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# A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

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

PART I

SECTION 1. Section 196-6.5, Hawaii Revised Statutes, is amended to read as follows:

"§196-6.5 Solar water heater system required for new single-family residential construction. (a) On or after January 1, 2010, no building permit shall be issued for a new single-family dwelling that does not include a solar water heater system that meets the standards established pursuant to section 269-44, unless the coordinator approves a variance. A variance application shall only be accepted if submitted by an architect or mechanical engineer licensed under chapter 464, who attests that:

- (1) Installation is impracticable due to poor solar resource;
- (2) Installation is cost-prohibitive based upon a life cycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the



1 new solar water heater system with a life cycle that  
2 does not exceed fifteen years;

3 (3) A renewable energy technology system [~~as defined in~~  
4 ~~section 235-12.5,~~] is substituted for use as the  
5 primary energy source for heating water; or

6 (4) A demand water heater device approved by Underwriters  
7 Laboratories, Inc., is installed; provided that at  
8 least one other gas appliance is installed in the  
9 dwelling. For the purposes of this paragraph, "demand  
10 water heater" means a gas-tankless instantaneous water  
11 heater that provides hot water only as it is needed.

12 (b) A request for a variance shall be submitted to the  
13 coordinator on an application prescribed by the coordinator and  
14 shall include a description of the location of the property and  
15 justification for the approval of a variance using the criteria  
16 established in subsection (a). A variance shall be deemed  
17 approved if not denied within thirty working days after receipt  
18 of the variance application. The coordinator shall publicize:

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



1           (2) The disposition of all applications for a variance  
2           within seven days of the determination of the variance  
3           application.

4           (c) The director of business, economic development, and  
5           tourism may adopt rules pursuant to chapter 91 to impose and  
6           collect fees to cover the costs of administering variances under  
7           this section. The fees, if any, shall be deposited into the  
8           energy security special fund established under section 201-12.8.

9           (d) Nothing in this section shall preclude any county from  
10          establishing procedures and standards required to implement this  
11          section.

12          (e) Nothing in this section shall preclude participation  
13          in any utility demand-side management program or public benefits  
14          fee program under part VII of chapter 269.

15          (f) As used in this section "renewable energy technology  
16          system" means a new system that captures and converts a  
17          renewable source of energy, such as solar or wind energy, into:

- 18           (1) A usable source of thermal or mechanical energy;
- 19           (2) Electricity; or
- 20           (3) Fuel."



1 SECTION 2. Section 235-12.5, Hawaii Revised Statutes, is  
2 amended to read as follows:

3 "§235-12.5 [Renewable energy technologies,] Solar energy,  
4 energy storage, wind energy properties; income tax credit. (a)

5 When the requirements of subsection [~~(d)~~] (c) are met, each  
6 individual or corporate taxpayer that files an individual or  
7 corporate net income tax return for a taxable year may claim a  
8 tax credit under this section against the Hawaii state  
9 individual or corporate net income tax. [~~The tax credit may be~~  
10 ~~claimed for every eligible renewable energy technology system~~  
11 ~~that is installed and placed in service in the State by a~~  
12 ~~taxpayer during the taxable year.] The tax credit may be  
13 claimed as follows:~~

14 (1) For each solar energy [~~system,]~~ property that is used  
15 exclusively to heat water and is installed and first  
16 placed in service in the State by a taxpayer during  
17 the taxable year: thirty-five per cent of the [actual  
18 ~~cost or the cap amount determined in subsection (b),~~  
19 ~~whichever is less, or]~~ basis up to the applicable cap  
20 amount, which is determined as follows:



- 1           (A) \$2,250 per solar energy property for single-
- 2           family residential property;
- 3           (B) \$350 per unit per solar energy property for
- 4           multi-family residential property; and
- 5           (C) \$250,000 per solar energy property for commercial
- 6           property;
- 7        (2) For each solar energy property that is used primarily
- 8        to generate electricity and is installed and first
- 9        placed in service in the State by a taxpayer during
- 10       the taxable year:
- 11        (A) Twenty-five per cent of the basis for solar
- 12        energy property first placed in service after
- 13        December 31, 2017, and before January 1, 2021, up
- 14        to the applicable cap amount, which is determined
- 15        as follows:
- 16        (i) \$5,000 per solar energy property for single-
- 17        family residential property; provided that
- 18        if all or a portion of the solar energy
- 19        property is used to fulfill the substitute
- 20        renewable energy technology requirement
- 21        pursuant to section 196-6.5(a)(3), the



1                   credit shall be reduced by twenty-five per  
2                   cent of the basis or \$2,250, whichever is  
3                   less;

