

107TH CONGRESS
1ST SESSION

H. R. 2184

To amend the Internal Revenue Code of 1986 to expand the energy credit to include investment in property which produces energy from certain renewable sources and expenditures for cool roofing, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 14, 2001

Mr. ENGEL (for himself, Mr. TERRY, Ms. KILPATRICK, Mr. SANDERS, and Ms. MCKINNEY) introduced the following bill; which was referred to the Committee on Ways and Means, and in addition to the Committee on Energy and Commerce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To amend the Internal Revenue Code of 1986 to expand the energy credit to include investment in property which produces energy from certain renewable sources and expenditures for cool roofing, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-
2 tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Preserving Our
5 World’s Energy and Resources Act of 2001”.

1 **SEC. 2. ENERGY CREDIT FOR INVESTMENTS IN CERTAIN**2 **RENEWABLE RESOURCE PROPERTY AND**3 **COOL ROOF PROPERTY.**

4 (a) ENERGY PROPERTY USED IN BUSINESS.—

5 (1) IN GENERAL.—Subparagraph (A) of section
6 48(a)(3) of the Internal Revenue Code of 1986 (de-
7 fining energy property) is amended by striking “or”
8 at the end of clause (i) and by inserting after clause
9 (ii) the following new clauses:

10 “(iii) equipment which uses wind to
11 generate electricity, or

12 “(iv) cool roof property.”.

13 (2) ENERGY PERCENTAGE.—Paragraph (2) of
14 section 48(a) of such Code (relating to energy per-
15 centage) is amended—

16 (A) in subparagraph (A) by striking “The”
17 and inserting “Except as provided in subpara-
18 graph (B), the”, and

19 (B) by redesignating subparagraph (B) as
20 subparagraph (C) and by inserting after sub-
21 paragraph (A) the following new subparagraph:

22 (B) EXCEPTION.—The energy percentage
23 for the following properties is—

24 (i) 25 percent for equipment which
25 uses solar energy to generate electricity,

1 “(ii) 25 percent for equipment which
2 uses wind to generate electricity,
3 “(iii) 25 percent for equipment which
4 uses energy derived from geothermal de-
5 posits and which is described in paragraph
6 (3)(A)(ii), and
7 “(iv) 30 percent for cool roof prop-
8 erty.”.

9 (3) COOL ROOF PROPERTY DEFINED.—Sub-
10 section (a) of section 48 of such Code (relating to
11 energy credit) is amended by redesignating para-
12 graphs (4) and (5) as paragraphs (5) and (6), re-
13 spectively, and by inserting after paragraph (3) the
14 following new paragraph:

15 “(4) COOL ROOF PROPERTY.—For purposes of
16 this subsection, the term ‘cool roof property’ means
17 property which is used as a roof or roof coating and
18 which has a solar reflectance index (as determined
19 by the Lawrence Berkeley National Laboratory) of
20 65 percent or greater.”.

21 (4) CREDIT ALLOWABLE AGAINST REGULAR
22 AND MINIMUM TAX.—

23 (A) IN GENERAL.—Section 38(c) of such
24 Code (relating to limitation based on amount of
25 tax) is amended by redesignating paragraph (3)

1 as paragraph (4) and inserting after paragraph
2 (2) the following:

3 “(3) SPECIAL RULES FOR ENERGY CREDIT RE-
4 LATING TO EQUIPMENT WHICH USES WIND TO GEN-
5 ERATE ELECTRICITY AND COOL ROOF PROPERTY.—

6 “(A) IN GENERAL.—In the case of the por-
7 tion of the energy credit relating to equipment
8 which uses wind to generate electricity and cool
9 roof property—

10 “(i) this section and section 39 shall
11 be applied separately with respect to such
12 portion of the credit, and

13 “(ii) in applying paragraph (1) to
14 such portion of the credit—

15 “(I) subparagraphs (A) and (B)
16 thereof shall not apply, and

17 “(II) the limitation under para-
18 graph (1) (as modified by subclause
19 (I)) shall be reduced by the credit al-
20 lowed under subsection (a) for the
21 taxable year (other than such por-
22 tion).

