

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.

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

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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