4                   (ii) \$350 per unit per solar energy property for  
5                   multi-family residential property; and

6                   (iii) \$500,000 per solar energy property for  
7                   commercial property;

8                   (B) Twenty per cent of the basis for solar energy  
9                   property first placed in service after  
10                   December 31, 2020, and before January 1, 2024, up  
11                   to the applicable cap amount, which is determined  
12                   as follows:

13                   (i) \$5,000 per solar energy property for single-  
14                   family residential property; provided that  
15                   if all or a portion of the solar energy  
16                   property is used to fulfill the substitute  
17                   renewable energy technology requirement  
18                   pursuant to section 196-6.5(a)(3), the  
19                   credit shall be reduced by twenty per cent  
20                   of the basis or \$2,250, whichever is less;



1           (ii) \$350 per unit per solar energy property for  
2                   multi-family residential property; and

3           (iii) \$500,000 per solar energy property for  
4                   commercial property; and

5           (C) Fifteen per cent of the basis for solar energy  
6                   property first placed in service after  
7                   December 31, 2023, up to the applicable cap  
8                   amount, which is determined as follows:

9           (i) \$5,000 per solar energy property for single-  
10                   family residential property; provided that  
11                   if all or a portion of the solar energy  
12                   property is used to fulfill the substitute  
13                   renewable energy technology requirement  
14                   pursuant to section 196-6.5(a)(3), the  
15                   credit shall be reduced by fifteen per cent  
16                   of the basis or \$2,250, whichever is less;

17           (ii) \$350 per unit per solar energy property for  
18                   multi-family residential property; and

19           (iii) \$500,000 per solar energy property for  
20                   commercial property;



1        (3) For each solar energy property that is used primarily  
2        to generate electricity and is installed and first  
3        placed in service in the State by a taxpayer during  
4        the taxable year; provided that the solar energy  
5        property is grid-connected and incorporates an energy  
6        storage property:

7        (A) Twenty-five per cent of the basis for solar  
8        energy property first placed in service after  
9        December 31, 2017, and before January 1, 2021, up  
10       to the applicable cap amount, which is determined  
11       as follows:

12       (i) \$10,000 per solar energy property for  
13       single-family residential property; provided  
14       that if all or a portion of the solar energy  
15       property is used to fulfill the substitute  
16       renewable energy technology requirement  
17       pursuant to section 196-6.5(a)(3), the  
18       credit shall be reduced by twenty-five per  
19       cent of the basis or \$2,250, whichever is  
20       less;





- 1           (C) Fifteen per cent of the basis for solar energy  
2           property first placed in service after  
3           December 31, 2023, up to the applicable cap  
4           amount, which is determined as follows:
- 5           (i) \$10,000 per solar energy property for  
6           single-family residential property; provided  
7           that if all or a portion of the solar energy  
8           property is used to fulfill the substitute  
9           renewable energy technology requirement  
10           pursuant to section 196-6.5(a)(3), the  
11           credit shall be reduced by fifteen per cent  
12           of the basis or \$2,250, whichever is less;
- 13           (ii) \$700 per unit per solar energy property for  
14           multi-family residential property; and
- 15           (iii) \$500,000 per solar energy property for  
16           commercial property;
- 17           (4) For each energy storage property that is installed and  
18           first placed in service in the State by a taxpayer  
19           during the taxable year, if the cost of the energy  
20           storage property is not also included in the basis of  
21           a solar or wind energy property under subsection (a):



- 1           (A) Twenty-five per cent of the basis for energy
- 2                   storage property first placed in service after
- 3                   December 31, 2017, and before January 1, 2021, up
- 4                   to the applicable cap amount, which is determined
- 5                   as follows:
- 6                   (i) \$5,000 per energy storage property for
- 7                           single-family residential property;
- 8                   (ii) \$350 per unit per energy storage property
- 9                           for multi-family residential property; and
- 10                  (iii) \$500,000 per energy storage property for
- 11                           commercial property;
- 12           (B) Twenty per cent of the basis for energy storage
- 13                   property first placed in service after
- 14                   December 31, 2020, and before January 1, 2024, up
- 15                   to the applicable cap amount, which is determined
- 16                   as follows:
- 17                   (i) \$5,000 per energy storage property for
- 18                           single-family residential property;
- 19                   (ii) \$350 per unit per energy storage property
- 20                           for multi-family residential property; and



1            (iii) \$500,000 per energy storage property for  
2                            commercial property; and

3            (C) Fifteen per cent of the basis for energy storage  
4                            property first placed in service after  
5                            December 31, 2023, up to the applicable cap  
6                            amount, which is determined as follows:

