#### 108TH CONGRESS 1ST SESSION

# H. R. 1423

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

March 25, 2003

Mr. Engel (for himself and Mr. Terry) 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 2003".

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.
- "(a) ALLOWANCE OF CREDIT.—In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount 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 'coo
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 sec-
25	tion—

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

taxpayer whose taxable year is such calendaryear.

"(B) There shall be allowable with respect to such expenditures to each of such individuals, a credit under subsection (a) for the taxable year in which such calendar year ends in an amount which bears the same ratio to the amount determined under subparagraph (A) as the amount of such expenditures made by such individual during such calendar year bears to the aggregate of such expenditures made by all of such individuals during such calendar year.

"(3) Tenant-stockholder in cooperative Housing corporation.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having paid his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of the cost of qualified renewable resource property and qualified cool roof property made by such corporation.

### "(4) Condominiums.—

"(A) IN GENERAL.—In the case of an individual who is a member of a condominium man-

agement association with respect to a condo-minium which he owns, such individual shall be treated as having paid his proportionate share of the cost of qualified renewable resource prop-erty and qualified cool roof property made by such association. "(B) Condominium management asso-CIATION.—For purposes of this paragraph, the 

- CIATION.—For purposes of this paragraph, the term 'condominium management association' means an organization which meets the requirements of paragraph (1) of section 528(c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as residences.
- "(5) Manufactured Homes included.—For purposes of this section, the term 'dwelling' includes a manufactured home which conforms to Federal Manufactured Home Construction and Safety Standards (24 C.F.R. 3280).
- "(6) Joint ownership of items of solar or wind energy property.—

"(A) IN GENERAL.—Any expenditure otherwise qualifying as an expenditure described in paragraph (1) or (2) of subsection (c) shall not 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,".

1	(3) Paragraph (1) of section 26(a) of such Code
2	is amended by striking "and 25B" and inserting
3	"25B, and 25C".
4	(4) Section 904(h) of such Code is amended by
5	striking "and 25B" and inserting "25B, and 25C".
6	(5) Subsection (d) of section 1400C of such
7	Code is amended by striking "and 25B" and insert-
8	ing "25B, and 25C".
9	(6) Subsection (a) of section 1016 of such Code
10	is amended by striking "and" at the end of para-
11	graph (27), by striking the period at the end of
12	paragraph (28) and inserting "; and", and by add-
13	ing at the end the following:
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.".
17	(7) The table of sections for subpart A of part
18	IV of subchapter A of chapter 1 of such Code is
19	amended by inserting after the item relating to sec-
20	tion 25B the following new item:
	"Sec. 25C. 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 quali-
16	fied 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.

"(D) The unit operates in parallel with the 1 2 retail electric supplier. "(E) The unit is intended primarily to off-3 4 set part or all of the customer-generator's requirements for electric energy. 6 "(4) The term 'retail electric supplier' means 7 any person that sells electric energy to the ultimate consumer thereof. 8 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 comply with each of the following requirements and notify 16 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-

plier of its generating capacity an electric energy

25

- meter that is capable of net metering if the customer-generator's existing electrical meter cannot perform that function.
- "(2) Rates and charges and contract terms and conditions for the sale of electric energy to customer-generators shall be the same as the rates and charges and contract terms and conditions that would be applicable if the customer-generator did not own or operate a qualified generation unit and 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

by the retail electric supplier at the time of such generation. At the beginning of each calendar year, any remaining unused kilowatt-hour credit accumulated by a customer-generator during the previous year may be sold by the customer-generator to any electric supplier that agrees to purchase such credit. In the absence of any such purchase, the credit shall be assigned (at no cost) to the retail electric supplier that supplied electric energy to such customer-generator at the end of the previous year.

### "(d) Percent Limitations.—

"(1) Two percent limitation.—A local distribution company retail electric supplier shall not be required to provide local distribution service with respect to additional customer-generators after the date during any calendar year on which the total generating capacity of all customer-generators with qualified generation facilities and net metering systems served by that local distribution company is equal to or in excess of 2 percent of the capacity necessary to meet the company's average forecasted aggregate customer peak demand for that calendar year.

"(2) ONE PERCENT LIMITATION.—A local distribution company retail electric supplier shall not be required to provide local distribution service with respect to additional customer-generators using a single type of qualified energy generation system after the date during any calendar year on which the total generating capacity of all customer-generators with qualified generation facilities of that type and net metering systems served by that local distribution company is equal to or in excess of 1 percent of the capacity necessary to meet the company's average forecasted aggregate customer peak demand for that calendar year.

"(3) Records and notice.—Each retail electric supplier shall maintain, and make available to the public, records of the total generating capacity of customer-generators of such system that are using net metering, the type of generating systems and energy source used by the electric generating systems used by such customer-generators. Each such retail electric supplier shall notify the Commission when the total generating capacity of such customer-generators is equal to or in excess of 2 percent of the capacity necessary to meet the supplier's aggregate customer peak demand during the previous calendar year and when the total generating 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—
- "(1) by such owner or operator at such owner's
- or operator's expense, or
- 12 "(2) by the owner or operator of the local dis-
- tribution system upon the request of the owner or
- operator of the generating unit and pursuant to an
- offer by the owner or operator of the generating unit
- to reimburse the local distribution system in an
- amount equal to the minimum cost of such connec-
- tion, consistent with the procurement procedures of
- 19 the State in which the unit is located, except that
- the work on all such connections shall be performed
- 21 by qualified electrical personnel certified by a re-
- 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."

 $\bigcirc$