

**AMENDMENT TO H.R. 2454, AS REPORTED
OFFERED BY MR. PETERSON OF MINNESOTA**

(Page and line numbers refer to the file ACESFL_001 (HR 2998) on the Rules Committee website)

Page 15, beginning line 8, strike paragraph (11), relating to the definition of high conservation priority land.

Page 19, beginning line 13, strike paragraph (16), relating to the definition of renewable biomass, and insert the following new paragraph:

1 “(16) RENEWABLE BIOMASS.—The term ‘re-
2 newable biomass’ means any of the following:

3 “(A) Materials, pre-commercial thinnings,
4 or removed invasive species from National For-
5 est System land and public lands (as defined in
6 section 103 of the Federal Land Policy and
7 Management Act of 1976 (43 U.S.C. 1702)),
8 including those that are byproducts of preven-
9 tive treatments (such as trees, wood, brush,
10 thinnings, chips, and slash), that are removed
11 as part of a federally recognized timber sale, or
12 that are removed to reduce hazardous fuels, to
13 reduce or contain disease or insect infestation,
14 or to restore ecosystem health, and that are—

1 “(i) not from components of the Na-
2 tional Wilderness Preservation System,
3 Wilderness Study Areas, Inventoried
4 Roadless Areas, old growth or late-succes-
5 sional forest stands, components of the
6 National Landscape Conservation System,
7 National Monuments, National Conserva-
8 tion Areas, Designated Primitive Areas, or
9 Wild and Scenic Rivers corridors;

10 “(ii) harvested in environmentally sus-
11 tainable quantities, as determined by the
12 appropriate Federal land manager; and

13 “(iii) harvested in accordance with
14 Federal and State law, and applicable land
15 management plans.

16 “(B) Any organic matter that is available
17 on a renewable or recurring basis from non-
18 Federal land or land belonging to an Indian or
19 Indian tribe that is held in trust by the United
20 States or subject to a restriction against alien-
21 ation imposed by the United States, including—

22 “(i) renewable plant material, includ-
23 ing—

24 “(I) feed grains;

1 “(II) other agricultural commod-
2 ities;
3 “(III) other plants and trees; and
4 “(IV) algae; and
5 “(ii) waste material, including—
6 “(I) crop residue;
7 “(II) other vegetative waste ma-
8 terial (including wood waste and wood
9 residues);
10 “(III) animal waste and byprod-
11 ucts (including fats, oils, greases, and
12 manure);
13 “(IV) construction waste; and
14 “(V) food waste and yard
15 waste.”.

Page 116, beginning line 1, strike section 126 and
insert the following new section:

16 **SEC. 126. DEFINITION OF RENEWABLE BIOMASS.**

17 Section 211(o)(1)(I) of the Clean Air Act (42 U.S.C.
18 7545(o)(1)(I)) is amended to read as follows:

19 “(I) RENEWABLE BIOMASS.—The term ‘re-
20 newable biomass’ means any of the following:

21 “(i) Materials, pre-commercial
22 thinnings, or removed invasive species from
23 National Forest System land and public

1 lands (as defined in section 103 of the
2 Federal Land Policy and Management Act
3 of 1976 (43 U.S.C. 1702)), including those
4 that are byproducts of preventive treat-
5 ments (such as trees, wood, brush,
6 thinnings, chips, and slash), that are re-
7 moved as part of a federally recognized
8 timber sale, or that are removed to reduce
9 hazardous fuels, to reduce or contain dis-
10 ease or insect infestation, or to restore eco-
11 system health, and that are—

12 “(I) not from components of the
13 National Wilderness Preservation Sys-
14 tem, Wilderness Study Areas, Inven-
15 toried Roadless Areas, old growth or
16 late-successional forest stands, compo-
17 nents of the National Landscape Con-
18 servation System, National Monu-
19 ments, National Conservation Areas,
20 Designated Primitive Areas, or Wild
21 and Scenic Rivers corridors;

22 “(II) harvested in environ-
23 mentally sustainable quantities, as de-
24 termined by the appropriate Federal
25 land manager; and

1 “(III) harvested in accordance
2 with Federal and State law, and ap-
3 plicable land management plans.

4 “(ii) Any organic matter that is avail-
5 able on a renewable or recurring basis
6 from non-Federal land or land belonging to
7 an Indian or Indian tribe that is held in
8 trust by the United States or subject to a
9 restriction against alienation imposed by
10 the United States, including—

11 “(I) renewable plant material, in-
12 cluding—

13 “(aa) feed grains;

14 “(bb) other agricultural
15 commodities;

16 “(cc) other plants and trees;

17 and

18 “(dd) algae; and

19 “(II) waste material, including—

20 “(aa) crop residue;

21 “(bb) other vegetative waste
22 material (including wood waste
23 and wood residues);

1 “(cc) animal waste and by-
2 products (including fats, oils,
3 greases, and manure);
4 “(dd) construction waste;
5 “(ee) food waste and yard
6 waste; and
7 “(ff) the non-fossil biogenic
8 portion of municipal solid waste
9 and construction, demolition, and
10 disaster debris.”.

Page 693, beginning line 13, strike paragraph (29), relating to the definition of high conservation priority land.

Page 696, beginning line 15, strike paragraph (42), relating to the definition of renewable biomass, and insert the following new paragraph:

11 “(42) RENEWABLE BIOMASS.—The term ‘re-
12 newable biomass’ means any of the following:
13 “(A) Materials, pre-commercial thinnings,
14 or removed invasive species from National For-
15 est System land and public lands (as defined in
16 section 103 of the Federal Land Policy and
17 Management Act of 1976 (43 U.S.C. 1702)),
18 including those that are byproducts of preven-

1 tive treatments (such as trees, wood, brush,
2 thinnings, chips, and slash), that are removed
3 as part of a federally recognized timber sale, or
4 that are removed to reduce hazardous fuels, to
5 reduce or contain disease or insect infestation,
6 or to restore ecosystem health, and that are—

7 “(i) not from components of the Na-
8 tional Wilderness Preservation System,
9 Wilderness Study Areas, Inventoried
10 Roadless Areas, old growth or late-succes-
11 sional forest stands, components of the
12 National Landscape Conservation System,
13 National Monuments, National Conserva-
14 tion Areas, Designated Primitive Areas, or
15 Wild and Scenic Rivers corridors;

16 “(ii) harvested in environmentally sus-
17 tainable quantities, as determined by the
18 appropriate Federal land manager; and

19 “(iii) harvested in accordance with
20 Federal and State law, and applicable land
21 management plans.