7                            (i) \$5,000 per energy storage property for  
8                            single-family residential property;

9                            (ii) \$350 per unit per energy storage property  
10                           for multi-family residential property; and

11                           (iii) \$500,000 per energy storage property for  
12                           commercial property;

13            (5) For each combined energy storage and solar energy  
14                           system that is installed and first placed in service  
15                           in the State by a taxpayer during the taxable year,  
16                           the applicable credit available for an energy storage  
17                           system under paragraph (4) of this subsection plus one  
18                           half of the available applicable credit for a solar  
19                           energy system under paragraph (2) or (3) of this  
20                           section; and



1       ~~[-2-]~~ (6) For each ~~[wind powered]~~ wind energy ~~[system-]~~  
2       property, twenty per cent of the ~~[actual cost or the~~  
3       ~~cap amount determined in subsection (b), whichever is~~  
4       ~~less-]~~ basis, up to the applicable cap amount, which  
5       is determined as follows:

6       (A) \$1,500 per wind energy property for single-family  
7       residential property; provided that if all or a  
8       portion of the system is used to fulfill the  
9       substitute renewable energy technology  
10       requirement pursuant to section 196-6.5(a)(3),  
11       the credit shall be reduced by twenty per cent of  
12       the basis or \$1,500, whichever is less;

13       (B) \$200 per unit per wind energy property for multi-  
14       family residential property; and

15       (C) \$500,000 per wind energy property for commercial  
16       property.

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



1 In the case of a partnership, S corporation, estate, or  
 2 trust, the tax credit allowable is for every eligible [~~renewable~~  
 3 ~~energy technology system~~] solar or wind energy property that is  
 4 installed and placed in service in the State by the entity. The  
 5 cost upon which the tax credit is computed shall be determined  
 6 at the entity level. Distribution and share of credit shall be  
 7 determined pursuant to section [~~235-110.7(a).~~] 704(b) of the  
 8 Internal Revenue Code.

9 [~~(b) The amount of credit allowed for each eligible~~  
 10 ~~renewable energy technology system shall not exceed the~~  
 11 ~~applicable cap amount, which is determined as follows:~~

12 ~~(1) If the primary purpose of the solar energy system is~~  
 13 ~~to use energy from the sun to heat water for household~~  
 14 ~~use, then the cap amounts shall be:~~

15 ~~(A) \$2,250 per system for single family residential~~  
 16 ~~property;~~

17 ~~(B) \$350 per unit per system for multi family~~  
 18 ~~residential property; and~~

19 ~~(C) \$250,000 per system for commercial property;~~

20 ~~(2) For all other solar energy systems, the cap amounts~~  
 21 ~~shall be:~~



- 1           ~~(A) \$5,000 per system for single family residential~~
- 2           ~~property; provided that if all or a portion of~~
- 3           ~~the system is used to fulfill the substitute~~
- 4           ~~renewable energy technology requirement pursuant~~
- 5           ~~to section 196 6.5(a) (3), the credit shall be~~
- 6           ~~reduced by thirty five per cent of the actual~~
- 7           ~~system cost or \$2,250, whichever is less;~~
- 8           ~~(B) \$350 per unit per system for multi family~~
- 9           ~~residential property; and~~
- 10           ~~(C) \$500,000 per system for commercial property; and~~
- 11         ~~(3) For all wind powered energy systems, the cap amounts~~
- 12         ~~shall be:~~
- 13           ~~(A) \$1,500 per system for single family residential~~
- 14           ~~property; provided that if all or a portion of~~
- 15           ~~the system is used to fulfill the substitute~~
- 16           ~~renewable energy technology requirement pursuant~~
- 17           ~~to section 196 6.5(a) (3), the credit shall be~~
- 18           ~~reduced by twenty per cent of the actual system~~
- 19           ~~cost or \$1,500, whichever is less;~~
- 20           ~~(B) \$200 per unit per system for multi family~~
- 21           ~~residential property; and~~



1           ~~(c) \$500,000 per system for commercial property.~~

2           ~~(e)]~~ (b) For the purposes of this section:

3           ~~["Actual cost" means costs related to the renewable energy~~  
4 ~~technology systems under subsection (a), including accessories~~  
5 ~~and installation, but not including the cost of consumer~~  
6 ~~incentive premiums unrelated to the operation of the system or~~  
7 ~~offered with the sale of the system and costs for which another~~  
8 ~~credit is claimed under this chapter.~~

9           ~~"Household use" means any use to which heated water is~~  
10 ~~commonly put in a residential setting, including commercial~~  
11 ~~application of those uses.~~

