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# A BILL FOR AN ACT

RELATING TO ENERGY RESOURCES.

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

1           SECTION 1. The intent of the legislature is that the  
2 variances provided for in Act 204, Session Laws of Hawaii 2008,  
3 (Act 204) will be rarely, if ever, exercised or granted because  
4 the burden of proof will lie with the applicant to demonstrate  
5 that a solar water heater system, regardless of location or  
6 circumstance, is not cost effective in the context of a thirty-  
7 year mortgage term. This requires the use of realistic  
8 assumptions regarding interest rates, discount rates, inflation  
9 rates, and the expected average cost of electricity by island  
10 over the thirty-year period, regardless of the cost of  
11 electricity, or of oil or other fossil fuels, at a specific  
12 point in time.

13           The legislature finds that it is necessary to clarify the  
14 intent of the variance provision that allows for a demand water  
15 heater device. There is the potential that this provision may  
16 be used to allow a developer/builder, the purchaser of a water



1 heating device, of a single-family dwelling, to circumvent the  
2 policy objectives of Act 204.

3 In its deliberation of Act 204, the legislature found that  
4 the installation of a solar water heater system will only occur  
5 if the developer/builder was able to recover the cost of the  
6 investment from the consumer, who ultimately enjoys the energy  
7 savings. Therefore, a solar water heater mandate was necessary  
8 to ensure that an energy savings could be realized by the  
9 consumer, without which the housing market would be sensitive to  
10 certain price points that do not factor in the cost-  
11 effectiveness of energy efficiency devices that reduce the  
12 overall energy cost of a home to benefit the consumer.

13 The legislature further found that retrofitting a home for  
14 a solar water heater after it was constructed was more costly,  
15 and that such upfront costs, despite incentives such as state  
16 and federal tax credits and utility rebates, were substantial  
17 barriers for the average consumer. The financial barriers can  
18 be addressed, however, by including the installation of a solar  
19 water heater into the purchase price and mortgage of a home,  
20 where the cost of the system may pay for itself immediately.

21 Therefore, the legislature intended for a consumer to have  
22 the option to use gas appliances with the full knowledge that



1 such a system may be more costly and less efficient. To obviate  
2 any attempt to circumvent Act 204, then, the legislature intends  
3 that if the potential variance applicant is not the party who  
4 will ultimately pay for the energy cost consumption, then only  
5 items (1), (2), or (3) of subsection (a) in section 196-6.5,  
6 Hawaii Revised Statutes, should apply.

7 Additionally, the legislature finds that the continuation  
8 of the renewable energy income tax credit needs to remain  
9 available for all homes built before January 1, 2010.

10 The purpose of this Act, therefore, is to clarify the  
11 provisions of Act 204, to carry out the legislature's intent.

12 SECTION 2. Section 196-6.5, Hawaii Revised Statutes, is  
13 amended by amending subsections (a) and (b) to read as follows:

14 "(a) On or after January 1, 2010, no building permit shall  
15 be issued for a new single-family dwelling that does not include  
16 a solar water heater system that meets the standards established  
17 pursuant to section 269-44, unless the energy resources  
18 coordinator approves a variance. A variance application shall  
19 only be [~~approved~~] accepted if submitted by an architect or  
20 mechanical engineer licensed under chapter 464, who attests  
21 that:



- 1 (1) Installation is impracticable due to poor solar  
2 resource;
- 3 (2) Installation is cost-prohibitive based upon a life  
4 cycle cost-benefit analysis that incorporates the  
5 average residential utility bill and the cost of the  
6 new solar water heater system with a life cycle that  
7 does not exceed fifteen years;
- 8 (3) A [~~substitute~~] renewable energy technology system, as  
9 defined in section 235-12.5, is [~~used~~] substituted for  
10 use as the primary energy source for heating water; or
- 11 (4) A demand water heater device approved by Underwriters  
12 Laboratories, Inc., is installed; provided that at  
13 least one other gas appliance is installed in the  
14 dwelling. For the purposes of this paragraph, "demand  
15 water heater" means a gas-tankless instantaneous water  
16 heater that provides hot water only as it is needed.
- 17 (b) A request for a variance shall be submitted to the  
18 energy resources coordinator on an application prescribed by the  
19 energy resources coordinator and shall include[~~7~~] but not be  
20 limited to[~~7~~] a description of the location of the property and  
21 justification for the approval of a variance using the criteria  
22 established in subsection (a). A variance shall be deemed



1 approved if not denied within thirty working days after receipt  
2 of the variance application. The energy resources coordinator  
3 shall publicize:

4 (1) All applications for a variance within seven days  
5 after receipt of the variance application; and

6 (2) The disposition of all applications for a variance  
7 within seven days of the determination of the variance  
8 application."