22 “(B) Any organic matter that is available
23 on a renewable or recurring basis from non-
24 Federal land or land belonging to an Indian or
25 Indian tribe that is held in trust by the United

1 States or subject to a restriction against alien-
2 ation imposed by the United States, including—
3 “(i) renewable plant material, includ-
4 ing—
5 “(I) feed grains;
6 “(II) other agricultural commod-
7 ities;
8 “(III) other plants and trees; and
9 “(IV) algae; and
10 “(ii) waste material, including—
11 “(I) crop residue;
12 “(II) other vegetative waste ma-
13 terial (including wood waste and wood
14 residues);
15 “(III) animal waste and byprod-
16 ucts (including fats, oils, greases, and
17 manure);
18 “(IV) construction waste; and
19 “(V) food waste and yard
20 waste.”.

At the end of the bill, add the following new title:

1 **TITLE V—AGRICULTURAL AND**
2 **FORESTRY RELATED OFFSETS**
3 **Subtitle A—Offset Credit Program**
4 **From Domestic Agricultural and**
5 **Forestry Sources**

6 **SEC. 501. DEFINITIONS.**

7 (a) IN GENERAL.—In this title:

8 (1) ADDITIONAL.—The term “additional”,
9 when used with respect to reductions or avoidance of
10 greenhouse gas emissions, or to sequestration of
11 greenhouse gases, means reductions, avoidance, or
12 sequestration that result in a lower level of net
13 greenhouse gas emissions or atmospheric concentra-
14 tions than would occur in the absence of an offset
15 project.

16 (2) ADDITIONALITY.—The term “additionality”
17 means the extent to which reductions or avoidance
18 of greenhouse gas emissions, or sequestration of
19 greenhouse gases, are additional.

20 (3) ADMINISTRATOR.—The term “Adminis-
21 trator” means the Administrator of the Environ-
22 mental Protection Agency.

23 (4) ADVISORY COMMITTEE.—The term “Advi-
24 sory Committee” means the USDA Greenhouse Gas
25 Emission Reduction and Sequestration Advisory

1 Committee established under section 1245(f) of the
2 Food Security Act of 1985 (16 U.S.C. 3845).

3 (5) GREENHOUSE GAS.—The term “greenhouse
4 gas” means any of the following:

5 (A) Carbon dioxide.

6 (B) Methane.

7 (C) Nitrous oxide.

8 (D) Sulfur hexafluoride.

9 (E) Hydrofluorocarbons from a chemical
10 manufacturing process at an industrial sta-
11 tionary source.

12 (F) Any perfluorocarbon.

13 (G) Nitrogen trifluoride.

14 (H) Any other anthropogenic gas des-
15 igned as a greenhouse gas by the Adminis-
16 trator.

17 (6) LEAKAGE.—The term “leakage” means a
18 significant and quantifiable increase in greenhouse
19 gas emissions, or a significant and quantifiable de-
20 crease in sequestration, which is caused by an offset
21 practice and occurs outside the boundaries of the
22 offset practice.

23 (7) OFFSET CREDIT.—The term “offset credit”
24 means a tradeable compliance instrument that—

1 (A) represents the reduction, avoidance, or
2 sequestration of 1 ton of carbon dioxide equiva-
3 lent; and

4 (B) is issued pursuant to this title.

5 (8) OFFSET PRACTICE.—The term “offset prac-
6 tice” means an activity that reduces, avoids, or se-
7 questers greenhouse gas emissions, and for which
8 offset credits may be issued pursuant to this title.

9 (9) OFFSET PRODUCER.—The term “offset pro-
10 ducer” means an owner, operator, landlord, tenant,
11 or sharecropper who has or shares responsibility for
12 ensuring that an offset practice is established and
13 maintained during the crediting period for purposes
14 of an offset credit.

15 (10) OFFSET PROJECT.—The term “offset
16 project” means a practice or set of practices that re-
17 duce or avoid greenhouse gas emissions, or sequester
18 greenhouse gases as implemented by an offset pro-
19 ducer.

20 (11) OFFSET PROJECT DEVELOPER.—The term
21 “offset project developer” means the offset producer
22 or designee of the offset producer.

23 (12) PRACTICE TYPE.—The term “practice
24 type” means a discrete category of offset practices
25 for which the Secretary develops a standardized

1 methodology to accurately estimate the amount of
2 greenhouse gas emissions reduced or avoided or
3 greenhouse gases sequestered.

4 (13) REVERSAL.—The term “reversal” means
5 an intentional or unintentional loss of sequestered
6 greenhouse gases to the atmosphere.

7 (14) SECRETARY.—The term “Secretary”
8 means the Secretary of Agriculture.

9 (15) SEQUESTRATION AND SEQUESTERED.—
10 The terms “sequestered” and “sequestration” mean
11 the separation, isolation, or removal of greenhouse
12 gases from the atmosphere, as determined by the
13 Secretary. The terms include biological sequestra-
14 tion, but do not include ocean fertilization tech-
15 niques.

16 (16) TERM OFFSET CREDIT.—The term “term
17 offset credit” means a compliance instrument au-
18 thorized under section 504(d).

19 (b) AGRICULTURAL AND FORESTRY EXCEPTION TO
20 CAPPED SECTORS.—For purposes of this title, the term
21 “capped sector” means a sector of economic activity that
22 directly emits capped emissions, including the industrial
23 sector, electricity generation sector, the transportation
24 sector, the residential and commercial sectors (to the ex-

1 tent they burn oil or natural gas), but such term does not
2 include the agricultural or forestry sectors.

3 **SEC. 502. ESTABLISHMENT OF OFFSET CREDIT PROGRAM**
4 **FROM DOMESTIC AGRICULTURAL AND FOR-**
5 **ESTRY SOURCES.**

6 (a) ESTABLISHMENT.—Not later than 1 year after
7 the date of enactment of this title, the Secretary shall es-
8 tablish a program governing the generation of offset cred-
9 its from domestic agricultural and forestry sources.

10 (b) REQUIREMENTS.—The program described in sub-
11 section (a) shall—

12 (1) ensure that offset credits represent
13 verifiable and additional greenhouse gas emission re-
14 ductions or avoidance, or increases in sequestration;
15 and

16 (2) ensure that offset credits issued for seques-
17 tration offset projects are only issued for greenhouse
18 gas reductions that result in a permanent net reduc-
19 tion in atmospheric greenhouse gases.

