

106TH CONGRESS  
1ST SESSION

# H. R. 2520

To authorize the President to enter into agreements to provide regulatory credit for voluntary early action to mitigate potential environmental impacts from greenhouse gas emissions.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 14, 1999

Mr. LAZIO (for himself, Mr. DOOLEY of California, Mr. BOEHLERT, Mr. KIND, Mr. CASTLE, Mr. MORAN of Virginia, Mr. SAXTON, Mr. ROEMER, Mr. GANSKE, Mr. MALONEY of Connecticut, Mr. GILCHREST, Mr. PRICE of North Carolina, and Mr. SMITH of Washington) introduced the following bill; which was referred to the Committee on Commerce

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## A BILL

To authorize the President to enter into agreements to provide regulatory credit for voluntary early action to mitigate potential environmental impacts from greenhouse gas emissions.

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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “Credit for Voluntary Actions Act”.

6 (b) TABLE OF CONTENTS.—The table of contents of  
7 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Purpose.
- Sec. 3. Definitions.
- Sec. 4. Authority for voluntary action agreements.
- Sec. 5. Entitlement to greenhouse gas reduction credit for voluntary action.
- Sec. 6. Baseline and base period.
- Sec. 7. Sources covered by voluntary action agreements.
- Sec. 8. Measurement and verification.
- Sec. 9. Participation by manufacturers and adopters of end-use, consumer, and similar technology.
- Sec. 10. Increases in domestic carbon stocks.
- Sec. 11. Trading and pooling.
- Sec. 12. Relationship to future domestic greenhouse gas regulatory statute.

1 **SEC. 2. PURPOSE.**

2 (a) IN GENERAL.—The purpose of this Act is to en-  
3 courage voluntary actions to mitigate potential environ-  
4 mental impacts of greenhouse gas emissions by author-  
5 izing the President to enter into binding agreements under  
6 which entities operating in the United States will receive  
7 credit, usable in any future domestic program that re-  
8 quires mitigation of greenhouse gas emissions, for vol-  
9 untary mitigation actions taken before the end of the cred-  
10 it period and to ensure that their future emission baselines  
11 reflect these actions.

12 (b) RULES OF CONSTRUCTION REGARDING KYOTO  
13 PROTOCOL AND FEDERAL REGULATORY ACTIONS.—This  
14 Act may not be construed—

15 (1) as an indication of support for, or an en-  
16 dorsement or ratification of, the Kyoto Protocol; or

17 (2) as establishing an obligation on the part of  
18 the Congress to enact a domestic greenhouse gas  
19 regulatory statute (as defined in section 3(9)).

1 **SEC. 3. DEFINITIONS.**

2 In this Act:

3 (1) AFFORESTATION.—The term  
4 “afforestation” means conversion of non-forest to  
5 forest on lands that have, historically, not contained  
6 forests and did not in 1990.

7 (2) BASELINE CARBON STOCKS.—The term  
8 “baseline carbon stocks” means the average amount  
9 of carbon stocks (in tons carbon) estimated to be  
10 present on a participant’s land during the partici-  
11 pant’s base period.

12 (3) BEST MANAGEMENT PRACTICES.—The term  
13 “best management practices” means sustainable  
14 land-management practices that conserve resources  
15 while maintaining long-term productivity.

16 (4) CARBON RESERVOIR.—The term “carbon  
17 reservoir” means quantifiable nonfossil storage of  
18 carbon in a natural or managed ecosystem or other  
19 reservoir.

20 (5) CARBON STOCKS.—The term “carbon  
21 stocks” means living biomass carbon, dead biomass  
22 carbon, and soil carbon (organic and mineral soils).

23 (6) COMPLIANCE PERIOD.—The term “compli-  
24 ance period” means any period during which a do-  
25 mestic greenhouse gas regulatory statute is in effect.

1           (7) CREDIT PERIOD.—The term “credit period”  
2 means—

3           (A) the period of January 1, 1999,  
4 through the earlier of—

5           (i) the day before the beginning of the  
6 compliance period; or

7           (ii) the end of the ninth calendar year  
8 that begins after the date of enactment of  
9 this Act; or

10          (B) if a different period is determined for  
11 a participant under section 5(e) or 6(c)(4), the  
12 period so determined.

13          (8) DOMESTIC.—The term “domestic” means  
14 within the territorial jurisdiction of the United  
15 States.

16          (9) DOMESTIC GREENHOUSE GAS REGULATORY  
17 STATUTE.—The term “domestic greenhouse gas reg-  
18 ulatory statute” means a Federal statute, enacted  
19 after the date of enactment of this Act, that imposes  
20 a quantitative limitation on domestic greenhouse gas  
21 emissions.

22          (10) ECOSYSTEMS.—The term “ecosystems” in-  
23 clude above- and below-ground living biomass, soils  
24 (organic and mineral), and necromass.

1           (11) EXISTING SOURCE.—The term “existing  
2 source” means a source that emitted greenhouse  
3 gases during the participant’s base period deter-  
4 mined under section 6.