23 “(B) PORTION OF ENERGY CREDIT RELAT-
24 ING TO EQUIPMENT WHICH USES WIND TO GEN-
25 ERATE ELECTRICITY AND COOL ROOF PROP-

1 ERTY.—For purposes of this subsection, the
2 portion of energy credit relating to equipment
3 which uses wind to generate electricity and cool
4 roof property means the credit allowable under
5 subsection (a) by reason of clauses (iii) and (iv)
6 of section 48(a)(3)(A).”.

7 (B) CONFORMING AMENDMENT.—Sub-
8 clause (II) of section 38(c)(2)(A)(ii) of such
9 Code is amended by inserting “or the portion of
10 energy credit relating to equipment which uses
11 wind to generate electricity and cool roof prop-
12 erty” after “employment credit”.

13 (b) RENEWABLE RESOURCE AND COOL ROOF PROP-
14 ERTY —

15 (1) IN GENERAL.—Subpart A of part IV of sub-
16 chapter A of chapter 1 of such Code (relating to
17 nonrefundable personal credits) is amended by in-
18 serting after section 25B the following new section:

19 "SEC. 25C. CERTAIN RENEWABLE RESOURCE AND COOL
20 ROOF PROPERTY.

21 "(a) ALLOWANCE OF CREDIT.—In the case of an in-
22 dividual, there shall be allowed as a credit against the tax
23 imposed by this chapter for the taxable year an amount
24 equal to the amount paid or incurred by the taxpayer for

1 qualified renewable resource property and qualified cool
2 roof property installed during such taxable year.

3 “(b) LIMITATION.—

4 “(1) LIMITATION BASED ON AMOUNT OF
5 TAX.—The credit allowed under subsection (a) for
6 any taxable year shall not exceed the excess of—

7 “(A) the sum of the regular tax liability
8 (as defined in section 26(b)) plus the tax im-
9 posed by section 55, over

10 “(B) the sum of the credits allowable
11 under this subpart (other than this section) and
12 section 27 for the taxable year.

13 “(2) CARRYFORWARD OF UNUSED CREDIT.—If
14 the credit allowable under subsection (a) exceeds the
15 limitation imposed by paragraph (1) for such taxable
16 year, such excess shall be carried to the succeeding
17 taxable year and added to the credit allowable under
18 subsection (a) for such taxable year.

19 “(c) DEFINITIONS.—For purposes of this section—

20 “(1) QUALIFIED RENEWABLE RESOURCE PROP-
21 ERTY.—The term ‘qualified renewable resource prop-
22 erty’ means—

23 “(A) equipment which uses solar energy to
24 generate electricity,

1 “(B) equipment which uses wind to gen-
2 erate electricity, and

3 “(C) equipment which uses energy derived
4 from geothermal deposits to generate electricity
5 and which is described in section
6 48(a)(3)(A)(ii).

7 “(2) COOL ROOF PROPERTY.—The term ‘cool
8 roof property’ means property which is used as a
9 roof or roof coating and which has a solar reflec-
10 tance index (as determined by the Lawrence Berke-
11 ley National Laboratory) of 65 percent or greater.

12 “(3) LABOR COSTS.—Expenditures for labor
13 costs properly allocable to the onsite preparation, as-
14 sembly, or original installation of the property de-
15 scribed in paragraph (1) or (2) and for wiring to
16 interconnect such property to the dwelling unit shall
17 be taken into account for purposes of this section.

18 “(4) ENERGY STORAGE MEDIUM.—Expendi-
19 tures which are properly allocable to a swimming
20 pool, hot tub, or any other energy storage medium
21 which has a function other than the function of such
22 storage shall not be taken into account for purposes
23 of this section.

24 “(d) SPECIAL RULES.—For purposes of this
25 section—

1 “(1) PROPERTY MUST BE INSTALLED ON PRIN-
2 CIPAL RESIDENCE.—Property shall not be treated as
3 described in subsection (c) unless—

4 “(A) such property is installed in or on a
5 dwelling—

6 “(i) located in the United States, and
7 “(ii) owned and used by the taxpayer
8 as the taxpayer’s principal residence (with-
9 in the meaning of section 121),

10 “(B) the original use of such property
11 commences with the taxpayer, and

12 “(C) such property reasonably can be ex-
13 pected to remain in use for at least 5 years.

