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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. The legislature finds that energy efficiency is  
2 the most cost-effective way to reduce carbon emissions  
3 associated with electricity generation and consumption. The  
4 legislature further finds that maximizing efficiency and thereby  
5 reducing demand for power generation is a necessary component of  
6 reaching the State's clean energy and decarbonization goals.  
7 Energy used to power buildings accounts for more than fifty per  
8 cent of the electricity consumed in the State, yet the State has  
9 not undertaken improvements for increased efficiency in many of  
10 its own facilities, forgoing millions of dollars in potential  
11 savings.

12           The legislature also finds that the coronavirus disease  
13 2019 (COVID-19) pandemic has devastated Hawaii's economy. With  
14 one of the State's primary areas of focus being economic  
15 recovery and resilience in the wake of COVID-19, the legislature  
16 recognizes the importance of elevating Hawaii's growing clean  
17 energy industry, which can diversify the economy, create new



1 jobs, contribute to workforce development, and help the State  
2 meet critical energy goals. Likewise, with the budget deficit  
3 the State is currently facing, the legislature believes it is  
4 imperative for all state agencies to control their energy usage  
5 and lower their utility bills. Energy efficiency is the first  
6 and foremost cost-effective step in smart energy management and  
7 should be prioritized by every state agency. The State should  
8 also seize this opportunity to create new jobs in the energy  
9 sector at a time when they are sorely needed.

10 It is also important for the State to lead by example when  
11 it comes to energy efficiency. One way to do this is to  
12 construct energy efficient buildings, which could maximize the  
13 savings of taxpayer dollars that would otherwise be spent on  
14 electric, water, and other utility bills.

15 Act 122, Session Laws of Hawaii 2019 (Act 122), states that  
16 "efforts taken by universities, public schools, executive  
17 departments, and other government entities have already begun to  
18 save taxpayers money by reducing the government's electricity  
19 costs. However, those efforts lack statewide coordination,  
20 preventing economies of scale to maximize savings. While some  
21 departments have made substantial progress, others have yet to



1 commence meaningful activities." Additionally, Act 122 further  
2 states, regarding the Hawaii state energy office, that  
3 "[t]asking a single agency to plan for energy savings measures  
4 across all public facilities and assist government entities  
5 already working to reduce energy costs is a necessary step to  
6 maximize taxpayer savings" and "[t]he legislature's intent is to  
7 establish in statute an energy agency . . . that will assist  
8 both the public and private sectors in achieving the State's  
9 energy goals." Consistent with this, the Hawaii state energy  
10 office is working with state agencies to assess opportunities to  
11 reach a target goal of a twenty-five per cent reduction by 2025,  
12 from a 2005 baseline year, through the energy efficiency in  
13 state building projects.

14 The purpose of this Act is to:

- 15 (1) Require state facilities, with the exception of  
16 smaller facilities and facilities within the stadium  
17 development district, to implement cost-effective  
18 energy efficiency measures;
- 19 (2) Direct the Hawaii state energy office to collect all  
20 state-owned facilities' electric utility bills and



- 1 energy usage data and make this data publicly  
2 available;
- 3 (3) Direct the office of planning and sustainable  
4 development to collect all state-owned facilities'  
5 water utility bills and water usage data and make this  
6 data publicly available;
- 7 (4) Establish a goal for the State to achieve at least a  
8 twenty-five per cent reduction in the electricity  
9 consumption of state facilities;
- 10 (5) Provide that certain agencies that perform energy  
11 efficiency retrofitting may continue to receive budget  
12 appropriations for energy expenditures; and
- 13 (6) Beginning July 1, 2023, require, where feasible and  
14 cost-effective, the design of all new state building  
15 construction to maximize energy generation, water  
16 efficiency, energy efficiency, and energy generation  
17 potential, and to use building materials, such as  
18 post-industrial carbon dioxide mineralized concrete  
19 and clumping bamboo, that reduce the carbon footprint  
20 of the project.