5           (12) FOREST.—The term “forest” means land  
6 at least 10 percent occupied by forest trees of any  
7 size or formerly having had such tree cover and not  
8 currently developed for non-forest use. Lands devel-  
9 oped for non-forest use include areas for crops, im-  
10 proved pasture, residential, or administrative areas,  
11 improved roads of any width, and adjoining road  
12 clearing and powerline clearing of any width. The  
13 land must be a minimum of one acre in area. Road-  
14 side, streamside, and shelterbelt strips of timber  
15 must have a crown width of at least 120 feet to  
16 qualify as forest land; and unimproved roads, trails,  
17 streams, and clearings within forest areas are classi-  
18 fied as forest land if they are less than 120 feet wide  
19 (USDA Forest Service 1972).

20           (13) GREENHOUSE GAS.—The term “green-  
21 house gas” means—

- 22                   (A) carbon dioxide;
- 23                   (B) methane;
- 24                   (C) nitrous oxide;
- 25                   (D) hydrofluorocarbons;

1 (E) perfluorocarbons; and

2 (F) sulfur hexafluoride.

3 (14) GREENHOUSE GAS REDUCTION CREDIT.—

4 The term “greenhouse gas reduction credit” means  
5 an authorization under a domestic greenhouse gas  
6 regulatory statute to emit 1 metric ton of green-  
7 house gas (expressed in terms of carbon dioxide  
8 equivalent) that is provided because of greenhouse  
9 gas emission reductions or carbon sequestration car-  
10 ried out before the compliance period.

11 (15) MATURE PRIMARY FOREST.—The term  
12 “mature primary forest” means forests where the  
13 majority of dominant and codominant trees are  
14 greater than 100 years of age and where there is no  
15 history of significant direct human disturbance, with  
16 the exception of prescribed fire, over the last 100  
17 years.

18 (16) NEW SOURCE.—The term “new source”  
19 means—

20 (A) a source other than an existing source;

21 and

22 (B) a facility that would be a source but  
23 for the facility’s use of renewable energy.

1           (17) OWN.—The term “own” means to have di-  
2           rect or indirect ownership of an undivided interest in  
3           an asset.

4           (18) PARTICIPANT.—The term “participant”  
5           means a person that enters into a voluntary action  
6           agreement with the United States under this Act.

7           (19) PERSON.—The term “person” includes a  
8           governmental entity.

9           (20) REFORESTATION.—The term “reforest-  
10          ation” means conversion of non-forest to forest on  
11          lands which had, historically, contained forests but  
12          which had been converted to some other use as of  
13          1990.

14          (21) REGION.—The term “region” has the  
15          meaning applicable pursuant to the inventory and  
16          analysis survey unit or units of the United States  
17          Forest Service in which the participant’s lands are  
18          located.

19          (22) SOURCE.—The term “source” means a  
20          source of greenhouse gas emissions.

21          (23) TON-YEAR.—The term “ton year” means  
22          the maintenance of a carbon stock of one ton for one  
23          year.

24          (24) VOLUNTARY ACTION AGREEMENT.—The  
25          term “voluntary action agreement” means an agree-

1       ment with the United States entered into under sec-  
2       tion 4(a).

3 **SEC. 4. AUTHORITY FOR VOLUNTARY ACTION AGREE-**  
4                   **MENTS.**

5       (a) AUTHORITY.—

6           (1) IN GENERAL.—The President may enter  
7       into a legally binding voluntary action agreement  
8       with any person under which the United States  
9       agrees to provide greenhouse gas reduction credit  
10      usable beginning in the compliance period, if the  
11      person takes an action described in section 5 that  
12      reduces greenhouse gas emissions or section 10 that  
13      sequesters carbon before the end of the credit pe-  
14      riod.

15          (2) REQUIREMENTS.—A voluntary action agree-  
16      ment entered into under paragraph (1) shall meet  
17      either—

18           (A) the requirements for voluntary action  
19      agreements under sections 5 through 8;

20           (B) in the case of a participant described  
21      in section 9, the requirements of that section;  
22      or

23           (C) in the case of carbon sequestration, the  
24      requirements of section 10.

1 (b) DELEGATION.—The President may delegate any  
2 authority under this Act to any Federal department or  
3 agency.

4 (c) REGULATIONS.—The President may promulgate  
5 such regulations (including guidelines) as are appropriate  
6 to carry out this Act.

7 **SEC. 5. ENTITLEMENT TO GREENHOUSE GAS REDUCTION**

8 **CREDIT FOR VOLUNTARY ACTION.**

9 (a) CREDITABLE ACTIONS WHICH RESULT IN IN-  
10 CREASES TO UNITED STATES LIMITATIONS.—A partici-  
11 pant shall receive greenhouse gas reduction credit under  
12 a voluntary action agreement if the participant takes an  
13 action that—

14 (1) reduces greenhouse gas emissions or seques-  
15 ters carbon before the end of the credit period; and

16 (2) will result in an addition to the United  
17 States quantified emission limitation during the  
18 credit period.