14 “(2) DOLLAR AMOUNTS IN CASE OF JOINT OC-
15 CUPANCY.—In the case of any dwelling unit which is
16 jointly occupied and used during any calendar year
17 as a residence by 2 or more individuals the following
18 shall apply:

19 “(A) The amount of the credit allowable
20 under subsection (a) by reason of expenditures
21 for qualified renewable resource property and
22 qualified cool roof property made during such
23 calendar year by any of such individuals with
24 respect to such dwelling unit shall be deter-
25 mined by treating all of such individuals as 1

1 taxpayer whose taxable year is such calendar
2 year.

3 “(B) There shall be allowable with respect
4 to such expenditures to each of such individ-
5 uals, a credit under subsection (a) for the tax-
6 able year in which such calendar year ends in
7 an amount which bears the same ratio to the
8 amount determined under subparagraph (A) as
9 the amount of such expenditures made by such
10 individual during such calendar year bears to
11 the aggregate of such expenditures made by all
12 of such individuals during such calendar year.

13 “(3) TENANT-STOCKHOLDER IN COOPERATIVE
14 HOUSING CORPORATION.—In the case of an indi-
15 vidual who is a tenant-stockholder (as defined in sec-
16 tion 216) in a cooperative housing corporation (as
17 defined in such section), such individual shall be
18 treated as having paid his tenant-stockholder’s pro-
19 portionate share (as defined in section 216(b)(3)) of
20 the cost of qualified renewable resource property and
21 qualified cool roof property made by such corpora-
22 tion.

23 “(4) CONDOMINIUMS.—

24 “(A) IN GENERAL.—In the case of an indi-
25 vidual who is a member of a condominium man-

15 “(5) MANUFACTURED HOMES INCLUDED.—For
16 purposes of this section, the term ‘dwelling’ includes
17 a manufactured home which conforms to Federal
18 Manufactured Home Construction and Safety Stand-
19 ards (24 C.F.R. 3280).

20 “(6) JOINT OWNERSHIP OF ITEMS OF SOLAR OR
21 WIND ENERGY PROPERTY.—

22 “(A) IN GENERAL.—Any expenditure oth-
23 erwise qualifying as an expenditure described in
24 paragraph (1) or (2) of subsection (c) shall not
25 be treated as failing to so qualify merely be-

1 cause such expenditure was made with respect
2 to 2 or more dwelling units.

3 “(B) LIMITS APPLIED SEPARATELY.—In
4 the case of any expenditure described in sub-
5 paragraph (A), the amount of the credit allow-
6 able under subsection (a) shall (subject to para-
7 graph (1)) be computed separately with respect
8 to the amount of the expenditure made for each
9 dwelling unit.

10 “(7) ALLOCATION IN CERTAIN CASES.—If less
11 than 80 percent of the use of an item is for nonbusi-
12 ness residential purposes, only that portion of the
13 expenditures for such item which is properly allo-
14 cable to use for nonbusiness residential purposes
15 shall be taken into account. For purposes of this
16 paragraph, use for a swimming pool shall be treated
17 as use which is not for residential purposes.

18 “(8) WHEN EXPENDITURE MADE; AMOUNT OF
19 EXPENDITURE.—

20 “(A) IN GENERAL.—Except as provided in
21 subparagraph (B), an expenditure with respect
22 to an item shall be treated as made when the
23 original installation of the item is completed.

24 “(B) EXPENDITURES PART OF BUILDING
25 CONSTRUCTION.—In the case of an expenditure

1 in connection with the construction or recon-
2 struction of a structure, such expenditure shall
3 be treated as made when the original use of the
4 constructed or reconstructed structure by the
5 taxpayer begins.

6 “(C) AMOUNT.—The amount of any ex-
7 penditure shall be the cost thereof.

8 “(9) REDUCTION OF CREDIT FOR GRANTS, TAX-
9 EXEMPT BONDS, AND SUBSIDIZED ENERGY FINANC-
10 ING.—The rules of section 29(b)(3) shall apply for
11 purposes of this section.