1 SECTION 2. Chapter 196, Hawaii Revised Statutes, is  
2 amended by adding three new sections to part II to be  
3 appropriately designated and to read as follows:

4 "§196- Energy efficiency implementation for state  
5 facilities. (a) State facilities shall implement  
6 cost-effective energy efficiency measures or enter into  
7 performance contracts for the implementation of cost-effective  
8 energy efficiency measures as follows:

9 (1) Beginning on January 1, 2028, for all state facilities  
10 that have not implemented section 36-41 since 2010;  
11 and

12 (2) Beginning on January 1, 2030, for all other state  
13 facilities;

14 provided that the simple payback period shall not exceed the  
15 performance period of the contract; provided further that  
16 nothing in this subsection shall prohibit facilities from  
17 implementing energy efficiency measures sooner than indicated  
18 under paragraphs (1) or (2).

19 (b) State facilities having an area under ten thousand  
20 square feet and facilities within the stadium development



1 district shall be exempt from the requirements of subsection  
2 (a).

3 (c) The department of accounting and general services may  
4 opt out of the requirements of this subsection if a facility is  
5 scheduled for demolition within five years.

6 (d) For purposes of this section:

7 "Cost-effective energy efficiency measure" means any energy  
8 efficiency measure where the cost of the energy efficiency  
9 measure shall be equal to or less than the estimated savings  
10 over a period of twenty years or the life of the installed  
11 components, whichever is less.

12 "Energy efficiency measure" means any energy services,  
13 projects, and equipment, including but not limited to building  
14 or facility energy conservation enhancing, demand management, or  
15 demand response retrofits, which may include energy saved  
16 offsite by water or other utility enhancing retrofits, to  
17 improve the energy efficiency or reduce energy costs of the  
18 facility.

19 "Facility" shall have the same meaning as that term is  
20 defined in section 36-41(d).



1        §196-        Electric utility bills and energy usage data;  
2        state-owned facilities.    The Hawaii state energy office shall  
3        collect all electric utility bills and energy usage data for  
4        state-owned facilities monthly and shall make this information  
5        available in a publicly accessible format.

6        §196-        Reduction of electricity consumption of state  
7        facilities.    It shall be the goal of the State to achieve at  
8        least a twenty-five per cent reduction in electricity  
9        consumption of state-owned facilities, using 2005 as the  
10       baseline year."

11       SECTION 3.    Section 36-41, Hawaii Revised Statutes, is  
12       amended by amending subsection (a) to read as follows:

13              "(a)    All agencies shall evaluate and identify for  
14       implementation energy efficiency retrofitting through  
15       performance contracting.    Agencies that perform energy  
16       efficiency retrofitting may continue to receive budget  
17       appropriations for energy expenditures at an amount that [~~shall~~  
18       ~~not fall below the pre retrofitting energy budget but shall rise~~  
19       ~~in proportion to any increase in the agency's overall budget for~~  
20       ~~the duration of the performance contract or project payment~~  
21       ~~term.]    accounts for any costs, including maintenance, contracts,~~



1 or debt service, for the implementation and management of energy  
2 efficiency measures."

3 SECTION 4. Section 107-27, Hawaii Revised Statutes, is  
4 amended to read as follows:

5 "§107-27 Design of state buildings. (a) No later than  
6 one year after the adoption of codes or standards pursuant to  
7 section 107-24(c), the design of all state building construction  
8 shall be in compliance with the Hawaii state building codes,  
9 except state building construction shall be allowed to be  
10 exempted from:

- 11 (1) County codes that have not adopted the Hawaii state  
12 building codes;
- 13 (2) Any county code amendments that are inconsistent with  
14 the minimum performance objectives of the Hawaii state  
15 building codes or the objectives enumerated in this  
16 part; or
- 17 (3) Any county code amendments that are contrary to code  
18 amendments adopted by another county.

