# S. 547

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 SENATE OF THE UNITED STATES

March 4, 1999

Mr. Chafee (for himself, Mr. Mack, Mr. Lieberman, Mr. Warner, Mr. Moynihan, Mr. Reid, Mr. Jeffords, Mr. Wyden, Mr. Biden, Ms. Collins, Mr. Baucus, and Mr. Voinovich) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

# 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 Reductions 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 early action agreements.
- Sec. 5. Entitlement to greenhouse gas reduction credit for early action.
- Sec. 6. Baseline and base period.
- Sec. 7. Sources and carbon reservoirs covered by early action agreements.
- Sec. 8. Measurement and verification.
- Sec. 9. Authority to enter into agreements that achieve comparable reductions.
- Sec. 10. Trading and pooling.
- Sec. 11. Relationship to future domestic greenhouse gas regulatory statute.

#### 1 SEC. 2. PURPOSE.

- 2 The purpose of this Act is to encourage voluntary ac-
- 3 tions to mitigate potential environmental impacts of green-
- 4 house gas emissions by authorizing the President to enter
- 5 into binding agreements under which entities operating in
- 6 the United States will receive credit, usable in any future
- 7 domestic program that requires mitigation of greenhouse
- 8 gas emissions, for voluntary mitigation actions taken be-
- 9 fore the end of the credit period.

#### 10 SEC. 3. DEFINITIONS.

- 11 In this Act:
- 12 (1) CARBON RESERVOIR.—The term "carbon
- 13 reservoir" means quantifiable nonfossil storage of
- carbon in a natural or managed ecosystem or other
- 15 reservoir.
- 16 (2) COMPLIANCE PERIOD.—The term "compli-
- ance period" means any period during which a do-
- mestic greenhouse gas regulatory statute is in effect.
- 19 (3) CREDIT PERIOD.—The term "credit period"
- 20 means—

1	(A) the period of January 1, 1999
2	through the earlier of—
3	(i) the day before the beginning of the
4	compliance period; or
5	(ii) the end of the ninth calendar year
6	that begins after the date of enactment of
7	this Act; or
8	(B) if a different period is determined for
9	a participant under section $5(e)$ or $6(c)(4)$ , the
10	period so determined.
11	(4) Domestic.—The term "domestic" means
12	within the territorial jurisdiction of the United
13	States.
14	(5) Domestic greenhouse gas regulatory
15	STATUTE.—The term "domestic greenhouse gas reg-
16	ulatory statute" means a Federal statute, enacted
17	after the date of enactment of this Act, that imposes
18	a quantitative limitation on domestic greenhouse gas
19	emissions, or taxes such emissions.
20	(6) Early action agreement.—The term
21	"early action agreement" means an agreement with
22	the United States entered into under section 4(a).
23	(7) Existing source.—The term "existing
24	source" means a source that emitted greenhouse

1	gases during the participant's base period deter-
2	mined under section 6.
3	(8) Greenhouse gas.—The term "greenhouse
4	gas'' means—
5	(A) carbon dioxide; and
6	(B) to the extent provided by an early ac-
7	tion agreement—
8	(i) methane;
9	(ii) nitrous oxide;
10	(iii) hydrofluorocarbons;
11	(iv) perfluorocarbons; and
12	(v) sulfur hexafluoride.
13	(9) Greenhouse gas reduction credit.—
14	The term "greenhouse gas reduction credit" means
15	an authorization under a domestic greenhouse gas
16	regulatory statute to emit 1 metric ton of green-
17	house gas (expressed in terms of carbon dioxide
18	equivalent) that is provided because of greenhouse
19	gas emission reductions or carbon sequestration car-
20	ried out before the compliance period.
21	(10) New Source.—The term "new source"
22	means—
23	(A) a source other than an existing source;
24	and

