
A BILL FOR AN ACT

RELATING TO SOLAR ENERGY.

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

1 SECTION 1. The legislature finds that increasing local
2 renewable energy production can greatly benefit Hawaii's
3 economy, energy sustainability, and the environment, while
4 supporting local agriculture and improving food security.

5 The legislature finds that Hawaii is dangerously dependent
6 on imported fossil fuel, which accounted for more than ninety
7 per cent of the State's energy consumption in 2011, the latest
8 year for which comprehensive data is available. In 2012, Hawaii
9 imported approximately forty-five million barrels of petroleum
10 fuels, spending approximately \$5,000,000,000 or seven per cent
11 of the State's gross domestic product. Having previously
12 established a renewable portfolio standard of forty per cent
13 renewable energy by the year 2030, the legislature finds that
14 while some progress has been made, significantly more renewable
15 energy capacity must be brought online to achieve that goal.

16 The legislature further finds that utility scale solar
17 energy facilities can generate clean energy at significantly
18 lower cost and with less environmental impact than conventional



1 generation. As an example, a one hundred megawatt solar energy
2 facility could save residents \$300,000,000 in electricity costs
3 over twenty years compared to the utility's current avoided
4 cost, while also eliminating the need to import and burn three
5 hundred million gallons of petroleum and the consequent emission
6 of 3,400,000 tons of carbon dioxide into the atmosphere.

7 The legislature finds that the productive use of
8 agricultural land is important for local food production and
9 that utility scale energy projects on agricultural land can
10 enhance a property's agricultural productivity. Energy
11 generation can improve the viability of land for agriculture by
12 providing infrastructure and subsidizing land costs for
13 complementary agricultural uses. Wind energy facilities are
14 permitted within agricultural districts with soil classified by
15 the land study bureau's detailed land classification as overall
16 (master) productivity rating class A, B, C, D, or E, and
17 existing wind projects have supported concurrent agricultural
18 uses such as grazing of livestock.

19 The legislature previously found that allowing solar energy
20 facilities within the agricultural district furthers and is
21 consistent with the purposes, standards, and criteria of uses
22 within agricultural lands, and that renewable energy facilities



1 increase both the State's energy self-sufficiency and food
2 security.

3 The purpose of this Act is to enable the complementary uses
4 of utility scale solar energy generation and local food
5 production on agricultural land with soil classified by the land
6 study bureau's detailed land classification as overall (master)
7 productivity rating class B or C.

8 SECTION 2. Section 205-2, Hawaii Revised Statutes, is
9 amended by amending subsection (d) to read as follows:

10 "(d) Agricultural districts shall include:

11 (1) Activities or uses as characterized by the cultivation
12 of crops, crops for bioenergy, orchards, forage, and
13 forestry;

14 (2) Farming activities or uses related to animal husbandry
15 and game and fish propagation;

16 (3) Aquaculture, which means the production of aquatic
17 plant and animal life within ponds and other bodies of
18 water;

19 (4) Wind generated energy production for public, private,
20 and commercial use;



- 1 (5) Biofuel production, as described in section
2 205-4.5(a)(16), for public, private, and commercial
3 use;
- 4 (6) Solar energy facilities; provided that:
- 5 (A) This paragraph shall apply only to land with soil
6 classified by the land study bureau's detailed
7 land classification as overall (master)
8 productivity rating class B, C, D, or E; and
- 9 (B) Solar energy facilities placed within land with
10 soil classified as overall productivity rating
11 class B or C shall not occupy more than ten per
12 cent of the acreage of the parcel, or twenty
13 acres of land, whichever is lesser[+], unless a
14 special use permit is granted pursuant to section
15 205-6 and the area occupied by the solar energy
16 facilities is also made available for compatible
17 agricultural activities at a lease rate that is
18 at least fifty per cent below the fair market
19 rent for comparable properties; provided further
20 that the solar energy facilities shall be
21 decommissioned and removed within twelve months
22 of the conclusion of operation.



