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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 PART I

2 SECTION 1. (a) There is established within the department  
3 of transportation a building energy efficiency demonstration  
4 project for building energy efficiency designs that assist the  
5 State in reaching net zero emissions.

6 (b) The department of transportation shall identify one  
7 state land site and construct a new state building or remodel an  
8 existing state facility to create a facility or building with  
9 net zero emissions. The department of transportation shall  
10 follow the United States Department of Energy's description of a  
11 Zero Energy Ready Home, which is a home with a renewable energy  
12 system that can offset all or most of its annual energy  
13 consumption. The department of transportation shall work with  
14 the department of business, economic development, and tourism to  
15 identify a site.

16 (c) In developing, constructing, and maintaining the new  
17 state building following the guidelines established under



1 subsection (b), the department of transportation with the  
2 department of business, economic development, and tourism shall  
3 conduct an analysis of the cost and benefits of adopting the  
4 building energy efficiency designs incorporated into the  
5 building or facility, including the fiscal consequences to the  
6 State and the related cost savings from energy efficiency. The  
7 department shall include payback periods of investment, taking  
8 into account the cost savings of the program. Building energy  
9 efficiency designs shall include, but not be limited to, the  
10 following when applicable:

- 11 (1) Lighter colored roofing material;
- 12 (2) Windows that use dynamic or electro chromatic glazing  
13 with the ability to change performance properties;
- 14 (3) Sensor-based lighting control systems;
- 15 (4) High efficiency ventilation or air conditioning units;
- 16 (5) Incorporation of natural light;
- 17 (6) Renewable energy systems; and
- 18 (7) Waste to energy conversion systems.

19 (d) The department of transportation shall submit a report  
20 to the legislature of the analysis conducted pursuant to



1 subsection (c) no later than twenty days prior to the convening  
2 of the regular session of 2020.

3 SECTION 2. There is appropriated out of the  
4 special fund the sum of \$ or so much thereof as may be  
5 necessary for fiscal year 2017-2018 and the same sum or so much  
6 thereof as may be necessary for fiscal year 2018-2019 to  
7 implement the building energy efficiency demonstration project.

8 The sums appropriated shall be expended by the department  
9 of transportation for the purposes of this Act.

10 PART II

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

13 "§107-27 Design of state buildings. (a) No later than  
14 one year after the adoption of rules under this chapter, the  
15 design of all state building construction shall be in compliance  
16 with the Hawaii state building codes, except state building  
17 construction shall be allowed to be exempted from:

18 (1) County codes that have not adopted the Hawaii state  
19 building codes;

20 (2) Any county code amendments that are inconsistent with  
21 the minimum performance objectives of the Hawaii state



1 building codes or the objectives enumerated in this  
2 part; or

3 (3) Any county code amendments that are contrary to code  
4 amendments adopted by another county.

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

8 (c) For state buildings constructed or renovated on or  
9 after July 1, 2020, the design of state buildings shall  
10 encourage the use of natural light and incorporate the use of  
11 glass that uses a dynamic glazing system where appropriate.

12 As used in this subsection, "dynamic glazing system" means  
13 a glazing system that has the ability to reversibly change its  
14 performance properties."

15 PART III

16 SECTION 4. New statutory material is underscored.

17 SECTION 5. This Act shall take effect on July 1, 2050;  
18 provided that section 1 shall be repealed on June 30, 2020; and  
19 provided further that section 3 of this Act shall take effect on  
20 July 1, 2020.



**Report Title:**

State Building Design; Energy Efficiency; Appropriation

**Description:**

Establishes a demonstration project for building energy efficiency designs within the Department of Transportation. Requires all state buildings built or renovated after July 1, 2020, to incorporate certain energy efficient practices. Appropriates special funds. (HB1508 HD2)

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