1	(B) a facility that would be a source but
2	for the facility's use of renewable energy.
3	(11) Own.—The term "own" means to have di-
4	rect or indirect ownership of an undivided interest in
5	an asset.
6	(12) Participant.—The term "participant"
7	means a person that enters into an early action
8	agreement with the United States under this Act.
9	(13) Person.—The term "person" includes a
10	governmental entity.
11	(14) Source.—The term "source" means a
12	source of greenhouse gas emissions.
13	SEC. 4. AUTHORITY FOR EARLY ACTION AGREEMENTS.
14	(a) Authority.—
15	(1) In general.—The President may enter
<ul><li>15</li><li>16</li></ul>	(1) In general.—The President may enter into a legally binding early action agreement with
16	into a legally binding early action agreement with
16 17	into a legally binding early action agreement with any person under which the United States agrees to
16 17 18	into a legally binding early action agreement with any person under which the United States agrees to provide greenhouse gas reduction credit usable be-
16 17 18 19	into a legally binding early action agreement with any person under which the United States agrees to provide greenhouse gas reduction credit usable be- ginning in the compliance period, if the person takes
16 17 18 19 20	into a legally binding early action agreement with any person under which the United States agrees to provide greenhouse gas reduction credit usable be- ginning in the compliance period, if the person takes an action described in section 5 that reduces green-
16 17 18 19 20 21	into a legally binding early action agreement with any person under which the United States agrees to provide greenhouse gas reduction credit usable be- ginning in the compliance period, if the person takes an action described in section 5 that reduces green- house gas emissions or sequesters carbon before the
<ul><li>16</li><li>17</li><li>18</li><li>19</li><li>20</li><li>21</li><li>22</li></ul>	into a legally binding early action agreement with any person under which the United States agrees to provide greenhouse gas reduction credit usable beginning in the compliance period, if the person takes an action described in section 5 that reduces greenhouse gas emissions or sequesters carbon before the end of the credit period.

1	(A) the requirements for early action
2	agreements under sections 5 through 8; or
3	(B) in the case of a participant described
4	in section 9, the requirements of that section.
5	(b) Delegation.—The President may delegate any
6	authority under this Act to any Federal department or
7	agency.
8	(c) Regulations.—The President may promulgate
9	such regulations (including guidelines) as are appropriate
10	to carry out this Act.
11	SEC. 5. ENTITLEMENT TO GREENHOUSE GAS REDUCTION
12	CREDIT FOR EARLY ACTION.
13	(a) Internationally Creditable Actions.—A
13 14	(a) Internationally Creditable Actions.—A participant shall receive greenhouse gas reduction credit
14	participant shall receive greenhouse gas reduction credit
14 15	participant shall receive greenhouse gas reduction credit under an early action agreement if the participant takes
<ul><li>14</li><li>15</li><li>16</li></ul>	participant shall receive greenhouse gas reduction credit under an early action agreement if the participant takes an action that—
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	participant shall receive greenhouse gas reduction credit under an early action agreement if the participant takes an action that—  (1) reduces greenhouse gas emissions or seques-
14 15 16 17 18	participant shall receive greenhouse gas reduction credit under an early action agreement if the participant takes an action that—  (1) reduces greenhouse gas emissions or seques- ters carbon before the end of the credit period; and
<ul><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li><li>19</li></ul>	participant shall receive greenhouse gas reduction credit under an early action agreement if the participant takes an action that—  (1) reduces greenhouse gas emissions or seques- ters carbon before the end of the credit period; and (2) under any applicable international agree-
14 15 16 17 18 19 20	participant shall receive greenhouse gas reduction credit under an early action agreement if the participant takes an action that—  (1) reduces greenhouse gas emissions or seques- ters carbon before the end of the credit period; and (2) under any applicable international agree- ment, will result in an addition to the United States
14 15 16 17 18 19 20 21	participant shall receive greenhouse gas reduction credit under an early action agreement if the participant takes an action that—  (1) reduces greenhouse gas emissions or seques- ters carbon before the end of the credit period; and (2) under any applicable international agree- ment, will result in an addition to the United States quantified emission limitation for the compliance pe-

1	(1) IN GENERAL.—Subject to paragraph (2), an
2	early action agreement may provide that a partici-
3	pant shall be entitled to receive greenhouse gas re-
4	duction credit for a greenhouse gas emission reduc-
5	tion or carbon sequestration that—
6	(A) is not creditable under subsection (a);
7	and
8	(B) is for a project—
9	(i) accepted before December 31,
10	2000, under the United States Initiative
11	for Joint Implementation; and
12	(ii) financing for which was provided
13	or construction of which was commenced
14	before that date.
15	(2) Limitation on Period During which
16	CREDIT MAY BE EARNED.—No greenhouse gas re-
17	duction credit may be earned under this subsection
18	after the earlier of—
19	(A) the earliest date on which credit may
20	be earned for a greenhouse gas emission reduc-
21	tion, carbon sequestration, or comparable
22	project under an applicable international agree-
23	ment; or
24	(B) the end of the credit period.
25	(c) Prospective Domestic Actions.—