12 “(e) BASIS ADJUSTMENT.—For purposes of this sub-
13 title, if a credit is allowed under this section for any ex-
14 penditure with respect to any property, the increase in the
15 basis of such property which would (but for this sub-
16 section) result from such expenditure shall be reduced by
17 the amount of the credit so allowed.”.

18 (c) CONFORMING AMENDMENTS.—

19 (1) Subsection (c) of section 23 of such Code
20 is amended by striking “sections 24” and inserting
21 “sections 24, 25C.”.

22 (2) Subparagraph (C) of section 25(e)(1) of
23 such Code is amended by inserting “25C” after
24 “25B.”.

14 “(29) to the extent provided in section 25C(e),
15 in the case of amounts with respect to which a credit
16 has been allowed under section 25C.”.

“Sec. 25B. Certain renewable resource and cool roof property.”.

21 (d) EFFECTIVE DATE.—The amendments made by
22 this section shall apply to taxable years ending on or after
23 the date of the enactment of this Act.

1 **SEC. 3. NET METERING.**

2 Part II of the Federal Power Act is amended by add-
3 ing the following new section at the end thereof:

4 **“SEC. 215. NET METERING.**

5 “(a) DEFINITIONS.—As used in this section:

6 “(1) The term ‘customer-generator’ means the
7 owner or operator of an electric generation unit
8 qualified for net metering under this section.

9 “(2) The term ‘net metering’ means measuring
10 the difference between the electricity supplied to a
11 customer-generator and the electricity generated by
12 a customer-generator that is delivered to a local dis-
13 tribution section system at the same point of inter-
14 connection during an applicable billing period.

15 “(3) The terms ‘electric generation unit qualifi-
16 ed for net metering’ and ‘qualified generation unit’
17 mean an electric energy generation unit that meets
18 the requirements of paragraph (5) and each of the
19 following requirements:

20 “(A) The unit is a fuel cell or uses as its
21 energy source either solar, wind, or biomass.

22 “(B) The unit has a generating capacity of
23 not more than 100 kilowatts.

24 “(C) The unit is located on premises that
25 are owned, operated, leased, or otherwise con-
26 trolled by the customer-generator.

1 “(D) The unit operates in parallel with the
2 retail electric supplier.

3 “(E) The unit is intended primarily to off-
4 set part or all of the customer-generator’s re-
5 quirements for electric energy.

6 “(4) The term ‘retail electric supplier’ means
7 any person that sells electric energy to the ultimate
8 consumer thereof.

9 “(5) The term ‘local distribution system’ means
10 any system for the distribution section of electric en-
11 ergy to the ultimate consumer thereof, whether or
12 not the owner or operator of such system is also a
13 retail electric supplier.

14 “(b) ADOPTION.—Not later than one year after the
15 enactment of this section, each retail electric supplier shall
16 comply with each of the following requirements and notify
17 all of its retail customers of such requirements not less
18 frequently than quarterly:

19 “(1) The supplier shall offer to arrange (either
20 directly or through a local distribution company or
21 other third party) to make available, on a first-come-
22 first-served basis, to each of its retail customers that
23 has installed an energy generation unit that is in-
24 tended for net metering and that notifies the sup-
25 plier of its generating capacity an electric energy

1 meter that is capable of net metering if the cus-
2 tomer-generator's existing electrical meter cannot
3 perform that function.

4 “(2) Rates and charges and contract terms and
5 conditions for the sale of electric energy to cus-
6 tomer-generators shall be the same as the rates and
7 charges and contract terms and conditions that
8 would be applicable if the customer-generator did
9 not own or operate a qualified generation unit and
10 use a net metering system.

11 Any retail electric supplier or local distribution company
12 may, at its own expense, install one or more additional
13 electric energy meters to monitor the flow of electricity
14 in either direction or to reflect the time of generation or
15 both. Whenever a customer-generator with a net metering
16 system uses any energy generation system entitled to cred-
17 its under a Federal minimum renewable energy generation
18 requirement, the total amount of energy generated by that
19 system shall be treated as generated by the retail electric
20 supplier for purposes of such requirement.

