State Special Permit process. This process, along with any specific limitations on parcel percentage (%) or acreage the Legislature may require, can insure that an open public forum is used to balance competing uses on our best agricultural lands and identify the parties responsible for implementing and enforcing any conditions of approval.

We suggest substituting the following for the language contained in SD1 on pages 2,3,14 and 15 of SD 1 and inserting the following:

Pages 2 and 3 Lines 9 on page 2 through line 5 on page 3, paragraph numbered 6(B) be amended to read:

- (B) Solar energy facilities placed within land with soil classified as overall productivity rating class B or C shall not occupy more than ten per cent of the acreage of the parcel or twenty acres of land, whichever is lesser, unless a special use permit is

obtained from the Land Use Commission for the facilities pursuant to Section 205-6 Hawai'i Revised Statutes and, the area occupied by the solar energy facilities is also devoted to agricultural activities; provided further that the solar energy facilities shall be decommissioned and removed within 12 months of the conclusion of operation; and

Page 14 to 15, lines 20 on page 14 through line 16 on page 15, the paragraph numbered (20) be amended to read:

- (20) Solar energy facilities that have been authorized pursuant to a Land Use Commission Special Permit granted pursuant to Section 205-6 Hawai'i Revised Statutes and~~[do not occupy more than ten per cent of the acreage of the parcel, or twenty acres of land, whichever is lesser,]~~ provide an area of land for agricultural food production that is greater than the area occupied by the solar energy equipment, which equipment shall be decommissioned and removed within twelve months of the operation; provided further that this use shall not be permitted on lands with soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class A; or

Thank you for the opportunity to testify on this matter.



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

**NEIL ABERCROMBIE**  
GOVERNOR

**RICHARD C. LIM**  
DIRECTOR

**MARY ALICE EVANS**  
DEPUTY DIRECTOR

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Statement of  
**RICHARD C. LIM**  
Director

Department of Business, Economic Development, and Tourism  
before the  
**SENATE COMMITTEE ON WATER AND LAND**

Wednesday, February 19, 2014  
1:00 PM

State Capitol, Conference Room 225

in consideration of  
**SB 2658, SD 1**  
**RELATING TO SOLAR ENERGY.**

Chair Solomon, Vice Chair Galuteria, and Members of the Committee.

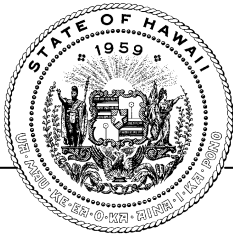
The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent of SB 2658, SD 1, which would permit solar energy facilities on class B or C agricultural lands, provided the solar energy facility does not occupy more than 30% of the acreage of the parcel(s), and the area occupied by the solar facility is made available for compatible agricultural activities at 50% below market lease rate. The measure also requires that solar energy facilities be removed within twelve (12) months of the conclusion of the operation.

Our state Energy Policy seeks to make the best use of Hawaii's land and resources by balancing technical, economic, environmental, and cultural considerations. DBEDT is supportive of the advancement of renewable energy development which simultaneously benefits and encourages on-site agricultural activities.

DBEDT supports the mandated decommissioning and removal of solar energy facilities within twelve (12) months of the conclusion of the operation.

We defer to the appropriate agencies regarding whether a State Special Use Permit (SUP) should be required prior to placing solar energy facilities on agricultural lands.

Thank you for the opportunity to provide these comments.



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STATE OF HAWAII**

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**NEIL ABERCROMBIE**  
GOVERNOR

**JESSE K. SOUKI**  
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Statement of  
**JESSE K. SOUKI**  
Director, Office of Planning  
before the  
**SENATE COMMITTEE ON WATER AND LAND**  
Wednesday, February 19, 2014  
1:00 PM  
State Capitol, Conference Room 225  
  
in consideration of  
**SB 2658 SD1**  
**RELATING TO SOLAR ENERGY.**

Chair Solomon, Vice Chair Galuteria, and Members of the Senate Committee on Water and Land.