19 (b) UNITED STATES INITIATIVE FOR JOINT IMPLE-  
20 MENTATION.—

21 (1) IN GENERAL.—Subject to paragraph (2), a  
22 voluntary action agreement may provide that a par-  
23 ticipant shall be entitled to receive greenhouse gas  
24 reduction credit for a greenhouse gas emission re-  
25 duction or carbon sequestration that—

1 (A) is not creditable under subsection (a);

2 and

3 (B) is for a project—

4 (i) accepted before December 31,  
5 2000, under the United States Initiative  
6 for Joint Implementation; and

7 (ii) financing for which was provided  
8 or construction of which was commenced  
9 before that date.

10 (2) LIMITATION ON PERIOD DURING WHICH  
11 CREDIT MAY BE EARNED.—No greenhouse gas re-  
12 duction credit may be earned under this subsection  
13 after the earlier of—

14 (A) the earliest date on which credit may  
15 be earned for a greenhouse gas emission reduc-  
16 tion, carbon sequestration, or comparable  
17 project under a Congressionally authorized do-  
18 mestic greenhouse gas regulatory statute; or

19 (B) the end of the credit period.

20 (c) PROSPECTIVE DOMESTIC ACTIONS.—

21 (1) EMISSION REDUCTIONS.—A participant  
22 shall receive greenhouse gas reduction credit under  
23 a voluntary action agreement if during the entire  
24 credit period the participant's aggregate greenhouse  
25 gas emissions from domestic sources that are cov-

1       ered by the voluntary action agreement are less than  
2       the sum of the participant's annual source baselines  
3       during that entire period (as determined under sec-  
4       tion 6 and adjusted under subsections (a)(2), (c)(1),  
5       and (c)(2) of section 7).

6           (2) SEQUESTRATION.—For the purpose of re-  
7       ceiving greenhouse gas reduction credit under para-  
8       graph (1), the amount by which aggregate net car-  
9       bon sequestration for the credit period in a partici-  
10      pant's domestic carbon reservoirs covered by a vol-  
11      untary action agreement exceeds the sum of the par-  
12      ticipant's annual reservoir baselines for the credit  
13      period (as determined under section 6 and adjusted  
14      under section 7(c)(1)(B)) shall be treated as a  
15      greenhouse gas emission reduction.

16      (d) RETROSPECTIVE DOMESTIC ACTIONS.—

17           (1) CREDIT.—A voluntary action agreement  
18      may provide that a participant shall be entitled to  
19      receive 1 ton of greenhouse gas reduction credit for  
20      each ton of greenhouse gas emission reductions or  
21      carbon sequestration for the 1991 through 1998 pe-  
22      riod from domestic actions that are—

23           (A) reported before January 1, 1999,

24           under section 1605 of the Energy Policy Act of

25           1992 (42 U.S.C. 13385); or

1 (B) carried out and reported before Janu-  
2 ary 1, 1999, under a Federal agency program  
3 to implement other recognized greenhouse gas  
4 reductions efforts.

5 (2) VERIFICATION.—The participant shall pro-  
6 vide information sufficient to verify to the satisfac-  
7 tion of the President (in accordance with section 8  
8 and the regulations promulgated under section 4(e))  
9 that actions reported under paragraph (1)—

10 (A) have been accurately reported;

11 (B) are not double-counted; and

12 (C) represent actual reductions in green-  
13 house gas emissions or actual increases in net  
14 carbon sequestration.

15 (3) THIRD-PARTY CERTIFICATION.—All submis-  
16 sions made pursuant to paragraph (2) shall be cer-  
17 tified by qualified third-party auditors.

18 (e) EXTENSION.—The parties to a voluntary action  
19 agreement may extend the credit period during which  
20 greenhouse gas reduction credit may be earned under the  
21 voluntary action agreement, if Congress permits such an  
22 extension by law enacted after the date of enactment of  
23 this Act.

24 (f) AWARD OF GREENHOUSE GAS REDUCTION CRED-  
25 IT.—

1           (1) ANNUAL NOTIFICATION OF CUMULATIVE  
2 BALANCES.—After the end of each calendar year,  
3 the President shall notify each participant of the cu-  
4 mulative balance (if any) of greenhouse gas reduc-  
5 tion credit earned under a voluntary action agree-  
6 ment as of the end of the calendar year.

7           (2) ANNUAL REPORT TO CONGRESS.—After the  
8 end of each calendar year, the President shall notify  
9 Congress of the cumulative balance of greenhouse  
10 gas emissions credits potentially earned under all  
11 voluntary action agreements as of the end of that  
12 calendar year, and shall notify Congress within 30  
13 days of a determination that the cumulative balance  
14 of greenhouse gas emission credits potentially earned  
15 under all voluntary action agreements as of that  
16 time has reached, or exceeded, 365,000,000.

17           (3) AWARD OF FINAL CREDIT.—Effective at the  
18 end of the credit period, a participant shall have a  
19 contractual entitlement, to the extent provided in the  
20 participant’s voluntary action agreement, to receive  
21 1 ton of greenhouse gas reduction credit for each 1  
22 ton that is creditable under subsections (a) through  
23 (d).