20 (c) DUTIES OF SECRETARY.—In addition to the du-
21 ties described in subsection (a) and section 1245 of the
22 Food Security Act of 1985 (16 U.S.C. 3845), the Sec-
23 retary shall, with respect to practices relating to offset
24 credits from agricultural and forestry sources—

1 (1) establish by rule methodologies by practice
2 types for quantifying greenhouse gas benefits;

3 (2) establish by rule methodologies for each
4 practice type for establishing activity baselines and
5 determining additionality;

6 (3) establish by rule methodologies by practice
7 types for accounting for and mitigating potential
8 leakage;

9 (4) establish rules to account for and address
10 reversals;

11 (5) establish rules to require third-party
12 verification;

13 (6) provide technical assistance to offset project
14 developers using funds appropriated to the Con-
15 servation Operations account;

16 (7) establish rules for approval of offset project
17 plans;

18 (8) establish rules for certification of implemen-
19 tation of offset project plans;

20 (9) establish by rule requirements for reporting
21 and record keeping; and

22 (10) conduct audits.

23 **SEC. 503. LIST OF ELIGIBLE DOMESTIC AGRICULTURAL**
24 **AND FORESTRY OFFSET PRACTICE TYPES.**

25 (a) LIST REQUIRED.—

1 (1) PREPARATION AND PUBLICATION.—Not
2 later than 1 year after the date of enactment of this
3 title, the Secretary shall prepare and publish in the
4 Federal Register a list of domestic agricultural and
5 forestry practice types that are eligible to generate
6 offset credits under this title because the practices
7 avoid or reduce greenhouse gas emissions or seques-
8 ter greenhouse gases.

9 (2) RECOMMENDATIONS.—In preparing the list
10 under paragraph (1), the Secretary shall take into
11 consideration the recommendations of the Advisory
12 Committee.

13 (b) INITIAL LIST.—At a minimum, the list prepared
14 under this section shall include those practices that avoid
15 or reduce greenhouse gas emissions or sequester green-
16 house gases, such as—

17 (1) agricultural, grassland, and rangeland se-
18 questration and management practices, including—

19 (A) altered tillage practices;

20 (B) winter cover cropping, continuous
21 cropping, and other means to increase biomass
22 returned to soil in lieu of planting followed by
23 fallowing;

24 (C) reduction of nitrogen fertilizer use or
25 increase in nitrogen use efficiency;

1 (D) reduction in the frequency and dura-
2 tion of flooding of rice paddies;

3 (E) reduction in carbon emissions from or-
4 ganic soils;

5 (F) reduction in greenhouse gas emissions
6 from manure and effluent; and

7 (G) reduction in greenhouse gas emissions
8 due to changes in animal management prac-
9 tices, including dietary modifications;

10 (2) changes in carbon stocks attributed to land
11 use change and forestry activities, including—

12 (A) afforestation or reforestation of acre-
13 age that is not forested;

14 (B) forest management resulting in an in-
15 crease in forest carbon stores including but not
16 limited to harvested wood products;

17 (C) management of peatland or wetland;

18 (D) conservation of grassland and forested
19 land;

20 (E) improved forest management, includ-
21 ing accounting for carbon stored in wood prod-
22 ucts;

23 (F) reduced deforestation or avoided forest
24 conversion;

25 (G) urban tree-planting and maintenance;

1 (H) agroforestry; and

2 (I) adaptation of plant traits or new tech-
3 nologies that increase sequestration by forests;
4 and

5 (3) manure management and disposal, includ-
6 ing—

7 (A) waste aeration;

8 (B) biogas capture and combustion; and

9 (C) application to fields as a substitute for
10 commercial fertilizer.

11 (c) ADDITIONS AND REVISIONS TO LIST.—

12 (1) PERIODIC REVISION.—Not later than 2
13 years after the date of enactment of this title, and
14 every 2 years thereafter, the Secretary, after public
15 notice and opportunity for comment, shall add to
16 and revise the types of offset practices to the list es-
17 tablished under subsection (a) if those types of prac-
18 tices meet the standards for environmental integrity
19 that are consistent with the purposes of this title.

20 (2) CONSIDERATION OF PETITIONS.—The Sec-
21 retary shall—

22 (A) consider petitions to add types of off-
23 set practices to the list established under sub-
24 section (a); and

1 (B) add those types of offset practices to
2 the list if the types of offset practices meet
3 standards for environmental integrity consistent
4 with the purposes of this title.

5 (3) TIME FOR CONSIDERATION OF PETI-
6 TIONS.—Not later than 1 year after the receipt of
7 a petition under paragraph (2), the Secretary shall
8 make a decision to either grant or deny the petition
9 and publish a written explanation of the reasons for
10 the Secretary's decision. The Secretary may not
11 deny a petition under this subsection on the basis of
12 inadequate Department of Agriculture resources at
13 the time of the review.

14 **SEC. 504. REQUIREMENTS FOR DOMESTIC AGRICULTURAL**
15 **AND FORESTRY PRACTICES.**

16 (a) METHODOLOGIES.—

17 (1) IN GENERAL; CONDITION.—In promulgating
18 regulations under section 502, the Secretary shall
19 establish methodologies for domestic agricultural
20 and forestry practices listed under section 503, if
21 the Secretary determines that methodologies can be
22 established for such practices that meet each of the
23 requirements of this section. The Secretary shall
24 only issue offset credits under this title pursuant to
25 promulgated methodologies applicable to the offset

1 practice that avoided or reduced greenhouse gas
2 emissions or sequestered greenhouse gases.

3 (2) SPECIFIED METHODOLOGIES.—The Sec-
4 retary shall establish the following methodologies
5 under this section:

6 (A) ACTIVITY BASELINES.—A standardized
7 methodology for establishing activity baselines
8 for an offset practice of that type. The Sec-
9 retary shall set activity baselines to reflect a
10 conservative estimate of performance or activi-
11 ties for the relevant type of practice (excluding
12 changes in performance or activities due to the
13 availability of offset credits) such that the base-
14 line provides an adequate margin of safety to
15 ensure the environmental integrity of offset
16 credits calculated in reference to such baseline.

