
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 235-12.57~~] 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 [~~-~~] and the life cycle cost for the device is
10 less than a solar water heater system based on the
11 analysis in paragraph (a) (2). For the purposes of
12 this paragraph, "demand water heater" means a gas-
13 tankless instantaneous water heater that provides hot
14 water only as it is needed.

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



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

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

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

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

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

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

20 (1) A usable source of thermal or mechanical energy;

21 (2) Electricity; or



1 (3) Fuel."

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

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

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

15 (1) For each solar energy system[+] that is used
16 exclusively to heat water and is installed and first
17 placed in service in the State by a taxpayer during
18 the taxable year or is approved in the taxable year
19 and is placed in the following taxable year: thirty-
20 five per cent of the [actual cost or the cap amount
21 determined in subsection (b), whichever is less; or]



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

basis up to the applicable cap amount, which is
determined as follows:

(A) _____ per solar energy system for single-
family residential property;

(B) _____ per unit per solar energy system for
multi-family residential property; and

(C) _____ per solar energy system for commercial
property;

(2) For each solar energy system that is used primarily to
generate electricity and is installed and first placed
in service in the State by a taxpayer during the
taxable year or is approved in the taxable year and is
placed in the following taxable year:

(A) Twenty-five per cent of the basis for solar
energy systems first placed in service after
December 31, 2018, and before January 1, 2026, up
to the applicable cap amount, which is determined
as follows:

(i) _____ per solar energy system for
single-family residential property; provided
that if all or a portion of the solar energy



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

7 (ii) _____ per unit per solar energy system
8 for multi-family residential property; and

9 (iii) _____ per solar energy system for
10 commercial property;

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

18 (B) Twenty per cent of the basis for solar energy
19 systems first placed in service after
20 December 31, 2025, and before January 1, 2027, up



1 to the applicable cap amount, which is determined
2 as follows:

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

11 (ii) _____ per unit per solar energy system
12 for multi-family residential property; and

13 (iii) _____ per solar energy system for
14 commercial property; and

15 (C) Fifteen per cent of the basis for solar energy
16 systems first placed in service after
17 December 31, 2026, up to the applicable cap
18 amount, which is determined as follows:

19 (i) _____ per solar energy system for single-
20 family residential property; provided that
21 if all or a portion of the solar energy



1 system is used to fulfill the substitute
2 renewable energy technology requirement
3 pursuant to section 196-6.5(a)(3), the
4 credit shall be reduced by fifteen per cent
5 of the basis or _____, whichever is less;

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

8 (iii) _____ per solar energy system for
9 commercial property;

10 (3) For each solar energy system that is used primarily to
11 generate electricity and is installed and first placed
12 in service in the State by a taxpayer during the
13 taxable year or is approved in the taxable year and is
14 placed in the following taxable year; provided that
15 the solar energy system is grid-connected and
16 incorporates an energy storage system:

17 (A) Twenty-five per cent of the basis for solar
18 energy systems first placed in service after
19 December 31, 2018, and before January 1, 2026, up
20 to the applicable cap amount, which is determined
21 as follows:

1 (B) Twenty per cent of the basis for solar energy
 2 systems first placed in service after
 3 December 31, 2025, and before January 1, 2027, up
 4 to the applicable cap amount, which is determined
 5 as follows:

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

14 (ii) _____ per unit per solar energy system
 15 for multi-family residential property; and

16 (iii) _____ per solar energy system for
 17 commercial property; and

18 (C) Fifteen per cent of the basis for solar energy
 19 systems first placed in service after
 20 December 31, 2026, up to the applicable cap
 21 amount, which is determined as follows:

1 December 31, 2018, and before January 1, 2026, up
2 to the applicable cap amount, which is determined
3 as follows:

4 (i) _____ per energy storage system for
5 single-family residential property;

6 (ii) _____ per unit per energy storage system
7 for multi-family residential property; and

8 (iii) _____ per energy storage system for
9 commercial property;

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

17 (B) Twenty per cent of the basis for energy storage
18 systems first placed in service after
19 December 31, 2025, and before January 1, 2027, up
20 to the applicable cap amount, which is determined
21 as follows:



- 1 (i) _____ per energy storage system for
- 2 single-family residential property;
- 3 (ii) _____ per unit per energy storage system
- 4 for multi-family residential property; and
- 5 (iii) _____ per energy storage system for
- 6 commercial property; and
- 7 (C) Fifteen per cent of the basis for energy storage
- 8 systems first placed in service after
- 9 December 31, 2026, up to the applicable cap
- 10 amount, which is determined as follows:
- 11 (i) _____ per energy storage system for
- 12 single-family residential property;
- 13 (ii) _____ per unit per energy storage system
- 14 for multi-family residential property; and
- 15 (iii) _____ per energy storage system for
- 16 commercial property;
- 17 (5) For each combined energy storage and solar energy
- 18 system that is installed and first placed in service
- 19 in the State by a taxpayer during the taxable year or
- 20 is approved in the taxable year and is placed in the
- 21 following taxable year, the applicable credit

1 available for an energy storage system under paragraph
2 (4) plus one-half of the applicable credit for a solar
3 energy system under paragraph (2) or (3); and

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

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

16 (B) _____ per unit per wind energy system for
17 multi-family residential property; and

18 (C) _____ per wind energy system for commercial
19 property.