24           (g) AUTOMATIC FIRE SUPPRESSION SYSTEMS.—  
25 Credits shall not be issued under this Act for the reduction

1 of greenhouse gases used in automatic fire suppression  
2 systems provided that such greenhouse gases—

3 (1) remain in an approved fire suppression sys-  
4 tem maintained strictly according to NFPA 2001 to  
5 ensure against accidental or unnecessary discharges;  
6 and

7 (2) upon decommissioning, the greenhouse  
8 gases in the system are chemically transformed to  
9 eliminate any and all global warming potential.

10 **SEC. 6. BASELINE AND BASE PERIOD.**

11 (a) SOURCE BASELINE.—A participant’s annual  
12 source baseline for each of the calendar years in the credit  
13 period shall be equal to the participant’s average annual  
14 greenhouse gas emissions from domestic sources covered  
15 by the participant’s voluntary action agreement during the  
16 participant’s base period, adjusted for the calendar year  
17 as provided in subsections (a)(2), (c)(1), and (c)(2) of sec-  
18 tion 7, or subsections (c) and (d) of section 9, or sub-  
19 section (e) of section 9. A participant’s annual source  
20 baseline shall not include emissions that resulted from fail-  
21 ure to comply with applicable requirements in force during  
22 the base period.

23 (b) RESERVOIR BASELINE.—A participant’s annual  
24 reservoir baseline for each of the calendar years in the  
25 credit period shall be equal to the average level of carbon

1 stocks in carbon reservoirs covered by the participant's  
2 voluntary action agreement for the participant's base pe-  
3 riod, adjusted for the calendar year as provided in section  
4 7(c)(1).

5 (c) BASE PERIOD.—

6 (1) IN GENERAL.—Except as provided in para-  
7 graphs (2) and (3), a participant's base period shall  
8 be an average of the 3-year period ending with the  
9 year of enactment of this Act.

10 (2) DATA UNAVAILABLE OR UNREPRESENTA-  
11 TIVE.—The regulations promulgated under section  
12 4(c) may specify a base period other than the period  
13 described in section 6(c)(1) that will be applicable if  
14 adequate data are not available to determine a base-  
15 line for those years or if such data are unrepresenta-  
16 tive.

17 (3) ELECTIONS.—The regulations promulgated  
18 under section 4(c) may permit a participant to elect  
19 a base period earlier than the period described in  
20 section 6(c)(1) (not to include any year earlier than  
21 1990) to reflect voluntary reductions made before  
22 that period.

23 (4) ADJUSTMENT OF PERIOD DURING WHICH  
24 CREDIT MAY BE EARNED.—Notwithstanding sub-  
25 sections (c) and (d) of section 5, except as otherwise

1 provided by the regulations promulgated under sec-  
2 tion 4(c), if an election is made for a base period  
3 earlier than 1996—

4 (A) greenhouse gas reduction credit shall  
5 be available under section 5(c) for the calendar  
6 year that begins after the end of the base pe-  
7 riod and any calendar year thereafter through  
8 the end of the credit period; and

9 (B) greenhouse gas reduction credit shall  
10 be available under section 5(d) only through the  
11 end of the base period.

12 **SEC. 7. SOURCES COVERED BY VOLUNTARY ACTION**  
13 **AGREEMENTS.**

14 (a) SOURCES.—

15 (1) IN GENERAL.—

16 (A) COVERED SOURCES.—Except as other-  
17 wise provided in this subsection, a participant's  
18 voluntary action agreement shall cover all do-  
19 mestic greenhouse gas sources that the partici-  
20 pant owns as of the date on which the voluntary  
21 action agreement is entered into.

22 (B) EXCLUSIONS.—The regulations pro-  
23 mulgated under section 4(c) (or the terms of an  
24 early action agreement) may exclude from cov-  
25 erage under a voluntary action agreement small

1 or diverse sources owned by the participant  
2 where the emissions represent a de minimis per-  
3 centage of the participant's total emissions.

4 (2) ECONOMIC CHANGE.—

5 (A) IN GENERAL.—The regulations pro-  
6 mulgated under section 4(c) shall provide that  
7 a voluntary action agreement shall provide for  
8 annual addition to, or deduction from, a partici-  
9 pant's emissions baseline to account for eco-  
10 nomic change.

11 (B) CALCULATIONS.—Each participant's  
12 annual baseline shall be the product of—

13 (i) its baseline emissions;

14 (ii) the participant's economic change  
15 factor; and

16 (iii) the GDP adjustment factor.

17 (C) TERMS.—

18 (i) ECONOMIC CHANGE FACTOR.—For  
19 purposes of subparagraph (B)(ii), the eco-  
20 nomic change factor represents the ratio,  
21 expressed in percentage terms, of the prod-  
22 uct output of the participant during the  
23 year and the average annual product out-  
24 put of the participant during the base pe-  
25 riod.

