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# A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

1           SECTION 1. In January 2008, the United States Department  
2 of Energy and the State of Hawaii signed a Memorandum of  
3 Understanding to strengthen cooperation to implement clean  
4 energy technologies that will increase energy-efficiency and  
5 maximize use of the State's vast and abundant renewable  
6 resources. The legislature finds that the establishment of this  
7 long-term partnership, called the Hawaii Clean Energy  
8 Initiative, is designed to transform Hawaii's energy system into  
9 one that uses renewable energy and energy-efficient technologies  
10 for a significant portion of its energy needs. The partnership  
11 aims to put Hawaii on a path to supply seventy per cent of its  
12 energy needs using clean energy by 2030, which can significantly  
13 reduce Hawaii's current crude oil consumption. This type of  
14 clean energy transformation will help to stabilize and  
15 strengthen Hawaii's economy by reducing its dependency on  
16 imported fossil fuels and protect its environment by sharply  
17 reducing greenhouse gas emissions.



1           The United States Department of Energy, as a leader in  
2 clean energy technologies, is working with the State of Hawaii  
3 to further the potential of its natural resources, including  
4 wind, sun, and bioenergy resources, and engage experts in clean  
5 energy technology development to help Hawaii launch projects in  
6 conjunction with public and private sector partners that target  
7 opportunities and address critical needs for Hawaii's transition  
8 to a clean energy economy, including:

- 9           (1) Designing cost-effective approaches for the exclusive  
10           use of renewable energy on smaller islands;
- 11           (2) Designing systems to improve the stability of electric  
12           grids operating with variable generating sources, such  
13           as wind power plants on the islands of Hawaii and  
14           Maui;
- 15           (3) Minimizing energy use while maximizing energy-  
16           efficiency and renewable energy technologies at new  
17           large military housing developments;
- 18           (4) Expanding Hawaii's capability to use locally-grown  
19           crops and byproducts for producing fuel and  
20           electricity; and



1 (5) Assisting in the development of comprehensive energy  
2 regulatory and policy frameworks for promoting clean  
3 energy technology use.

4 Similar to the establishment of a renewable energy  
5 portfolio standard, an energy-efficiency portfolio standard sets  
6 a target of electricity-use reduction to be achieved in  
7 incremental stages, as end-use energy-efficiency programs can  
8 make a significant and cost-effective contribution to achieving  
9 the goals and objectives of the Hawaii Clean Energy Initiative.

10 The purpose of this Act is to maximize cost-effective  
11 energy-efficiency programs and technologies to achieve  
12 electricity-use reductions to the maximum extent feasible by  
13 establishing an energy-efficiency portfolio standard, making  
14 public buildings more energy-efficient, disclosing a property's  
15 energy consumption at the time of sale, and establishing an  
16 energy efficiency revolving loan fund, to achieve electricity  
17 use reductions to the maximum extent feasible.

18 SECTION 2. The Hawaii Revised Statutes is amended by  
19 adding three new sections to be appropriately designated and to  
20 read as follows:

21 "§ - Energy-efficiency portfolio standards. (a) The  
22 public utilities commission shall establish energy-efficiency



1 portfolio standards that will maximize cost-effective energy-  
2 efficiency programs and technologies.

3 (b) The energy-efficiency portfolio standards shall be  
4 designed to achieve four thousand three hundred gigawatt hours  
5 of electricity use reductions statewide by 2030; provided that  
6 the commission shall establish interim goals for electricity use  
7 reduction to be achieved by 2015, 2020, and 2025 and may also  
8 adjust the 2030 standard by rule or order to maximize cost-  
9 effective energy-efficiency programs and technologies.

10 (c) The commission shall establish incentives and  
11 penalties based on performance in achieving the energy-  
12 efficiency portfolio standards by rule or order.

13 (d) The public utilities commission shall evaluate the  
14 energy-efficiency portfolio standard every five years, beginning  
15 in 2013, and may revise the standard, based on the best  
16 information available at the time, to determine if the energy-  
17 efficiency portfolio standard established by this section  
18 remains achievable. The commission shall report its findings  
19 and revisions to the energy-efficiency portfolio standard, based  
20 on its own studies and other information, to the legislature no  
21 later than twenty days before the convening of the regular  
22 session of 2014, and every five years thereafter.



1       (e) Beginning in 2015, electric energy savings brought  
2 about by the use of renewable displacement or off-set  
3 technologies, including solar water heating and seawater air  
4 conditioning district cooling systems, shall count toward this  
5 standard.

6       (f) An electric utility company and its electric utility  
7 affiliates may aggregate their efficiency portfolios to achieve  
8 the energy-efficiency portfolio standard.