1 For the purposes of this paragraph, "agricultural
2 activities" means the activities described in
3 paragraphs (1) through (3);

4 (7) Bona fide agricultural services and uses that support
5 the agricultural activities of the fee or leasehold
6 owner of the property and accessory to any of the
7 above activities, regardless of whether conducted on
8 the same premises as the agricultural activities to
9 which they are accessory, including farm dwellings as
10 defined in section 205-4.5(a)(4), employee housing,
11 farm buildings, mills, storage facilities, processing
12 facilities, photovoltaic, biogas, and other small-
13 scale renewable energy systems producing energy solely
14 for use in the agricultural activities of the fee or
15 leasehold owner of the property, agricultural-energy
16 facilities as defined in section 205-4.5(a)(17),
17 vehicle and equipment storage areas, and plantation
18 community subdivisions as defined in section
19 205-4.5(a)(12);

20 (8) Wind machines and wind farms;

21 (9) Small-scale meteorological, air quality, noise, and
22 other scientific and environmental data collection and



1 monitoring facilities occupying less than one-half
2 acre of land; provided that these facilities shall not
3 be used as or equipped for use as living quarters or
4 dwellings;

5 (10) Agricultural parks;

6 (11) Agricultural tourism conducted on a working farm, or a
7 farming operation as defined in section 165-2, for the
8 enjoyment, education, or involvement of visitors;
9 provided that the agricultural tourism activity is
10 accessory and secondary to the principal agricultural
11 use and does not interfere with surrounding farm
12 operations; and provided further that this paragraph
13 shall apply only to a county that has adopted
14 ordinances regulating agricultural tourism under
15 section 205-5;

16 (12) Agricultural tourism activities, including overnight
17 accommodations of twenty-one days or less, for any one
18 stay within a county; provided that this paragraph
19 shall apply only to a county that includes at least
20 three islands and has adopted ordinances regulating
21 agricultural tourism activities pursuant to section
22 205-5; provided further that the agricultural tourism



1 activities coexist with a bona fide agricultural
2 activity. For the purposes of this paragraph, "bona
3 fide agricultural activity" means a farming operation
4 as defined in section 165-2;

5 (13) Open area recreational facilities;

6 [†] (14) [†] Geothermal resources exploration and geothermal
7 resources development, as defined under section 182-1;
8 and

9 [†] (15) [†] Agricultural-based commercial operations, including:

10 (A) A roadside stand that is not an enclosed
11 structure, owned and operated by a producer for
12 the display and sale of agricultural products
13 grown in Hawaii and value-added products that
14 were produced using agricultural products grown
15 in Hawaii;

16 (B) Retail activities in an enclosed structure owned
17 and operated by a producer for the display and
18 sale of agricultural products grown in Hawaii,
19 value-added products that were produced using
20 agricultural products grown in Hawaii, logo items
21 related to the producer's agricultural
22 operations, and other food items; and



1 (C) A retail food establishment owned and operated by
2 a producer and permitted under [~~title 11,~~]
3 chapter 12 of the rules of the department of
4 health that prepares and serves food at retail
5 using products grown in Hawaii and value-added
6 products that were produced using agricultural
7 products grown in Hawaii.

8 The owner of an agricultural-based commercial
9 operation shall certify, upon request of an officer or
10 agent charged with enforcement of this chapter under
11 section 205-12, that the agricultural products
12 displayed or sold by the operation meet the
13 requirements of this paragraph.

14 Agricultural districts shall not include golf courses and golf
15 driving ranges, except as provided in section 205-4.5(d).

16 Agricultural districts include areas that are not used for, or
17 that are not suited to, agricultural and ancillary activities by
18 reason of topography, soils, and other related characteristics."

19 SECTION 3. Section 205-4.5, Hawaii Revised Statutes, is
20 amended by amending subsection (a) to read as follows:

21 "(a) Within the agricultural district, all lands with soil
22 classified by the land study bureau's detailed land



1 classification as overall (master) productivity rating class A
2 or B shall be restricted to the following permitted uses:

3 (1) Cultivation of crops, including crops for bioenergy,
4 flowers, vegetables, foliage, fruits, forage, and
5 timber;

6 (2) Game and fish propagation;

7 (3) Raising of livestock, including poultry, bees, fish,
8 or other animal or aquatic life that are propagated
9 for economic or personal use;

