

114TH CONGRESS
1ST SESSION

S. 1733

To require the Secretary of Agriculture to establish a forest incentives program to keep forests intact and sequester carbon on private forest land of the United States, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 9, 2015

Mrs. SHAHEEN introduced the following bill; which was read twice and referred to the Committee on Agriculture, Nutrition, and Forestry

A BILL

To require the Secretary of Agriculture to establish a forest incentives program to keep forests intact and sequester carbon on private forest land of the United States, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Forest Incentives Pro-
5 gram Act of 2015”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

1 (1) public and private forest land in the United
2 States plays a crucial role in sequestering carbon
3 and otherwise contributes to mitigation of green-
4 house gas emissions;

5 (2) the Environmental Protection Agency has
6 reported in the annual greenhouse gas inventory
7 that United States forests and forest products se-
8 quester as much as 12 to 14 percent of annual
9 United States carbon emissions, which makes forests
10 one of the largest carbon sinks in the United States;

11 (3) according to the Environmental Protection
12 Agency, carbon sequestration from forests and other
13 land uses has grown by approximately 14 percent
14 since 1990, largely as a result of afforestation and
15 improved forest management;

16 (4) the use of forests products, such as wood
17 products, in buildings and biobased products can
18 also reduce carbon emissions when used in place of
19 other, more carbon-intensive products;

20 (5)(A) in addition to the significant carbon
21 mitigation benefits of using forests and forest prod-
22 ucts for carbon sequestration, the economic and soci-
23 etal cobenefits of forest carbon solutions are extraor-
24 dinarily valuable; and

1 (B) incentivizing forest carbon activities, includ-
2 ing through working forests, has the potential to
3 provide timber and other forest commodities, im-
4 prove air quality, enhance watershed function and
5 water supply, create and sustain fish and wildlife
6 habitat, contribute to scenic and aesthetic qualities,
7 support historical and cultural resources, provide
8 hunting, fishing, and recreational opportunities, and
9 increase forest resiliency, while also supporting rural
10 jobs and local economies;

11 (6) despite positive recent trends in forest car-
12 bon, as documented by the annual greenhouse gas
13 inventory of the Environmental Protection Agency,
14 projections of the Forest Service indicate those for-
15 est carbon and other benefits are at risk in future
16 decades due to development pressures and other fac-
17 tors;

18 (7) while the majority of the productive forest
19 land of the United States is under private owner-
20 ship, private landowners are facing increased pres-
21 sure to convert their forest land to other uses;

22 (8) while some landowners are able to partici-
23 pate in various carbon markets, the transaction
24 costs and restrictions of those programs are often

1 prohibitive for private landowners, particularly
2 smallholders; and

3 (9) creating incentives for private forest land-
4 owners to adopt best practices to maintain and in-
5 crease carbon benefits from forest land through a
6 streamlined program that avoids excessive trans-
7 action costs will help “keep forests as forests” and
8 enhance forest carbon benefits by providing incentive
9 payments for a suite of eligible practices throughout
10 the lifecycle of forest management, including forest
11 products that provide long-term carbon storage ben-
12 efits.

13 **SEC. 3. FOREST INCENTIVES PROGRAM.**

14 (a) DEFINITIONS.—In this section:

15 (1) CARBON INCENTIVES CONTRACT; CON-
16 TRACT.—The term “carbon incentives contract” or
17 “contract” means a 15- to 30-year contract that
18 specifies—

19 (A) the eligible practices that will be un-
20 dertaken;

21 (B) the acreage of eligible land on which
22 the practices will be undertaken;

23 (C) the agreed rate of compensation per
24 acre;

1 (D) a schedule to verify that the terms of
2 the contract have been fulfilled; and

3 (E) such other terms as are determined
4 necessary by the Secretary.

5 (2) CONSERVATION EASEMENT AGREEMENT;
6 AGREEMENT.—The term “conservation easement
7 agreement” or “agreement” means a permanent
8 conservation easement that—

9 (A) covers eligible land that will not be
10 converted for development;

11 (B) is enrolled under a carbon incentives
12 contract; and

13 (C) is consistent with the guidelines for—

14 (i) the Forest Legacy Program estab-
15 lished under section 7 of the Cooperative
16 Forestry Assistance Act of 1978 (16
17 U.S.C. 2103c), subject to the condition
18 that an eligible practice shall be considered
19 to be a conservation value for purposes of
20 such consistency; or

21 (ii) any other program approved by
22 the Secretary for use under this section to
23 provide consistency with Federal legal re-
24 quirements for permanent conservation
25 easements.