17 (B) ADDITIONALITY.—A standardized
18 methodology for determining the additionality
19 of greenhouse gas emissions reduction or avoid-
20 ance, or greenhouse gas sequestration, achieved
21 by an offset practice of that type. Such method-
22 ology shall ensure, at a minimum, that any
23 greenhouse gas emission reduction or avoidance,
24 or any greenhouse gas sequestration, is consid-

1 ered additional only to the extent that it results
2 from activities that—

3 (i) are not required by existing gov-
4 ernment regulations, as determined by the
5 Secretary;

6 (ii) were not commenced prior to Jan-
7 uary 1, 2009, except in the case of—

8 (I) offset project activities that
9 commenced after January 1, 2001,
10 and were registered as of the date of
11 enactment of this title under an offset
12 program with respect to which an af-
13 firmative determination has been
14 made under section 740 of the Clean
15 Air Act; or

16 (II) activities that are readily re-
17 versible, with respect to which the
18 Secretary may set an alternative ear-
19 lier date under this subparagraph that
20 is not earlier than January 1, 2001,
21 where the Secretary determines that
22 setting such an alternative date may
23 produce an environmental benefit by
24 removing an incentive to cease and

1 then reinitiate activities that began
2 prior to January 1, 2009; and

3 (iii) exceed the applicable activity
4 baseline established under paragraph (2).

5 (C) QUANTIFICATION METHODS.—A stand-
6 ardized methodology for determining the extent
7 to which greenhouse gas emission reductions or
8 avoidance, or greenhouse gas sequestration,
9 achieved by an offset practice of that type ex-
10 ceeded a relevant activity baseline, including
11 methods for monitoring and accounting for un-
12 certainty.

13 (D) LEAKAGE.—A standardized method-
14 ology for accounting for and mitigating poten-
15 tial leakage, if any, from an offset practice of
16 that type, taking uncertainty into account, ex-
17 cluding international indirect land use changes
18 unless a positive determination is made under
19 section 211(o)(13)(C)(iii) of the Clean Air Act.

20 (b) SPECIAL CONSIDERATIONS.—

21 (1) EXISTING OFFSET PRACTICES.—In estab-
22 lishing the methodologies under subsection (a), the
23 Secretary shall give due consideration to methodolo-
24 gies for offset practices existing as of the date of the
25 enactment of this title.

1 (2) CERTAIN FACTORS.—As part of the meth-
2 odologies established under subsection (a), the Sec-
3 retary shall establish a formula that takes into ac-
4 count the components of the practice, the character-
5 istics of the land on which the practice is applied,
6 the crop produced, and such other factors as deter-
7 mined appropriate by the Secretary.

8 (c) ACCOUNTING FOR REVERSALS.—

9 (1) IN GENERAL.—Except as provided in sub-
10 section (d) with respect to issuance of a term offset
11 credit, for each type of practice listed under section
12 503, the Secretary shall establish requirements to
13 account for and address reversals, including—

14 (A) a requirement to report any reversal
15 with respect to an offset practice for which off-
16 set credits have been issued under this title;

17 (B) provisions to require emission allow-
18 ances or offset credits to be held in amounts to
19 fully compensate for greenhouse gas emissions
20 attributable to reversals, and to assign responsi-
21 bility for holding such emission allowances; and

22 (C) any other provisions that the Secretary
23 determines to be necessary to account for and
24 address reversals.

25 (2) MECHANISMS.—

1 (A) IN GENERAL.—The Secretary shall
2 prescribe mechanisms to ensure that any se-
3 questration of greenhouse gases, with respect to
4 which an offset credit is issued under this title,
5 results in a permanent net increase in seques-
6 tration of greenhouse gases, and that full ac-
7 count is taken of any actual or potential rever-
8 sal of such sequestration, with an adequate
9 margin of safety.

10 (B) SPECIFIC MECHANISMS.—The Sec-
11 retary shall make available one or more of the
12 following mechanisms to meet the requirements
13 of this paragraph:

14 (i) An offsets reserve, pursuant to
15 paragraph (3).

16 (ii) Insurance that provides for pur-
17 chase and provision to the Secretary for
18 retirement of a quantity of offset credits or
19 emission allowances equal in number to the
20 tons of carbon dioxide equivalents of green-
21 house gas emissions released due to rever-
22 sal.

23 (iii) Another mechanism if the Sec-
24 retary determines it is necessary to satisfy
25 the requirements of this title, taking into

1 account whether the reversal was inten-
2 tional or unintentional.

3 (3) OFFSETS RESERVE.—

4 (A) IN GENERAL.—An offsets reserve re-
5 ferred to in paragraph (2)(B)(i) is a program
6 under which, before issuance of offset credits
7 under this title, the Secretary shall—

8 (i) subtract and reserve from the
9 quantity to be issued a quantity of offset
10 credits based on the risk of reversal;

11 (ii) hold those reserved offset credits
12 in the offsets reserve; and

13 (iii) register the holding of the re-
14 served offset credits in an offset registry.

15 (B) PRACTICE REVERSAL.—

16 (i) IN GENERAL.—If a reversal has
17 occurred with respect to an offset practice
18 within an offset project, for which offset
19 credits are reserved under this paragraph,
20 the Secretary shall retire offset credits
21 from the offsets reserve to fully account
22 for the tons of carbon dioxide equivalent
23 that are no longer sequestered.

24 (ii) INTENTIONAL REVERSALS.—If the
25 Secretary determines that a reversal was

1 intentional, the offset practice developer
2 for the relevant offset practice shall place
3 into the offsets reserve a quantity of offset
4 credits, or combination of offset credits
5 and emission allowances, equal in number
6 to the number of reserve offset credits that
7 were retired pursuant to clause (i).

8 (iii) UNINTENTIONAL REVERSALS.—If
9 the Secretary determines that a reversal
10 was unintentional, the offset project devel-
11 oper for the relevant offset project shall
12 place into the offsets reserve a quantity of
13 offset credits, or combination of offset
14 credits and emission allowances, equal in
15 number to half the number of offset credits
16 that were reserved for that offset project,
17 or half the number of reserve offset credits
18 that were canceled due to the reversal pur-
19 suant to clause (i), whichever is less, ex-
20 cept that the Secretary may lower this
21 amount based on undue hardship in the
22 event of a catastrophic occurrence.