Senate Bill 2658, SD1 amends the State Land Use Law at Hawaii Revised Statutes (HRS) §§ 205-2 and 205-4.5, to allow “solar energy facilities” within the State Agricultural Land Use District<sup>1</sup> on soils rated by the Land Study Bureau's Overall Productivity Rating (LSB) as “B” and “C.”<sup>2</sup>

HRS § 205-2 currently allows solar energy facilities. However, this amendment would expand the land coverage of solar energy facilities from 10 percent or 20 acres (whichever is

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<sup>1</sup> See HRS § 205-2 (“There shall be four major land use districts in which all lands in the State shall be placed: urban, rural, agricultural, and conservation.” As of November 12, 2013, approximately 49% of lands in the state are in the Conservation District and 46% is in the Agricultural District.)

<sup>2</sup> See *Land Study Bureau (LSB) Detailed Land Classification*, Office of Planning, at <http://files.hawaii.gov/dbedt/op/gis/data/lsb.pdf> (The Land Study Bureau of the University of Hawaii prepared an inventory and evaluation of the State's land resources during the 1960's and 1970's. The Bureau grouped all lands in the State, except those in the urban district, into homogeneous units of land types; described their condition and environment; rated the land on its over-all quality in terms of agricultural productivity; appraised its performance for selected alternative crops; and delineated the various land types and groupings based on soil properties and productive capabilities. A five-class productivity rating system was developed with “A” representing the class of highest productivity and “E” the lowest. Ratings were developed for both over-all productivity, and for specific crops. HRS Chapter 205 uses over-all productivity ratings.)

lesser) to 30 percent of the acreage of the parcel. These statutory provisions would continue to prohibit solar energy facilities on LSB “A” lands within the State Agricultural District.

The Hawaii State Plan, passed by the legislature in 1978 and subsequently amended, promotes both agriculture and the promotion and development of renewable energy for current and future generations.<sup>3</sup> As the Committee balances these complex, often competing policy objectives, we provide the following comments for your consideration:

- Statewide, LSB soil productivity ratings of lands within the State Agricultural District are distributed as follows:
  - 3.1%, LSB “A”
  - 6.2%, LSB “B”
  - 14.9%, LSB “C”
  - 24.9%, LSB “D”
  - 50.9%, LSB “E”
- The counties and the State have not completed the process of identifying important agricultural lands (IAL) to the State of Hawaii. The intent of the IAL law is to “conser[ve] the State's agricultural land resource base and assur[e] the long-term availability of agricultural lands for agricultural use[.]”<sup>4</sup> The IAL law, passed in 2005, implements Article XI, Section 3, of the Hawaii State Constitution, which directs the State to “conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands.”
- Allowing non-agricultural uses in the State Agricultural District may contribute to the impermanence syndrome, whereby agricultural use declines due to farmers’ disinvestment in their farm operations in anticipation of development. This has been observed to occur where competing uses are allowed in areas designed for agricultural uses.<sup>5</sup>

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<sup>3</sup> See HRS §§ 226-7 and 226-18 (relating to the State’s “Objectives and policies for the economy—agriculture” and “Objectives and policies for facility systems—energy,” respectively).

<sup>4</sup> HRS § 205-41.

<sup>5</sup> *Impermanence Syndrome – Have you got it?*, Rutgers, at <http://njsustainingfarms.rutgers.edu/farmlandissues.html> (last visited, Feb. 3, 2014).

- The list of non-agricultural uses on LSB “B” and “C” lands has grown over time. Currently, HRS § 205-2 allows the following non-agricultural uses: wind generated energy production; biofuel production; limited solar energy facilities; wind machines and wind farms; small-scale meteorological, air quality, noise, and other scientific and environmental data collection and monitoring facilities; open area recreational facilities; and geothermal resources exploration and geothermal resources development. The list of non-food related uses is longer still.
- The State Special Permit under HRS § 205-6 grants counties the authority to allow “certain unusual and reasonable uses within agricultural and rural districts other than those for which the district is classified[.]” In other words, the Special Permit process allows uses in the State Agricultural District that are not agricultural uses or related to agricultural uses on a case-by-case basis. Although we do not advocate for allowing non-agricultural uses within the State Agricultural District, this established process allows counties to review non-agricultural uses to mitigate impacts on the State Agricultural District. As HRS §§ 205-2 and 205-4.5 are currently drafted, Special Permits are not allowed for solar energy facilities on (1) LSB “A” lands, or (2) LSB “B” and “C” lands for more than 10 acres or 20 percent of a parcel (whichever is lesser).

