
A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

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

1 SECTION 1. Section 226-10, Hawaii Revised Statutes, is
2 amended by amending subsection (b) to read as follows:

3 "(b) To achieve the potential growth and innovative
4 activity objective, it shall be the policy of [~~this~~] the State
5 to:

6 (1) Facilitate investment and employment growth in
7 economic activities that have the potential to expand
8 and diversify Hawaii's economy, including but not
9 limited to diversified agriculture, aquaculture,
10 renewable energy development, creative media, health
11 care, and science and technology-based sectors;

12 (2) Facilitate investment in innovative activity that may
13 pose risks or be less labor-intensive than other
14 traditional business activity, but, if successful,
15 will generate revenue in Hawaii through the export of
16 services or products or substitution of imported
17 services or products;



- 1 (3) Encourage entrepreneurship in innovative activity by
2 academic researchers and instructors who may not have
3 the background, skill, or initial inclination to
4 commercially exploit their discoveries or
5 achievements;
- 6 (4) Recognize that innovative activity is not exclusively
7 dependent upon individuals with advanced formal
8 education, but that many self-taught, motivated
9 individuals are able, willing, sufficiently
10 knowledgeable, and equipped with the attitude
11 necessary to undertake innovative activity;
- 12 (5) Increase the opportunities for investors in innovative
13 activity and talent engaged in innovative activity to
14 personally meet and interact at cultural, art,
15 entertainment, culinary, athletic, or visitor-oriented
16 events without a business focus;
- 17 (6) Expand Hawaii's capacity to attract and service
18 international programs, technologies, and activities
19 that generate employment for Hawaii's people;
- 20 (7) Enhance and promote Hawaii's role as a center for
21 international relations[τ]; trade[τ]; finance[τ];



- 1 services[~~τ~~]; technology[~~τ~~]; education[~~τ~~];
2 demonstration projects for innovations in
3 sustainability, renewable energy innovation and
4 intellectual property; culture[~~τ~~]; and the arts;
- 5 (8) Accelerate research and development of new
6 energy-related industries based on wind, solar, ocean,
7 underground resources, [~~and~~] solid waste[~~τ~~], and firm
8 renewable energy;
- 9 (9) Promote Hawaii's geographic, environmental, social,
10 and technological advantages to attract new or
11 innovative economic activities into the State;
- 12 (10) Provide public incentives and encourage private
13 initiative to attract new or innovative industries
14 that best support Hawaii's social, economic, physical,
15 and environmental objectives;
- 16 (11) Increase research and the development of ocean-related
17 economic activities such as mining, food production,
18 energy production, and scientific research;
- 19 (12) Develop, promote, and support research and educational
20 and training programs that will enhance Hawaii's



- 1 ability to attract and develop economic activities of
- 2 benefit to Hawaii;
- 3 (13) Foster a broader public recognition and understanding
- 4 of the potential benefits of new or innovative
- 5 growth-oriented industry in Hawaii;
- 6 (14) Encourage the development and implementation of joint
- 7 federal and state initiatives to attract federal
- 8 programs and projects that will support Hawaii's
- 9 social, economic, physical, and environmental
- 10 objectives;
- 11 (15) Increase research and development of businesses and
- 12 services in the telecommunications and information
- 13 industries;
- 14 (16) Foster the research and development of nonfossil fuel
- 15 and energy efficient modes of transportation; and
- 16 (17) Recognize and promote health care and health care
- 17 information technology as growth industries."

18 SECTION 2. Section 226-18, Hawaii Revised Statutes, is
 19 amended to read as follows:

20 "**§226-18 Objectives and policies for facility systems--**
 21 **energy.** (a) Planning for the State's facility systems with



1 regard to energy shall be directed toward the achievement of the
2 following objectives, giving due consideration to all:

3 (1) Dependable, efficient, and economical statewide energy
4 systems capable of supporting the needs of the people;

5 (2) Increased energy security and self-sufficiency through
6 the reduction and ultimate elimination of Hawaii's
7 dependence on imported fuels for electrical generation
8 and ground transportation;

9 (3) Greater diversification of energy generation and
10 reduction of reliance on imports in the face of
11 threats to Hawaii's energy supplies and systems;

12 (4) Reduction, avoidance, or sequestration of greenhouse
13 gas emissions from energy supply and use~~[+and]~~,
14 including but not limited to ensuring that all new
15 utility scale electricity generation projects shall be
16 renewable;

17 (5) Utility models that make the social and financial
18 interests of Hawaii's utility customers a priority~~[-]~~;

19 (6) Balancing of grid resources to achieve a reliable,
20 affordable, equitable, resilient, low greenhouse gas
21 emissions energy system that reduces reliance on



1 imports and to achieve the one hundred per cent
2 renewable portfolio standard and zero-emissions clean
3 economy target;
4 (7) Reliable replacement of fossil fuel generation with
5 grid resources that meet the objectives of paragraph
6 (6);
7 (8) Achieving the appropriate balance of firm renewable
8 energy generation with other grid resources,
9 recognizing that firm renewable generation is a grid
10 resource that can contribute to achieving the
11 objectives of paragraph (6), and recognizing that the
12 appropriate balance of grid resources will vary by
13 county and should be considered by the appropriate
14 state energy planning processes; and
15 (9) Fossil fuel generation shall be prohibited after
16 December 31, 2045, except in cases of emergencies or
17 natural disaster, situations where unavailability of
18 renewable fuels would require limited use of fossil
19 fuels to maintain grid reliability, and events or
20 circumstances that are outside of an electric utility
21 company's reasonable control.