- 1 (1) Emission reductions.—A participant 2 shall receive greenhouse gas reduction credit under 3 an early action agreement if, during the credit 4 period—
  - (A) the participant's aggregate greenhouse gas emissions from domestic sources that are covered by the early action agreement; are less than
  - (B) the sum of the participant's annual source baselines during that period (as determined under section 6 and adjusted under subsections (a)(2), (c)(1), and (c)(2) of section 7).
  - (2) Sequestration.—For the purpose of receiving greenhouse gas reduction credit under paragraph (1), the amount by which aggregate net carbon sequestration for the credit period in a participant's domestic carbon reservoirs covered by an early action agreement exceeds the sum of the participant's annual reservoir baselines for the credit period (as determined under section 6 and adjusted under section 7(c)(1)(B)) shall be treated as a greenhouse gas emission reduction.

### (d) Domestic Section 1605 Actions.—

(1) CREDIT.—An early action agreement may provide that a participant shall be entitled to receive

1	1 ton of greenhouse gas reduction credit for each
2	ton of greenhouse gas emission reductions or carbon
3	sequestration for the 1991 through 1998 period
4	from domestic actions that are—
5	(A) reported before January 1, 1999,
6	under section 1605 of the Energy Policy Act of
7	1992 (42 U.S.C. 13385); or
8	(B) carried out and reported before Janu-
9	ary 1, 1999, under a Federal agency program
10	to implement the Climate Change Action Plan.
11	(2) Verification.—The participant shall pro-
12	vide information sufficient to verify to the satisfac-
13	tion of the President (in accordance with section 8
14	and the regulations promulgated under section 4(c))
15	that actions reported under paragraph (1)—
16	(A) have been accurately reported;
17	(B) are not double-counted; and
18	(C) represent actual reductions in green-
19	house gas emissions or actual increases in net
20	carbon sequestration.
21	(e) Extension.—The parties to an early action
22	agreement may extend the credit period during which
23	greenhouse gas reduction credit may be earned under the
24	early action agreement, if Congress permits such an exten-

- 1 sion by law enacted after the date of enactment of this
- 2 Act.
- 3 (f) Award of Greenhouse Gas Reduction Cred-
- 4 IT.—
- 5 (1) ANNUAL NOTIFICATION OF CUMULATIVE
- 6 BALANCES.—After the end of each calendar year,
- 7 the President shall notify each participant of the cu-
- 8 mulative balance (if any) of greenhouse gas reduc-
- 9 tion credit earned under an early action agreement
- as of the end of the calendar year.
- 11 (2) AWARD OF FINAL CREDIT.—Effective at the
- end of the credit period, a participant shall have a
- contractual entitlement, to the extent provided in the
- participant's early action agreement, to receive 1 ton
- of greenhouse gas reduction credit for each 1 ton
- that is creditable under subsections (a) through (d).

#### 17 SEC. 6. BASELINE AND BASE PERIOD.

- 18 (a) Source Baseline.—A participant's annual
- 19 source baseline for each of the calendar years in the credit
- 20 period shall be equal to the participant's average annual
- 21 greenhouse gas emissions from domestic sources covered
- 22 by the participant's early action agreement during the par-
- 23 ticipant's base period, adjusted for the calendar year as
- 24 provided in subsections (a)(2), (c)(1), and (c)(2) of section
- 25 7.

- 1 (b) Reservoir Baseline.—A participant's annual 2 reservoir baseline for each of the calendar years in the 3 credit period shall be equal to the average level of carbon 4 stocks in carbon reservoirs covered by the participant's 5 early action agreement for the participant's base period, 6 adjusted for the calendar year as provided in section 7 7(c)(1).
- 8 (c) Base Period.—