12           ~~"Renewable energy technology system" means a new system~~  
13 ~~that captures and converts a renewable source of energy, such as~~  
14 ~~solar or wind energy, into:~~

- 15           ~~(1) A usable source of thermal or mechanical energy;~~
- 16           ~~(2) Electricity; or~~
- 17           ~~(3) Fuel.]~~

18           "Basis" means costs related to the solar energy, wind  
19 energy, or energy storage property under subsection (a),  
20 including accessories, energy storage, and installation, but  
21 does not include the cost of consumer incentive premiums



1 unrelated to the operation of the energy property or offered  
 2 with the sale of the energy property and costs for which another  
 3 credit is claimed under this chapter. Any cost incurred and paid  
 4 for the repair, construction, or reconstruction of a structure in  
 5 conjunction with the installation and placing in service of solar  
 6 or wind energy property, such as the reroofing of single-family  
 7 residential property, multi-family residential property, or  
 8 commercial property, shall not constitute a part of the basis for  
 9 the purpose of this section; provided that costs incurred for the  
 10 physical support of the solar or wind energy property, such as  
 11 racking and mounting equipment and costs incurred to seal or  
 12 otherwise return a roof to its pre-installation condition shall  
 13 constitute part of the basis for the purposes of this section.

14 The basis used under this section shall be consistent with  
 15 the use of basis in section 25D or section 48 of the Internal  
 16 Revenue Code.

17 "Energy storage property" means any identifiable facility,  
 18 equipment, or apparatus, including battery, grid-interactive  
 19 water heater, ice storage air conditioner, or the like, that is  
 20 permanently fixed to a site and electrically connected to a site  
 21 distribution panel by means of an installed wiring, and that



1 receives electricity generated from various sources, stores that  
2 electricity as electrical, chemical, thermal, or mechanical  
3 energy, and delivers the energy back to an electric utility or  
4 the user of the electric system at a later time.

5 "First placed in service" has the same meaning as in 26  
6 Code of Federal Regulations 1.167(a)-11(e)(1).

7 "Grid-connected" means that the individual or corporate  
8 taxpayer has obtained an approved interconnection agreement from  
9 an electric utility for the solar energy property or whose  
10 facility does not have an existing tie to the electric grid.

11 "Solar or wind energy [system"] property" means any  
12 identifiable facility, equipment, apparatus, or the like that  
13 converts solar or wind energy to useful thermal or electrical  
14 energy for heating, cooling, or reducing the use of other types  
15 of energy that are dependent upon fossil fuel for their  
16 generation[-]; provided that:

17 (1) The construction, reconstruction, or erection of the  
18 solar or wind energy property is completed by the  
19 taxpayer; or



1        (2) The solar or wind energy property is acquired by the  
2                    taxpayer if the original use of the solar or wind  
3                    energy property commences with the taxpayer.

4        [~~(d)~~] (c) For taxable years beginning after December 31,  
5 2005, the dollar amount of any utility rebate shall be deducted  
6 from the [~~cost~~] basis of the qualifying [~~system~~] property and  
7 its installation before applying the state tax credit.

8        [~~(e)~~] (d) The director of taxation shall prepare any forms  
9 that may be necessary to claim a tax credit under this section,  
10 including forms identifying the technology type of each tax  
11 credit claimed under this section[~~, whether for solar or wind~~].

12 The director may also require the taxpayer to furnish reasonable  
13 information to ascertain the validity of the claim for credit  
14 made under this section and may adopt rules necessary to  
15 effectuate the purposes of this section pursuant to chapter 91.

16        [~~(f)~~] (e) If the tax credit under this section exceeds the  
17 taxpayer's income tax liability, the excess of the credit over  
18 liability may be used as a credit against the taxpayer's income  
19 tax liability in subsequent years until exhausted, unless  
20 otherwise elected by the taxpayer pursuant to subsection (f) or  
21 (g) [~~or (h)~~]. All claims for the tax credit under this section,



1 including amended claims, shall be filed on or before the end of  
2 the twelfth month following the close of the taxable year for  
3 which the credit may be claimed. Failure to comply with this  
4 subsection shall constitute a waiver of the right to claim the  
5 credit.

6 [~~g~~] (f) For solar or wind energy [~~systems,~~] properties,  
7 a taxpayer may elect to reduce the eligible credit amount by  
8 thirty per cent and if this reduced amount exceeds the amount of  
9 income tax payment due from the taxpayer, the excess of the  
10 credit amount over payments due shall be refunded to the  
11 taxpayer; provided that tax credit amounts properly claimed by a  
12 taxpayer who has no income tax liability shall be paid to the  
13 taxpayer; and provided further that no refund on account of the  
14 tax credit allowed by this section shall be made for amounts  
15 less than \$1.