20 ~~[provided that multiple]~~ Multiple owners of a single system
21 shall be entitled to a single tax credit~~[+]~~, and ~~[provided~~



1 ~~further that~~] the tax credit shall be apportioned between the
2 owners in proportion to their contribution to the cost of the
3 system.

4 In the case of a partnership, S corporation, estate, or
5 trust, the tax credit allowable is for every eligible [~~renewable~~
6 ~~energy technology~~] solar energy, energy storage, or wind energy
7 system that is installed and placed in service in the State by
8 the entity. The cost upon which the tax credit is computed
9 shall be determined at the entity level. Distribution and share
10 of credit shall be determined pursuant to section [~~235-~~
11 ~~110.7(a)-~~] 704(b) of the Internal Revenue Code.

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

- 15 ~~(1) If the primary purpose of the solar energy system is~~
16 ~~to use energy from the sun to heat water for household~~
17 ~~use, then the cap amounts shall be:~~
- 18 ~~(A) \$2,250 per system for single family residential~~
19 ~~property;~~
- 20 ~~(B) \$350 per unit per system for multi-family~~
21 ~~residential property; and~~



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



1 ~~reduced by twenty per cent of the actual system~~
 2 ~~cost or \$1,500, whichever is less,~~
 3 ~~(B) \$200 per unit per system for multi-family~~
 4 ~~residential property; and~~
 5 ~~(C) \$500,000 per system for commercial property.~~

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

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

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

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

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

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

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



1 "Energy storage system" means any identifiable facility,
2 equipment, apparatus, or the like, including a battery, grid-
3 interactive water heater, or ice storage air conditioner, that
4 is permanently fixed to a site and electrically connected to a
5 site distribution panel by means of installed wiring, and that
6 receives electricity generated from various sources, stores that
7 electricity as electrical, chemical, thermal, or mechanical
8 energy, and delivers the energy back to an electric utility or
9 the user of the electric system at a later time.

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

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

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



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

4 (2) The solar or wind energy system is acquired by the
5 taxpayer if the original use of the solar or wind
6 energy system commences with the taxpayer.

7 [~~d~~] (c) For taxable years beginning after December 31,
8 2005, the dollar amount of any utility rebate shall be deducted
9 from the [~~cost~~] basis of the qualifying system and its
10 installation before applying the state tax credit.

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

19 [~~f~~] (e) If the tax credit under this section exceeds the
20 taxpayer's income tax liability, the excess of the credit over
21 liability may be used as a credit against the taxpayer's income



1 tax liability in subsequent years until exhausted, unless
 2 otherwise elected by the taxpayer pursuant to subsection (f) or
 3 (g) [~~or (h)~~]. All claims for the tax credit under this section,
 4 including amended claims, shall be filed on or before the end of
 5 the twelfth month following the close of the taxable year for
 6 which the credit may be claimed. Failure to comply with this
 7 subsection shall constitute a waiver of the right to claim the
 8 credit.

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

19 The election required by this subsection shall be made in a
 20 manner prescribed by the director on the taxpayer's return for
 21 the taxable year in which the solar energy, energy storage, or



1 wind energy system is installed and first placed in service. A
2 separate election may be made for each separate solar energy,
3 energy storage, or wind energy system that generates a credit.

4 An election once made is irrevocable.

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

- 10 (1) All of the taxpayer's income is exempt from taxation
11 under section 235-7(a)(2) or (3); or
- 12 (2) The taxpayer's adjusted gross income is \$20,000 or
13 less (or \$40,000 or less if filing a tax return as
14 married filing jointly);

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

19 A [~~husband and wife~~] married couple who do not file a joint
20 tax return shall only be entitled to make this election to the



1 extent that they would have been entitled to make the election
2 had they filed a joint tax return.

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

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

16 (i) The tax credit under this section shall be construed
17 in accordance with Treasury Regulations and judicial
18 interpretations of similar provisions in sections 25D, 45, and
19 48 of the Internal Revenue Code.

20 (j) A planned community association, condominium
21 association of owners, or cooperative housing corporation may



1 claim the tax credit under this section in its own name for
2 systems or facilities placed in service and located on common
3 areas.

4 (k) No credit under this section shall be authorized for
5 taxable years ending after December 31, 2036.

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

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

14 (A) Technology type; and

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

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

18 (A) Technology type; and

19 (B) Taxpayer type.



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

4 SECTION 3. If any provision of this Act, or the
5 application thereof to any person or circumstance, is held
6 invalid, the invalidity does not affect other provisions or
7 applications of the Act that can be given effect without the
8 invalid provision or application, and to this end the provisions
9 of this Act are severable.

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

13 SECTION 5. Statutory material to be repealed is bracketed
14 and stricken. New statutory material is underscored.

15 SECTION 6. This Act shall take effect on July 1, 2050;
16 provided that section 2 shall apply to taxable years beginning
17 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. (SB2100 HD2)

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

