

---

---

# A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

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

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

3 "§196-6.5 Solar water heater system required for new  
4 single-family residential construction. (a) On or after  
5 January 1, 2010, no building permit shall be issued for a new  
6 single-family dwelling that does not include a solar water  
7 heater system that meets the standards established pursuant to  
8 section 269-44, unless the coordinator approves a variance. A  
9 variance application shall only be accepted if submitted by an  
10 architect or mechanical engineer licensed under chapter 464, who  
11 attests that:

- 12 (1) Installation is impracticable due to poor solar  
13 resource;
- 14 (2) Installation is cost-prohibitive based upon a life  
15 cycle cost-benefit analysis that incorporates the  
16 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 system; 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[+] 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 system for single-family
- 2                   residential property;
- 3           (B) \$350 per unit per solar energy system for multi-
- 4                   family residential property; and
- 5           (C) \$250,000 per solar energy system for commercial
- 6                   property;
- 7       (2) For each solar energy system that is used primarily to
- 8           generate electricity and is installed and first placed
- 9           in service in the State by a taxpayer during the
- 10           taxable year:
- 11           (A) Twenty-five per cent of the basis for solar
- 12                   energy systems first placed in service after
- 13                   December 31, 2018, and before January 1, 2024, up
- 14                   to the applicable cap amount, which is determined
- 15                   as follows:
- 16                   (i) \$5,000 per solar energy system for single-
- 17                           family residential property; provided that
- 18                           if all or a portion of the solar energy
- 19                           system 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 system for  
5                   multi-family residential property; and

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

8                   provided that a solar energy system that has an  
9                   executed customer service contract dated prior to  
10                   June 30, 2018, and is installed and first placed  
11                   in service before December 31, 2019, shall  
12                   receive thirty-five per cent of the basis for the  
13                   solar energy system, up to the applicable cap  
14                   amount as described in this subparagraph;

15                   (B) Twenty per cent of the basis for solar energy  
16                   systems first placed in service after  
17                   December 31, 2023, and before January 1, 2025, up  
18                   to the applicable cap amount, which is determined  
19                   as follows:

20                   (i) \$5,000 per solar energy system for single-  
21                   family residential property; provided that



1           if all or a portion of the solar energy  
2           system is used to fulfill the substitute  
3           renewable energy technology requirement  
4           pursuant to section 196-6.5(a)(3), the  
5           credit shall be reduced by twenty per cent  
6           of the basis or \$2,250, whichever is less;  
7           (ii) \$350 per unit per solar energy system for  
8           multi-family residential property; and  
9           (iii) \$500,000 per solar energy system for  
10           commercial property; and  
11           (C) Fifteen per cent of the basis for solar energy  
12           systems first placed in service after  
13           December 31, 2024, up to the applicable cap  
14           amount, which is determined as follows:  
15           (i) \$5,000 per solar energy system for single-  
16           family residential property; provided that  
17           if all or a portion of the solar energy  
18           system is used to fulfill the substitute  
19           renewable energy technology requirement  
20           pursuant to section 196-6.5(a)(3), the



1                   credit shall be reduced by fifteen per cent  
2                   of the basis or \$2,250, whichever is less;  
3           (ii)   \$350 per unit per solar energy system for  
4                   multi-family residential property; and  
5           (iii) \$500,000 per solar energy system for  
6                   commercial property;  
7    (3)   For each solar energy system that is used primarily to  
8           generate electricity and is installed and first placed  
9           in service in the State by a taxpayer during the  
10           taxable year; provided that the solar energy system is  
11           grid-connected and incorporates an energy storage  
12           system:  
13           (A)   Twenty-five per cent of the basis for solar  
14                   energy systems first placed in service after  
15                   December 31, 2018, and before January 1, 2024, up  
16                   to the applicable cap amount, which is determined  
17                   as follows:  
18                   (i)   \$10,000 per solar energy system for single-  
19                           family residential property; provided that  
20                           if all or a portion of the solar energy  
21                           system is used to fulfill the substitute



1                   renewable energy technology requirement  
2                   pursuant to section 196-6.5(a)(3), the  
3                   credit shall be reduced by twenty-five per  
4                   cent of the basis or \$2,250, whichever is  
5                   less;

6                   (ii) \$700 per unit per solar energy system for  
7                   multi-family residential property; and

8                   (iii) \$500,000 per solar energy system for  
9                   commercial property;

10                   provided that a solar energy system that has an  
11                   executed customer service contract dated prior to  
12                   June 30, 2018, and is installed and first placed  
13                   in service before December 31, 2019, shall  
14                   receive thirty-five per cent of the basis for the  
15                   solar energy system, up to the applicable cap  
16                   amount as described in this subparagraph;

17                   (B) Twenty per cent of the basis for solar energy  
18                   systems first placed in service after  
19                   December 31, 2023, and before January 1, 2025, up  
20                   to the applicable cap amount, which is determined  
21                   as follows:



- 1            (i) \$10,000 per solar energy system for single-  
2            family residential property; provided that  
3            if all or a portion of the solar energy  
4            system is used to fulfill the substitute  
5            renewable energy technology requirement  
6            pursuant to section 196-6.5(a)(3), the  
7            credit shall be reduced by twenty per cent  
8            of the basis or \$2,250, whichever is less;  
9            (ii) \$700 per unit per solar energy system for  
10           multi-family residential property; and  
11           (iii) \$500,000 per solar energy system for  
12           commercial property; and  
13           (C) Fifteen per cent of the basis for solar energy  
14           systems first placed in service after  
15           December 31, 2024, up to the applicable cap  
16           amount, which is determined as follows:  
17           (i) \$10,000 per solar energy system for single-  
18           family residential property; provided that  
19           if all or a portion of the solar energy  
20           system is used to fulfill the substitute  
21           renewable energy technology requirement



1                   pursuant to section 196-6.5(a)(3), the  
2                   credit shall be reduced by fifteen per cent  
3                   of the basis or \$2,250, whichever is less;  
4                   (ii) \$700 per unit per solar energy system for  
5                   multi-family residential property; and  
6                   (iii) \$500,000 per solar energy system for  
7                   commercial property;  
8                   (4) For each energy storage system that is installed and  
9                   first placed in service in the State by a taxpayer  
10                   during the taxable year, if the cost of the energy  
11                   storage system is not also included in the basis of a  
12                   solar or wind energy system under paragraphs (2), (3),  
13                   or (6):  
14                   (A) Twenty-five per cent of the basis for energy  
15                   storage systems first placed in service after  
16                   December 31, 2018, and before January 1, 2024, up  
17                   to the applicable cap amount, which is determined  
18                   as follows:  
19                   (i) \$5,000 per energy storage system for single-  
20                   family residential property;



- 1           (ii) \$350 per unit per energy storage system for  
2                     multi-family residential property; and  
3           (iii) \$500,000 per energy storage system for  
4                     commercial property;

5           provided that an energy storage system that has  
6           an executed customer service contract dated prior  
7           to June 30, 2018, and is installed and first  
8           placed in service before December 31, 2019, shall  
9           receive thirty-five per cent of the basis for the  
10           energy storage system, up to the applicable cap  
11           amount as described in this subparagraph;

12        (B) Twenty per cent of the basis for energy storage  
13           systems first placed in service after  
14           December 31, 2023, and before January 1, 2025, up  
15           to the applicable cap amount, which is determined  
16           as follows:

- 17           (i) \$5,000 per energy storage system for single-  
18                     family residential property;  
19           (ii) \$350 per unit per energy storage system for  
20                     multi-family residential property; and



- 1            (iii) \$500,000 per energy storage system for  
2                            commercial property; and
- 3        (C) Fifteen per cent of the basis for energy storage  
4                            systems first placed in service after  
5                            December 31, 2024, up to the applicable cap  
6                            amount, which is determined as follows:
- 7            (i) \$5,000 per energy storage system for single-  
8                            family residential property;
- 9            (ii) \$350 per unit per energy storage system for  
10                            multi-family residential property; and
- 11           (iii) \$500,000 per energy storage system 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) plus one-half of the  
18                            applicable credit for a solar energy system under  
19                            paragraph (2) or (3); and
- 20        ~~[-(2)-]~~ (6) For each [wind-powered] wind energy system[+],  
21                            twenty per cent of the [actual cost or the cap amount



1 ~~determined in subsection (b), whichever is less;]~~  
2 basis, up to the applicable cap amount, which is  
3 determined as follows:

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

11 (B) \$200 per unit per wind energy system for multi-  
12 family residential property; and

13 (C) \$500,000 per wind energy system for commercial  
14 property.

15 ~~[provided that multiple]~~ Multiple owners of a single system  
16 shall be entitled to a single tax credit~~[+]~~, and ~~[provided~~  
17 ~~further that]~~ the tax credit shall be apportioned between the  
18 owners in proportion to their contribution to the cost of the  
19 system.

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



1 ~~energy technology]~~ solar or wind energy system that is installed  
2 and placed in service in the State by the entity. The cost upon  
3 which the tax credit is computed shall be determined at the  
4 entity level. Distribution and share of credit shall be  
5 determined pursuant to section [~~235-110.7(a).~~] 704(b) of the  
6 Internal Revenue Code.

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

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

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

15 ~~(B) \$350 per unit per system for multi-family~~  
16 ~~residential property; and~~

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

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

20 ~~(A) \$5,000 per system for single family residential~~  
21 ~~property; provided that if all or a portion of~~



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



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

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

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

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

16 "Basis" means costs related to the solar energy, wind  
17 energy, or energy storage system under subsection (a), including  
18 accessories, energy storage, and installation, but does not  
19 include the cost of consumer incentive premiums unrelated to the  
20 operation of the energy system or offered with the sale of the  
21 energy system and costs for which another credit is claimed



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

12 The basis used under this section shall be consistent with  
13 the use of the term "basis" in section 25D or section 48 of the  
14 Internal Revenue Code.