1 (b) To achieve the energy objectives, it shall be the
2 policy of [~~this~~] the State to ensure the short- and long-term
3 provision of adequate, reasonably priced, reliable, equitable,
4 and dependable energy services to accommodate demand[~~-~~] and
5 reduce reliance on imports, and that electrical energy services
6 shall be renewable.

7 (c) To further achieve the energy objectives, it shall be
8 the policy of [~~this~~] the State to:

9 (1) Support research and development as well as promote
10 the use of a diversified portfolio of renewable energy
11 sources;

12 (2) Ensure that the combination of energy supplies and
13 energy-saving systems is sufficient to support the
14 demands of growth;

15 (3) Base decisions of least-cost supply-side and
16 demand-side energy resource options on a comparison of
17 their total costs and benefits when a least-cost is
18 determined by a reasonably comprehensive,
19 quantitative, and qualitative accounting of their
20 long-term, direct and indirect economic,
21 environmental, social, cultural, and public health



- 1 costs and benefits[~~+~~], including accounting for the
2 benefits of renewable energy that reduces the
3 consumption of fossil fuels;
- 4 (4) Promote all cost-effective conservation of power and
5 fuel supplies through measures, including:
- 6 (A) Development of cost-effective demand-side
7 management programs;
- 8 (B) Education;
- 9 (C) Adoption of energy-efficient practices and
10 technologies; and
- 11 (D) Increasing energy efficiency and decreasing
12 energy use in public infrastructure;
- 13 (5) Ensure, to the extent that new supply-side resources
14 are needed, that the development or expansion of
15 energy systems uses the least-cost energy supply
16 ~~[option]~~ grid resources options that are not fossil
17 fuels, and maximizes efficient technologies;
- 18 (6) Support research, development, demonstration, and use
19 of energy efficiency, load management, and other
20 demand-side management programs, practices, and
21 technologies;



- 1 (7) Promote alternate fuels and transportation energy
2 efficiency;
- 3 (8) Support actions that reduce, avoid, or sequester
4 greenhouse gases in utility, transportation, and
5 industrial sector applications;
- 6 (9) Support actions that reduce, avoid, or sequester
7 Hawaii's greenhouse gas emissions through agriculture
8 and forestry initiatives;
- 9 (10) Provide priority handling and processing for all state
10 and county permits required for renewable energy
11 projects;
- 12 (11) Ensure that liquefied natural gas is used only as a
13 cost-effective transitional, limited-term replacement
14 of petroleum for electricity generation and does not
15 impede the development and use of other cost-effective
16 renewable energy sources; [~~and~~]
- 17 (12) Promote the development of indigenous geothermal
18 energy resources that are located on public trust land
19 as an affordable and reliable source of firm power for
20 Hawaii[~~;~~];



1 (13) Ensure that the development or expansion of energy
2 systems recognizes and emphasizes the need to balance
3 grid resources to achieve a reliable, affordable,
4 equitable, renewable, low greenhouse gas emissions
5 energy system that reduces reliance on imports; and

6 (14) Ensure that the development or expansion of energy
7 systems recognizes and emphasizes the need to ensure
8 grid reliability by balancing grid resources to
9 achieve a reliable, affordable, equitable, low
10 greenhouse gas emissions energy system that reduces
11 reliance on imports.

12 (d) As used in this section:

13 "Firm renewable energy" means renewable energy that is
14 available on the demand of the energy system operator consistent
15 with the terms of an approved power purchase agreement.

16 "Grid resources" means all demand- and supply-side options
17 to meet grid requirements, including but not limited to firm and
18 intermittent energy generation, energy storage, demand-response,
19 efficiency, and customer-sited resources.



1 "Intermittent renewable generation" means the generation of
2 renewable energy that does not qualify as firm renewable
3 energy."

4 SECTION 3. Section 226-103, Hawaii Revised Statutes, is
5 amended as follows:

6 1. By amending subsection (a) to read:

7 "(a) Priority guidelines to stimulate economic growth and
8 encourage business expansion and development to provide needed
9 jobs for Hawaii's people and achieve a stable and diversified
10 economy:

11 (1) Seek a variety of means to increase the availability
12 of investment capital for new and expanding
13 enterprises.