23 (C) USE OF RESERVED OFFSET CRED-
24 ITS.—Offset credits placed into the offsets re-

1 serve under this paragraph may not be used to
2 comply with section 722 of the Clean Air Act.

3 (d) TERM OFFSET CREDITS.—

4 (1) APPLICABILITY.—With respect to a practice
5 listed under section 503 that sequesters greenhouse
6 gases and has a crediting period of no more than
7 five years, the Secretary may address reversals pur-
8 suant to this subsection in lieu of permanently ac-
9 counting for reversals pursuant to subsection (c).

10 (2) ACCOUNTING FOR REVERSALS.—For such
11 practices or projects implementing such practices,
12 the Secretary shall require only reversals that occur
13 during the crediting period to be accounted for and
14 addressed pursuant to subsection (c).

15 (3) CREDITS ISSUED.—For practices or projects
16 regulated pursuant to paragraph (2), the Secretary
17 shall issue under section 507 a term offset credit, in
18 lieu of an offset credit, for each ton of carbon diox-
19 ide equivalent that has been sequestered.

20 (e) CREDITING PERIODS.—

21 (1) IN GENERAL.—For each offset practice type
22 within an offset project, the Secretary shall specify
23 a crediting period, and establish provisions for re-
24 enrollment for a subsequent crediting period, in ac-
25 cordance with this subsection.

1 (2) DURATION.—The crediting period shall
2 have a term of up to—

3 (A) 5 years for agricultural sequestration
4 practices;

5 (B) 20 years for forestry sequestration
6 practices; and

7 (C) 10 years for other practice types that
8 reduce or avoid greenhouse gas emissions or se-
9 quester greenhouse gases.

10 (3) ELIGIBILITY.—An offset practice, within an
11 offset project, shall—

12 (A) be eligible to generate offset credits
13 under this title only during the crediting period
14 of the offset practice; and

15 (B) remain eligible to generate offset cred-
16 its, only during the crediting period, subject to
17 the methodologies and practice type eligibility
18 list that applied as of the date of the project
19 approval.

20 (4) REENROLLMENT FOR SUBSEQUENT CRED-
21 ITING PERIOD.—

22 (A) REENROLLMENT AUTHORIZED; TIME
23 FOR REENROLLMENT.—An offset project devel-
24 oper may reenroll for a subsequent crediting pe-
25 riod, to commence after termination of the cur-

1 rent crediting period, subject to the methodolo-
2 gies and practice type eligibility list in effect at
3 the time of reenrollment. Reenrollment may not
4 occur more than 18 months before the end of
5 the crediting period then in effect.

6 (B) LIMITATION.—The Secretary may
7 limit the number of subsequent crediting peri-
8 ods available for a particular practice type.

9 (f) ENVIRONMENTAL INTEGRITY.—In establishing
10 the requirements under this section, the Secretary shall
11 apply conservative assumptions or methods to ensure the
12 environmental integrity of the cap established under sec-
13 tion 703 of the Clean Air Act is not compromised.

14 **SEC. 505. PROJECT PLAN SUBMISSION AND APPROVAL.**

15 (a) PROJECT PLAN REQUIRED.—An offset project
16 developer shall submit to the Secretary an offset project
17 plan for approval.

18 (b) REQUIREMENTS.—As part of the regulations pro-
19 mulgated under this title, the Secretary shall include pro-
20 visions for, and shall specify, the required components of
21 an offset project plan, including—

22 (1) designation of an offset project developer;

23 (2) a list and schedule of the practices to be im-
24 plemented;

1 (3) any other information that the Secretary
2 considers to be necessary—

3 (A) to determine whether the offset prac-
4 tice, within the offset project, is eligible for
5 issuance of offset credits under regulations pro-
6 mulgated under this title; and

7 (B) to achieve the purposes of this title.

8 (c) TIME FOR CONSIDERATION; NOTIFICATION.—Not
9 later than 90 days after receiving a complete offset project
10 plan under subsection (a), the Secretary shall—

11 (1) approve the plan in writing and include an
12 estimate of the offset project credits that will be
13 earned if the plan is implemented, subject to
14 verification of all project-specific variables; or

15 (2) if the plan is denied, provide the reasons for
16 denial in writing.

17 (d) APPEAL.—The Secretary shall establish proce-
18 dures for appeal and review of determinations made under
19 this section.

20 (e) RESUBMISSION.—After an offset project plan is
21 approved, the offset project developer shall not be required
22 to resubmit a project plan during the crediting period.

1 **SEC. 506. VERIFICATION OF OFFSET PRACTICES.**

2 (a) IN GENERAL.—As part of the regulations promul-
3 gated under this title, the Secretary shall establish re-
4 quirements to verify—

5 (1) that offset practices in an approved offset
6 project plan have been implemented; and

7 (2) the quantity of greenhouse gas emission re-
8 ductions or avoidance, or sequestration of green-
9 house gases, resulting from an offset practice and
10 project.

11 (b) VERIFICATION REPORTS.—

12 (1) IN GENERAL.—The regulations described in
13 subsection (a) shall require an offset project devel-
14 oper to submit a report, prepared by a third-party
15 verifier accredited under subsection (c).

16 (2) REQUIREMENTS.—The Secretary shall
17 specify the components of a verification report re-
18 quired under paragraph (1), including—

19 (A) the name and contact information for
20 the offset project developer;

21 (B) a certification that the project plan
22 has been implemented;

23 (C) the quantity of greenhouse gases re-
24 duced, avoided, or sequestered;

25 (D) a certification establishing that the
26 conflict of interest requirements in the regula-

1 tions promulgated under this title have been
2 complied with;

3 (E) any other information that the Sec-
4 retary requires to determine the quantity of
5 greenhouse gas emission reduction or avoidance,
6 or sequestration of greenhouse gases, resulting
7 from the offset practice and project; and

8 (F) any other information that the Sec-
9 retary considers to be necessary to achieve the
10 purposes of this title.

11 (c) VERIFIER ACCREDITATION.—

12 (1) IN GENERAL.—As part of the regulations
13 promulgated under this title, the Secretary shall es-
14 tablish a process and requirements for periodic ac-
15 creditation of third-party verifiers for offset credits
16 under this program to ensure that those verifiers are
17 professionally qualified and have no conflicts of in-
18 terest.

19 (2) PUBLIC ACCESSIBILITY.—Each verifier
20 meeting the requirements for accreditation in ac-
21 cordance with this subsection shall be listed in a
22 publicly accessible database, which shall be main-
23 tained and updated by the Secretary.