21 “(c) NET ENERGY MEASUREMENT AND BILLING.—
22 Each retail electric supplier subject to subsection (b) shall
23 calculate the net energy measurement for a customer
24 using a net metering system in the following manner:

1 “(1) The retail electric supplier shall measure
2 the net electricity produced or consumed during the
3 billing period using the metering referred to in para-
4 graph (1) or (2) of subsection (b).

5 “(2) If the electricity supplied by the retail elec-
6 tric supplier exceeds the electricity generated by the
7 customer-generator during the billing period, the
8 customer-generator shall be billed for the net elec-
9 tricity supplied by the retail electric supplier in ac-
10 cordance with normal metering practices.

11 “(3) If electricity generated by the customer-
12 generator exceeds the electricity supplied by the re-
13 tail electric supplier, the customer-generator—

14 “(A) shall be billed for the appropriate
15 customer charges for that billing period;

16 “(B) shall be credited for the excess elec-
17 tric energy generated during the billing period,
18 with this credit appearing on the bill for the fol-
19 lowing billing period (except for a billing period
20 that ends in the next calendar year); and

21 “(C) shall not be charged for transmission
22 losses.

23 If the customer-generator is using a meter that re-
24 flects the time of generation (a ‘real time meter’),
25 the credit shall be based on the retail rates for sale

1 by the retail electric supplier at the time of such
2 generation. At the beginning of each calendar year,
3 any remaining unused kilowatt-hour credit accumu-
4 lated by a customer-generator during the previous
5 year may be sold by the customer-generator to any
6 electric supplier that agrees to purchase such credit.
7 In the absence of any such purchase, the credit shall
8 be assigned (at no cost) to the retail electric supplier
9 that supplied electric energy to such customer-gener-
10 ator at the end of the previous year.

11 “(d) PERCENT LIMITATIONS.—

12 “(1) TWO PERCENT LIMITATION.—A local dis-
13 tribution company retail electric supplier shall not be
14 required to provide local distribution service with re-
15 spect to additional customer-generators after the
16 date during any calendar year on which the total
17 generating capacity of all customer-generators with
18 qualified generation facilities and net metering sys-
19 tems served by that local distribution company is
20 equal to or in excess of 2 percent of the capacity
21 necessary to meet the company’s average forecasted
22 aggregate customer peak demand for that calendar
23 year.

24 “(2) ONE PERCENT LIMITATION.—A local dis-
25 tribution company retail electric supplier shall not be

1 required to provide local distribution service with re-
2 spect to additional customer-generators using a sin-
3 gle type of qualified energy generation system after
4 the date during any calendar year on which the total
5 generating capacity of all customer-generators with
6 qualified generation facilities of that type and net
7 metering systems served by that local distribution
8 company is equal to or in excess of 1 percent of the
9 capacity necessary to meet the company's average
10 forecasted aggregate customer peak demand for that
11 calendar year.

12 “(3) RECORDS AND NOTICE.—Each retail elec-
13 tric supplier shall maintain, and make available to
14 the public, records of the total generating capacity
15 of customer-generators of such system that are
16 using net metering, the type of generating systems
17 and energy source used by the electric generating
18 systems used by such customer-generators. Each
19 such retail electric supplier shall notify the Commis-
20 sion when the total generating capacity of such cus-
21 tomer-generators is equal to or in excess of 2 per-
22 cent of the capacity necessary to meet the supplier's
23 aggregate customer peak demand during the pre-
24 vious calendar year and when the total generating
25 capacity of such customer-generators using a single

1 type of qualified generation is equal to or in excess
2 of 1 percent of such capacity.

3 “(e) SAFETY AND PERFORMANCE STANDARDS.—(1)

4 A qualified generation unit and net metering system used
5 by a customer-generator shall meet all applicable safety
6 and performance and reliability standards established by
7 the national electrical code, the Institute of Electrical and
8 Electronics Engineers, Underwriters Laboratories, or the
9 American National Standards Institute.

10 “(2) The Commission, after consultation with State
11 regulatory authorities and nonregulated local distribution
12 systems and after notice and opportunity for comment,
13 may adopt by regulation additional control and testing re-
14 quirements for customer-generators that the Commission
15 determines are necessary to protect public safety and sys-
16 tem reliability.