9 SECTION 3. Section 235-12.5, Hawaii Revised Statutes, is  
10 amended by amending subsection (a) to read as follows:

11 "(a) When the requirements of subsection (c) are met, each  
12 individual or corporate taxpayer that files an individual or  
13 corporate net income tax return for a taxable year may claim a  
14 tax credit under this section against the Hawaii state  
15 individual or corporate net income tax. The tax credit may be  
16 claimed for every eligible renewable energy technology system  
17 that is installed and placed in service in the [~~State~~] state by  
18 a taxpayer during the taxable year. This credit shall be  
19 available for systems installed and placed in service in the  
20 [~~State~~] state after June 30, 2003. The tax credit may be  
21 claimed as follows:

22 (1) Solar thermal energy systems for:



- 1 (A) Single-family residential property for which a
- 2 building permit for a single-family dwelling was
- 3 issued prior to January 1, 2010: thirty-five per
- 4 cent of the actual cost or \$2,250, whichever is
- 5 less;
- 6 (B) Multi-family residential property: thirty-five
- 7 per cent of the actual cost or \$350 per unit,
- 8 whichever is less; and
- 9 (C) Commercial property: thirty-five per cent of the
- 10 actual cost or \$250,000, whichever is less;
- 11 (2) Wind-powered energy systems for:
  - 12 (A) Single-family residential property: twenty per
  - 13 cent of the actual cost or \$1,500, whichever is
  - 14 less[+], unless all or a portion of the system is
  - 15 used to fulfill the substitute renewable energy
  - 16 technology requirement pursuant to section 196-
  - 17 6.5(a)(3), then the credit shall be reduced by
  - 18 twenty per cent of the actual system cost or
  - 19 \$1,500, whichever is less;
  - 20 (B) Multi-family residential property: twenty per
  - 21 cent of the actual cost or \$200 per unit,
  - 22 whichever is less; and



1 (C) Commercial property: twenty per cent of the  
2 actual cost or \$500,000, whichever is less; and

3 (3) Photovoltaic energy systems for:

4 (A) Single-family residential property: thirty-five  
5 per cent of the actual cost or \$5,000, whichever  
6 is less[+], unless all or a portion of the system  
7 is used to fulfill the substitute renewable  
8 energy technology requirement pursuant to section  
9 196-6.5(a)(3), then the credit shall be reduced  
10 by thirty-five per cent of the actual system cost  
11 or \$2,250, whichever is less;

12 (B) Multi-family residential property: thirty-five  
13 per cent of the actual cost or \$350 per unit,  
14 whichever is less; and

15 (C) Commercial property: thirty-five per cent of the  
16 actual cost or \$500,000, whichever is less;

17 provided that multiple owners of a single system shall be  
18 entitled to a single tax credit; and provided further that the  
19 tax credit shall be apportioned between the owners in proportion  
20 to their contribution to the cost of the system.

21 In the case of a partnership, S corporation, estate, or  
22 trust, the tax credit allowable is for every eligible renewable



1 energy technology system that is installed and placed in service  
2 in the [State] state by the entity. The cost upon which the tax  
3 credit is computed shall be determined at the entity level.

4 Distribution and share of credit shall be determined pursuant to  
5 section 235-110.7(a)."

6 SECTION 4. Section 269-44, Hawaii Revised Statutes, is  
7 amended to read as follows:

8 "[~~§~~269-44~~]~~ **Solar water heater system standards.** Not  
9 later than [~~July 1, 2009,~~] \_\_\_\_\_, or as soon as reasonably  
10 practicable, the public utilities commission shall adopt [~~or~~  
11 ~~establish by rule, tariff, or order,~~] standards for solar water  
12 heater systems [~~to include, but not be limited to,~~  
13 ~~specifications for the performance, materials, components,~~  
14 ~~durability, longevity, proper sizing, installation, and quality~~  
15 ~~to promote the objectives of section 269-124.]; provided that  
16 the public utilities commission may contract with the public  
17 benefits fee administrator for the development of standards that  
18 may be adopted by the public utilities commission."~~

19 SECTION 5. Statutory material to be repealed is bracketed  
20 and stricken. New statutory material is underscored.

21 SECTION 6. This Act shall take effect on January 1, 2050,  
22 and shall be retroactive to July 1, 2009.





S.B. NO. 390  
S.D. 2  
H.D. 1

**Report Title:**

Energy Resources; Solar Water Heating

**Description:**

Amends the law mandating solar water heater systems for single-family dwellings by clarifying its application to new dwellings and clarifying variance request procedures and authority.  
Effective 1/1/2050. (SB390 HD1)