10 (4) Farm dwellings, employee housing, farm buildings, or
11 activities or uses related to farming and animal
12 husbandry. "Farm dwelling", as used in this
13 paragraph, means a single-family dwelling located on
14 and used in connection with a farm, including clusters
15 of single-family farm dwellings permitted within
16 agricultural parks developed by the State, or where
17 agricultural activity provides income to the family
18 occupying the dwelling;

19 (5) Public institutions and buildings that are necessary
20 for agricultural practices;

21 (6) Public and private open area types of recreational
22 uses, including day camps, picnic grounds, parks, and



- 1 riding stables, but not including dragstrips,
2 airports, drive-in theaters, golf courses, golf
3 driving ranges, country clubs, and overnight camps;
- 4 (7) Public, private, and quasi-public utility lines and
5 roadways, transformer stations, communications
6 equipment buildings, solid waste transfer stations,
7 major water storage tanks, and appurtenant small
8 buildings such as booster pumping stations, but not
9 including offices or yards for equipment, material,
10 vehicle storage, repair or maintenance, treatment
11 plants, corporation yards, or other similar
12 structures;
- 13 (8) Retention, restoration, rehabilitation, or improvement
14 of buildings or sites of historic or scenic interest;
- 15 (9) Agricultural-based commercial operations as described
16 in section [‡]205-2(d)(15)[‡];
- 17 (10) Buildings and uses, including mills, storage, and
18 processing facilities, maintenance facilities,
19 photovoltaic, biogas, and other small-scale renewable
20 energy systems producing energy solely for use in the
21 agricultural activities of the fee or leasehold owner
22 of the property, and vehicle and equipment storage



1 areas that are normally considered directly accessory
2 to the above-mentioned uses and are permitted under
3 section 205-2(d);

4 (11) Agricultural parks;

5 (12) Plantation community subdivisions, which as used in
6 this chapter means an established subdivision or
7 cluster of employee housing, community buildings, and
8 agricultural support buildings on land currently or
9 formerly owned, leased, or operated by a sugar or
10 pineapple plantation; provided that the existing
11 structures may be used or rehabilitated for use, and
12 new employee housing and agricultural support
13 buildings may be allowed on land within the
14 subdivision as follows:

15 (A) The employee housing is occupied by employees or
16 former employees of the plantation who have a
17 property interest in the land;

18 (B) The employee housing units not owned by their
19 occupants shall be rented or leased at affordable
20 rates for agricultural workers; or



1 (C) The agricultural support buildings shall be
2 rented or leased to agricultural business
3 operators or agricultural support services;

4 (13) Agricultural tourism conducted on a working farm, or a
5 farming operation as defined in section 165-2, for the
6 enjoyment, education, or involvement of visitors;
7 provided that the agricultural tourism activity is
8 accessory and secondary to the principal agricultural
9 use and does not interfere with surrounding farm
10 operations; and provided further that this paragraph
11 shall apply only to a county that has adopted
12 ordinances regulating agricultural tourism under
13 section 205-5;

14 (14) Agricultural tourism activities, including overnight
15 accommodations of twenty-one days or less, for any one
16 stay within a county; provided that this paragraph
17 shall apply only to a county that includes at least
18 three islands and has adopted ordinances regulating
19 agricultural tourism activities pursuant to section
20 205-5; provided further that the agricultural tourism
21 activities coexist with a bona fide agricultural
22 activity. For the purposes of this paragraph, "bona



1 fide agricultural activity" means a farming operation
2 as defined in section 165-2;

3 (15) Wind energy facilities, including the appurtenances
4 associated with the production and transmission of
5 wind generated energy; provided that the wind energy
6 facilities and appurtenances are compatible with
7 agriculture uses and cause minimal adverse impact on
8 agricultural land;

9 (16) Biofuel processing facilities, including the
10 appurtenances associated with the production and
11 refining of biofuels that is normally considered
12 directly accessory and secondary to the growing of the
13 energy feedstock; provided that biofuel processing
14 facilities and appurtenances do not adversely impact
15 agricultural land and other agricultural uses in the
16 vicinity.

17 For the purposes of this paragraph:

18 "Appurtenances" means operational infrastructure
19 of the appropriate type and scale for economic
20 commercial storage and distribution, and other similar
21 handling of feedstock, fuels, and other products of
22 biofuel processing facilities.