19 (b) Exemptions shall include county ordinances allowing  
20 the exercise of indigenous Hawaiian architecture adopted in  
21 accordance with section 46-1.55.



1 (c) The State shall consider hurricane resistant criteria  
2 when designing and constructing new public schools for the  
3 capability of providing shelter refuge.

4 (d) Beginning July 1, 2023, where feasible and  
5 cost-effective, the design of all new state building  
6 construction shall:

7 (1) Maximize energy and water efficiency measures;

8 (2) Maximize energy generation potential; and

9 (3) Use building materials, such as post-industrial carbon  
10 dioxide mineralized concrete and clumping bamboo,  
11 which reduce the carbon footprint of the project."

12 SECTION 5. Section 225M-2, Hawaii Revised Statutes, is  
13 amended by amending subsection (b) to read as follows:

14 "(b) The office of planning and sustainable development  
15 shall gather, analyze, and provide information to the governor,  
16 the legislature, and state and county agencies to assist in the  
17 overall analysis and formulation of state policies and  
18 strategies to provide central direction and cohesion in the  
19 allocation of resources and effectuation of state activities and  
20 programs and effectively address current or emerging issues and



1 opportunities. More specifically, the office shall engage in  
2 the following activities:

3 (1) State comprehensive planning and program coordination.  
4 Formulating and articulating comprehensive statewide  
5 goals, objectives, policies, and priorities, and  
6 coordinating their implementation through the  
7 statewide planning system established in part II of  
8 chapter 226;

9 (2) Strategic planning. Identifying and analyzing  
10 significant issues, problems, and opportunities  
11 confronting the State, and formulating strategies and  
12 alternative courses of action in response to  
13 identified problems and opportunities by:

14 (A) Providing in-depth policy research, analysis, and  
15 recommendations on existing or potential areas of  
16 critical state concern;

17 (B) Examining and evaluating the effectiveness of  
18 state programs in implementing state policies and  
19 priorities;



- 1 (C) Monitoring current social, economic, and physical  
2 conditions and trends through surveys,  
3 environmental scanning, and other techniques; and
- 4 (D) Developing, in collaboration with affected public  
5 or private agencies and organizations,  
6 implementation plans and schedules and, where  
7 appropriate, assisting in the mobilization of  
8 resources to meet identified needs;
- 9 (3) Planning coordination and cooperation. Facilitating  
10 coordinated and cooperative planning and policy  
11 development and implementation activities among state  
12 agencies and between the state, county, and federal  
13 governments, by:
- 14 (A) Reviewing, assessing, and coordinating, as  
15 necessary, major plans, programs, projects, and  
16 regulatory activities existing or proposed by  
17 state and county agencies;
- 18 (B) Formulating mechanisms to simplify, streamline,  
19 or coordinate interagency development and  
20 regulatory processes; and



- 1 (C) Recognizing the presence of federal defense and
- 2 security forces and agencies in the State as
- 3 important state concerns;
- 4 (4) Statewide planning and geographic information system.
- 5 Collecting, integrating, analyzing, maintaining, and
- 6 disseminating various forms of data and information,
- 7 including geospatial data and information, to further
- 8 effective state planning, policy analysis and
- 9 development, and delivery of government services by:
- 10 (A) Collecting, assembling, organizing, evaluating,
- 11 and classifying existing geospatial and
- 12 non-geospatial data and performing necessary
- 13 basic research, conversions, and integration to
- 14 provide a common database for governmental
- 15 planning and geospatial analyses by state
- 16 agencies;
- 17 (B) Planning, coordinating, and maintaining a
- 18 comprehensive, shared statewide planning and
- 19 geographic information system and associated
- 20 geospatial database. The office shall be the
- 21 lead agency responsible for coordinating the