1 (3) ELIGIBLE LAND.—The term “eligible land”
2 means forest land in the United States that is pri-
3 vately owned at the time of initiation of a carbon in-
4 centives contract or conservation easement agree-
5 ment.

6 (4) ELIGIBLE PRACTICE.—

7 (A) IN GENERAL.—The term “eligible
8 practice” means a forestry practice, including
9 improved forest management that produces
10 marketable forest products, that is determined
11 by the Secretary to provide measurable in-
12 creases in carbon sequestration and storage be-
13 yond customary practices on comparable land.

14 (B) INCLUSIONS.—The term “eligible prac-
15 tice” includes—

16 (i) afforestation on nonforested land,
17 such as marginal crop or pasture land,
18 windbreaks, shelterbelts, stream buffers,
19 including working land and urban forests
20 and parks, or other areas identified by the
21 Secretary;

22 (ii) reforestation on forest land im-
23 pacted by wildfire, pests, wind, or other
24 stresses, including working land and urban
25 forests and parks;

1 (iii) improved forest management
2 through practices such as improving regen-
3 eration after harvest, planting in under-
4 stocked forests, reducing competition from
5 slow-growing species, thinning to encour-
6 age growth, changing rotations to increase
7 carbon storage, improving harvest effi-
8 ciency or wood use; and

9 (iv) such other practices as the Sec-
10 retary determines to be appropriate.

11 (5) FOREST INCENTIVES PROGRAM; PRO-
12 GRAM.—The term “forest incentives program” or
13 “program” means the forest incentives program es-
14 tablished under subsection (b)(1).

15 (6) SECRETARY.—The term “Secretary” means
16 the Secretary of Agriculture.

17 (b) SUPPLEMENTAL GREENHOUSE GAS EMISSION
18 REDUCTIONS IN UNITED STATES.—

19 (1) IN GENERAL.—The Secretary shall establish
20 a forest incentives program to achieve supplemental
21 greenhouse gas emission reductions and carbon se-
22 questration on private forest land of the United
23 States through—

24 (A) carbon incentives contracts; and

25 (B) conservation easement agreements.

1 (2) PRIORITY.—In selecting projects under this
2 subsection, the Secretary shall provide a priority for
3 contracts and agreements—

4 (A) that sequester the most carbon on a
5 per acre basis; and

6 (B) that create forestry jobs or protect
7 habitats and achieve significant other environ-
8 mental, economic, and social benefits.

9 (3) ELIGIBILITY.—

10 (A) IN GENERAL.—To participate in the
11 program, an owner of eligible land shall—

12 (i) enter into a carbon incentives con-
13 tract; and

14 (ii) fulfill such other requirements as
15 the Secretary determines to be necessary.

16 (B) CONTINUED ELIGIBLE PRACTICES.—

17 An owner of eligible land who has been carrying
18 out eligible practices on the eligible land shall
19 not be barred from entering into a carbon in-
20 centives contract under this subsection to con-
21 tinue carrying out the eligible practices on the
22 eligible land.

23 (C) DURATION OF CONTRACT.—A contract
24 shall be for a term of not less than 15 nor more

1 than 30 years, as determined by the owner of
2 eligible land.

3 (D) COMPENSATION UNDER CONTRACT.—

4 The Secretary shall determine the rate of com-
5 pensation per acre under the contract so that
6 the longer the term of the contract, the higher
7 rate of compensation.

8 (E) RELATIONSHIP TO OTHER PRO-

9 GRAMS.—An owner or operator shall not be
10 prohibited from participating in the program
11 due to participation of the owner or operator in
12 other Federal or State conservation assistance
13 programs.

14 (4) COMPLIANCE.—In developing regulations
15 for carbon incentives contracts under this sub-
16 section, the Secretary shall specify requirements to
17 address whether the owner of eligible land has com-
18 pleted contract and agreement requirements.

19 (c) INCENTIVE PAYMENTS.—

20 (1) IN GENERAL.—The Secretary shall provide
21 to owners of eligible land financial incentive pay-
22 ments for—

23 (A) eligible practices that measurably in-
24 crease carbon sequestration and storage over a

1 designated period on eligible land, as specified
2 through a carbon incentives contract; and

3 (B) subject to paragraph (2), conservation
4 easements on eligible land covered under a con-
5 servation easement agreement.

6 (2) COMPENSATION.—The Secretary shall de-
7 termine the amount of compensation to be provided
8 under a contract under this subsection based on the
9 emissions reductions obtained or avoided and the du-
10 ration of the reductions, with due consideration to
11 prevailing carbon pricing as determined by any rel-
12 evant or State compliance offset programs.