15 "Energy storage system" means any identifiable facility,  
16 equipment, apparatus, or the like, including a battery, grid-  
17 interactive water heater, or ice storage air conditioner, that  
18 is permanently fixed to a site and electrically connected to a  
19 site distribution panel by means of installed wiring, and that  
20 receives electricity generated from various sources, stores that  
21 electricity as electrical, chemical, thermal, or mechanical



1 energy, and delivers the energy back to an electric utility or  
2 the user of the electric system at a later time.

3 "First placed in service" has the same meaning as in title  
4 26 Code of Federal Regulations section 1.167(a)-11(e)(1).

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

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

15 (1) The construction, reconstruction, or erection of the  
16 solar or wind energy system is completed by the  
17 taxpayer; or

18 (2) The solar or wind energy system is acquired by the  
19 taxpayer if the original use of the solar or wind  
20 energy system commences with the taxpayer.



1           ~~[(d)]~~ (c) For taxable years beginning after December 31,  
2 2005, the dollar amount of any utility rebate shall be deducted  
3 from the ~~[cost]~~ basis of the qualifying system and its  
4 installation before applying the state tax credit.

5           ~~[(e)]~~ (d) The director of taxation shall prepare any forms  
6 that may be necessary to claim a tax credit under this section,  
7 including forms identifying the technology type of each tax  
8 credit claimed under this section~~[, whether for solar or wind]~~.  
9 The director may also require the taxpayer to furnish reasonable  
10 information to ascertain the validity of the claim for credit  
11 made under this section and may adopt rules necessary to  
12 effectuate the purposes of this section pursuant to chapter 91.

13           ~~[(f)]~~ (e) If the tax credit under this section exceeds the  
14 taxpayer's income tax liability, the excess of the credit over  
15 liability may be used as a credit against the taxpayer's income  
16 tax liability in subsequent years until exhausted, unless  
17 otherwise elected by the taxpayer pursuant to subsection (f) or  
18 (g) ~~[(h)]~~. All claims for the tax credit under this section,  
19 including amended claims, shall be filed on or before the end of  
20 the twelfth month following the close of the taxable year for  
21 which the credit may be claimed. Failure to comply with this



1 subsection shall constitute a waiver of the right to claim the  
2 credit.

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

12       The election required by this subsection shall be made in a  
13 manner prescribed by the director on the taxpayer's return for  
14 the taxable year in which the solar or wind energy system is  
15 installed and first placed in service. A separate election may  
16 be made for each separate solar or wind energy system that  
17 generates a credit. An election once made is irrevocable.

18       ~~[(h)]~~ (g) Notwithstanding subsection ~~[(g)]~~ (f), for any  
19 ~~[renewable energy technology]~~ solar or wind energy system, an  
20 individual taxpayer may elect to have any excess of the credit



1 over payments due refunded to the taxpayer[7] without discount,  
2 if:

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

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

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

12 A [~~husband and wife~~] married couple who do not file a joint  
13 tax return shall only be entitled to make this election to the  
14 extent that they would have been entitled to make the election  
15 had they filed a joint tax return.

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 solar or wind energy system is  
19 installed and first placed in service. A separate election may  
20 be made for each separate solar or wind energy system that  
21 generates a credit. An election once made is irrevocable.



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

7        (i) The tax credit under this section shall be construed  
8 in accordance with Treasury Regulations and judicial  
9 interpretations of similar provisions in sections 25D, 45, and  
10 48 of the Internal Revenue Code.

11        (j) A planned community association, condominium  
12 association of owners, or cooperative housing corporation may  
13 claim the tax credit under this section in its own name for  
14 systems or facilities placed in service and located on common  
15 areas.

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

19        (l) No credit under this section shall be authorized for  
20 taxable years ending after December 31, 2036.



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

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

8           (A) Technology type; and

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

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

12          (A) Technology type; and

13          (B) Taxpayer type.

14          ~~[(k) This section shall apply to eligible renewable energy~~  
15 ~~technology systems that are installed and placed in service on~~  
16 ~~or after July 1, 2009.] "~~

17          SECTION 3. If any provision of this Act, or the  
18 application thereof to any person or circumstance, is held  
19 invalid, the invalidity does not affect other provisions or  
20 applications of the Act that can be given effect without the



1 invalid provision or application, and to this end the provisions  
2 of this Act are severable.

3 SECTION 4. This Act does not affect rights and duties that  
4 matured, penalties that were incurred, and proceedings that were  
5 begun before its effective date.

6 SECTION 5. Statutory material to be repealed is bracketed  
7 and stricken. New statutory material is underscored.

8 SECTION 6. This Act shall take effect on July 1, 2050;  
9 provided that section 2 shall apply to taxable years beginning  
10 after December 31, 2018.



**Report Title:**

Renewable Energy; Solar and Wind Energy System; Energy Storage System; Tax Credit

**Description:**

Replaces the current renewable energy technology systems tax credit with tax credits for solar or wind energy systems and energy storage systems. Applies to taxable years beginning after 12/31/2018. Effective 7/1/2050. (SD2)

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

