
A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY AND FOOD SECURITY.

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

1 PART I

2 SECTION 1. The legislature finds that food insecurity
3 remains a significant challenge for many individuals and
4 families throughout the State. Food insecurity impacts
5 approximately one in six Hawaii residents, including nearly one
6 in four children. In 2022, more than eighty-two thousand
7 children were projected to struggle with hunger, and Hawaii had
8 the second highest projected rate of child food insecurity in
9 the nation.

10 The legislature also finds that the State has committed to
11 increasing the amount of locally grown food to help improve food
12 security and self-sufficiency. The legislature further finds
13 that there are many acres of suitable farmland currently being
14 used solely for renewable energy projects that could
15 simultaneously help support both the State's renewable energy
16 and food security goals.



1 Accordingly, the purpose of this part is to increase food
2 security throughout the State by requiring the Hawaii state
3 energy office, in collaboration with the department of
4 agriculture and department of land and natural resources, to
5 facilitate the private sector's development of renewable energy
6 projects that also support agricultural food production.

7 SECTION 2. Chapter 196, Hawaii Revised Statutes, is
8 amended by adding a new section to be appropriately designated
9 and to read as follows:

10 "§196- State support for achieving local renewable
11 energy development and food security. In collaboration with the
12 department of agriculture and department of land and natural
13 resources, the Hawaii state energy office shall facilitate the
14 private sector's development of renewable energy projects that
15 also support agricultural food production by:

- 16 (1) Identifying and publishing a list of lands hosting
17 renewable energy projects that also have the potential
18 to concurrently support local agricultural food
19 production;
- 20 (2) Developing a program to maximize the agricultural use
21 of lands hosting renewable energy projects; and



1 (3) Working with federal agencies to obtain research,
2 funding, and technical assistance to help the State
3 achieve its local renewable energy and food security
4 goals."

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

7 "(a) Within the agricultural district, all lands with soil
8 classified by the land study bureau's detailed land
9 classification as overall (master) productivity rating class A
10 or B and for solar energy facilities, class B or C, shall be
11 restricted to the following permitted uses:

12 (1) Cultivation of crops, including crops for bioenergy,
13 flowers, vegetables, foliage, fruits, forage, and
14 timber;

15 (2) Game and fish propagation;

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

19 (4) Farm dwellings, employee housing, farm buildings, or
20 activities or uses related to farming and animal
21 husbandry. "Farm dwelling", as used in this



1 paragraph, means a single-family dwelling located on
2 and accessory to a farm, including clusters of single-
3 family farm dwellings permitted within agricultural
4 parks developed by the State, or where agricultural
5 activity provides income to the family occupying the
6 dwelling;

7 (5) Public institutions and buildings that are necessary
8 for agricultural practices;

9 (6) Public and private open area types of recreational
10 uses, including day camps, picnic grounds, parks, and
11 riding stables, but not including dragstrips,
12 airports, drive-in theaters, golf courses, golf
13 driving ranges, country clubs, and overnight camps;

14 (7) Public, private, and quasi-public utility lines and
15 roadways, transformer stations, communications
16 equipment buildings, solid waste transfer stations,
17 major water storage tanks, and appurtenant small
18 buildings such as booster pumping stations, but not
19 including offices or yards for equipment, material,
20 vehicle storage, repair or maintenance, treatment



- 1 plants, corporation yards, or other similar
- 2 structures;
- 3 (8) Retention, restoration, rehabilitation, or improvement
- 4 of buildings or sites of historic or scenic interest;
- 5 (9) Agricultural-based commercial operations as described
- 6 in section 205-2(d)(15);
- 7 (10) Buildings and uses, including mills, storage, and
- 8 processing facilities, maintenance facilities,
- 9 photovoltaic, biogas, and other small-scale renewable
- 10 energy systems producing energy solely for use in the
- 11 agricultural activities of the fee or leasehold owner
- 12 of the property, and vehicle and equipment storage
- 13 areas that are normally considered directly accessory
- 14 to the above-mentioned uses and are permitted under
- 15 section 205-2(d);
- 16 (11) Agricultural parks;
- 17 (12) Plantation community subdivisions, which as used in
- 18 this chapter means an established subdivision or
- 19 cluster of employee housing, community buildings, and
- 20 agricultural support buildings on land currently or
- 21 formerly owned, leased, or operated by a sugar or