1 (ii) GDP ADJUSTMENT FACTOR.—For  
2 purposes of subparagraph (B)(iii), the  
3 GDP adjustment factor, expressed in per-  
4 centage terms, represents the difference  
5 between 100 and the percentage by which  
6 the Gross Domestic Product of the United  
7 States has increased since the base period.

8 (iii) DEMAND-SIDE MANAGEMENT.—  
9 For purposes of clause (i), in the case of  
10 electricity generators, the calculations of  
11 product output shall take into account re-  
12 ductions in output due to demand-side  
13 management investments.

14 (b) OPT-IN PROVISIONS.—

15 (1) OPT-IN FOR OTHER OWNED SOURCES.—Do-  
16 mestic sources owned by a participant that are not  
17 required to be covered under subsection (a) may be  
18 covered under a voluntary action agreement at the  
19 election of the participant.

20 (2) OPT-IN FOR CARBON RESERVOIRS.—

21 (A) IN GENERAL.—A voluntary action  
22 agreement may provide that domestic carbon  
23 reservoirs owned by a participant may be cov-  
24 ered under the voluntary action agreement at  
25 the election of the participant.

1           (B) COVERAGE.—Except in the case of  
2           small or diverse carbon reservoirs owned by the  
3           participant (as provided in the regulations pro-  
4           mulgated under section 4(c)), if a participant  
5           elects to have domestic carbon reservoirs cov-  
6           ered under the voluntary action agreement, all  
7           of the participant’s domestic carbon reservoirs  
8           shall be covered under the voluntary action  
9           agreement.

10       (c) ACCOUNTING RULES.—

11           (1) TRANSFERS.—If ownership of a carbon  
12           stock covered by a voluntary action agreement is  
13           transferred to or from the participant—

14                (A) the carbon stocks shall be adjusted to  
15                reflect the transfer for the participant’s base  
16                period;

17                (B) the net carbon sequestration shall be  
18                adjusted to reflect the transfer for each year for  
19                which greenhouse gas reduction credit is  
20                claimed; and

21                (C) pro rata adjustments shall be made to  
22                reflect transfers that occur during a program  
23                year.

24           (2) DISPLACEMENT OF EMISSIONS.—In addi-  
25           tion to the baseline adjustments made pursuant to

1 subsection (a)(2), a voluntary action agreement shall  
2 contain effective and workable provisions that ensure  
3 that only net emission reductions will be credited  
4 under section 5 in circumstances in which emissions  
5 are displaced, as a result of outsourcing, from  
6 sources covered by a voluntary action agreement to  
7 other sources.

8 (3) PERIOD OF COVERAGE.—Emissions from  
9 sources and net carbon sequestration in carbon res-  
10 ervoirs shall be covered by a voluntary action agree-  
11 ment for the entire credit period, except as provided  
12 under paragraph (1) or by the regulations promul-  
13 gated under section 4(c).

14 **SEC. 8. MEASUREMENT AND VERIFICATION.**

15 (a) IN GENERAL.—In accordance with the regula-  
16 tions promulgated under section 4(c), a voluntary action  
17 agreement shall—

18 (1) provide that, for each calendar year during  
19 which the voluntary action agreement is in effect,  
20 the participant shall report to the United States, as  
21 applicable—

22 (A) the participant’s annual source base-  
23 line and greenhouse gas emissions for the cal-  
24 endar year; and

1 (B) the requirements of section 10(d) per-  
2 taining to carbon sequestration for the calendar  
3 year.

4 (2) establish procedures under which the partici-  
5 ipant will measure, track, and report the information  
6 required by paragraph (1);

7 (3) establish requirements for maintenance of  
8 records by the participant and provisions for inspec-  
9 tion of the records by representatives of the United  
10 States; and

11 (4) permit qualified independent third party en-  
12 tities to measure, track, and report the information  
13 required by paragraph (1) on behalf of the partici-  
14 pant.

15 (b) AVAILABILITY OF REPORTS TO THE PUBLIC.—  
16 Reports required to be made under subsection (a)(1) shall  
17 be available to the public.

18 (c) CONFIDENTIALITY.—The regulations promul-  
19 gated under section 4(c) shall make appropriate provision  
20 for protection of confidential commercial and financial in-  
21 formation.

1 **SEC. 9. PARTICIPATION BY MANUFACTURERS AND ADOPT-**  
2 **ERS OF END-USE, CONSUMER, AND SIMILAR**  
3 **TECHNOLOGIES.**

4 (a) **IN GENERAL.**—In the case of a participant that  
5 manufactures or constructs for sale to end-users equip-  
6 ment or facilities that emit greenhouse gases or which  
7 adopt end use efficiency technologies, the President may  
8 enter into a voluntary action agreement.

9 (b) **EMISSIONS BASELINES.**—For each participant  
10 under subsection (a), its emissions baseline shall be estab-  
11 lished by determining the average annual number of prod-  
12 ucts of the same type sold by the participant in the United  
13 States during the base period and multiplying that num-  
14 ber by the expected useful life of the product and a numer-  
15 ical factor to determine the greenhouse gas emissions re-  
16 sulting from the electricity generated, or fossil fuel con-  
17 sumed, in connection with the operation of the product.