1 maintenance of the multi-agency, statewide  
2 planning and geographic information system and  
3 coordinating, collecting, integrating, and  
4 disseminating geospatial data sets that are used  
5 to support a variety of state agency applications  
6 and other spatial data analyses to enhance  
7 decision-making. The office shall promote and  
8 encourage free and open data sharing among and  
9 between all government agencies. To ensure the  
10 maintenance of a comprehensive, accurate,  
11 up-to-date geospatial data resource that can be  
12 drawn upon for decision-making related to  
13 essential public policy issues such as land use  
14 planning, resource management, homeland security,  
15 and the overall health, safety, and well-being of  
16 Hawaii's citizens, and to avoid redundant data  
17 development efforts, state agencies shall provide  
18 to the shared system either their respective  
19 geospatial databases or, at a minimum, especially  
20 in cases of secure or confidential data sets that  
21 cannot be shared or must be restricted, metadata



- 1           describing existing geospatial data. In cases  
2           where agencies provide restricted data, the  
3           office of planning and sustainable development  
4           shall ensure the security of that data; ~~and~~
- 5           (C) Maintaining a centralized depository of state and  
6           national planning references; and
- 7           (D) Collecting all water utility bills and water  
8           usage data for state-owned facilities monthly and  
9           making this information available in a publicly  
10           accessible format;
- 11          (5) Land use planning. Developing and presenting the  
12          position of the State in all boundary change petitions  
13          and proceedings before the land use commission, and  
14          assisting state agencies in the development and  
15          submittal of petitions for land use district boundary  
16          amendments, and conducting reviews of the  
17          classification and districting of all lands in the  
18          State, as specified in chapter 205;
- 19          (6) Coastal and ocean policy management, and sea level  
20          rise adaptation coordination. Carrying out the lead  
21          agency responsibilities for the Hawaii coastal zone



1 management program, as specified in chapter 205A.

2 Also:

3 (A) Developing and maintaining an ocean and coastal  
4 resources information, planning, and management  
5 system;

6 (B) Further developing and coordinating  
7 implementation of the ocean resources management  
8 plan;

9 (C) Formulating ocean policies with respect to the  
10 exclusive economic zone, coral reefs, and  
11 national marine sanctuaries; and

12 (D) Coordinating sea level rise adaptation with state  
13 agencies having operational responsibilities over  
14 state facilities to identify existing and planned  
15 facilities, including critical infrastructure,  
16 that are vulnerable to sea level rise, flooding  
17 impacts, and natural hazards;

18 (7) Regional planning and studies. Conducting plans and  
19 studies to determine:



- 1 (A) The capability of various regions within the  
2 State to support projected increases in both  
3 resident populations and visitors;
- 4 (B) The potential physical, social, economic, and  
5 environmental impact on these regions resulting  
6 from increases in both resident populations and  
7 visitors;
- 8 (C) The maximum annual visitor carrying capacity for  
9 the State by region, county, and island; and
- 10 (D) The appropriate guidance and management of  
11 selected regions and areas of statewide critical  
12 concern.

13 The studies in subparagraphs (A) to (C) shall be  
14 conducted at appropriate intervals, but not less than  
15 once every five years;

- 16 (8) Regional, national, and international planning.  
17 Participating in and ensuring that state plans,  
18 policies, and objectives are consistent, to the extent  
19 practicable, with regional, national, and  
20 international planning efforts;



1           (9) Climate adaptation and sustainability planning and  
2           coordination. Conducting plans and studies and  
3           preparing reports as follows:

4           (A) Develop, monitor, and evaluate strategic climate  
5           adaptation plans and actionable policy  
6           recommendations for the State and counties  
7           addressing expected statewide climate change  
8           impacts identified under chapter 225P and  
9           sections 226-108 and 226-109; and

10          (B) Provide planning and policy guidance and  
11          assistance to state and county agencies regarding  
12          climate change and sustainability;

13          (10) Smart growth and transit-oriented development. Acting  
14          as the lead agency to coordinate and advance smart  
15          growth and transit-oriented development planning  
16          within the State as follows:

17          (A) Identify transit-oriented development  
18          opportunities shared between state and county  
19          agencies, including relevant initiatives such as  
20          the department of health's healthy Hawaii