17 “(3) The Commission shall, after consultation with
18 State regulatory authorities and nonregulated local dis-
19 tribution systems and after notice and opportunity for
20 comment, prohibit by regulation the imposition of addi-
21 tional charges by electric suppliers and local distribution
22 systems for equipment or services for safety or perform-
23 ance that are additional to those necessary to meet the
24 standards referred to in subparagraphs (A) and (B).

1 “(f) STATE AUTHORITY.—Nothing in this section
2 shall preclude a State from establishing or imposing addi-
3 tional incentives or requirements to encourage qualified
4 generation and net metering additional to that required
5 under this section.”.

6 “(g) INTERCONNECTION STANDARDS.—(1) Within
7 one year after the enactment of this section the Commis-
8 sion shall publish model standards for the physical connec-
9 tion between local distribution systems and qualified gen-
10 eration units and electric generation units that would be
11 qualified generation units but for the fact that the unit
12 has a generating capacity of more than 100 kilowatts (but
13 not more than 250 kilowatts). Such model standards shall
14 be designed to encourage the use of qualified generation
15 units and to insure the safety and reliability of such units
16 and the local distribution systems interconnected with
17 such units. Within 2 years after the enactment of this sec-
18 tion, each State shall adopt such model standards, with
19 or without modification, and submit such standards to the
20 Commission for approval. The Commission shall approve
21 a modification of the model standards only if the Commis-
22 sion determines that such modification is consistent with
23 the purpose of such standards and is required by reason
24 of local conditions. If standards have not been approved
25 under this paragraph by the Commission for any State

1 within 2 years after the enactment of this section, the
2 Commission shall, by rule or order, enforce the Commis-
3 sion's model standards in such State until such time as
4 State standards are approved by the Commission.

5 “(2) The standards under this section shall establish
6 such measures for the safety and reliability of the affected
7 equipment and local distribution systems as may be appro-
8 priate. Such standards shall be consistent with all applica-
9 ble safety and performance standards established by the
10 national electrical code, the Institute of Electrical and
11 Electronics Engineers, Underwriters Laboratories, or the
12 American National Standards Institute and with such ad-
13 ditional safety and reliability standards as the Commission
14 shall, by rule, prescribe. Such standards shall ensure that
15 generation units will automatically isolate themselves from
16 the electrical system in the event of an electrical power
17 outage. Such standards shall permit the owner or operator
18 of the local distribution system to interrupt or reduce de-
19 liveries of available energy from the generation unit to the
20 system when necessary in order to construct, install, main-
21 tain, repair, replace, remove, investigate, or inspect any
22 of its equipment or part of its system; or if it determines
23 that curtailment, interruption, or reduction is necessary
24 because of emergencies, forced outages, force majeure, or
25 compliance with prudent electrical practices.

1 “(3) The model standards under this subsection pro-
2 hibit the imposition of additional charges by local distribu-
3 tion systems for equipment or services for interconnection
4 that are additional to those necessary to meet such stand-
5 ards.

6 “(h) INTERCONNECTION.—At the election of the
7 owner or operator of the generation unit concerned, con-
8 nections meeting the standards applicable under sub-
9 section (g) may be made—

10 “(1) by such owner or operator at such owner’s
11 or operator’s expense, or

12 “(2) by the owner or operator of the local dis-
13 tribution system upon the request of the owner or
14 operator of the generating unit and pursuant to an
15 offer by the owner or operator of the generating unit
16 to reimburse the local distribution system in an
17 amount equal to the minimum cost of such connec-
18 tion, consistent with the procurement procedures of
19 the State in which the unit is located, except that
20 the work on all such connections shall be performed
21 by qualified electrical personnel certified by a re-
22 sponsible body or licensed by a State or local govern-
23 ment authority.

24 “(i) CONSUMER FRIENDLY CONTRACTS.—The Com-
25 mission shall promulgate regulations insuring that sim-

1 plified contracts will be used for the interconnection of
2 electric energy by electric energy transmission or distribu-
3 tion systems and generating facilities that have a power
4 production capacity not greater than 250 kilowatts.”

○