- 9 (1) IN GENERAL.—Except as provided in para-10 graphs (2) and (3), a participant's base period shall 11 be 1996 through 1998.
  - (2) Data unavailable or unrepresentative.—The regulations promulgated under section 4(c) may specify a base period other than 1996 through 1998 that will be applicable if adequate data are not available to determine a 1996 through 1998 baseline or if such data are unrepresentative.
  - (3) ELECTIONS.—The regulations promulgated under section 4(c) may permit a participant to elect a base period earlier than 1996 (not to include any year earlier than 1990) to reflect voluntary reductions made before January 1, 1996.
  - (4) Adjustment of Period During Which Credit May be Earned.—Notwithstanding subsections (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 AND CARBON RESERVOIRS COVERED BY
13	EARLY ACTION AGREEMENTS.
14	(a) Sources.—
15	(1) In general.—
15 16	<ul><li>(1) In general.—</li><li>(A) Covered sources.—Except as other-</li></ul>
16	(A) COVERED SOURCES.—Except as other-
16 17	(A) Covered sources.—Except as otherwise provided in this subsection, a participant's
16 17 18	(A) Covered sources.—Except as otherwise provided in this subsection, a participant's early action agreement shall cover all domestic
16 17 18 19	(A) Covered sources.—Except as otherwise provided in this subsection, a participant's early action agreement shall cover all domestic greenhouse gas sources that the participant
16 17 18 19 20	(A) Covered sources.—Except as otherwise provided in this subsection, a participant's early action agreement shall cover all domestic greenhouse gas sources that the participant owns as of the date on which the early action
116 117 118 119 220 221	(A) Covered sources.—Except as otherwise provided in this subsection, a participant's early action agreement shall cover all domestic greenhouse gas sources that the participant owns as of the date on which the early action agreement is entered into.
16 17 18 19 20 21 22	(A) Covered sources.—Except as otherwise provided in this subsection, a participant's early action agreement shall cover all domestic greenhouse gas sources that the participant owns as of the date on which the early action agreement is entered into.  (B) Exclusions.—The regulations pro-

1	(i) small or diverse sources owned by
2	the participant; and
3	(ii) sources owned by more than 1
4	person.
5	(2) New Sources.—
6	(A) In general.—The regulations pro-
7	mulgated under section 4(c) may provide that
8	an early action agreement may provide for an
9	annual addition to a participant's source base-
10	line to account for new sources owned by the
11	participant.
12	(B) Amount of addition.—The amount
13	of an addition under subparagraph (A) shall re-
14	flect the emission performance of the most effi-
15	cient commercially available technology for
16	sources that produce the same or similar output
17	as the new source (determined as of the date on
18	which the early action agreement is entered
19	into).
20	(b) Opt-in Provisions.—
21	(1) Opt-in for other owned sources.—Do-
22	mestic sources owned by a participant that are not
23	required to be covered under subsection (a) may be
24	covered under an early action agreement at the elec-
25	tion of the participant.

1	(2) Opt-in for carbon reservoirs.—
2	(A) IN GENERAL.—An early action agree-
3	ment may provide that domestic carbon res-
4	ervoirs owned by a participant may be covered
5	under the early action agreement at the election
6	of the participant.
7	(B) Coverage.—Except in the case of
8	small or diverse carbon reservoirs owned by the
9	participant (as provided in the regulations pro-
10	mulgated under section 4(c)), if a participant
11	elects to have domestic carbon reservoirs cov-
12	ered under the early action agreement, all of
13	the participant's domestic carbon reservoirs
14	shall be covered under the early action agree-
15	ment.
16	(3) Opt-in for sources and carbon res-
17	ERVOIRS NOT OWNED BY PARTICIPANT.—Any source
18	or carbon reservoir not owned by the participant, or
19	any project that decreases greenhouse gas emissions
20	from or sequesters carbon in such a source or car-
21	bon reservoir, may be covered by an early action
22	agreement—
23	(A) in the case of a source or carbon res-
24	ervoir that is covered by another early action

agreement, if each owner of the source or car-

1	bon reservoir agrees to exclude the source or
2	reservoir from coverage by the owner's early ac-
3	tion agreement; and
4	(B) in accordance with the regulations pro-
5	mulgated under section 4(c).
6	(c) Accounting Rules.—
7	(1) Transfers.—If ownership of a source or
8	carbon reservoir covered by an early action agree-
9	ment is transferred to or from the participant—
10	(A) in the case of a source, the source's
11	emissions shall be adjusted to reflect the trans-
12	fer for the base period and each year for which
13	greenhouse gas reduction credit is claimed; and
14	(B) in the case of a carbon reservoir—
15	(i) the carbon reservoir's carbon
16	stocks shall be adjusted to reflect the
17	transfer for the participant's base period
18	and
19	(ii) the carbon reservoir's net carbon
20	sequestration shall be adjusted to reflect
21	the transfer for each year for which green-
22	house gas reduction credit is claimed.
23	(2) Displacement of emissions.—An early
24	action agreement shall contain effective and work-
25	able provisions that ensure that only net emission