14 (A) Encourage investments [~~which:~~] that:

15 (i) Reflect long-term commitments to the State;

16 (ii) Rely on economic linkages within the local
17 economy;

18 (iii) Diversify the economy;

19 (iv) Reinvest in the local economy;

20 (v) Are sensitive to community needs and
21 priorities; and



- 1 (vi) Demonstrate a commitment to provide
2 management opportunities to Hawaii
3 residents; and
- 4 (B) Encourage investments in innovative activities
5 that have a nexus to the State, such as:
- 6 (i) Present or former residents acting as
7 entrepreneurs or principals;
- 8 (ii) Academic support from an institution of
9 higher education in Hawaii;
- 10 (iii) Investment interest from Hawaii residents;
- 11 (iv) Resources unique to Hawaii that are required
12 for innovative activity; and
- 13 (v) Complementary or supportive industries or
14 government programs or projects.
- 15 (2) Encourage the expansion of technological research to
16 assist industry development and support the
17 development and commercialization of technological
18 advancements.
- 19 (3) Improve the quality, accessibility, and range of
20 services provided by government to business, including



- 1 data and reference services and assistance in
2 complying with governmental regulations.
- 3 (4) Seek to ensure that state business tax and labor laws
4 and administrative policies are equitable, rational,
5 and predictable.
- 6 (5) Streamline the processes for building and development
7 permit and review and telecommunication infrastructure
8 installation approval and eliminate or consolidate
9 other burdensome or duplicative governmental
10 requirements imposed on business, where scientific
11 evidence indicates that public health, safety, and
12 welfare would not be adversely affected.
- 13 (6) Encourage the formation of cooperatives and other
14 favorable marketing or distribution arrangements at
15 the regional or local level to assist Hawaii's
16 small-scale producers, manufacturers, and
17 distributors.
- 18 (7) Continue to seek legislation to protect Hawaii from
19 transportation interruptions between Hawaii and the
20 continental United States.



- 1 (8) Provide public incentives and encourage private
2 initiative to develop and attract industries [~~which~~]
3 that promise long-term growth potentials and [~~which~~]
4 that have the following characteristics:
- 5 (A) An industry that can take advantage of Hawaii's
6 unique location and available physical and human
7 resources.
- 8 (B) A clean industry that would have minimal adverse
9 effects on Hawaii's environment.
- 10 (C) An industry that is willing to hire and train
11 Hawaii's people to meet the industry's labor
12 needs at all levels of employment.
- 13 (D) An industry that would provide reasonable income
14 and steady employment.
- 15 (9) Support and encourage, through educational and
16 technical assistance programs and other means,
17 expanded opportunities for employee ownership and
18 participation in Hawaii business.
- 19 (10) Enhance the quality of Hawaii's labor force and
20 develop and maintain career opportunities for Hawaii's
21 people through the following actions:



- 1 (A) Expand vocational training in diversified
2 agriculture, aquaculture, information industry,
3 renewable energy and related industries, and
4 other areas where growth is desired and feasible.
- 5 (B) Encourage more effective career counseling and
6 guidance in high schools and post-secondary
7 institutions to inform students of present and
8 future career opportunities.
- 9 (C) Allocate educational resources to career areas
10 where high employment is expected and where
11 growth of new industries is desired.
- 12 (D) Promote career opportunities in all industries
13 for Hawaii's people by encouraging firms doing
14 business in the State to hire residents.
- 15 (E) Promote greater public and private sector
16 cooperation in determining industrial training
17 needs and in developing relevant curricula and
18 on-the-job training opportunities.
- 19 (F) Provide retraining programs and other support
20 services to assist entry of displaced workers
21 into alternative employment."



- 1 2. By amending subsection (f) to read:
- 2 "(f) Priority guidelines for energy use and development:
- 3 (1) Encourage the development, demonstration, and
- 4 commercialization of renewable energy sources.
- 5 (2) Initiate, maintain, and improve energy conservation
- 6 programs aimed at reducing energy waste and increasing
- 7 public awareness of the need to conserve energy.
- 8 (3) Provide incentives to encourage the use of energy
- 9 conserving technology in residential, industrial, and
- 10 other buildings.
- 11 (4) Encourage the development and use of energy conserving
- 12 and cost-efficient transportation systems.
- 13 (5) Provide incentives to encourage the development of
- 14 grid resources to replace fossil fuel generation."

15 SECTION 4. Statutory material to be repealed is bracketed

16 and stricken. New statutory material is underscored.

17 SECTION 5. This Act shall take effect on July 1, 2050.



Report Title:

Office of Planning and Sustainable Development; Hawaii State Planning Act; Renewable Energy; Grid Resources Balancing

Description:

Amends the Hawaii State Planning Act to give consideration to reducing reliance on energy imports, ensuring that all new utility scale electricity generation projects are renewable, balancing of grid resources including firm renewable energy resources, reliable replacement of fossil fuel generation with balanced grid resources, prohibiting fossil fuel generation after 12/31/2045 except in certain circumstances, and expanding vocational training in renewable energy and related industries. Takes effect 7/1/2050. (HD1)

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