Thank you for the opportunity to provide testimony on this measure.



State of Hawaii  
**DEPARTMENT OF AGRICULTURE**  
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**TESTIMONY OF SCOTT E. ENRIGHT  
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEE ON WATER AND LAND  
WEDNESDAY, FEBRUARY 19, 2014  
1:00 P.M.  
Room 225  
SENATE BILL NO. 2658, SENATE DRAFT 1  
RELATING TO SOLAR ENERGY**

Chairperson Solomon and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 2658, SD1. The Department of Agriculture supports the intent to have solar energy facilities that are compatible to agricultural activities and provides comments on this bill.

According to Office of Planning statistics, about 75 percent of the 1.9 million-acre Agricultural District has “D” or “E” ratings. We strongly believe that these poorer-quality agricultural lands be considered first for siting solar energy facilities. As we stated earlier, existing State law does not impose limits on the acreage of “D” and “E” rated lands that can be used for solar energy facilities. On the other hand, “B” and “C” rated agricultural lands comprise 21 percent of Hawaii’s agricultural lands, have fair to good capacity for intensive agricultural production, and are more likely to be considered and designated as Important Agricultural Lands.

Thank you for the opportunity to present our testimony.







**SENATE COMMITTEE ON WATER AND LAND**

February 19, 2014, 1 P.M.

Room 225

**(Testimony is 3 pages long)**

**TESTIMONY IN SUPPORT OF SB 2658 SD1**

Chair Solomon, Vice Chair Galuteria, and members of the Committee on Water and Land:

The Blue Planet Foundation supports SB 2658, allowing the dual use of solar energy generation with farming or ranching on agricultural lands with Land Study Bureau ratings of B & C. We believe passage of this measure will enable greater amounts of low-cost, clean, indigenous energy to power our islands while preserving and expanding the opportunity to provide local food and other agricultural products.

## **This policy is timely and necessary to expand the amount of affordable renewable energy**

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Solar energy is currently a bright spot in Hawaii's progress toward energy independence, with increasing amounts of affordable renewable solar powering our lifestyles and economy. The cost of solar energy equipment has dropped some 50% over the past four years, making it more affordable than oil-fired electricity generation. In fact, in responses to an invitation from Hawaiian Electric Company last year for utility scale renewable projects fitting certain criteria, the proposed electricity prices from projects (which were mostly solar) averaged 15.8 cents per kilowatt-hour—far below the 23 to 25 cents per kilowatt-hour for oil-fired generation. These proposed photovoltaic farms—the others that are currently in operation—provide the lowest cost solar energy, and those savings are shared with all ratepayers. Further, when we shift our energy dollars away from foreign oil and to local clean energy sources, those dollars circulate in Hawai'i's economy to the benefit of everyone.

Solar energy has widespread support and is typically easier to site than other forms of renewable energy, such as wind and geothermal. A recent poll of Hawai'i residents conducted by the Pacific Resource Partnership found that solar has broad acceptance and support, with

96% of respondents in favor of solar. On O’ahu in particular, much of the available land is more suitable for solar energy than wind. Solar energy’s low profile, silent operation, and lack of significant moving parts make it less likely to encounter community resistance than other clean energy sources.

The timing of SB 2658 is critical to provide the opportunity for projects to come online that will make use of the existing 30% federal tax credit for solar—further lowering costs to ratepayers. This 30% federal credit expires at the end of 2016 and it is unlikely to be renewed. This measure will help clear the path for some projects to be built before the credit’s expiration, saving ratepayers hundreds of millions over the life of the project. Allowing solar projects to proceed on class B & C lands without having to obtain a special use permit will help to enable timely construction so ratepayers can enjoy the benefits of low-cost renewable energy.