9       § - Public buildings; benchmarks; retro-commissioning  
10 guidelines; energy savings performance contracts. (a) By  
11 December 31, 2010, each state department with responsibilities  
12 for the design and construction of public buildings and  
13 facilities shall benchmark every existing public building that  
14 is either larger than five thousand square feet or uses more  
15 than eight thousand kilowatt-hours of electricity or energy per  
16 year and shall use the benchmark as a basis for determining the  
17 State's investment in improving the efficiency of its own  
18 building stock. Benchmarking shall be conducted using the  
19 ENERGY STAR portfolio management tool or an equivalent tool.  
20 The energy resources coordinator shall provide training to  
21 affected departments on the ENERGY STAR portfolio management  
22 tool or an equivalent tool.



1        (b) Public buildings shall be retro-commissioned not less  
2 than every five years. The energy resources coordinator shall  
3 establish retro-commissioning guidelines by January 1, 2010.

4        (c) Departments may enter into energy savings performance  
5 contracts with a third party to cover the capital costs of  
6 energy-efficiency measures and distributed generation as long as  
7 the terms of the energy savings performance contracts conform to  
8 the benchmark standard. The comptroller may review and exempt  
9 specific projects as appropriate to take into account cost-  
10 effectiveness.

11        Energy savings performance contracts shall be executed  
12 according to state guidelines issued by the comptroller, and the  
13 contracts shall be reviewed by the comptroller. To expedite  
14 energy saving performance contracting for public buildings, the  
15 department of accounting and general services shall develop a  
16 master energy savings performance contracts agreement that any  
17 department may use to contract with an energy savings  
18 performance contracts provider for energy-efficiency and  
19 renewable energy services.

20        (d) Existing public buildings that undergo a major  
21 retrofit or renovation shall make investments in efficiency;



1 provided that the cost of the measures shall be recouped within  
2 twenty years.

3 § - Energy-efficiency consumer information in sale or  
4 lease of real property. (a) Prior to the sale or lease of  
5 property, property owners and lessors shall provide utility  
6 bills for the most recent three-month period in which the  
7 property was occupied; provided that if the property has no  
8 utility accounts associated with it, the property owner or  
9 lessor is exempt from meeting this requirement.

10 (b) The energy resources coordinator shall develop  
11 guidelines for format and content to assist the seller or lessor  
12 in providing the information required in subsection (a)."

13 SECTION 3. Chapter 201, Hawaii Revised Statutes, is  
14 amended by adding a new section to read as follows:

15 "§201- Building energy efficiency revolving loan fund.

16 (a) There is established in the state treasury the building  
17 energy efficiency revolving loan fund which shall be  
18 administered by the department, and into which shall be  
19 deposited:

20 (1) Funds from federal, state, county, private, or other  
21 funding sources;



1       (2) Moneys received as repayment of loans and interest  
2           payments; and

3       (3) Any fees collected by the department under this  
4           section.

5       (b) Moneys in the building energy efficiency cleanup  
6       revolving fund shall be used to provide low or no interest loans  
7       or other authorized financial assistance to eligible public,  
8       private, and nonprofit borrowers for making energy efficiency  
9       improvements in buildings. Moneys from the fund may be used to  
10       cover administrative and legal costs of fund management and  
11       management associated with individual loans, to include  
12       personnel, services, technical assistance, data collection and  
13       reporting, materials, equipment, and travel for the purposes of  
14       this section.

15       (c) Appropriations or authorizations from the fund shall  
16       be expended by the department. The department may contract with  
17       other public or private entities for the provision of all or a  
18       portion of the services necessary for the administration and  
19       implementation of the loan fund program. The department may set  
20       fees or charges for fund management and technical site  
21       assistance provided under this section. The department may





1 adopt rules pursuant to chapter 91 to carry out the purposes of  
2 this section.

3 (d) All interest earned on the deposit or investment of  
4 the moneys in the fund shall become a part of the fund.

5 (e) The department may establish subaccounts within the  
6 fund as necessary."

7 SECTION 4. Section 269-123, Hawaii Revised Statutes, is  
8 amended by amending subsection (b) to read as follows:

9 "(b) The public benefits fee administrator's duties and  
10 responsibilities shall be established by the public utilities  
11 commission by rule or order, and may include:

12 (1) Identifying, developing, administering, promoting,  
13 implementing, and evaluating programs, methods, and  
14 technologies that support energy-efficiency and  
15 demand-side management programs;

16 (2) Encouraging the continuance or improvement of  
17 efficiencies made in the production, delivery, and use  
18 of energy-efficiency and demand-side management  
19 programs and services;

20 (3) Using the energy-efficiency expertise and capabilities  
21 that have developed or may develop in the State and  
22 consulting with state agency experts;