18 (c) **ECONOMIC CHANGE.**—

19 (1) **CALCULATIONS.**—Each participant’s annual  
20 baseline shall be the product of—

21 (A) its baseline emissions;

22 (B) the participant’s economic change fac-  
23 tor; and

24 (C) the GDP adjustment factor.

25 (2) **TERMS.**—

1           (A) ECONOMIC CHANGE FACTOR.—For  
2 purposes of paragraph (1)(B), the economic  
3 change factor represents the ratio, expressed in  
4 percentage terms, of the products of the same  
5 type sold by the participant during the year and  
6 the average annual number of such products  
7 sold by the participant during the base period.

8           (B) GDP ADJUSTMENT FACTOR.—For  
9 purposes of paragraph (1)(C), the GDP adjust-  
10 ment factor, expressed in percentage terms,  
11 represents the difference between 100 and the  
12 percentage by which the Gross Domestic Prod-  
13 uct of the United States has increased since the  
14 base period.

15       (d) CALCULATION OF CREDITS.—Each participant  
16 shall be entitled to receive greenhouse gas emissions re-  
17 duction credits in an amount equal to the difference  
18 between—

19           (1) the sum of its annual emissions baselines  
20 for the program period, as calculated pursuant to  
21 subsections (b) and (c); and

22           (2) the product of—

23               (A) the number of products sold by the  
24 participant in the United States;

1 (B) the expected useful life of each prod-  
2 uct; and

3 (C) the numerical factor used to determine  
4 the greenhouse gas emissions resulting from the  
5 electricity generated, or fossil fuel consumed, in  
6 connection with the operation of the product.

7 (e) AUTOMOTIVE VEHICLES.—

8 (1) IN GENERAL.—Participants that manufac-  
9 ture automobiles, including both passenger vehicles  
10 and light-duty trucks, may enter into agreements  
11 authorized by this section.

12 (2) CALCULATION OF EMISSIONS BASELINE,  
13 ANNUAL BASELINE, AND REDUCTION CREDITS.—For  
14 purposes of this section, the calculation of each par-  
15 ticipant’s emissions baseline, annual baseline, and  
16 reduction credits shall be based on the methods and  
17 factors used in subsections (b), (c), and (d), which  
18 shall be used to determine the greenhouse gas emis-  
19 sions reductions achieved, and credits awarded, as a  
20 result of improvements made by the participant in  
21 the actual fuel economy of its passenger vehicles and  
22 light duty trucks.

23 (f) PREVENTION OF DOUBLE-COUNTING.—In the  
24 event the President determines that the adjustments to  
25 participants’ baselines made pursuant to section 7(a)(2)

1 are not adequate to effect the purposes of this subsection,  
2 the regulations promulgated under section 4(c) shall in-  
3 clude provisions to ensure that, notwithstanding any other  
4 provision of this Act, no more than one credit shall be  
5 awarded for each ton of emissions of greenhouse gas emis-  
6 sions reduced pursuant to the agreements entered into  
7 pursuant to this Act.

8 **SEC. 10. INCREASES IN DOMESTIC CARBON STOCKS.**

9 (a) PURPOSE.—The purpose of this section is to en-  
10 sure that voluntary action credits earned for approved ac-  
11 tions leading to increases in domestic carbon stocks are  
12 of a sufficient quality to allow comparable and tradable  
13 with other credits authorized by this Act.

14 (b) IN GENERAL.—A voluntary action agreement  
15 shall provide that a participant may be entitled to receive  
16 greenhouse gas reduction credit for permanent protection  
17 of carbon stocks in mature primary forests, reforestation  
18 and afforestation, and improved forest carbon stock man-  
19 agement in forests that have merchantable timber.

20 (c) CALCULATIONS.—Credits shall be subject to po-  
21 tential debiting pursuant to section 10(c)(2)(A), or shall  
22 be counted in ton-year credits pursuant to section  
23 10(c)(2)(B).

24 (1) PERMANENT PROTECTION.—In the case of  
25 permanent protection of mature primary forests

1 where protection is initiated during the credit period,  
2 credits shall be equal to 50 percent of the carbon  
3 stock in above and belowground live biomass, meas-  
4 ured by the end of the credit period.

5 (2) REFORESTATION AND AFFORESTATION.—  
6 For reforestation and afforestation initiated during  
7 the credit period, credits will be equal to the full net  
8 increases in carbon stocks generated by project ac-  
9 tivities during the credit period.

10 (3) IMPROVED FOREST CARBON STOCK MAN-  
11 AGEMENT.—In forests that are not being perma-  
12 nently protected and have merchantable timber,  
13 creditable net increases in carbon stocks must be ad-  
14 ditional to those which would have occurred in the  
15 absence of this legislation. These net increases are  
16 subject to adjustments for leakage.