- 1 initiative and the Hawaii clean energy  
2 initiative;
- 3 (B) Refine the definition of "transit-oriented  
4 development" in the context of Hawaii, while  
5 recognizing the potential for smart growth  
6 development patterns in all locations;
- 7 (C) Clarify state goals for transit-oriented  
8 development and smart growth that support the  
9 principles of the Hawaii State Planning Act by  
10 preserving non-urbanized land, improving worker  
11 access to jobs, and reducing fuel consumption;
- 12 (D) Target transit-oriented development areas for  
13 significant increase in affordable housing and  
14 rental units;
- 15 (E) Conduct outreach to state agencies to help  
16 educate state employees about the ways they can  
17 support and benefit from transit-oriented  
18 development and the State's smart growth goals;
- 19 (F) Publicize coordinated state efforts that support  
20 smart growth, walkable neighborhoods, and  
21 transit-oriented development;



- 1 (G) Review state land use decision-making processes
- 2 to identify ways to make transit-oriented
- 3 development a higher priority and facilitate
- 4 better and more proactive leadership in creating
- 5 walkable communities and employment districts,
- 6 even if transit will only be provided at a later
- 7 date; and
- 8 (H) Approve all state agencies' development plans for
- 9 parcels along the rail transit corridor. For the
- 10 purposes of this subparagraph, "development
- 11 plans" means conceptual land use plans that
- 12 identify the location and planned uses within a
- 13 defined area; and
- 14 (11) Environmental review. Performing duties set forth
- 15 under chapter 343, serving the governor in an advisory
- 16 capacity on all matters relating to environmental
- 17 review, and having such powers delegated by the
- 18 governor as are necessary to coordinate and, when
- 19 requested by the governor, direct all state
- 20 governmental agencies in matters concerning
- 21 environmental quality control, including:



1           (A) Advising and assisting private industries,  
2                           government department and agencies, and other  
3                           persons on the requirements of chapter 343; and  
4           (B) Conducting public education programs on  
5                           environmental quality control;  
6           provided that the office shall adopt rules in  
7           accordance with chapter 91 to implement this  
8           paragraph."

9           SECTION 6. There is appropriated out of the general  
10 revenues of the State of Hawaii the sum of \$                    or so  
11 much thereof as may be necessary for fiscal year 2022-2023 to  
12 fund           full-time equivalent (           .0 FTE) positions at the  
13 office of planning and sustainable development to collect and  
14 make available all water utility bills and water usage data for  
15 state-owned facilities monthly pursuant to section 5 of this  
16 Act.

17           The sum appropriated shall be expended by the office of  
18 planning and sustainable development for the purposes of section  
19 5 of this Act.



1 SECTION 7. This Act does not affect rights and duties that  
2 matured, penalties that were incurred, and proceedings that were  
3 begun before its effective date.

4 SECTION 8. Statutory material to be repealed is bracketed  
5 and stricken. New statutory material is underscored.

6 SECTION 9. This Act shall take effect upon its approval.



**Report Title:**

Energy Efficiency; State Facilities; Building Design; Energy Cost and Usage Report; Hawaii State Energy Office; Office of Planning and Sustainable Development; Appropriation

**Description:**

Requires and establishes deadlines for state facilities, except smaller facilities and facilities within the stadium development district, to implement cost-effective energy efficiency measures. Allows the Department of Accounting and General Services to opt out of the cost-effective energy efficiency measures if a facility will be demolished within five years. Directs the Hawaii State Energy Office to collect electric utility bills and energy usage data for state-owned buildings and to make the data publicly available. Directs the Office of Planning and Sustainable Development to collect water utility bills and water usage data for state-owned buildings and to make the data publicly available. Establishes a goal for the State to achieve at least a twenty-five per cent reduction in the electricity consumption of state facilities. Provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures. Beginning 7/1/2023, requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project. Appropriates funds. (SD1)

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