1 pineapple plantation; provided that the existing
2 structures may be used or rehabilitated for use, and
3 new employee housing and agricultural support
4 buildings may be allowed on land within the
5 subdivision as follows:

6 (A) The employee housing is occupied by employees or
7 former employees of the plantation who have a
8 property interest in the land;

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

12 (C) The agricultural support buildings shall be
13 rented or leased to agricultural business
14 operators or agricultural support services;

15 (13) Agricultural tourism conducted on a working farm, or a
16 farming operation as defined in section 165-2, for the
17 enjoyment, education, or involvement of visitors;
18 provided that the agricultural tourism activity is
19 accessory and secondary to the principal agricultural
20 use and does not interfere with surrounding farm
21 operations; and provided further that this paragraph



1 shall apply only to a county that has adopted
2 ordinances regulating agricultural tourism under
3 section 205-5;

4 (14) Agricultural tourism activities, including overnight
5 accommodations of twenty-one days or less, for any one
6 stay within a county; provided that this paragraph
7 shall apply only to a county that includes at least
8 three islands and has adopted ordinances regulating
9 agricultural tourism activities pursuant to section
10 205-5; provided further that the agricultural tourism
11 activities coexist with a bona fide agricultural
12 activity. For the purposes of this paragraph, "bona
13 fide agricultural activity" means a farming operation
14 as defined in section 165-2;

15 (15) Wind energy facilities, including the appurtenances
16 associated with the production and transmission of
17 wind generated energy; provided that the wind energy
18 facilities and appurtenances are compatible with
19 agriculture uses and cause minimal adverse impact on
20 agricultural land;



1 (16) Biofuel processing facilities, including the
2 appurtenances associated with the production and
3 refining of biofuels that is normally considered
4 directly accessory and secondary to the growing of the
5 energy feedstock; provided that biofuel processing
6 facilities and appurtenances do not adversely impact
7 agricultural land and other agricultural uses in the
8 vicinity.

9 For the purposes of this paragraph:

10 "Appurtenances" means operational infrastructure
11 of the appropriate type and scale for economic
12 commercial storage and distribution, and other similar
13 handling of feedstock, fuels, and other products of
14 biofuel processing facilities.

15 "Biofuel processing facility" means a facility
16 that produces liquid or gaseous fuels from organic
17 sources such as biomass crops, agricultural residues,
18 and oil crops, including palm, canola, soybean, and
19 waste cooking oils; grease; food wastes; and animal
20 residues and wastes that can be used to generate
21 energy;



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

13 As used in this paragraph:

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

16 "Agricultural-energy enterprise" means an
17 enterprise that integrally incorporates an
18 agricultural activity with an agricultural-energy
19 facility.

20 "Agricultural-energy facility" means a facility
21 that generates, stores, or distributes renewable



1 energy as defined in section 269-91 or renewable fuel
2 including electrical or thermal energy or liquid or
3 gaseous fuels from products of agricultural activities
4 from agricultural lands located in the State.

5 "Appurtenances" means operational infrastructure
6 of the appropriate type and scale for the economic
7 commercial generation, storage, distribution, and
8 other similar handling of energy, including equipment,
9 feedstock, fuels, and other products of agricultural-
10 energy facilities;

11 (18) Construction and operation of wireless communication
12 antennas, including small wireless facilities;
13 provided that, for the purposes of this paragraph,
14 "wireless communication antenna" means communications
15 equipment that is either freestanding or placed upon
16 or attached to an already existing structure and that
17 transmits and receives electromagnetic radio signals
18 used in the provision of all types of wireless
19 communications services; provided further that "small
20 wireless facilities" shall have the same meaning as in
21 section 206N-2; provided further that nothing in this