16 The election required by this subsection shall be made in a  
17 manner prescribed by the director on the taxpayer's return for  
18 the taxable year in which the [~~system~~] solar or wind energy  
19 property is installed and first placed in service. A separate  
20 election may be made for each separate [~~system~~] solar or wind



1 energy property that generates a credit. An election once made  
2 is irrevocable.

3 ~~[(h)]~~ (g) Notwithstanding subsection ~~[(g)7]~~ (f), for any  
4 ~~[renewable energy technology system7]~~ solar or wind energy  
5 property, an individual taxpayer may elect to have any excess of  
6 the credit over payments due refunded to the taxpayer~~7]~~ without  
7 discount, if:

8 (1) All of the taxpayer's income is exempt from taxation  
9 under section 235-7(a)(2) or (3); or

10 (2) The taxpayer's adjusted gross income is \$20,000 or  
11 less (or \$40,000 or less if filing a tax return as  
12 married filing jointly);

13 provided that tax credits properly claimed by a taxpayer who has  
14 no income tax liability shall be paid to the taxpayer; and  
15 provided further that no refund on account of the tax credit  
16 allowed by this section shall be made for amounts less than \$1.

17 A husband and wife who do not file a joint tax return shall  
18 only be entitled to make this election to the extent that they  
19 would have been entitled to make the election had they filed a  
20 joint tax return.



1           The election required by this subsection shall be made in a  
2 manner prescribed by the director on the taxpayer's return for  
3 the taxable year in which the ~~[system]~~ solar or wind energy  
4 property is installed and first placed in service. A separate  
5 election may be made for each separate ~~[system]~~ solar or wind  
6 energy property that generates a credit. An election once made  
7 is irrevocable.

8           ~~[(i)]~~ (h) No taxpayer shall be allowed a credit under this  
9 section for the portion of the renewable energy technology  
10 system required by section 196-6.5 that is installed and first  
11 placed in service on any newly constructed single-family  
12 residential property authorized by a building permit issued on  
13 or after January 1, 2010.

14           (i) The tax credit under this section shall be construed  
15 in accordance with federal regulations and judicial  
16 interpretations of similar provisions in sections 25D, 45, and  
17 48 of the Internal Revenue Code.

18           (j) A planned community association, condominium  
19 association of owners, or cooperative housing corporation may  
20 claim the tax credit under this section in its own name for



1 property or facilities placed in service and located on common  
2 areas.

3 (k) No credit under this section shall be allowed to any  
4 federal, state, or local government or any political  
5 subdivision, agency, or instrumentality thereof.

6 (l) No credit under this section shall be authorized for  
7 taxable years ending after December 31, 2035.

8 [~~(j)~~] (m) To the extent feasible, using existing resources  
9 to assist the energy-efficiency policy review and evaluation,  
10 the department shall assist with data collection on the  
11 following for each taxable year:

12 (1) The number of [~~renewable energy technology systems~~]  
13 solar or wind energy properties that have qualified  
14 for a tax credit during the calendar year by:

15 (A) Technology type; and

16 (B) Taxpayer type (corporate and individual); and

17 (2) The total cost of the tax credit to the State during  
18 the taxable year by:

19 (A) Technology type; and

20 (B) Taxpayer type.





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

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

18 (d) The department of transportation shall submit a report  
19 to the legislature of the analysis conducted pursuant to  
20 subsection (c) no later than twenty days prior to the convening  
21 of the regular session of 2020.



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

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

8 PART III

9 SECTION 5. If any provision of this Act, or the  
10 application thereof to any person or circumstance, is held  
11 invalid, the invalidity does not affect other provisions or  
12 applications of the Act that can be given effect without the  
13 invalid provision or application, and to this end the provisions  
14 of this Act are severable.

15 SECTION 6. This Act does not affect rights and duties that  
16 matured, penalties that were incurred, and proceedings that were  
17 begun before its effective date.

18 SECTION 7. Statutory material to be repealed is bracketed  
19 and stricken. New statutory material is underscored.



1 SECTION 8. This Act shall take effect on July 1, 2050;  
2 provided that section 2 shall apply to taxable years beginning  
3 after December 31, 2050.



**Report Title:**

Renewable Energy; Solar and Wind Energy Property; Tax Credit;  
State Building Design; Energy Efficiency; Appropriation

**Description:**

Replaces the current renewable energy technology systems tax credit with tax credits for solar or wind energy property and energy storage property and is applicable to taxable years beginning after 12/31/2017. Establishes a demonstration project for building energy efficiency designs within the Department of Transportation. (SB665 HD1)

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