1 **SEC. 507. CERTIFICATION OF OFFSET CREDITS.**

2 (a) DETERMINATION AND NOTIFICATION.—Not later
3 than 90 days after receiving a complete verification report,
4 the Secretary shall—

5 (1) make a determination of the quantity of
6 greenhouse gas emissions that have been reduced or
7 avoided, or greenhouse gases that have been seques-
8 tered, by the offset practice in an approved and
9 verified offset project plan; and

10 (2) notify the offset project developer in writing
11 of the determination.

12 (b) ISSUANCE OF OFFSET CREDITS.—The Secretary
13 shall issue 1 offset credit to an offset project developer
14 for each ton of carbon dioxide equivalent that the Sec-
15 retary determines has been reduced, avoided, or seques-
16 tered during the crediting period. Offset credits may be
17 issued only for greenhouse gas emissions reduced, avoided,
18 or sequestered after January 1, 2009.

19 (c) APPEAL.—The Secretary shall establish proce-
20 dures for appeal and review of determinations made under
21 subsection (a).

22 (d) TIMING.—Offset credits meeting the criteria de-
23 scribed in subsection (b) shall be issued by the Secretary
24 not later than 14 days after the date on which the Sec-
25 retary makes a determination under subsection (a).

1 (e) REGISTRATION.—The Secretary shall obtain from
2 the Administrator a unique serial number to allow for the
3 registration of each offset credit to be issued under this
4 title.

5 **SEC. 508. OWNERSHIP AND TRANSFER OF OFFSET CREDITS.**

6 (a) OWNERSHIP.—Initial ownership of an offset cred-
7 it shall lie with the offset project developer, unless other-
8 wise specified in a legally binding contract or agreement.

9 (b) TRANSFERABILITY.—An offset credit issued
10 under this title may be sold, traded, or transferred, unless
11 the offset credit has expired or been retired.

12 **SEC. 509. PROGRAM REVIEW AND REVISION.**

13 At least once every 5 years, the Secretary shall review
14 and, based on new or updated information and taking into
15 consideration the recommendations of the Advisory Board,
16 update and revise—

17 (1) the list of eligible practice types established
18 under section 503;

19 (2) the methodologies established, including
20 specific activity baselines, under section 504(a);

21 (3) the reversal requirements and mechanisms
22 established or prescribed under subsections (c) and
23 (d) of section 504;

24 (4) measures to improve the accountability of
25 the offsets program; and

1 (5) any other requirements established under
2 this title to ensure the environmental integrity and
3 effective operation of this title.

4 **SEC. 510. ENVIRONMENTAL CONSIDERATIONS.**

5 If the Secretary lists forestry practices as eligible off-
6 set practice types under section 503, the Secretary, in con-
7 sultation with appropriate Federal agencies, shall promul-
8 gate regulations for the selection and use of species in for-
9 estry and other relevant land management-related offset
10 practices—

11 (1) to ensure that native species are given pri-
12 mary consideration in such practices;

13 (2) to encourage the conservation of biological
14 diversity in such practices;

15 (3) to prohibit the use of federally designated
16 or State-designated noxious weeds;

17 (4) to prohibit the use of a species listed by a
18 regional or State invasive plant authority within the
19 applicable region or State; and

20 (5) in accordance with widely accepted, environ-
21 mentally sustainable forestry practices.

22 **SEC. 511. AUDITS.**

23 (a) **AUDITS REQUIRED.**—The Secretary shall con-
24 duct, on an annual basis, random audits of offset projects,
25 offset credits, and the practices of third-party verifiers. At

1 a minimum, the Secretary shall conduct audits each year
2 for a representative sample of practice types and geo-
3 graphical areas.

4 (b) ADDITIONAL AUTHORITY.—Nothing in this sec-
5 tion prevents the Secretary from conducting any audit the
6 Secretary considers to be necessary.

7 **Subtitle B—USDA Greenhouse Gas**
8 **Emission Reduction and Seques-**
9 **tration Advisory Committee**

10 **SEC. 531. ESTABLISHMENT OF USDA GREENHOUSE GAS**
11 **EMISSION REDUCTION AND SEQUESTRATION**
12 **ADVISORY COMMITTEE.**

13 Section 1245 of the Food Security Act of 1985 (16
14 U.S.C. 3854), as added by section 2709 of the Food, Con-
15 servation, and Energy Act of 2008 (Public Law 110–246;
16 122 Stat. 1809), is amended by adding at the end the
17 following new subsection:

18 “(f) USDA GREENHOUSE GAS EMISSION REDUC-
19 TION AND SEQUESTRATION ADVISORY COMMITTEE.—

20 “(1) ESTABLISHMENT.—Not later than 30 days
21 after the date of the enactment of the American
22 Clean Energy and Security Act of 2009, the Sec-
23 retary shall establish an independent advisory com-
24 mittee, to be known as the ‘USDA Greenhouse Gas
25 Emission Reduction and Sequestration Advisory

1 Committee', to provide scientific and technical advice
2 on establishing, implementing, and ensuring the
3 overall environmental integrity of an offset program
4 for domestic agricultural and forestry practices that
5 reduce or avoid greenhouse gas emissions, or seques-
6 ter greenhouse gases.

7 “(2) MEMBERSHIP.—The Advisory Committee
8 shall be comprised of nine members, including a
9 chairperson and vice-chairperson, appointed by the
10 Secretary. Each member shall be qualified by edu-
11 cation, training, and experience to evaluate scientific
12 and technical information for domestic agricultural
13 and forestry offset practices that reduce or avoid
14 greenhouse gas emissions or sequester greenhouse
15 gases.

16 “(3) TERMS.—Terms shall be 3 years in length,
17 except for the initial terms, which may be up to 5
18 years in length to allow staggered terms. Members
19 may be reappointed only once for an additional 3-
20 year term, and such term may follow directly after
21 a first term.