1 "Biofuel processing facility" means a facility
2 that produces liquid or gaseous fuels from organic
3 sources such as biomass crops, agricultural residues,
4 and oil crops, including palm, canola, soybean, and
5 waste cooking oils; grease; food wastes; and animal
6 residues and wastes that can be used to generate
7 energy;

8 (17) Agricultural-energy facilities, including
9 appurtenances necessary for an agricultural-energy
10 enterprise; provided that the primary activity of the
11 agricultural-energy enterprise is agricultural
12 activity. To be considered the primary activity of an
13 agricultural-energy enterprise, the total acreage
14 devoted to agricultural activity shall be not less
15 than ninety per cent of the total acreage of the
16 agricultural-energy enterprise. The agricultural-
17 energy facility shall be limited to lands owned,
18 leased, licensed, or operated by the entity conducting
19 the agricultural activity.

20 As used in this paragraph:

21 "Agricultural activity" means any activity
22 described in paragraphs (1) to (3) of this subsection.



1 "Agricultural-energy enterprise" means an
2 enterprise that integrally incorporates an
3 agricultural activity with an agricultural-energy
4 facility.

5 "Agricultural-energy facility" means a facility
6 that generates, stores, or distributes renewable
7 energy as defined in section 269-91 or renewable fuel
8 including electrical or thermal energy or liquid or
9 gaseous fuels from products of agricultural activities
10 from agricultural lands located in the State.

11 "Appurtenances" means operational infrastructure
12 of the appropriate type and scale for the economic
13 commercial generation, storage, distribution, and
14 other similar handling of energy, including equipment,
15 feedstock, fuels, and other products of agricultural-
16 energy facilities;

17 (18) Construction and operation of wireless communication
18 antennas; provided that, for the purposes of this
19 paragraph, "wireless communication antenna" means
20 communications equipment that is either freestanding
21 or placed upon or attached to an already existing
22 structure and that transmits and receives



1 electromagnetic radio signals used in the provision of
2 all types of wireless communications services;
3 provided further that nothing in this paragraph shall
4 be construed to permit the construction of any new
5 structure that is not deemed a permitted use under
6 this subsection;

7 (19) Agricultural education programs conducted on a farming
8 operation as defined in section 165-2, for the
9 education and participation of the general public;
10 provided that the agricultural education programs are
11 accessory and secondary to the principal agricultural
12 use of the parcels or lots on which the agricultural
13 education programs are to occur and do not interfere
14 with surrounding farm operations. For the purposes of
15 this section, "agricultural education programs" means
16 activities or events designed to promote knowledge and
17 understanding of agricultural activities and practices
18 conducted on a farming operation as defined in section
19 165-2;

20 (20) Solar energy facilities [~~that do not occupy more than~~
21 ~~ten per cent of the acreage of the parcel, or twenty~~
22 ~~acres of land, whichever is lesser;~~] for which a



1 special use permit has been granted pursuant to
2 section 205-6; provided that [this]:

3 (A) The area occupied by the solar energy facilities
4 is also made available for compatible
5 agricultural activities at a lease rate that is
6 at least fifty per cent below the fair market
7 rent for comparable properties;

8 (B) The solar energy facilities shall be
9 decommissioned and removed within twelve months
10 of the conclusion of the operation; and

11 (C) This use shall not be permitted on lands with
12 soil classified by the land study bureau's
13 detailed land classification as overall (master)
14 productivity rating class A[+].

15 For the purposes of this paragraph, "agricultural
16 activities" means the activities described in
17 paragraphs (1) to (3); or

18 [+] (21) [+] Geothermal resources exploration and geothermal
19 resources development, as defined under section
20 182-1."



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

3 SECTION 5. This Act shall take effect on January 1, 2030.



Report Title:

Agricultural Lands; Solar Energy

Description:

Allows solar energy facilities on agricultural lands with soil classified as class B or C under a special use permit if the area is also made available for compatible agricultural activities and the facilities are decommissioned and removed within twelve months of the conclusion of operation. Effective January 1, 2030. (HB2203 HD2)

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