- 1 (4) Promoting program initiatives, incentives, and market  
2 strategies that address the needs of persons facing  
3 the most significant barriers to participation;
- 4 (5) Promoting coordinated program delivery, including  
5 coordination with electric public utilities regarding  
6 the delivery of low-income home energy assistance,  
7 other demand-side management or energy-efficiency  
8 programs, and any utility programs;
- 9 (6) Consideration of innovative approaches to delivering  
10 demand-side management and energy-efficiency services,  
11 including strategies to encourage third-party  
12 financing and customer contributions to the cost of  
13 demand-side management and energy-efficiency services;  
14 [and]
- 15 (7) Conducting energy-efficiency assessments to identify  
16 current energy use patterns in the state and areas of  
17 greatest potential for energy savings. The  
18 assessments shall include end-use research regarding  
19 Hawaii's homes, businesses, and other utility  
20 customers. The energy-efficiency assessments shall  
21 help the public benefits fee administrator to identify  
22 and recommend energy-efficiency programs to target.



1       The energy-efficiency assessments shall be forwarded  
2       to the legislature, the public utilities commission,  
3       the energy resources coordinator, and the electric  
4       public utilities;

5       (8) Establishing aggressive energy-efficiency plans with  
6       the provision that efficiency shall be the first  
7       loaded resource in all cases where it is cost-  
8       effective. For the purposes of this paragraph, "cost-  
9       effective" means that all resources are deemed to  
10       effectively cover the incremental cost of investment  
11       within fifteen years, when measured against average  
12       electricity rates for residential, small commercial,  
13       large commercial, industrial, and agricultural  
14       customers;

15       (9) Establishing on-bill financing programs to promote and  
16       encourage the consumer acquisition of more efficient  
17       major electrical appliances, solar water heaters, and  
18       photovoltaic systems;

19       ~~(7)~~ (10) Submitting, to the public utilities commission  
20       for review and approval, a multi-year budget and  
21       planning cycle that promotes program improvement,



1 program stability, and maturation of programs and  
2 delivery resources[-];

3 (11) Conducting building code analysis and review and  
4 developing and implementing recommendations including:

5 (A) Instituting procedures for, and measurement and  
6 verification of, buildings and homes constructed  
7 under the building code to assess building code  
8 compliance and building performance to provide  
9 information on necessary changes to the building  
10 code and in the delivery of building code  
11 training;

12 (B) Conducting analyses of the energy intensity of  
13 residential and commercial buildings built  
14 pursuant to the building code compared to  
15 baseline homes;

16 (C) Surveying builders to determine costs associated  
17 with meeting building code requirements for  
18 residential and commercial buildings;

19 (D) Delivering the results of these analyses and  
20 surveys to the public utilities commission  
21 annually, the results of which shall include  
22 recommendations for building code updates to be



- 1           provided to the state building code council as  
2           petitions for rules changes;
- 3           (E) Assessing the feasibility of implementing a  
4           net-zero energy building code for residential and  
5           commercial construction;
- 6           (F) Recommending technical amendments to the  
7           International Energy Conservation Code to take  
8           advantage of Hawaii's climate;
- 9           (G) Evaluating the costs and benefits of requiring:
- 10           (i) Advanced meters and energy "dashboard"  
11           technologies that improve the ability of the  
12           occupant to monitor and improve building  
13           performance;
- 14           (ii) Cool roof standards;
- 15           (iii) Roofs of new homes to be solar-ready;
- 16           (iv) All homes built or rehabilitated in the  
17           state to have and present an energy label;  
18           and
- 19           (v) Any other measures that will improve the  
20           ability of the homeowner to better  
21           understand and manage the homeowner's energy  
22           use;



- 1                   and
- 2                   (H) Establishing building energy-efficiency
- 3                   commissioning guidelines appropriate for building
- 4                   practices, including recommending enforcement
- 5                   mechanisms in the state by January 1, 2010;
- 6                   (12) Establishing programs and information to educate
- 7                   financial institutions, mortgage brokers, and
- 8                   consumers on the economics of energy-efficient
- 9                   properties, including savings over the life-cycle of
- 10                   the properties; and
- 11                   (13) Processing variances from solar water heater
- 12                   installations required under chapter 196."

13                   SECTION 5. Statutory material to be repealed is bracketed

14 and stricken. New statutory material is underscored.

15                   SECTION 6. This Act shall take effect on July 1, 2020.

S.B. NO. 1173  
S.D. 2  
H.D. 3

**Report Title:**

Energy-Efficiency

**Description:**

Establishes requirements, standards, guidelines, and incentives for energy-efficiency initiatives and programs. (SB1173 HD3)

SB1173 HD3 HMS 2009-3660