22 “(4) DUTIES.—The Advisory Committee
23 shall—

24 “(A) provide options and recommenda-
25 tions, not later than 180 days after the date of

1 the enactment of the American Clean Energy
2 and Security Act of 2009, to the Secretary re-
3 garding the establishment of methodologies as
4 described in section 504 of such Act, taking
5 into account relevant scientific information, in-
6 cluding—

7 “(i) the availability of representative
8 data for use in developing an activity base-
9 line for a land area, forest, soil, industry
10 sector, and facility type;

11 “(ii) the potential for accurate
12 quantification of greenhouse gas reduc-
13 tion, or sequestration for an offset practice
14 type;

15 “(iii) the potential level of scientific
16 and measurement uncertainty associated
17 with an offset practice type; and

18 “(iv) the use of practice methodologies
19 that account for common practice or other
20 direct comparisons within a relevant land
21 area, industry sector, forest, soil, or facility
22 type;

23 “(B) make available to the Secretary op-
24 tions and recommendations for the program as
25 a whole and on offset methodologies for each

1 practice type that should be considered under
2 regulations promulgated pursuant to section
3 504 of the American Clean Energy and Secu-
4 rity Act of 2009, including methodologies to ad-
5 dress the issues of additionality, activity base-
6 lines, measurement, leakage, including the ap-
7 plication of sector specific leakage factors, un-
8 certainty, permanence, and environmental in-
9 tegrity;

10 “(C) make available to the Secretary ad-
11 vice and comment on areas where further
12 knowledge is required to appraise the adequacy
13 of existing, revised, or proposed methodologies
14 and describe the research efforts necessary to
15 provide the required information;

16 “(D) make available to the Secretary ad-
17 vice and comments on other ways to improve or
18 safeguard the environmental integrity of the
19 offset practice types listed under section 503 of
20 the American Clean Energy and Security Act of
21 2009; and

22 “(E) provide options and recommendations
23 regarding new practice types.

24 “(5) SCIENTIFIC REVIEW OF OFFSET PRO-
25 GRAM.—Not later than January 1, 2017, and at 5-

1 year intervals thereafter, the Advisory Committee
2 shall—

3 “(A) submit to the Secretary and make
4 available to the public an analysis of relevant
5 scientific and technical information regarding
6 agricultural and forestry offset practices that
7 reduce or avoid greenhouse gas emissions or se-
8 quester greenhouse gases;

9 “(B) review approved and potential prac-
10 tice types, methodologies, scientific studies, off-
11 set project monitoring, offset project
12 verification reports, reporting of reversals, au-
13 dits related to the offset program, and other
14 relevant information needed to evaluate the off-
15 set program;

16 “(C) evaluate the net emission effects of
17 implemented offset projects; and

18 “(D) recommend changes to offset meth-
19 odologies, procedures, practice types, or the
20 overall program to ensure that—

21 “(i) the offset practices result in re-
22 duced or avoided greenhouse gas emissions
23 or sequestration of greenhouse gases;

24 “(ii) the offset credits issued by the
25 Secretary do not compromise the integrity

1 of the annual emissions reductions estab-
2 lished under section 703 of the Clean Air
3 Act; and

4 “(iii) the offset program avoids or
5 minimizes adverse affects to human health
6 and the environment.

7 “(6) COORDINATION.—To avoid duplication, the
8 Advisory Committee shall coordinate its activities
9 with those of any other Federal advisory committees
10 working in related areas, and shall to the maximum
11 extent possible use research data and services of the
12 research, education, extension agencies of the De-
13 partment of Agriculture.

14 “(7) CONSULTATION.—On a periodic basis, the
15 Advisory Committee shall consult with, and be in-
16 formed by the views of, the Offsets Integrity Advi-
17 sory Board established under section 731 of the
18 Clean Air Act.

19 “(8) MEETING.—The Advisory Committee shall
20 meet on at least a quarterly basis each year.

21 “(9) ADMINISTRATIVE SUPPORT AND FUND-
22 ING.—The Secretary may provide such administra-
23 tive and funding support as necessary to enable the
24 Advisory Committee to carry out its duties under
25 this section.

1 “(10) REPORT.—For each fiscal year, the Sec-
2 retary shall submit to Congress a report on—

3 “(A) the status and progress on the offset
4 practices;

5 “(B) the general status of cooperation and
6 research and development; and

7 “(C) the plans for addressing future issues
8 and concerns.”.

9 **Subtitle C—Miscellaneous**

10 **SEC. 551. INTERNATIONAL INDIRECT LAND USE CHANGES.**

11 Section 211(o) of the Clean Air Act (42 U.S.C.
12 7545(o)) is amended by adding at the end the following

13 “(13) INTERNATIONAL INDIRECT LAND USE
14 CHANGES.—

15 “(A) EXCLUSION FROM REGULATORY RE-
16 QUIREMENTS REGARDING LIFECYCLE GREEN-
17 HOUSE GAS EMISSIONS.—Notwithstanding the
18 definition of ‘lifecycle greenhouse gas emissions’
19 in paragraph (1)(H), for purposes of deter-
20 mining whether the fuel meets a definition in
21 paragraph (1) or complies with paragraph
22 (2)(A)(i), the Administrator shall exclude emis-
23 sions from indirect land use changes outside the
24 renewable fuel’s feedstock’s country of origin.

1 “(B) NATIONAL ACADEMIES OF SCIENCE
2 REPORT.—(i) Not later than 6 months after the
3 date of enactment of this paragraph, the Ad-
4 ministrators and the Secretary of Agriculture
5 shall jointly arrange for the National Academies
6 of Science to review and report on specified
7 issues related to indirect greenhouse gas emis-
8 sions related to transportation fuels.

9 “(ii) The report shall evaluate and report
10 on whether there are economic and environ-
11 mental models and methodologies that individ-
12 ually, or as a system, can project with reli-
13 ability, predictability, and confidence—

14 “(I) for purposes of determining
15 whether the fuel meets a definition in
16 paragraph (1) or complies with paragraph
17 (2)(A)(i), indirect land use changes that
18 are related to the production of renewable
19 fuels and that may occur outside the coun-
20 try in which the feedstocks are grown, and
21 the impacts of these changes on green-
22 house gas emissions; and

23 “(II) indirect effects, both domestic
24 and international, related to the production
25 and importation of non-renewable trans-

1 portation fuels that have significant green-
2 house gas emissions, and the impact of
3 these effects on greenhouse gas emissions.