1 paragraph shall be construed to permit the
2 construction of any new structure that is not deemed a
3 permitted use under this subsection;

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

17 (20) Solar energy facilities that do not occupy more than
18 ten per cent of the acreage of the parcel, or twenty
19 acres of land, whichever is lesser or for which a
20 special use permit is granted pursuant to section
21 205-6; provided that this use shall not be permitted



1 on lands with soil classified by the land study
2 bureau's detailed land classification as overall
3 (master) productivity rating class A;

4 (21) Solar energy facilities on lands with soil classified
5 by the land study bureau's detailed land
6 classification as overall (master) productivity rating
7 B or C for which a special use permit is granted
8 pursuant to section 205-6; provided that:

9 (A) The area [~~occupied by~~] under and adjacent to the
10 solar energy facilities [~~is also made available~~
11 ~~for~~] and appurtenances shall:

12 (i) Be put into compatible agricultural
13 activities by a farm operation that derives
14 revenue from the sale of the production from
15 agricultural activities; and

16 (ii) Be made available at a lease rate that is
17 [at least fifty] not less than seventy-five
18 per cent below the fair market rent for
19 comparable properties;

20 (B) Proof of financial security to decommission the
21 facility is provided to the satisfaction of the



1 appropriate county planning commission prior to
2 date of commencement of commercial generation;
3 and

4 (C) Solar energy facilities shall be decommissioned
5 at the owner's expense according to the following
6 requirements:

7 (i) Removal of all equipment related to the
8 solar energy facility within twelve months
9 of the conclusion of operation or useful
10 life; and

11 (ii) Restoration of the disturbed earth to
12 substantially the same physical condition as
13 existed prior to the development of the
14 solar energy facility.

15 For the purposes of this paragraph, "agricultural
16 activities" means the activities described in
17 paragraphs (1) to (3) [7] and "farming operation" as
18 defined in section 165-2;

19 (22) Geothermal resources exploration and geothermal
20 resources development, as defined under section 182-1;



- 1 (23) Hydroelectric facilities, including the appurtenances
2 associated with the production and transmission of
3 hydroelectric energy, subject to section 205-2;
4 provided that the hydroelectric facilities and their
5 appurtenances:
- 6 (A) Shall consist of a small hydropower facility as
7 defined by the United States Department of
8 Energy, including:
- 9 (i) Impoundment facilities using a dam to store
10 water in a reservoir;
- 11 (ii) A diversion or run-of-river facility that
12 channels a portion of a river through a
13 canal or channel; and
- 14 (iii) Pumped storage facilities that store energy
15 by pumping water uphill to a reservoir at
16 higher elevation from a reservoir at a lower
17 elevation to be released to turn a turbine
18 to generate electricity;
- 19 (B) Comply with the state water code, chapter 174C;
- 20 (C) Shall, if over five hundred kilowatts in
21 hydroelectric generating capacity, have the



1 approval of the commission on water resource
2 management, including a new instream flow
3 standard established for any new hydroelectric
4 facility; and

5 (D) Do not impact or impede the use of agricultural
6 land or the availability of surface or ground
7 water for all uses on all parcels that are served
8 by the ground water sources or streams for which
9 hydroelectric facilities are considered; or

10 (24) Notwithstanding any other law to the contrary,
11 composting and co-composting operations; provided that
12 operations that process their own green waste and do
13 not require permits from the department of health
14 shall use the finished composting product only on the
15 operation's own premises to minimize the potential
16 spread of invasive species."

17 SECTION 4. There is appropriated out of the general
18 revenues of the State of Hawaii the sum of \$ or so
19 much thereof as may be necessary for fiscal year 2024-2025 for
20 the Hawaii state energy office to facilitate the private
21 sector's development of renewable energy projects that also



1 support agricultural food production, including the
2 establishment of one full-time equivalent (1.0 FTE) permanent
3 interagency liaison position within the Hawaii state energy
4 office for the purposes of this Act.