17 (A) ADDITIONALLY.—For improved forest  
18 carbon stock management, the annual amount  
19 of carbon stock increase that is considered addi-  
20 tional to that which would have occurred in the  
21 absence of this legislation shall be the difference  
22 between the net rate of increase in carbon  
23 stocks during the credit period on all land  
24 owned by the participant within the region, and  
25 the average net rate of increase in carbon

1 stocks on the same area of land in similar pri-  
2 vately owned forest lands within the region. For  
3 the purpose of this analysis, regulations pro-  
4 mulgated under section 4(c) shall establish av-  
5 erage rates of change of carbon stocks for for-  
6 est type, productivity class, age, and region,  
7 taking into account the most recent forest in-  
8 ventory and analysis data. All analyses of rates  
9 of change in carbon stocks shall exclude all sub-  
10 merchantable timber. If the average per acre  
11 rate of change in carbon stocks in similar for-  
12 ests within the region is less than zero, net  
13 changes in those carbon stocks shall be re-  
14 garded as zero for the purpose of comparison  
15 with the rates of change on an individual land-  
16 owner's property.

17 (B) LEAKAGE.—If improved forest carbon  
18 stock management results in a reduction in tim-  
19 ber supply from the participant's lands, there  
20 will be a deduction in claimed credits equal to  
21 the product of the amount of reduction in tim-  
22 ber supply and the average direct and indirect  
23 carbon emissions associated with supplying  
24 similar timber. These emissions shall include  
25 those identified in tables developed pursuant to

1 section 10(d). No deduction for leakage will be  
2 required if it can be demonstrated that the net  
3 rate of carbon stock increase in the region has  
4 risen for the last period for which such data is  
5 available, and the aggregate output of all tim-  
6 ber, fiber, and fuel producing mills and facilities  
7 in the region has not declined, subtracting any  
8 production which relied on imports of timber or  
9 fiber from outside the region.

10 (d) LIMITATIONS.—

11 (1) COVERAGE.—The following applies under  
12 this section:

13 (A) Only private lands, and such lands  
14 that are transferred into permanent protection  
15 under State or Federal jurisdiction during the  
16 credit period, are eligible to participate in the  
17 program established by this section.

18 (B) Mature primary forests, and lands on  
19 which reforestation and afforestation is initiated  
20 during the credit period, are eligible for cred-  
21 iting under the provisions of this legislation.  
22 Where increases in carbon stocks are achieved  
23 through improved forest carbon stock manage-  
24 ment, forests must be, at a minimum, old  
25 enough to have merchantable timber to be eligi-

1 ble. To determine the minimum age needed for  
2 these lands to be eligible, rules issued under  
3 this Act shall describe methods for determining  
4 forest age, and define the age at which different  
5 forest types produce merchantable pulpwood,  
6 sawtimber, or other timber products commonly  
7 sold by landowners in the applicable region. For  
8 the purposes of this Act, the age of the forest  
9 management unit (each not to exceed 100  
10 acres) is the oldest age class that represents at  
11 least 20 percent of the standing timber.

12 (C) A participant must enroll all the forest  
13 land it owns to participate in the program es-  
14 tablished by this section, except those lands  
15 used only for ecosystem preservation during the  
16 entire early action period, and small or diverse  
17 land holdings that represent a de minimis per-  
18 centage of the participant's total carbon stocks.  
19 For the purposes of this Act, a participant  
20 owns forest land if it owns a controlling interest  
21 in the timber on the land. To reduce trans-  
22 action costs, landowners may pool their lands  
23 for enrollment and act as a single participant.  
24 Changes in carbon stocks, on all lands enrolled  
25 need to be included, and for those lands with

1 a net loss in carbon stocks the loss needs to  
2 be subtracted from the creditable gain in car-  
3 bon stocks calculated under this section.

4 (2) DURABILITY.—The following applies under  
5 this section:

6 (A) The participant may elect to receive  
7 credit equal to the net increase in carbon stocks  
8 during the credit period, as calculated under  
9 section 10(b). Under this election, if at any  
10 time before 50 years have passed since specific  
11 tracts were enrolled in the program, the stock  
12 of carbon on those tracts covered by the agree-  
13 ment is less than the stock of carbon at the end  
14 of the credit period, the participant shall retire  
15 a number of greenhouse gas reduction credits  
16 equal to the difference between the 2 amounts.

17 (B) If the participant elects not to count  
18 the greenhouse gas reductions accruing from  
19 their activities as described above, the partici-  
20 pant will be awarded a fraction of 1 ton of  
21 credit (a ton-year credit) for each year that the  
22 carbon stock is maintained. This fraction shall  
23 be defined by the Government agency respon-  
24 sible for the implementation of this Act.

1           (3) LAND STEWARDSHIP.—The following ap-  
2           plies under this section:

3                   (A) To prevent the establishment of forests  
4           in areas that currently support natural vegeta-  
5           tive communities other than forests, no credits  
6           will be granted for afforestation of areas his-  
7           torically not forested unless those areas have  
8           been supporting systems other than natural  
9           vegetative communities (e.g. cropland, non-na-  
10          tive grasslands, abandoned mine lands, parking  
11          lots) since 1990.