13 (3) NO CONSERVATION EASEMENT AGREEMENT
14 REQUIRED.—Eligibility for financial incentive pay-
15 ments under a carbon incentives contract described
16 in paragraph (1)(A) shall not require a conservation
17 easement agreement.

18 (d) REGULATIONS.—Not later than 1 year after the
19 date of enactment of this Act, the Secretary shall issue
20 regulations that specify eligible practices and related com-
21 pensation rates, standards, and guidelines as the basis for
22 entering into the program with owners of eligible land.

23 (e) SET-ASIDE OF FUNDS FOR CERTAIN PUR-
24 POSES.—

1 (1) IN GENERAL.—At the discretion of the Sec-
2 retary, a portion of program funds made available
3 under this program for a fiscal year may be used—

4 (A) to develop forest carbon modeling and
5 methodologies that will improve the projection
6 of carbon gains for any forest practices made
7 eligible under the program;

8 (B) to provide additional incentive pay-
9 ments for specified management activities that
10 increase the adaptive capacity of land under a
11 carbon incentives contract; and

12 (C) for the Forest Inventory and Analysis
13 Program of the Forest Service to develop im-
14 proved measurement and monitoring of forest
15 carbon stocks.

16 (2) PROGRAM COMPONENTS.—In establishing
17 the program, the Secretary shall provide that funds
18 provided under this section shall not be substituted
19 for, or otherwise used as a basis for reducing, fund-
20 ing authorized or appropriated under other pro-
21 grams to compensate owners of eligible land for ac-
22 tivities that are not covered under the program.

23 (f) PROGRAM MEASUREMENT, MONITORING,
24 VERIFICATION, AND REPORTING.—

1 (1) MEASUREMENT, MONITORING, AND
2 VERIFICATION.—The Secretary shall establish and
3 implement protocols that provide monitoring and
4 verification of compliance with the terms of con-
5 tracts and agreements.

6 (2) REPORTING REQUIREMENT.—At least annu-
7 ally, the Secretary shall submit to Congress a report
8 that contains—

9 (A) an estimate of annual and cumulative
10 reductions achieved as a result of the program,
11 determined using standardized measures, in-
12 cluding measures of economic efficiency;

13 (B) a summary of any changes to the pro-
14 gram that will be made as a result of program
15 measurement, monitoring, and verification;

16 (C) the total number of acres enrolled in
17 the program by method; and

18 (D) a State-by-State summary of the data.

19 (3) AVAILABILITY OF REPORT.—Each report
20 required by this subsection shall be available to the
21 public through the website of the Department of Ag-
22 riculture.

23 (4) PROGRAM ADJUSTMENTS.—At least once
24 every 2 years the Secretary shall adjust eligible prac-
25 tices and compensation rates for future carbon in-

1 centives contracts based on the results of monitoring
 2 under paragraph (1) and reporting under paragraph
 3 (2), if determined necessary by the Secretary.

4 (5) ESTIMATING CARBON BENEFITS.—Any
 5 modeling, methodology, or protocol resource devel-
 6 oped under this section—

7 (A) shall be suitable for estimating carbon
 8 benefits associated with eligible practices for
 9 the purpose of incentives under this section;
 10 and

11 (B) may be used for netting by States or
 12 emission sources under Federal programs relat-
 13 ing to carbon emissions.

14 (g) AUTHORIZATION OF APPROPRIATIONS.—There
 15 are authorized to be appropriated to carry out this section
 16 such sums as are necessary.

17 **SEC. 4. MATERIAL CHOICES IN BUILDINGS FOR SUPPLE-**
 18 **MENTAL GREENHOUSE GAS EMISSION RE-**
 19 **DUCTIONS IN UNITED STATES.**

20 (a) DEFINITIONS.—In this section:

21 (1) ELIGIBLE BUILDING.—The term “eligible
 22 building” means a nonresidential building used for
 23 commercial or State or local government purposes.

24 (2) ELIGIBLE PRODUCT.—The term “eligible
 25 product” means a commercial or industrial product,

1 such as an intermediate, feedstock, or end product
2 (other than food or feed), that is composed in whole
3 or in part of biological products, including renewable
4 agricultural and forestry materials used as struc-
5 tural building material.

6 (3) PROGRAM.—The term “program” means
7 the greenhouse gas incentives program established
8 under this section.

9 (4) SECRETARY.—The term “Secretary” means
10 the Secretary of Agriculture.