5 The sum appropriated shall be expended by the Hawaii state
6 energy office for the purposes of this Act.

7 PART II

8 SECTION 5. The legislature finds that certain corporate
9 farming practices in the early twentieth century resulted in the
10 contamination of soils and groundwater, adversely affecting land
11 use and human health. Notwithstanding, scientific studies have
12 shown that phytoremediation--a process of using non-food crops
13 to alter and remove contaminants--can help return contaminated
14 lands back to productive agricultural use. In addition, non-
15 food crops used for phytoremediation can be used for biofuel
16 production until the land is suitable again for agriculture,
17 providing a separate benefit that also furthers the State's
18 renewable energy goals.

19 Accordingly, the purpose of this part is to establish a
20 phytoremediation biofuels pilot program to determine whether
21 phytoremediation can be implemented as part of a long-term



1 strategy to support the State's local renewable energy and food
2 security goals.

3 SECTION 6. (a) There is established within the Hawaii
4 state energy office a three-year phytoremediation biofuels pilot
5 program. The Hawaii state energy office shall collaborate with
6 the department of agriculture and department of land and natural
7 resources to create a pilot program that shall:

- 8 (1) Identify suitable phytoremediation crops that can be
9 used as biofuel feedstocks;
- 10 (2) Identify contaminated agricultural lands that are
11 suitable for phytoremediation; and
- 12 (3) Implement the planting of one or more of the
13 identified crops in selected contaminated agricultural
14 land areas for the purpose of phytoremediation.

15 (b) The Hawaii state energy office shall submit to the
16 governor and legislature a report no later than twenty days
17 prior to the convening of the regular session of 2027. The
18 report shall describe the overall effectiveness of the pilot
19 program and shall include a cost-benefit analysis and
20 recommendation as to the feasibility of pursuing



1 phytoremediation as part of a long-term strategy to support the
2 State's local renewable energy and food security goals.

3 SECTION 7. There is appropriated out of the general
4 revenues of the State of Hawaii the sum of \$ or so
5 much thereof as may be necessary for fiscal year 2024-2025 to
6 establish and fund the phytoremediation biofuels pilot program
7 established pursuant to this Act.

8 The sum appropriated shall be expended by the Hawaii state
9 energy office for the purposes of this Act.

10 PART III

11 SECTION 8. In accordance with section 9 of article VII of
12 the Constitution of the State of Hawaii and sections 37-91 and
13 37-93, Hawaii Revised Statutes, the legislature has determined
14 that the appropriations contained in this Act will cause the
15 state general fund expenditure ceiling for fiscal year 2024-2025
16 to be exceeded by \$, or per cent. The reasons
17 for exceeding the general fund expenditure ceiling are that the
18 appropriations made in this Act are necessary to serve the
19 public interest and to meet the needs addressed by this Act.

20 SECTION 9. Statutory material to be repealed is bracketed
21 and stricken. New statutory material is underscored.



1 SECTION 10. This Act shall take effect on January 1, 2060.



Report Title:

HSEO; DOA; DLNR; Renewable Energy Development and Food Security; Phytoremediation Biofuels Pilot Program; Report; Expenditure Ceiling; Appropriations

Description:

Requires the Hawaii State Energy Office, in collaboration with the Department of Agriculture and Department of Land and Natural Resources, to facilitate the private sector's development of renewable energy projects that also support agricultural food production. Makes various amendments to the requirements of solar energy facilities on lands with certain soil classifications. Establishes within the Hawaii State Energy Office a three-year Phytoremediation Biofuels Pilot Program to be conducted by the Hawaii State Energy Office in collaboration with the Department of Agriculture and Department of Land and Natural Resources and requires a report to the Governor and Legislature. Declares that the general fund expenditure ceiling is exceeded. Makes appropriations and establishes an Interagency Liaison position within the Hawaii State Energy Office. Takes effect 1/1/2060. (SD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