12                   (B) Credits for carbon stock increases  
13          from land use activities should encourage wise  
14          land stewardship. All lands enrolled in a pro-  
15          gram for voluntary action carbon credits must  
16          adhere to best management practices as speci-  
17          fied on a regional or State basis by the appro-  
18          priate Federal or State agency.

19           (4) CREDIT LIMIT.—No more than 20 percent  
20          of the greenhouse reduction credits allocated under  
21          this Act shall be awarded for carbon stock increases  
22          under this section.

23          (e) MONITORING, REPORTING, AND VERIFICATION.—

1           (1) MONITORING GUIDELINES.—The rules  
2 issued pursuant to section 4(c) shall include moni-  
3 toring guidelines that, at a minimum, provide:

4           (A) Accurate and transparent carbon stock  
5 monitoring protocols based on statistically ro-  
6 bust inventory, soil sampling, ecological survey,  
7 and other applicable scientific techniques.

8           (B) Requirements for periodic monitoring  
9 of creditable activities. All enrolled carbon  
10 stocks that may be decreasing, and significant  
11 indirect increases in greenhouse gas emissions  
12 caused by project activities, must be monitored  
13 and subtracted from credits. Monitoring of en-  
14 rolled carbon stocks that are increasing is at  
15 the discretion of the participant. Only mon-  
16 itored stocks may be included in calculations  
17 under sections 10(a) and 10(b).

18           (C) Tables of estimated greenhouse gas  
19 emissions associated with land management ac-  
20 tivities that result in significant indirect in-  
21 creases in greenhouse gas emissions (such as  
22 fertilizer production and application, herbicide  
23 production, and fossil fuel consumption).

24           (D) Procedures for delineating which car-  
25 bon stocks on a participant's lands that may be

1 decreasing during the credit period due to  
2 project activities need to be monitored.

3 (E) Procedures for estimating baseline car-  
4 bon stocks on each participant's lands.

5 (F) Procedures to allow for appropriate es-  
6 timation of carbon stocks using tables and mod-  
7 els derived from forest inventory and analysis  
8 data of the United States Forest Service or  
9 other credible sources for the appropriate re-  
10 gion, forest type, age, stand management his-  
11 tory, and site productivity.

12 (2) REPORTING GUIDELINES.—The rules issued  
13 pursuant to section 4(c) shall include reporting  
14 guidelines that, at a minimum, provide as follows:

15 (A) Participants shall report claimed net  
16 increases in carbon stocks during the credit pe-  
17 riod to the Government agency responsible for  
18 implementation of this Act, which will then  
19 evaluate the participant's compliance with the  
20 guidelines. If not in compliance, the participant  
21 will be notified and advised what remedial ac-  
22 tions are needed. Participants may not receive  
23 greenhouse gas reduction credits until they are  
24 in compliance with the guidelines issued under  
25 this Act.

1 (B) Each participant's report must be sup-  
2 ported by a report from a recognized third  
3 party auditor. The auditor must verify the car-  
4 bon credits using a statistically robust evalua-  
5 tion of a valid subsample of the participant's  
6 lands.

7 (3) ELIGIBILITY FOR ASSISTANCE.—Partici-  
8 pants who own less than 50,000 acres will be eligible  
9 for monitoring and verification assistance.

10 **SEC. 11. TRADING AND POOLING.**

11 (a) TRADING.—A participant may—

12 (1) purchase earned greenhouse gas reduction  
13 credit from and sell the credit to any other partici-  
14 pant; and

15 (2) sell the credit to any person that is not a  
16 participant.

17 (b) POOLING.—The regulations promulgated under  
18 section 4(c) may permit pooling arrangements under  
19 which a group of participants agrees to act as a single  
20 participant for the purpose of entering into a voluntary  
21 action agreement.

22 **SEC. 12. RELATIONSHIP TO FUTURE DOMESTIC GREEN-**  
23 **HOUSE GAS REGULATORY STATUTE.**

24 A voluntary action agreement shall not bind the  
25 United States to adopt (or not to adopt) any particular

1 form of domestic greenhouse gas regulatory statute, ex-  
2 cept that a voluntary action agreement shall provide  
3 that—

4           (1) greenhouse gas reduction credit earned by a  
5 participant under a voluntary action agreement shall  
6 be provided to the participant in addition to any oth-  
7 erwise available authorizations of the participant to  
8 emit greenhouse gases during the compliance period  
9 under a domestic greenhouse gas regulatory statute;  
10 and

11           (2) if the allocation of authorizations under a  
12 domestic greenhouse gas regulatory statute to emit  
13 greenhouse gases during the compliance period is  
14 based on the level of a participant's emissions during  
15 a historic period that is later than the participant's  
16 base period under the participant's voluntary action  
17 agreement, any greenhouse gas reduction credit to  
18 which the participant was entitled under the vol-  
19 untary action agreement for domestic greenhouse  
20 gas reductions during that historic period shall, for  
21 the purpose of that allocation, be added back to the  
22 participant's greenhouse gas emissions level for the  
23 historic period.

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