- reductions will be credited under section 5 in circumstances in which emissions are displaced from sources covered by an early action agreement to sources not covered by an early action agreement.
  - (3) Period of Coverage.—Emissions from sources and net carbon sequestration in carbon reservoirs shall be covered by an early action agreement for the credit period, except as provided under paragraph (1) or by the regulations promulgated under section 4(c).
- 11 (4) Partial years.—An early action agree-12 ment shall contain appropriate provisions for any 13 partial year of coverage of a source or carbon res-14 ervoir.

#### 15 SEC. 8. MEASUREMENT AND VERIFICATION.

- 16 (a) IN GENERAL.—In accordance with the regula-17 tions promulgated under section 4(c), an early action 18 agreement shall—
- 19 (1) provide that, for each calendar year during 20 which the early action agreement is in effect, the 21 participant shall report to the United States, as 22 applicable—
- 23 (A) the participant's annual source base-24 line and greenhouse gas emissions for the cal-25 endar year; and

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1	(B) the participant's annual reservoir base-
2	line and net carbon sequestration for the cal-
3	endar year;
4	(2) establish procedures under which the partic-
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.
22	SEC. 9. AUTHORITY TO ENTER INTO AGREEMENTS THAT
23	ACHIEVE COMPARABLE REDUCTIONS.
24	In the case of a participant that manufactures or con-
25	structs for sale to end-users equipment or facilities that

- 1 emit greenhouse gases, the President may enter into an
- 2 early action agreement that does not meet the require-
- 3 ments of sections 5 through 7, if the President determines
- 4 that—
- 5 (1) an early action agreement that meets the
- 6 requirements of those sections is infeasible;
- 7 (2) an alternative form of agreement would bet-8 ter carry out this Act; and
- 9 (3) an agreement under this section would
- achieve tonnage reductions of greenhouse gas emis-
- sions that are comparable to reductions that would
- be achieved under an agreement that meets the re-
- 13 quirements of those sections.
- 14 SEC. 10. TRADING AND POOLING.
- 15 (a) Trading.—A participant may—
- 16 (1) purchase earned greenhouse gas reduction
- 17 credit from and sell the credit to any other partici-
- pant; and
- 19 (2) sell the credit to any person that is not a
- participant.
- 21 (b) Pooling.—The regulations promulgated under
- 22 section 4(c) may permit pooling arrangements under
- 23 which a group of participants agrees to act as a single
- 24 participant for the purpose of entering into an early action
- 25 agreement.

#### SEC. 11. RELATIONSHIP TO FUTURE DOMESTIC GREEN-

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)	HOUSE GAS REGULATORY STATUT	יעדי

- 3 (a) In General.—An early action agreement shall
- 4 not bind the United States to adopt (or not to adopt) any
- 5 particular form of domestic greenhouse gas regulatory
- 6 statute, except that an early action agreement shall pro-
- 7 vide that—
- 8 (1) greenhouse gas reduction credit earned by a 9 participant under an early action agreement shall be 10 provided to the participant in addition to any other-11 wise available authorizations of the participant to
- emit greenhouse gases during the compliance period
- under a domestic greenhouse gas regulatory statute;
- 14 and
- 15 (2) if the allocation of authorizations under a
- domestic greenhouse gas regulatory statute to emit
- 17 greenhouse gases during the compliance period is
- based on the level of a participant's emissions during
- a historic period that is later than the participant's
- base period under the participant's early action
- agreement, any greenhouse gas reduction credit to
- 22 which the participant was entitled under the early
- action agreement for domestic greenhouse gas reduc-
- 24 tions during that historic period shall, for the pur-
- pose of that allocation, be added back to the partici-

- 1 pant's greenhouse gas emissions level for the historic
- 2 period.
- 3 (b) LIMITATION.—Nothing in this Act authorizes ag-
- 4 gregate greenhouse gas emissions from domestic sources
- 5 in an amount that exceeds any greenhouse gas emission
- 6 limitation applicable to the United States under an inter-
- 7 national agreement that has been ratified by the United
- 8 States and has entered into force.

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