## This policy is limited in scope and contains provisions to protect—and increase—farming

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This measure contains a number of provisions to protect the long-term value and possible uses of farmland.

First, the measure requires that the land be made available for concurrent agricultural activities. This dual use of the agricultural lands—which may include the growing of some crops or grazing of livestock—provides double value from land that is likely currently unused. Further, energy generation can improve the viability of land for agriculture by providing infrastructure and subsidizing land costs for complementary agricultural uses, particularly through the requirement in SD1 that land be made available for agriculture at a lease rate that is 50% or less of the market value. Revenue from the solar operations can help make farming operations pencil out for the entire agricultural operation, benefitting agriculture for our state.

Second, SB 2658 requires that the solar facilities be removed at the end of their operation. Specifically, “the solar energy facilities shall be decommissioned and removed within twelve months of the conclusion of operation....” This ensures that the farmland can be later used for other agricultural purposes at the end of the solar facilities operations. Since solar farms have a relatively small footprint (when compared to housing or industrial development), the use of the land for a solar farm is really a form of land banking where the land is essentially protected for later use.

Third, this policy enables solar projects (with co-existing ag operations) to proceed without seeking a change in zoning. The land remains as agriculture and will remain similarly protected at the end of the solar facilities operations.

Finally, SB 2658 only relates to agricultural lands with LSB classifications of B & C—it does not include class A lands, the most productive and valuable farmlands.

Blue Planet believes that SB 2658 is an appropriate approach to support both energy and food sustainability. The legislature previously found that allowing solar energy facilities within the agricultural district furthers and is consistent with the purposes, standards, and criteria of uses within agricultural lands, and that renewable energy facilities increase both the State's energy self-sufficiency and food security. Many of the LSB class B & C agricultural lands currently are not being farmed. Because of the requirements in this measure, SB 2658 will likely increase the acreage of ag lands that are actively being farmed or ranched, while providing timely access to harvest the low-cost, indigenous, renewable solar energy to power our islands.

Mahalo for the opportunity to testify.

**From:** [Luann Casey](#)  
**To:** [WTLTestimony](#)  
**Subject:** \*\*\*\*\*SPAM\*\*\*\*\* In Support of Senate Bill 2658 SD1  
**Date:** Monday, February 17, 2014 6:34:14 PM

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Senator Malama Solomon, Senate Committee on Water and Land  
Senate Committee on Water and Land  
Hawaii State Legislature  
State Capitol  
415 S. Beretania Street  
Honolulu, HI 96813

TESTIMONY **IN SUPPORT** OF SENATE BILL 2658 SD1 – RELATING TO SOLAR ENERGY

Dear Chair Solomon and members of the Senate Committee on Water and Land,

We own and operate Tin Roof Ranch, an environmentally-friendly, organic, and sustainable farm located on the North Shore of Oahu in beautiful Haleiwa.

Tin Roof Ranch produces organic, free range chickens and eggs and other organic produce for purchase at local farmers' market.

We also raise sheep and lambs that we sell to local butchers, stores and restaurants. Demand for lamb and sheep products is so high we cannot keep up with the requests and many times we have to turn down offers to buy our lamb and sheep products.

We support S.B. 2658 SD1 because it will provide an incentive for large agricultural landowners to open up more land on Oahu for sheep farming. The solar energy operation could also help to subsidize segments of the sheep farming operation including lease rent, fencing and water production making farming more cost-effective for the farmer.

Sheep farming needs large tracts of land to be successful because sheep forage in herds within blocks of pasture and then are moved through cross fencing to other sections of the land to allow for regrowth of grass.

Because we pride ourselves on running a farm that utilizes sustainable practices, we also like the idea that our sheep operations would coexist with renewable energy and our sheep could help with grass maintenance for the solar panels.

We respectfully request that you approve S.B. 2658 SD1 as a show of support for renewable energy and sheep farming.

Aloha,  
Luann Casey and Gary Gunder  
Tin Roof Ranch  
Haleiwa, Hawaii