11 (b) SUPPLEMENTAL GREENHOUSE GAS EMISSION
12 REDUCTIONS IN BUILDINGS.—

13 (1) IN GENERAL.—The Secretary shall establish
14 a greenhouse gas incentives program to achieve sup-
15 plemental greenhouse gas emission reductions from
16 material choices in buildings, based on the lifecycle
17 assessment of the building materials.

18 (2) FINANCIAL INCENTIVE PAYMENTS.—The
19 Secretary shall provide to owners of eligible build-
20 ings incentive payments for the use of eligible prod-
21 ucts in buildings for sequestering carbon based on a
22 lifecycle assessment of the structural assemblies, as
23 compared to a model building as a result of using
24 eligible products in substitution for more energy-in-
25 tensive materials in—

1 (A) new construction; or

2 (B) building renovation.

3 (c) PROGRAM REQUIREMENTS.—

4 (1) APPLICATIONS.—To be eligible to partici-
5 pate in the program, the owner of an eligible build-
6 ing shall submit to the Secretary an application at
7 such time, in such manner, and containing such in-
8 formation as the Secretary may require.

9 (2) COMPONENTS.—In establishing the pro-
10 gram, the Secretary shall require that payments for
11 activities under the program shall be—

12 (A) established at a rate not to exceed the
13 net estimated benefit an owner of an eligible
14 building would receive for similar practices
15 under any federally established carbon offset
16 program, taking into consideration the costs as-
17 sociated with the issuance of credits and com-
18 pliance with reversal provisions;

19 (B) provided to owners of eligible buildings
20 demonstrating at least a 20-percent reduction
21 in carbon emissions potential, based on a
22 lifecycle assessment of the structural assem-
23 blies, as compared to the structural assemblies
24 of a model building, subject to the requirements
25 that—

- 1 (i) the Secretary shall identify a
2 model baseline nonresidential building—
- 3 (I) of common size and function;
4 and
- 5 (II) having a service life of not
6 less than 60 years; and
- 7 (ii) applicants shall evaluate the car-
8 bon emissions potential of the baseline
9 building and the proposed building using
10 the same lifecycle assessment software tool
11 and data sets, which shall be compliant
12 with the document numbered ISO 14044;
13 and
- 14 (C) provided on certification by the owner
15 of an eligible building and verification by the
16 Secretary, after consultation with the Secretary
17 of Energy, that—
- 18 (i) the eligible building meets the re-
19 quirements of the applicable State com-
20 mercial building energy efficiency code (as
21 in effect on the date of the applicable per-
22 mit of the eligible building); and
- 23 (ii) the State has made the certifi-
24 cation required pursuant to section 304 of

1 the Energy Conservation and Production
2 Act (42 U.S.C. 6833).

3 (3) INCENTIVE PAYMENTS.—A participant in
4 the program shall receive payment under the pro-
5 gram on completion of construction or renovation of
6 the applicable eligible building.

7 (d) REPORTS.—Not less frequently than once each
8 year, the Secretary shall submit to Congress a report that
9 contains—

10 (1) an estimate of annual and cumulative re-
11 ductions achieved as a result of the program—

12 (A) determined by using lifecycle assess-
13 ment software that is compliant with the docu-
14 ment numbered ISO 14044; and

15 (B) expressed in terms of the total number
16 of cars removed from the road;

17 (2) a summary of any changes to the program
18 that will be made as a result of past implementation
19 of the program; and

20 (3) the total number of buildings under carbon
21 incentives contracts as of the date of the report.

22 (e) ANALYTICAL REQUIREMENTS.—For purposes of
23 this section—

24 (1) any carbon emissions potential calculation
25 shall—

1 (A) be performed in accordance with
2 standard lifecycle assessment practice; and

3 (B) include removal and sequestration of
4 carbon dioxide from the use of biobased prod-
5 ucts, as well as recycled content materials;

6 (2) a full lifecycle assessment shall be con-
7 ducted taking into consideration all lifecycle stages,
8 including—

9 (A) resource extraction and processing;

10 (B) product manufacturing;

11 (C) onsite construction of assemblies;

12 (D) transportation;

13 (E) maintenance and replacement cycles
14 over an assumed eligible building service life of
15 60 years; and

16 (F) demolition;

17 (3) structural assemblies shall be considered to
18 include columns, beams, girders, purlins, floor deck,
19 roof, and structural envelope elements;

20 (4) primary materials shall be considered to in-
21 clude common products used as the structural sys-
22 tem, such as wood, steel, concrete, or masonry; and

23 (5) the effects of recycling, reuse, or energy re-
24 covery beyond the boundaries of an applicable study
25 system shall not be taken in account.

1 (f) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated such sums as are nec-
3 essary to carry out this section.

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