4 “(iii) The report shall include a review and
5 assessment of all pertinent scientific studies,
6 methodologies and data, shall evaluate potential
7 methodologies for calculating such emissions
8 (including an evaluation of methods for
9 annualizing emissions associated with forest
10 degradation or land conversion), and shall make
11 appropriate recommendations. The rec-
12 ommendations shall address indirect effects,
13 both domestic and international, related to the
14 production and importation of non-renewable
15 transportation fuels that have significant green-
16 house gas emissions. The report shall use ap-
17 propriate validation procedures, including sensi-
18 tivity analyses, of how results change as as-
19 sumptions change. The evaluation shall include
20 for a model, a methodology, or a system of
21 models—

22 “(I) an assessment of how reliably the
23 models, methodologies, or systems track
24 actual outcomes over historical periods
25 using available historical data; and

1 “(II) an assessment of how reliably
2 the models, methodologies or systems will
3 project future outcomes.

4 “(iv) The report shall be publicly available
5 and shall include sufficient information and
6 data such that economists and other scientists
7 with relevant expertise that are not on the Na-
8 tional Academies of Science panel can fully
9 evaluate the conclusions of the report.

10 “(v) The report shall be completed within
11 three years of the date of enactment of this
12 paragraph.

13 “(C) DETERMINATION.—(i) The Adminis-
14 trator and the Secretary of Agriculture shall,
15 after notice and an opportunity for public com-
16 ment, determine whether, for purposes of deter-
17 mining compliance with the percent reductions
18 in lifecycle greenhouse gas emissions specified
19 in paragraph (1) for various renewable fuels,
20 scientifically valid models and methodologies
21 exist to project indirect land use changes that
22 are related to the production of renewable fuels
23 and that occur outside the country in which the
24 feedstocks are grown, and the impact of these
25 changes on greenhouse gas emissions.

1 “(ii) The determination shall take into ac-
2 count the findings and recommendations of the
3 report required under subparagraph (B), as
4 well as other available scientific, economic, and
5 other relevant information. The Administrator
6 and the Secretary may also consider methods
7 used by the Environmental Protection Agency,
8 the Department of Agriculture, and other Fed-
9 eral agencies to assess or guide their related
10 policies.

11 “(iii) The Administrator and the Secretary
12 of Agriculture shall publish a proposed deter-
13 mination not later than 4 years after date of
14 enactment of this paragraph, and shall publish
15 a final determination not later than 5 years
16 after date of enactment of this paragraph. An
17 explanation and justification of the determina-
18 tion shall be included in the proposed and final
19 actions, together with a response to comments
20 received.

21 “(D) RESPONSE TO DETERMINATION.—(i)
22 In the event of a positive determination under
23 subparagraph (C), the Administrator and the
24 Secretary of Agriculture shall, after notice and
25 an opportunity for public comment, by the same

1 date jointly establish a methodology (or meth-
2 odologies) to calculate greenhouse gas emissions
3 from indirect land use changes that are attrib-
4 utable to the production of renewable fuels and
5 that occur outside the country in which feed-
6 stocks are grown for purposes of calculating a
7 renewable fuel's lifecycle greenhouse gas emis-
8 sions to determine whether the fuel meets a def-
9 inition in paragraph (1) or complies with para-
10 graph (2)(A)(i). The exclusion in subparagraph
11 (A) shall end, and the Administrator shall issue
12 a regulation by the same date that shall include
13 emissions from indirect land use changes out-
14 side the renewable fuel's feedstock's country of
15 origin for purposes of calculating a renewable
16 fuel's lifecycle greenhouse gas emissions to de-
17 termine whether the fuel meets a definition in
18 paragraph (1) or complies with paragraph
19 (2)(A)(i) for renewable fuels sold in the cal-
20 endar year following the year of the positive de-
21 termination. The effective date of the regulation
22 shall be six years after the date of enactment
23 of this paragraph.

1 “(ii) A negative determination under sub-
2 paragraph (C) shall include a statement of the
3 basis for the determination.

4 “(E) ACCOUNTABILITY.—The joint duties
5 and actions of the Administrator and the Sec-
6 retary of Agriculture shall be subject to sections
7 304 and 307 of this Act as if they were the du-
8 ties and actions of the Administrator alone.”.

9 **SEC. 552. BIOMASS-BASED DIESEL.**

10 Section 211(o)(2)(A) of the Clean Air Act (42 U.S.C.
11 7545(o)(2)(A)) is amended by adding at the end the fol-
12 lowing new clause:

13 “(v) GRANDFATHERING BIOMASS-
14 BASED DIESEL.—The Administrator shall
15 promulgate regulations exempting from the
16 lifecycle greenhouse gas requirements in
17 subparagraphs (B) and (D) of paragraph
18 (1) up to the greater of 1 billion gallons or
19 the volume mandate adopted pursuant to
20 subparagraph (B)(ii) of biomass-based die-
21 sel annually from facilities that commenced
22 construction before the date of enactment
23 of the Energy Independence and Security
24 Act of 2007.”.

1 **SEC. 553. MODIFICATION OF DEFINITION OF RENEWABLE**
2 **BIOMASS.**

3 (a) NATIONAL ACADEMY OF SCIENCE REPORT.—Not
4 later than 1 year after the date of enactment of this Act,
5 the Administrator of the Environmental Protection Agen-
6 cy, the Secretary of Agriculture, and the Federal Energy
7 Regulatory Commission shall jointly arrange for the Na-
8 tional Academy of Sciences to evaluate how sources of re-
9 newable biomass contribute to the goals of increasing
10 America’s energy independence, protecting the environ-
11 ment, and reducing global warming pollution.

12 (b) MODIFICATION.—

13 (1) EPA MODIFICATION AUTHORITY.—After re-
14 viewing the report required by subsection (a), the
15 Administrator of the Environmental Protection
16 Agency, in concurrence with the Secretary of Agri-
17 culture, may, by regulation and after public notice
18 and comment, modify the non-Federal lands portion
19 of the definition of “renewable biomass” in sections
20 211(o)(1)(I) and 700 of the Clean Air Act in order
21 to advance the goals of increasing America’s energy
22 independence, protecting the environment, and re-
23 ducing global warming pollution.

24 (2) FERC MODIFICATION AUTHORITY.—After
25 reviewing the report required by subsection (a), the
26 Federal Energy Regulatory Commission, in concur-

1 rence with the Secretary of Agriculture, may, by reg-
2 ulation and after public notice and comment, modify
3 the non-Federal lands portion of the definition of
4 “renewable biomass” in section 610 of the Public
5 Utility Regulatory Policies Act of 1978 in order to
6 advance the goals of increasing America’s energy
7 independence, protecting the environment, and re-
8 ducing global warming pollution.

